



# THE GATEWAY AT GRAND TERRACE SPECIFIC PLAN PROJECT

## Draft Environmental Impact Report

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**SPECIFIC PLAN 00-17  
GENERAL PLAN AMENDMENT 17-01  
ZONE CHANGE 17-02  
TENTATIVE TRACT MAP 18-01  
DEVELOPMENT AGREEMENT**

**June 2023**

***Lead Agency:***

**City of Grand Terrace**  
22795 Barton Road  
Grand Terrace, CA 92313  
Konrad Bolowich  
(909) 954-5175

***Consultant:***

**Kimley-Horn and Associates**  
3801 University Avenue, Suite 300  
Riverside, CA 92501  
Kari Cano  
(951) 543-9869

## Table of Contents

|       |   |       |
|-------|---|-------|
| 1.0   | EXECUTIVE SUMMARY .....                                     | 1-1   |
| 1.1   | Introduction .....  | 1-1   |
| 1.2   | Project Location .....                                      | 1-2   |
| 1.3   | Project Summary.....  | 1-3   |
| 1.4   | Areas of Controversy .....                                  | 1-3   |
| 1.5   | Summary of Project Alternatives .....                       | 1-3   |
| 1.6   | Significant and Unavoidable Impacts .....                   | 1-6   |
| 1.7   | Summary of Environmental Impacts & Mitigation Measures..... | 1-6   |
| 2.0   | INTRODUCTION.....   | 2-1   |
| 2.1   | Purpose of the Environmental Impact Report .....            | 2-1   |
| 2.2   | Proposed Project.....                                       | 2-6   |
| 2.3   | EIR Scope, Issues, and Concerns .....                       | 2-7   |
| 2.4   | Environmental Review Process.....                           | 2-10  |
| 2.5   | Report Organization .....                                   | 2-11  |
| 2.6   | Incorporation by Reference.....                             | 2-11  |
| 3.0   | PROJECT DESCRIPTION.....                                    | 3-1   |
| 3.1   | Purpose.....  | 3-1   |
| 3.2   | Lead Agency.....  | 3-1   |
| 3.3   | Project Applicant(s)/Sponsor(s) .....                       | 3-2   |
| 3.4   | Overview and Background.....                                | 3-2   |
| 3.5   | Project Location, Setting, and Surrounding Land Uses.....   | 3-2   |
| 3.6   | Project Characteristics.....                                | 3-5   |
| 4.0   | ENVIRONMENTAL IMPACT ANALYSIS .....                         | 4-1   |
| 4.0.1 | Section Content and Definition of Terms .....               | 4-1   |
| 4.0.2 | Cumulative Impacts Analysis.....                            | 4-3   |
| 4.1   | Aesthetics.....   | 4.1-1 |
| 4.1.1 | Introduction.....   | 4.1-1 |

4.1.2 Environmental Setting.....4.1-2

4.1.3 Regulatory Setting .....4.1-3

4.1.4 Significance Criteria Under CEQA .....4.1-5

4.1.5 Project Impacts and Mitigation .....4.1-6

4.1.6 Significant Unavoidable Impacts .....4.1-12

4.1.7 Cumulative Impacts .....4.1-12

4.1.8 References.....4.1-12

4.2 AIR QUALITY.....4.2-1

4.2.1 Introduction.....4.2-1

4.2.2 Environmental Setting.....4.2-2

4.2.3 Regulatory Setting .....4.2-6

4.2.4 Significance Criteria Under CEQA .....4.2-20

4.2.5 Project Impacts and Mitigation .....4.2-23

4.2.6 Significant Unavoidable Impacts .....4.2-40

4.2.7 Cumulative Impacts .....4.2-40

4.2.8 References.....4.2-41

4.3 BIOLOGICAL RESOURCES .....4.3-1

4.3.1 Introduction.....4.3-1

4.3.2 Environmental Setting.....4.3-3

4.3.3 Regulatory Setting .....4.3-25

4.3.4 Significance Criteria Under CEQA .....4.3-35

4.3.5 Project Impacts and Mitigation .....4.3-37

4.3.6 Significant Unavoidable Impacts .....4.3-43

4.3.7 Cumulative Impacts .....4.3-43

4.3.8 References.....4.3-44

4.4 CULTURAL RESOURCES.....4.4-1

4.4.1 Introduction.....4.4-1

4.4.2 Environmental Setting.....4.4-4

4.4.3 Regulatory Setting .....4.4-8

4.4.4 Significance Criteria under CEQA.....4.4-12

4.4.5 Impacts and Mitigation Measures .....4.4-14

4.4.6 Significant Unavoidable Impacts .....4.4-18

4.4.7 Cumulative Impacts .....4.4-18

4.4.8 References.....4.4-18

4.5 ENERGY.....4.5-1

4.5.1 Introduction.....4.5-1

4.5.2 Environmental Setting.....4.5-1

4.5.3 Regulatory Setting .....4.5-4

4.5.4 Significance Criteria Under CEQA .....4.5-11

4.5.5 Project Impacts and Mitigation .....4.5-12

4.5.6 Significant Unavoidable Impacts .....4.5-19

4.5.7 Cumulative Impacts .....4.5-19

4.5.8 References.....4.5-21

4.6 GEOLOGY AND SOILS.....4.6-1

4.6.1 Introduction.....4.6-1

4.6.2 Environmental Setting.....4.6-4

4.6.3 Regulatory Setting .....4.6-6

4.6.4 Significance Criteria Under CEQA .....4.6-10

4.6.5 Project Impacts and Mitigation .....4.6-11

4.6.6 Significant Unavoidable Impacts .....4.6-19

4.6.7 Cumulative Impacts .....4.6-19

4.6.8 References.....4.6-20

4.7 GREENHOUSE GAS EMISSIONS .....4.7-1

4.7.1 Environmental Setting.....4.7-1

4.7.2 Regulatory Setting .....4.7-3

4.7.3 Significance Criteria Under CEQA .....4.7-16

4.7.4 Project Impacts and Mitigation .....4.7-19

4.7.5 Significant Unavoidable Impacts .....4.7-30

4.7.6 Cumulative Impacts .....4.7-30

4.7.7 References.....4.7-31

4.8 HAZARDS AND HAZARDOUS MATERIALS.....4.8-1

4.8.1 Introduction.....4.8-1

4.8.2 Environmental Setting.....4.8-4

4.8.3 Regulatory Setting .....4.8-7

4.8.4 Significance Criteria Under CEQA .....4.8-13

4.8.5 Project Impacts and Mitigation .....4.8-14

4.8.6 Significant Unavoidable Impacts .....4.8-21

4.8.7 Cumulative Impacts .....4.8-21

4.8.8 References.....4.8-22

4.9 HAZARDS AND HAZARDOUS MATERIALS.....4.9-1

4.9.1 Introduction.....4.9-1

4.9.2 Environmental Setting.....4.9-1

4.9.3 Regulatory Setting .....4.9-4

4.9.4 Significance Criteria Under CEQA .....4.9-9

4.9.5 Project Impacts and Mitigation .....4.9-10

4.9.6 Significant Unavoidable Impacts .....4.9-19

4.9.7 Cumulative Impacts .....4.9-19

4.9.8 References.....4.9-20

4.10 LAND USE AND PLANNING.....4.10-1

4.10.1 Introduction.....4.10-1

4.10.2 Environmental Setting.....4.10-1

4.10.3 Regulatory Setting .....4.10-3

4.10.4 Significance Criteria Under CEQA .....4.10-5

4.10.5 Project Impacts and Mitigation .....4.10-6

4.10.6 Significant Unavoidable Impacts .....4.10-22

4.10.7 Cumulative Impacts .....4.10-22

4.10.8 References.....4.10-23

4.11 NOISE.....4.11-1

    4.11.1 Introduction.....4.11-1

    4.11.2 Environmental Setting.....4.11-1

    4.11.3 Regulatory Setting .....4.11-8

    4.11.4 Significance Criteria Under CEQA .....4.11-13

    4.11.5 Project Impacts and Mitigation .....4.11-16

    4.11.6 Significant Unavoidable Impacts .....4.11-26

    4.11.7 Cumulative Impacts .....4.11-26

    4.11.8 References.....4.11-29

4.12 POPULATION AND HOUSING .....4.12-1

    4.12.1 Introduction.....4.12-1

    4.12.2 Environmental Setting.....4.12-1

    4.12.3 Regulatory Setting .....4.12-5

    4.12.4 Significance Criteria Under CEQA .....4.12-8

    4.12.5 Project Impacts and Mitigation .....4.12-9

    4.12.6 Significant Unavoidable Impacts .....4.12-12

    4.12.7 Cumulative Impacts .....4.12-12

    4.12.8 References.....4.12-12

4.13 PUBLIC SERVICES.....4.13-1

    4.13.1 Introduction.....4.13-1

    4.13.2 Environmental Setting.....4.13-1

    4.13.3 Regulatory Setting .....4.13-5

    4.13.4 Significance Criteria Under CEQA .....4.13-10

    4.13.5 Project Impacts and Mitigation .....4.13-10

    4.13.6 Significant Unavoidable Impacts .....4.13-15

    4.13.7 Cumulative Impacts .....4.13-16

    4.13.8 References.....4.13-16

4.14 RECREATION.....4.14-1

    4.14.1 Introduction.....4.14-1

4.14.2 Environmental Setting.....4.14-1

4.14.3 Regulatory Setting .....4.14-2

4.14.4 Significance Criteria Under CEQA .....4.14-4

4.14.5 Project Impacts and Mitigation .....4.14-4

4.14.6 Significant Unavoidable Impacts .....4.14-6

4.14.7 Cumulative Impacts .....4.14-6

4.14.8 References.....4.14-6

4.15 TRANSPORTATION.....4.15-1

4.15.1 Introduction.....4.15-1

4.15.2 Environmental Setting.....4.15-2

4.15.3 Regulatory Setting .....4.15-6

4.15.4 Significance Criteria Under CEQA .....4.15-12

4.15.5 Project Impacts and Mitigation .....4.15-14

4.15.6 Significant and Unavoidable Impacts.....4.15-20

4.15.7 Cumulative Impacts .....4.15-20

4.15.8 References.....4.15-20

4.16 TRIBAL CULTURAL RESOURCES .....4.16-1

4.16.1 Introduction.....4.16-1

4.16.2 Environmental Setting.....4.16-1

4.16.3 Regulatory Setting .....4.16-4

4.16.4 Significance Criteria Under CEQA .....4.16-6

4.16.5 Project Impacts and Mitigation .....4.16-9

4.16.6 Significant Unavoidable Impacts .....4.16-13

4.16.7 Cumulative Impacts .....4.16-13

4.16.8 References.....4.16-14

4.17 UTILITIES AND SERVICE SYSTEMS.....4.17-1

4.17.1 Introduction.....4.17-1

4.17.2 Environmental Setting.....4.17-1

4.17.3 Regulatory Setting .....4.17-5

|        |   |         |
|--------|---|---------|
| 4.17.4 | Significance Criteria Under CEQA .....                  | 4.17-10 |
| 4.17.5 | Project Impacts and Mitigation .....                    | 4.17-11 |
| 4.17.6 | Significant Unavoidable Impacts .....                   | 4.17-22 |
| 4.17.7 | Cumulative Impacts .....                                | 4.17-22 |
| 4.17.8 | References.....   | 4.17-22 |
| 4.18   | WILDFIRE.....   | 4.18-1  |
| 4.18.1 | Introduction.....                                       | 4.18-1  |
| 4.18.2 | Environmental Setting.....                              | 4.18-1  |
| 4.18.3 | Regulatory Setting .....                                | 4.18-2  |
| 4.18.4 | Significance Criteria Under CEQA .....                  | 4.18-6  |
| 4.18.5 | Project Impacts and Mitigation .....                    | 4.18-7  |
| 4.18.6 | Significant Unavoidable Impacts .....                   | 4.18-12 |
| 4.18.7 | Cumulative Impacts .....                                | 4.18-12 |
| 4.18.8 | References.....   | 4.18-12 |
| 5.0    | OTHER CEQA CONSIDERATIONS .....                         | 5-1     |
| 5.1    | Significant and Unavoidable Impacts .....               | 5-1     |
| 5.2    | Significant and Irreversible Environmental Changes..... | 5-1     |
| 5.3    | Growth Inducing Impacts.....                            | 5-3     |
| 5.4    | Mandatory Findings of Significance .....                | 5-5     |
| 6.0    | ALTERNATIVES .....                                      | 6-1     |
| 6.1    | Introduction .....                                      | 6-1     |
| 6.2    | Range of Alternatives .....                             | 6-2     |
| 6.3    | Project Alternatives.....                               | 6-4     |
| 6.4    | Environmentally Superior Alternative .....              | 6-22    |
| 7.0    | EFFECTS FOUND NOT TO BE SIGNIFICANT .....               | 7-1     |
| 7.1    | Agricultural and Forestry Resources .....               | 7-1     |
| 7.2    | Mineral Resources.....                                  | 7-4     |
| 7.3    | References .....  | 7-4     |
| 8.0    | ORGANIZATIONS AND PREPARATION.....                      | 8-1     |



**List of Tables**

|   |        |
|---|--------|
| Table 1-1: Summary of Environmental Impacts and Mitigation Measures .....                               | 1-7    |
| Table 3-1: Project Assessor Parcel Numbers .....  | 3-3    |
| Table 3-2: Project Site and Surrounding Existing Land Use Designations and Zoning .....                 | 3-5    |
| Table 3-3: Gateway at Grand Terrace Specific Plan Statistical Summary by Planning Area .....            | 3-6    |
| Table 3-4: Land Use Percentages .....   | 3-7    |
| Table 3-5: Projected Maximum Net Development for Residential and Commercial Uses.....                   | 3-7    |
| Table 3-6: Permitted and Conditionally Permitted Uses .....   | 3-14   |
| Table 3-7: Prohibited Uses.....   | 3-17   |
| Table 4-1: Cumulative Projects List .....   | 4-6    |
| Table 4.2-1: Air Contaminants and Associated Public Health Concerns.....                                | 4.2-3  |
| Table 4.2-2: Ambient Air Quality Data.....  | 4.2-5  |
| Table 4.2-3: Sensitive Receptors .....  | 4.2-6  |
| Table 4.2-4: State and National Ambient Air Quality Standards.....                                      | 4.2-8  |
| Table 4.2-5: South Coast Air Basin Attainment Status .....  | 4.2-15 |
| Table 4.2-6: South Coast Air Quality Management District Emissions Thresholds.....                      | 4.2-20 |
| Table 4.2-7: Local Significance Thresholds for Construction/Operations<br>(Maximum Pounds Per Day)..... | 4.2-21 |
| Table 4.2-8: Construction-Related Emissions .....   | 4.2-28 |
| Table 4.2-9: Unmitigated Operational Emissions.....   | 4.2-29 |
| Table 4.2-10: Mitigated Operational Emissions.....  | 4.2-30 |
| Table 4.2-11: Equipment-Specific Grading Rates.....   | 4.2-31 |
| Table 4.2-12: Localized Significance of Construction Emissions .....                                    | 4.2-31 |
| Table 4.2-13: Localized Significance of Operational Emissions.....                                      | 4.2-32 |
| Table 4.3-1: Summary of On-site Vegetation/Land Use Types .....   | 4.3-3  |
| Table 4.3-2: Summary of Off-site Vegetation/Land Use Types.....   | 4.3-3  |
| Table 4.3-3: Special-Status Plants Evaluated for the Project Study Area .....                           | 4.3-8  |
| Table 4.3-4: Special Status Animals Evaluated for the Project Study Area.....                           | 4.3-11 |
| Table 4.3-5: Potential USACE Jurisdiction Associated with the Project Study Area (On-site) .....        | 4.3-19 |

|  |         |
|--|---------|
| Table 4.3-6: Potential USACE Jurisdiction Associated with the Project Study Area (Off-site).....                         | 4.3-19  |
| Table 4.3-7: RWQCB Jurisdiction Associated with the Project Study Area (On-site) .....                                   | 4.3-22  |
| Table 4.3-8: RWQCB Jurisdiction Associated with the Project Study Area (Off-site).....                                   | 4.3-22  |
| Table 4.3-9: CDFW Jurisdiction Associated with the Project Study Area (On-site).....                                     | 4.3-23  |
| Table 4.3-10: CDFW Jurisdiction Associated with the Project Study Area (Off-site).....                                   | 4.3-23  |
| Table 4.3-11: CNPS Ranks 1A, 1B, 2A, 2B, 3, & 4, and Threat Code Extensions.....   | 4.3-31  |
| Table 4.3-12: Impacts to USACE/RWQCB Jurisdictional Waters Associated with<br>On-Site Phase 1 Area.....                  | 4.3-40  |
| Table 4.3-13: Impacts to USACE/RWQCB Jurisdictional Waters Associated with<br>Off-Site Phase 1 Area .....                | 4.3-40  |
| Table 4.3-14: Impacts to CDFW Jurisdictional Land and Riparian Vegetation Associated with<br>On-Site Phase 1 Area.....   | 4.3-41  |
| Table 4.3-15: Impacts to CDFW Jurisdictional Land and Riparian Vegetation Associated with<br>Off-Site Phase 1 Area ..... | 4.3-41  |
| Table 4.5-1: Energy Resources Used to Generate Electricity for SCE (2020).....   | 4.5-2   |
| Table 4.5-2: Energy Resources Used to Generate Electricity for SCE (2019).....   | 4.5-3   |
| Table 4.5-3: Energy Use During Construction .....  | 4.5-13  |
| Table 4.5-4: Annual Energy Use During Operations.....  | 4.5-16  |
| Table 4.7-1: Description of Greenhouse Gases.....  | 4.7-2   |
| Table 4.7-2: Construction-Related Greenhouse Gas Emissions.....  | 4.7-19  |
| Table 4.7-3: Operational Greenhouse Gas Emissions .....  | 4.7-20  |
| Table 4.7-4: Connect SoCal Consistency.....  | 4.7-25  |
| Table 4.10-1: Project Site and Surrounding – Existing Land Use Designations and Zoning.....                              | 4.10-3  |
| Table 4.10-2: Permitted and Conditionally Permitted Uses .....   | 4.10-8  |
| Table 4.10-3: General Plan Consistency Analysis.....   | 4.10-11 |
| Table 4.10-4: Project Compatibility with Connect SoCal Strategies.....   | 4.10-20 |
| Table 4.11-1: Definitions of Acoustical Terms .....  | 4.11-2  |
| Table 4.11-2: Human Reaction and Damage to Buildings for Continuous or<br>Frequent Intermittent Vibrations .....         | 4.11-6  |
| Table 4.11-3: Existing Traffic Noise Levels.....   | 4.11-7  |

|   |         |
|---|---------|
| Table 4.11-4: Existing Noise Measurements.....  | 4.11-8  |
| Table 4.11-5: Sensitive Receptors .....   | 4.11-8  |
| Table 4.11-6: Grand Terrace Interior and Exterior Noise Standards.....                    | 4.11-10 |
| Table 4.11-7: Grand Terrace Noise/Land Use Compatibility Matrix .....                     | 4.11-10 |
| Table 4.11-8: Construction Noise Levels at Sensitive Receptors .....                      | 4.11-18 |
| Table 4.11-9: Off-Site Traffic Noise Levels.....  | 4.11-19 |
| Table 4.11-10: On-Site Traffic Noise Levels - Local Roadways.....                         | 4.11-20 |
| Table 4.11-11: Typical Construction Equipment Vibration Levels .....                      | 4.11-23 |
| Table 4.11-12: On-Site Traffic Noise Levels – I-215.....                                  | 4.11-25 |
| Table 4.11-13: Cumulative Off-Site Traffic Noise Levels.....                              | 4.11-27 |
| Table 4.12 1: County of San Bernardino Population .....                                   | 4.12-2  |
| Table 4.12-2: City of Grand Terrace Population.....                                       | 4.12-2  |
| Table 4.12-3: County of San Bernardino Housing Characteristics.....                       | 4.12-3  |
| Table 4.12-4: City of Grand Terrace Housing Characteristics .....                         | 4.12-3  |
| Table 4.13-1: Police Response Times for 2021 .....  | 4.13-3  |
| Table 4.13-2: School Enrollment .....   | 4.13-4  |
| Table 4.13-3: Projected Student Population.....   | 4.13-14 |
| Table 4.15-1: Project Land Use .....  | 4.15-14 |
| Table 4.15-2: Project Generated VMT Estimates.....  | 4.15-17 |
| Table 4.15-3: VMT Impact Analysis Results and Threshold Comparisons .....                 | 4.15-17 |
| Table 4.17-1: RHWC Projected Normal Year Supply and Demand.....                           | 4.17-17 |
| Table 4.17-2: Single Dry Year Supply and Demand Comparison.....                           | 4.17-17 |
| Table 4.17-3: Multiple Dry Years Supply and Demand Comparison .....                       | 4.17-17 |
| Table 6-1: Comparison of Project Alternatives Environmental Impacts with the Project..... | 6-23    |

**List of Exhibits**

|  |         |
|--|---------|
| Exhibit 3-1: Regional Vicinity Map.....                              | 3-19    |
| Exhibit 3-2: Local Vicinity Map.....                                 | 3-20    |
| Exhibit 3-3: Existing General Plan Land Use Designations.....        | 3-21    |
| Exhibit 3-4: Existing Zoning Designations.....                       | 3-22    |
| Exhibit 3-5: Proposed General Plan Land Use Designation.....         | 3-23    |
| Exhibit 3-6: Proposed Zoning Designation.....                        | 3-24    |
| Exhibit 3-7: Project Planning Areas.....                             | 3-25    |
| Exhibit 3-8: Construction Phasing Plan.....                          | 3-26    |
| Exhibit 3-9: Existing Sewer Plan.....                                | 3-27    |
| Exhibit 3-10: Conceptual Water Plan.....                             | 3-28    |
| Exhibit 3-11: Conceptual Storm Drain Plan.....                       | 3-29    |
| Exhibit 3-12: Conceptual Circulation Plan.....                       | 3-30    |
| Exhibit 4.3-1: Biological Resources Study Area.....                  | 4.3-2   |
| Exhibit 4.3-2: Vegetation Map.....                                   | 4.3-6   |
| Exhibit 4.3-3: Potential USACE/RWQCB Jurisdictional Delineation..... | 4.3-20  |
| Exhibit 4.3-4: Potential CDFW Jurisdictional Delineation.....        | 4.3-24  |
| Exhibit 4.4-1: Cultural Resources Study Areas.....                   | 4.4-3   |
| Exhibit 4.6-1: Geotechnical Investigation Areas.....                 | 4.6-3   |
| Exhibit 4.8-1: Environmental Site Assessment Areas.....              | 4.8-3   |
| Exhibit 4.11-1: Noise Measurement Locations.....                     | 4.11-30 |

**Appendices (Provided under separate cover)**

Appendix A | Air Quality and Health Risk Assessments

Appendix B | Biological Technical Report

Appendix C | Cultural Resources Assessment

Appendix D | Energy Assessment

Appendix E | Geotechnical Investigation Reports

Appendix F | GHG Assessment

Appendix G | Phase I and Phase II Environmental Site Assessment Reports

Appendix H | Hydrology Calculations and Preliminary Water Quality Assessment Reports

Appendix I | Acoustical Assessment

Appendix J | Traffic Impact Assessment/VMT Assessment

Appendix K | Water Supply Assessment/Sewer Study

Appendix L | Notice of Preparation and Comment Letters

## 1.0 EXECUTIVE SUMMARY

### 1.1 INTRODUCTION

The environmental impact report (EIR) process, as defined by the California Environmental Quality Act (CEQA), requires the preparation of an objective, full-disclosure document in order to (1) inform agency decision-makers and the general public of the direct and indirect potentially significant environmental effects of a proposed action; (2) identify feasible or potentially feasible mitigation measures to reduce or eliminate potentially significant adverse impacts; and (3) identify and evaluate reasonable alternatives to a project. In accordance with State CEQA Guidelines §15168 (Title 14 of the California Code of Regulations [CCR]), this Draft EIR (State Clearinghouse No. 202102011) that has been prepared for The Gateway at Grand Terrace Specific Plan (Project) and for the City of Grand Terrace (City).

CEQA requires that projects subject to approval by a public agency of the State of California, and that are not otherwise exempt or excluded, undergo an environmental review process to identify and evaluate potential impacts. CEQA Guidelines §15050 states that environmental review shall be conducted by the Lead Agency, defined in CEQA Guidelines §15367 as the public agency with principal responsibility for approving a project. The Project is subject to approval actions by the City, which is, therefore the Lead Agency for CEQA purposes. In accordance with CEQA Guidelines §15123, this section of the Draft EIR provides a brief description of the Project; identifies significant effects and proposed mitigation measures or alternatives that would reduce or avoid those effects; and describes areas of controversy and issues to be resolved.

This Draft EIR serves as a “Program EIR” as defined in CEQA Guidelines §to address the overall Specific Plan at its complete buildout. Any future activities which relate to and follow the Specific Plan must be examined in light of the Program EIR to determine if additional environmental analysis is warranted. Later activities which have been adequately analyzed under the Program EIR may not require additional environmental documentation. If an activity may result in additional effects, or new mitigation measures are needed, a subsequent or supplemental EIR, or mitigated negative declaration must be prepared (CEQA Guidelines §15162 and 15163).

Pursuant to CEQA Guidelines §15082, the City circulated a Notice of Preparation (NOP) advising public agencies, districts, and members of the public that an EIR for the Project was being prepared. The NOP was distributed on February 8, 2021, to solicit comments related to the construction and operation of the Project. The NOP was circulated with a 30-day public review period ending on March 9, 2021. This process and comments submitted in response to the NOP is discussed in **Section 2.0, Introduction** and **Section 1.4, Areas of Controversy**, below.

After receiving public comments on the NOP, the Project was analyzed for its potential to result in environmental impacts. Impacts were evaluated in accordance with the significance criteria presented in CEQA Guidelines Appendix G, “Environmental Checklist Form.” The criteria in the Environmental Checklist Form, was used to determine if the Project would result in, “no impact,” “less than significant impact,” “less than significant impact with mitigation measures,” or “potentially significant impact” to a particular environmental resource. In some instances, a project may use the checklist to provide an initial discussion

of a project and to screen out certain topics from a full discussion in the Draft EIR. This Draft EIR discusses all environmental resources in CEQA Guidelines, Appendix G. A table listing the Project impacts and any associated mitigation measures is included at the end of this summary in **Table 1-1, Summary of Significant Impacts and Proposed Mitigation Measures**.

This Draft EIR describes the existing environmental resources within and near the Project site and analyzes potential impacts on those resources that would or could occur upon buildout of the Project. The Draft EIR also identifies mitigation measures that could avoid or reduce the severity of those impacts determined to be significant. The environmental impacts evaluated in this Draft EIR concern several subject areas, including but not limited to air quality, biological resources, cultural resources, energy/energy conservation, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, tribal cultural resources, and utilities and service systems. A total of 18 comment letters (excluding tribal consultation letters) were received in response to the NOP. The comment letters received during the NOP comment period; along with Scoping Reports for the NOP, providing a more detailed summary of the issues raised during the public scoping meeting, are included in **Appendix L, Notice of Preparation** to this Draft EIR. The comments were used to form the discussion of this Draft EIR and help determine the scope and framework of certain topical discussions.

This Draft EIR will be subject to further review and comment by the public, as well as responsible agencies and other interested agencies and organizations for a 45-day period.

Following the public review period, written responses to all comments received on the Draft will be prepared. Those written responses, and any necessary changes to the Draft EIR, will constitute the Final EIR and will be submitted to the City of Grand Terrace City Council (City Council) for their consideration. If the City Council finds that the Final EIR is “adequate and complete” in accordance with the CEQA Guidelines, the City Council may certify the EIR. The City Council will also consider the adoption of Findings of Fact concerning to the EIR, a Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Plan (MMRP). Upon review and consideration of the Final EIR, the City Council would take action concerning the Project.

Regarding the MMRP, CEQA Guidelines §15097 requires public agencies to set up monitoring and reporting programs to ensure compliance with mitigation measures, which are adopted or made as a condition of project approval and designed to mitigate or avoid the significant environmental effects identified in environmental impact reports. A MMRP incorporating the mitigation measures set forth in this EIR will be considered and acted upon by the City’s decision-makers concurrent with adoption of the findings of this EIR and prior to approval of the Project.

## 1.2 PROJECT LOCATION

The Project site is located in the southwestern portion of the County of San Bernardino (County) within the City of Grand Terrace. The Project site is approximately 112 acres and is bounded by Commerce Way and an existing commercial parking lot to the north; the northern portion of Grand Terrace High School to the south; commercial and residential uses to the east; and Interstate 215 (I-215) to the west. The

southern boundary of the Project is also in close proximity and approximately 0.27 mile north of Main Street. The location of the Project in both regional and local contexts are further discussed in **Section 3.0, Project Description** and illustrated in **Exhibit 3-1, Regional Map** and **Exhibit 3-2, Local Vicinity Map**.

### 1.3 PROJECT SUMMARY

The Project proposes the future development of a mixed-use development that would consist of the following land use areas within 22 Planning Areas (PAs) (refer to **Exhibit 3-7, Project Planning Areas** in **Section 3.0, Project Description**):

- Approximately 43 acres of residential development (up to 695 Dwelling Units) within PAs 11, 12, 14, 15, 16, 19, and 20.
- Approximately 25 acres of general commercial development (up to 335,700 square feet) within PAs 1, 2, 3, 6, 7, 8, 9 square feet).<sup>1</sup>
- Development and/or improvement of drainage facilities, utilities, and public streets with enhanced landscaping within PAs 5, 10, 13, 17, and 21.
- A newly constructed park at PA 22 that includes a lighted baseball field with a tot-lot/playground.
- A detention basin with open space overlay in PA 18.

Construction of these land uses and associated features, including recordation of final subdivision map(s); and design review would be conducted within two phases, provided that vehicular access, public facilities, and infrastructure are constructed to adequately service the development, or as needed for public health and safety. However, note that actual phasing sequence and years may vary depending on market conditions.

The Project also includes various discretionary approvals including applications for a Specific Plan, Zone Change, General Plan Amendment, Tentative Tract Map, and Development Agreement. These actions are further described in **Section 3.0, Project Description**, and in the proposed “The Gateway at Grand Terrace Specific Plan.”

### 1.4 AREAS OF CONTROVERSY

State CEQA Guidelines §15123 (b)(2) and (3) require that this section of the Program EIR identify areas of controversy known to the Lead Agency, issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether, or how to mitigate the significant effects. The following areas of concern identified during the scoping period included: Air Quality, Biological Resources, Greenhouse Gas Emissions, Noise, Traffic and Vehicle Miles Traveled, Solid Waste, Sewer Infrastructure and Flood Control. No other areas of controversy are known to the lead agency.

### 1.5 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines (§15126.6[a]) state that an EIR must address “a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the Project

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<sup>1</sup> Developable square footage accounts for development standards, site constraints, roads, and infrastructure



but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.” The alternatives were based, in part, on their potential ability to reduce or eliminate the impacts determined to be significant and unavoidable for the proposed Project. The following alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the Project, but which may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in **Section 6.0, Alternatives**, of this Draft EIR.

- No Project Alternative
- No Commercial Alternative
- Reduced Retail by 20 Percent Alternative

An EIR must identify an “environmentally superior” alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. However, only impacts found significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Impacts involving air quality and greenhouse gas emissions are significant and unavoidable. **Section 6.0, Alternatives** identifies the environmentally superior alternative.

### 1.6.1 No Project Alternative

Consistent with State CEQA Guidelines §15126.6, the No Project Alternative assumes that the existing land uses and condition of the Project Site at the time the NOP was published (February 2021) would continue to exist without the Project. The setting of the Project site at the time the NOP was published is described as part of the existing conditions within **Section 3.0, Project Description** and throughout **Section 4.0, Environmental Impact Analysis**, of this EIR. The discussion within the respective sections provides a description of the environmental conditions in regard to the individual environmental issues.

The No Project Alternative assumes the Project would not be implemented and proposed land uses, Specific Plan, and other improvements would not be implemented related to the Project.

Under this alternative, the adoption of the Specific Plan would not occur, and therefore, no associated development would be developed. The existing conditions and uses would remain in operation under the No Project Alternative. Accordingly, the No Project Alternative provides a comparison between the environmental impacts of the Project as compared to the current environmental conditions, resulting from not approving or denying the Project. The No Project Alternative would not develop 695 dwelling units, the 335,700 square feet (SF) of developable commercial space, utility infrastructure, public roads, and the public park that would otherwise occur under the Project.

### 1.6.2 Reduced Retail By 20 Percent Alternative

The Reduced Retail Development by 20 Percent Alternative assumes the development of commercial uses, but at a smaller retail square footage (20 percent less) than what is proposed for the Project. The Project proposes a projected maximum net development of approximately 335,700 SF of general commercial uses, which include 232,800 SF of retail space, 11,000 SF of restaurant space, and 91,900 SF

of self-storage space. Alternative 2 would reduce the Project's proposed retail space from 232,800 SF to 186,240 SF (or 5.34 to 4.07 acres). This would result in a 20 percent reduction of projected workforce, and customer base, resulting in a trip generation reduction of 20 percent from 8,616 daily trips to approximately 6,893 daily trips. Although the overall project area would be built out in a similar manner as the Project, Reduced Retail Development by 20 Percent Alternative would have a smaller development footprint.

Thus, Reduced Retail Development by 20 Percent Alternative would minimize impacts related to the scale of the Project. However, the Project's other proposed components would remain consistent under Reduced Retail Development by 20 Percent Alternative.

### 1.6.3 No Commercial Alternative

The No Commercial Alternative assumes that the Project Applicant would not develop any commercial development and would limit the Project's commercial component as a zone change only. Development under the No Commercial Alternative would only consist of the development of 695 dwelling units, and would forgo the 335,700 SF of combined retail, restaurant, and self-storage spaces that are proposed by the Project. Parcels that would be rezoned for commercial use would remain undeveloped or would be developed by a separate project applicant in the foreseeable future. Additionally, the Specific Plan would not include entitlements for commercial development and any future commercial development (by others) would be subject to the Specific Plan's design standards and provisions. All other Project components would stay the same.

### 1.6.4 Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior Alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the summary of information presented in **Table 6-1, Comparison of Project Alternatives Environmental Impacts with the Project**, the environmentally superior alternative is the No Commercial Alternative; see **Section 6.0, Alternatives**. Because the No Commercial Alternative would reduce the Project to only its residential components, this Alternative has fewer environmental impacts than the Project or any of the other alternatives.

Section 15126.6(e)(2) of the State CEQA Guidelines states that if the "No Project" alternative is found to be environmentally superior, "the EIR shall also identify an environmentally superior alternative among the other alternatives. The No Project Alternative was not found to be environmentally superior.

The context of an environmentally superior alternative is based on the consideration of several factors including the reduction of environmental impacts to a less than significant level, the Project objectives, and an alternative's ability to fulfill the objectives with minimal impacts to the existing site and surrounding environment. According to **Table 6-1**, the No Commercial Alternative would be the

environmentally superior alternative because it would reduce some of the potentially significant impacts of the Project. However, while the No Commercial Alternative is the environmentally superior alternative, it is not capable of meeting all of the basic objectives of the Project.

## 1.6 SIGNIFICANT AND UNAVOIDABLE IMPACTS

The Projects potentially significant impacts are defined in **Sections 4.1, Aesthetics** through **4.18, Wildfire**. As noted in these sections, most of the potentially significant impacts identified can be mitigated to a less than significant level through implementation of feasible mitigation measures with the exception of air quality and greenhouse gas emissions.

## 1.7 SUMMARY OF ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

**Table 1-1, Summary of Environmental Impacts and Mitigation Measures**, provides a summary of significant impacts and proposed mitigation measures associated with the Project as identified in this EIR. Refer to **Sections 4.1** through **4.18**, for a detailed description of the environmental impacts and mitigation measures for the Project. As noted above, all impacts of the Project can be mitigated to less than significant levels with the exception of air quality and greenhouse gas emissions.

**Table 1-1: Summary of Environmental Impacts and Mitigation Measures**

| Resource Impact  | Level of Significance   | Mitigation Measure(s)  | Level of Significance after Mitigation Implemented |
|--|-------------------------|--|--|
| <b>Section 4.1, Aesthetics</b>   |                         |  |  |
| <b>Impact 4.1-1:</b><br>Would the Project have a substantial adverse effect on a scenic vista?   | Less than Significant   | No mitigation is required.   | N/A  |
| <b>Impact 4.1-2:</b><br>Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?   | No Impact               | No mitigation is required.   | N/A  |
| <b>Impact 4.1-3:</b><br>In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | Less than Significant   | No mitigation is required.   | N/A  |
| <b>Impact 4.1-4:</b><br>Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?  | Less than Significant   | No mitigation is required.   | N/A  |
| <b>Section 4.2, Air Quality</b>  |                         |  |  |
| <b>Impact 4.2-1:</b><br>Would the Project, conflict with or obstruct implementation of the applicable air quality plan?  | Potentially Significant | <b>MM AQ-1: Low VOC Paint (Construction).</b> During construction, the Project shall utilize “Super-Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits (i.e., have a lower VOC content than what is required) put forth by SCAQMD’s Rule 1113 for all architectural coatings. Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Prior to issuance of building permits, the City of Grand Terrace Building and Safety Division shall confirm that plans include the following specifications: <ul style="list-style-type: none"> <li>▪ All architectural coatings will be super-compliant low VOC paints.</li> <li>▪ Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.</li> </ul> | Significant and Unavoidable                        |

| Resource Impact | Level of Significance | Mitigation Measure(s)  | Level of Significance after Mitigation Implemented |
|-----------------|-----------------------|--|--|
|                 |                       | <ul style="list-style-type: none"> <li>▪ Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.</li> <li>▪ For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of cleanup water and take it to the hazardous waste center (<a href="http://www.cleanup.org">www.cleanup.org</a>).</li> <li>▪ Use compliant low-VOC cleaning solvents to clean paint application equipment.</li> <li>▪ Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.</li> <li>▪ Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable.</li> <li>▪ Use high-pressure/low-volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.</li> </ul> <p><b>MM AQ-2: Vehicle Trip Reduction.</b> Develop a qualifying Commute Trip Reduction (CTR)/ Transportation Demand Management (TDM) plan to reduce mobile GHG emissions for all uses. The TDM plan shall be approved by the City of Grand Terrace prior to the issuance of building permits and incorporated into the Project’s Codes Covenants and Restrictions (CC&amp;Rs). The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The following measures shall be incorporated into the TDM plan.</p> <p>TDM Requirements for Non-Residential Uses:</p> <ul style="list-style-type: none"> <li>▪ The Project Applicant shall consult with the local transit service provider on the need to provide infrastructure to connect the Project with transit services. Evidence of compliance with this requirement may include correspondence from the local transit provider(s) regarding the potential need for installing bus turnouts, shelters, or bus stops at the site.</li> <li>▪ The portion of the TDM plan for non-residential uses shall include, but not be limited to the following potential measures: ride-matching assistance, preferential carpool parking, flexible work schedules for carpools, half-time transportation coordinators, providing a website or message board for coordinating rides, designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles, and including bicycle end of trip</li> </ul> |  |

| Resource Impact | Level of Significance | Mitigation Measure(s)  | Level of Significance after Mitigation Implemented |
|-----------------|-----------------------|--|--|
|                 |                       | <p>facilities. This list may be updated as new methods become available. Verification of this measure shall occur prior to building permit issuance for the commercial uses.</p> <p>TDM Requirements for Residential Units:</p> <ul style="list-style-type: none"> <li>▪ Owner-Occupied Units. Upon a residential dwelling being sold or offered for sale, the Project Applicant shall notify and offer to the buyer or prospective buyer, as soon as it may be done, materials describing public transit, ridesharing, and nonmotorized commuting opportunities available in the vicinity of the Project. Such information shall be transmitted no later than the close of escrow. This information shall be submitted to the City of Grand Terrace Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.</li> <li>▪ Rental Units. Upon a residential dwelling being rented or offered for rent, the Project Applicant shall notify and offer to the tenant or prospective tenant, materials describing public transit, ridesharing, and nonmotorized commuting opportunities in the vicinity of the development. The materials shall be approved by the City of Grand Terrace. The materials shall be provided no later than the time the rental agreement is executed. This information shall be submitted to the City of Grand Terrace Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.</li> </ul> <p><b>MM AQ-3: Prohibition of Fireplaces.</b> The installation of wood-burning and natural gas devices shall be prohibited. The purpose of this measure is to limit emissions of ROG, NO<sub>x</sub>, particulate matter and visible emissions from wood-burning and natural gas devices used for primary heat, supplemental heat, or ambiance. This prohibition shall be noted on the deed and/or lease agreements for future property owners/tenants to obey.</p> <p><b>MM AQ-4: Electric Landscape Equipment.</b> Prior to the issuance of occupancy permits, the Planning Division shall confirm that the Project’s Codes Covenants and Restrictions (CC&amp;Rs) and/or tenant lease agreements include contractual language that all landscaping equipment used on-site shall be 100 percent electrically powered. All residential and non-residential properties shall be equipped with exterior electrical outlets to accommodate this requirement. This requirement shall be included in the third-party vendor agreements for landscape services for the building owner and tenants, as applicable.</p> <p><b>MM AQ-5: Low VOC Paint (Operations).</b> The Project Applicant shall require by contract specifications commercial development to use interior and exterior</p> |  |

| Resource Impact   | Level of Significance   | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
|---|-------------------------|---|--|
|   |                         | architectural coatings (paint and primer including parking lot paint) products that have a volatile organic compound rating of 10 grams per liter (g/L) or less (i.e., “Super Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits). Contract specifications shall be reviewed and approved by the City of Grand Terrace prior to the issuance of occupancy permits. This measure shall be made a condition of approval for continued upkeep of the property.   |  |
| <p><b>Impact 4.2-2:</b><br/>Would the Project, result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</p>   | Potentially Significant | Refer to <b>MMs AQ-1</b> through <b>AQ-5</b> .  | Significant and Unavoidable                        |
| <p><b>Impact 4.2-3:</b><br/>Would the proposed project, expose sensitive receptors to substantial pollutant concentrations?</p>   | Less than Significant   | No mitigation is required.  | N/A  |
| <p><b>Impact 4.2-4:</b><br/>Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</p>  | No Impact               | No mitigation is required.  | N/A  |
| <b>Section 4.3, Biological Resources</b>  |                         |   |  |
| <p><b>Impact 4.3-1:</b><br/>Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</p> | Potentially Significant | <p><b>MM BIO-1:</b> To avoid impacts to nesting migratory and/or special-status birds, the removal of any vegetation with the potential to support nesting migratory and/or special-status birds should be performed outside of the nesting season (February 1 through August 31, but potentially earlier if the site can support nesting raptors). If vegetation must be removed during the nesting season, then a qualified biologist should perform a nesting bird survey no more than three days prior to the removal of any vegetation. If active nests are identified at the site, then the nests should be avoided with an adequate buffer as determined by the biologist until the nests are no longer active and the young can survive independently from the nest.</p> <p><b>MM BIO-2:</b> A qualified biologist shall conduct a take avoidance (pre-construction) survey of all suitable habitat areas for burrowing owl. The survey shall follow the 2012 CDFW Staff Report on Burrowing Owl Mitigation, which indicates that a survey should be performed 14 to 30 days prior to any disturbance activities, with a follow up survey within 24 hours prior to the disturbance. If any burrowing owls are present at the time of the planned disturbance, then the burrowing owls will be passively excluded or passively relocated from the site to avoid direct harm to individual owls; however, exclusion/relocation of nesting owls must occur outside of the breeding season (February 1 to September 15) to avoid impacts to active nests. The</p> | Less than Significant with Mitigation Incorporated |

| Resource Impact   | Level of Significance   | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
|---|-------------------------|---|--|
|   |                         | exclusion/relocation of owls must be approved by CDFW. If applicable, a Burrowing Owl Exclusion/Relocation Plan should be prepared and submitted to CDFW for review and approval.   |  |
| <p><b>Impact 4.3-2:</b><br/>Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</p> | Potentially Significant | <p><b>MM BIO-3:</b> In addition to obtaining permits from the USACE, RWQCB, and CDFW, impacts to CDFW jurisdiction will require a Streambed Alteration Agreement and the Project shall implement mitigation consisting of one or more of the following options (mitigation would be required at a minimum 1:1 ratio to offset impacts):</p> <ol style="list-style-type: none"> <li>1) Avoidance and conservation of on-site waters;</li> <li>2) Establishment and/or enhancement of wetlands/riparian habitat on-site;</li> <li>3) Establishment and/or enhancement of wetlands/riparian habitat off-site;</li> <li>4) Purchase of credits from an approved mitigation bank/in-lieu fee program.</li> </ol> | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.3-3:</b><br/>Would the Project have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>                           | Potentially Significant | See <b>MM BIO-3</b> above.  | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.3-4:</b><br/>Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>                     | Less than Significant   | No mitigation is required.  | N/A  |
| <p><b>Impact 4.3-5:</b><br/>Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p>  | Less than Significant   | No mitigation is required.  | N/A  |
| <p><b>Impact 4.3-6:</b><br/>Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?</p>   | No Impact               | No mitigation is required.  | N/A  |



| Resource Impact  | Level of Significance   | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
|--|-------------------------|---|--|
| <b>Section 4.4, Cultural Resources</b>   |                         |   |  |
| <p><b>Impact 4.4-1:</b><br/>Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?</p>  | Potentially Significant | <p><b>MM CUL-1:</b> Applications for future development facilitated by the Project, shall be required to comply with the following mitigation measure that established the framework for evaluating any buildings to be impacted that may be in excess of 50 years.</p> <p>For any buildings/structures in excess of 50 years of age having its original structural integrity intact and not already fully evaluated in <b>Appendices C2</b> through <b>C5</b>, the applicant shall retain a qualified professional historian to determine whether the affected building/structure is historically significant. The evaluation of historic architectural resources shall be based on criteria such as age, location, context, association with an important person or event, uniqueness, or structural integrity, as indicated in State CEQA Guidelines §15064.5. A historical resource report shall be submitted by the applicant to the City for approval and shall include the methods used to determine the presence or absence of historical resources, evaluate the significance of any historical resources identified, identify potential impacts from the proposed project, and propose measures to mitigate any impacts. The City shall require implementation of appropriate measures based on the report to reduce impacts to less than significant, if possible. If not possible to reduce impacts to less than significant, additional CEQA review shall be required.</p> | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.4-2:</b><br/>Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</p>   | Potentially Significant | <p><b>MM CUL-2:</b> If unanticipated archaeological resources are exposed or encountered during construction of the Project, all ground disturbing activities within 50 feet of the potential resource(s) shall be suspended. A qualified archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards, shall evaluate the significance of the find and determine whether or not additional study is warranted based on significance under CEQA. The evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. The treatment plan shall be reviewed and approved by the qualified archaeologist and submitted to the City for approval.</p>   | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.4-3:</b><br/>Would the Project disturb any human remains, including those interred outdoors of dedicated cemeteries?</p>  | Potentially Significant | See <b>MM TCR-3</b> in <b>Section 4.16: Tribal Cultural Resources</b> below.  | Less than Significant with Mitigation Incorporated |
| <b>Section 4.5, Energy</b>   |                         |   |  |
| <p><b>Impact 4.5-1:</b><br/>Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?</p> | Less than Significant   | No mitigation is required.  | N/A  |

| Resource Impact   | Level of Significance | Mitigation Measure(s)      | Level of Significance after Mitigation Implemented |
|---|-----------------------|----------------------------|--|
| <p><b>Impact 4.5-2:</b><br/>Would the Project conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?</p>  | Less than Significant | No mitigation is required. | N/A  |
| <b>Section 4.6, Geology and Soils</b>   |                       |                            |  |
| <p><b>Impact 4.6-1:</b><br/>Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> <li>▪ Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</li> </ul> | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.6-2:</b><br/>Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> <li>▪ Strong seismic ground shaking?</li> </ul>  | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.6-3:</b><br/>Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> <li>▪ Seismic-related ground failure, including liquefaction?</li> </ul>   | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.6-4:</b><br/>Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> <li>▪ Landslides?</li> </ul>   | No Impact             | No mitigation is required. | N/A  |

| Resource Impact   | Level of Significance   | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
|---|-------------------------|---|--|
| <p><b>Impact 4.6-5:</b><br/>Would the Project result in substantial soil erosion or the loss of topsoil?</p>  | Potentially Significant | <p><b>MM GEO-1: Construction Monitoring.</b> No clearing and/or grading activities will be performed without the presence of a qualified geotechnical engineer. Construction monitoring, including testing for on-site pavement design, would be performed during and after the site rough grading operations. During and/or near the completion of site grading, additional expansion index testing would be conducted to characterize selected areas and to develop lot-specific recommendations for foundation design as related to the expansion potential of the graded site soils.</p> <p>During construction, the qualified geotechnical engineer will perform additional observation and testing in correlation of the findings of the City-approved final geotechnical investigations, and if applicable, provide supplemental investigation, with the actual subsurface conditions exposed during construction.</p> | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.6-6:</b><br/>Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</p> | Potentially Significant | Refer to <b>MM GEO-1</b> above.   | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.6-7:</b><br/>Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</p>  | Potentially Significant | Refer to <b>MM GEO-1</b> above.   | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.6-8:</b><br/>Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</p>   | Less than Significant   | No mitigation required.   | N/A  |
| <p><b>Impact 4.6-9:</b><br/>Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</p>  | Potentially Significant | <p><b>MM GEO-2:</b> All earth moving operations reaching beyond the disturbed surface soils, generally below the depth of two feet, should be monitored for paleontological resources. The monitor should be prepared to quickly salvage fossil remains as they are unearthed to avoid construction delays and should also collect samples of sediments that are likely to contain fossils of small invertebrates and vertebrates. However, the monitor must have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.</p>  | Less than Significant with Mitigation Incorporated |

| Resource Impact   | Level of Significance          | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
|---|--------------------------------|---|--|
|   |                                | <p>Collected samples of sediments should be processed to recover small invertebrate and vertebrate fossils, and the recovered specimens should be identified and prepared for curation at a repository with permanent retrievable storage.</p> <p>A report of findings, including as itemized inventory of recovered specimens, should be prepared upon completion of the steps outlined above. Approval of the report by the City of Grand Terrace would signify the completion of the mitigation program.</p> <p>After Project design has been finalized to determine the precise extent and location of planned ground disturbances, and prior to construction activity, a qualified paleontologist (to be retained by the Applicant) will prepare a paleontological resource monitoring plan (PRMP) for approval by the City.</p>   |  |
| <b>Section 4.7, Greenhouse Gas Emissions</b>  |                                |   |  |
| <p><b>Impact 4.7-1:</b><br/>Would the Project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?</p> | <p>Potentially Significant</p> | <p>Refer to <b>MM AQ-2</b> through <b>MM AQ-4</b> in <b>Section 4.2, Air Quality</b> above. The following additional mitigation is also required.</p> <p><b>MM GHG-1: Residential Renewable Energy Generation.</b> Prior to issuance of each residential building’s permit for each development phase, residential development within the Project site shall be required to install solar photovoltaic (PV) panels or other source of renewable electricity generation on-site, based on the maximum roof area available for solar (i.e., solar-ready zone). The solar-ready zone shall comply with Section 110.10 of the 2022 California Energy Code and meet with access, pathway, ventilation, and spacing requirements, and exclude skylight area.</p> <p>Each residential building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage. The schedule of photovoltaic system locations may be updated as needed.</p> <p><b>MM GHG-2: Building Energy Efficiency.</b> Prior to the issuance of building permits, future development within the Project shall be designed to achieve Leadership in Energy and Environmental Design (LEED) standards or meet or exceed CALGreen Tier 2 standards in effect at the time in order to exceed 2022 Title 24 energy efficiency standards by a minimum of 15 percent. Alternatively, the Project design shall include on-site renewable energy for future commercial development, for example the incorporation of solar panels into future Project commercial development, such that 15 percent of the on-site energy consumption is offset.</p> <p><b>MM GHG-3: Energy Efficient Appliances.</b> For residential projects, all major appliances (e.g., dishwashers, refrigerators, clothes washers and dryers, water heaters, and equipment for space heating) provided/ installed shall be electric (i.e., appliances that do not use natural gas, propane, or other fossil fuels) and Energy</p> | <p>Significant and Unavoidable</p>                 |

| Resource Impact  | Level of Significance   | Mitigation Measure(s)  | Level of Significance after Mitigation Implemented |
|--|-------------------------|--|--|
|  |                         | <p>Star certified or of equivalent energy efficiency where applicable. Prior to the issuance of the certificate of occupancy, the City of Grand Terrace shall verify implementation of this requirement.</p> <p><b>MM GHG-4: Solid Waste Diversion.</b> Each future development within the Project shall divert a minimum of 75 percent of landfill waste. Prior to issuance of certificate of occupancy, a recyclables collection and load area shall be constructed in compliance with City standards for recyclable collection and loading areas.</p>   |  |
| <p><b>Impact 4.7-2:</b><br/>Would the Project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?</p>  | Less than Significant   | Refer to <b>MM AQ-2</b> through <b>MM AQ-5</b> in <b>Section 4.2, Air Quality</b> and <b>MM GHG-1</b> through <b>MM GHG-4</b> , above.   | N/A  |
| <b>Section 4.8, Hazards and Hazardous Materials</b>  |                         |  |  |
| <p><b>Impact 4.8-1:</b><br/>Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</p>   | Less than Significant   | No mitigation is required.   | N/A  |
| <p><b>Impact 4.8-2:</b><br/>Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</p> | Potentially Significant | <p><b>MM HAZ-1:</b> Applicable to future development projects within the parcels assessed in the Phase I ESA and Limited Site Characterization (ESA2) included as DEIR <b>Appendix G2</b>, if signs of soil contamination, including staining or odor are encountered during ground-disturbance activities, construction shall halt, and the project-specific applicant/contractor is required to prepare a Phase II ESA to evaluate the potential environmental concern. If test results are positive for a potential impact, then remediation would be required to clean and detoxify the site, prior to continuing ground-disturbing activities.</p> <p><b>MM HAZ-2:</b> Prior to issuance of a demolition permit of the on-site structures, preparation of a demolition plan for the safe dismantling and removal of building components and debris including a plan for lead and asbestos abatement shall be prepared. The demolition plan shall be submitted to the City's (Building and Safety Department) for review and approval prior to commencement of demolition activities.</p> <p>Prior to demolition activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and California Division of Occupational Safety and Health (Cal/OSHA) certified building inspector to determine the presence or absence of asbestos-containing materials (ACMs). If ACMs are located,</p> | Less than Significant with Mitigation Incorporated |

| Resource Impact  | Level of Significance        | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
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|  |                              | <p>abatement of asbestos shall be completed prior to any activities that would disturb ACMs or create an airborne asbestos hazard.</p> <p>Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403.</p> <p><b>MM HAZ-3:</b> If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist prior to any activities that would create lead dust or fume hazard. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the Building Official.</p> <p><b>MM HAZ-4:</b> If old cesspools and/or septic systems are encountered during the future development of parcels identified in the Phase I ESA included as DEIR <b>Appendix G3</b> the landowner/developer shall provide for the removal and disposal of septic tank(s) in accordance with applicable federal, state, and local regulations.</p> <p><b>MM HAZ-5</b> Applicable to future development projects, prior to development of an area not documented in the Phase I ESAs included as DEIR <b>Appendices G1</b> through <b>G3</b>, project applicants shall be required to conduct a site-specific Phase I ESA to determine if any potential for significant impact exists. If the Phase I ESA identifies new environmental concerns on-site, a Phase II ESA shall be conducted. If the Phase II ESA identifies that remediation is necessary, such remediation shall occur in consultation with the appropriate regulatory agency (e.g., CUPA) prior to any site disturbing activities.</p> |  |
| <p><b>Impact 4.8-3:</b><br/>Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</p>   | <p>Less than Significant</p> | <p>No mitigation is required.</p>   | <p>N/A</p>   |
| <p><b>Impact 4.8-4:</b><br/>Would the project be located on a site which is included on a list of hazardous materials Project sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?</p> | <p>Less than Significant</p> | <p>No mitigation is required.</p>   | <p>N/A</p>   |

| Resource Impact  | Level of Significance | Mitigation Measure(s)      | Level of Significance after Mitigation Implemented |
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| <p><b>Impact 4.8-5:</b><br/>For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?</p> | No Impact             | No mitigation is required. | N/A  |
| <p><b>Impact 4.8-6:</b><br/>Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</p>   | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.8-7:</b><br/>Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</p>   | No impact             | No mitigation is required. | N/A  |
| <p><b>Section 4.9, Hydrology and Water Quality</b></p>   |                       |                            |  |
| <p><b>Impact 4.9-1:</b><br/>Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?</p>  | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.9-2:</b><br/>Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</p>   | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.9-3:</b><br/>Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</p>  | Less than Significant | No mitigation is required. | N/A  |

| Resource Impact  | Level of Significance | Mitigation Measure(s)      | Level of Significance after Mitigation Implemented |
|--|-----------------------|----------------------------|--|
| <ul style="list-style-type: none"> <li>▪ Result in substantial erosion or siltation on- or off-site?</li> </ul>  |                       |                            |  |
| <p><b>Impact 4.9-4:</b><br/>Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?</p> <ul style="list-style-type: none"> <li>▪ Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</li> </ul>  | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.9-5:</b><br/>Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?</p> <ul style="list-style-type: none"> <li>▪ Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</li> </ul> | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.9-6:</b><br/>Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?</p> <ul style="list-style-type: none"> <li>▪ Impede or redirect flood flows?</li> </ul>  | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.9-7:</b><br/>In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?</p>   | Less than Significant | No mitigation is required. | N/A  |



| Resource Impact   | Level of Significance   | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
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| <p><b>Impact 4.9-8:</b><br/>Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</p>  | Less than Significant   | No mitigation is required.  | N/A  |
| <p><b>Section 4.10, Land Use and Planning</b></p>   |                         |   |  |
| <p><b>Impact 4.10-1:</b><br/>Would the Project physically divide an established community?</p>  | Less than Significant   | No mitigation is required.  | N/A  |
| <p><b>Impact 4.10-2:</b><br/>Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?</p>  | Less than Significant   | No mitigation is required.  | N/A  |
| <p><b>Section 4.11, Noise</b></p>   |                         |   |  |
| <p><b>Impact 4.11-1:</b><br/>Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</p> | Potentially Significant | <p><b>MM NOI-1: On-Site Noise Attenuation.</b> As part of the Site Development Review Permit process for the proposed residential developments, a detailed acoustical study based on architectural plans shall be prepared by a qualified acoustical consultant and submitted to the City of Grand Terrace Community Development Department to demonstrate that all residential units would meet the City’s 60 dBA exterior noise standard for all common outdoor living areas. In addition, the acoustical study shall demonstrate that interior noise levels at all residential units at the Project site would meet the City’s 45 dBA threshold. This mitigation measure complies with the applicable sections of the California Building Code (Title 24 of the <i>California Code of Regulations</i>). The necessary noise reduction may be achieved by implementing noise control measures at the receiver locations. Where closed windows are required to achieve the interior 45 dBA CNEL limit, Project plans and specifications shall include ventilation as required by the California Building Code. The final grading and building plans shall incorporate the required noise barriers (patio enclosure, wall, berm, or combination wall/berm), and the property owner/developer shall install these barriers and enclosures.</p> <p><b>MM NOI-2: Stationary Noise Sources.</b> Prior to issuance of building permits, a Noise Assessment shall be prepared, for submittal and approval of the City of Grand Terrace City Planner, which demonstrates on-site placement of stationary noise sources at commercial uses would not exceed noise standards established in the City of Grand Terrace General Plan and City of Grand Terrace Municipal Code Chapter 8.108, Noise. The Noise Assessment shall verify that stationary noise sources (e.g., loading dock facilities, mechanical equipment, and parking lots) are adequately shielded and/or located at an adequate distance from on-site and off-</p> | Less than Significant with Mitigation Incorporated |

| Resource Impact   | Level of Significance   | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented |
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|   |                         | site sensitive receptors and residences in order to comply with noise regulations established by the City of Grand Terrace.   |  |
| <p><b>Impact 4.11-2:</b><br/>Generation of excessive groundborne vibration or groundborne noise levels?</p>   | Potentially Significant | <p><b>MM NOI-3: Construction Vibration.</b> Future development projects with construction activities requiring operation of vibratory rollers within 26 feet of a structure shall be required to prepare a project-specific vibration impact analysis to evaluate potential construction vibration impacts associated with the project, and to determine any specific vibration control mechanisms that shall be incorporated into the project’s construction bid documents to reduce such impacts. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Engineer prior to issuance of a grading permit.</p> | Less than Significant with Mitigation Incorporated |
| <p><b>Impact 4.11-3:</b><br/>For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?</p> | Less than Significant   | No mitigation is required.  | N/A  |
| <b>Section 4.12, Population and Housing</b>   |                         |   |  |
| <p><b>Impact 4.12-1:</b><br/>Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</p>   | Less than Significant   | No mitigation is required.  | N/A  |
| <p><b>Impact 4.12-2:</b><br/>Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</p>   | Less than Significant   | No mitigation is required.  | N/A  |
| <b>Section 4.13, Public Services</b>  |                         |   |  |
| <p><b>Impact 4.13-1:</b><br/>Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause</p>   | Less than Significant   | No mitigation is required.  | N/A  |

| Resource Impact  | Level of Significance | Mitigation Measure(s)      | Level of Significance after Mitigation Implemented |
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| significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: <ul style="list-style-type: none"> <li>▪ Fire Protection?</li> <li>▪ Police Protection?</li> <li>▪ Schools?</li> <li>▪ Other Public Facilities?</li> </ul> |                       |                            |  |
| <b>Section 4.14, Recreation</b>  |                       |                            |  |
| <b>Impact 4.14-1:</b><br>Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?   | Less than Significant | No mitigation is required. | N/A  |
| <b>Impact 4.14-2:</b><br>Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?  | Less than Significant | No mitigation is required. | N/A  |
| <b>Section 4.15, Transportation</b>  |                       |                            |  |
| <b>Impact 4.15-1:</b><br>Would the Project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?  | Less than Significant | No mitigation is required. | N/A  |
| <b>Impact 4.15-2:</b><br>Would the Project, conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?  | Less than Significant | No mitigation is required. | N/A  |
| <b>Impact 4.15-3:</b><br>Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?   | Less than Significant | No mitigation is required. | N/A  |

| Resource Impact  | Level of Significance          | Mitigation Measure(s)   | Level of Significance after Mitigation Implemented        |
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| <p><b>Impact 4.15-4</b><br/>Would the Project result in inadequate emergency access?</p>   | <p>Less than Significant</p>   | <p>No mitigation is required.</p>   | <p>N/A</p>  |
| <p><b>Section 4.16, Tribal Cultural Resources</b></p>  |                                |   |   |
| <p><b>Impact 4.16-1:</b><br/>Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p> <p>i. Would the Project be developed in an area listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?</p> <p>ii. Would the Project contain a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?</p> | <p>Potentially Significant</p> | <p>Refer to <b>MM CUL-2</b> above.</p> <p><b>MM TCR-1: Discovery of Tribal Cultural Resources.</b> In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, San Manuel Band of Mission Indians will be contacted if any such find occurs and be provided information and permitted/invited to perform a site visit when the archaeologist makes his/her assessment, so as to provide Tribal input. The archaeologist shall complete an isolate record for the find and submit this document to the applicant and Lead Agency for dissemination to the San Manuel Band of Mission Indians.</p> <p><b>MM TCR-2: Treatment and Disposition of TCRs.</b> If significant Native American historical resources are discovered and avoidance cannot be ensured, an SOI-qualified archaeologist shall be retained to develop an cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, the drafts of which shall be provided to San Manuel Band of Mission Indians for review and comment.</p> <p>All in-field investigations, assessments, and/or data recovery enacted pursuant to the finalized Treatment Plan shall be monitored by a San Manuel Band of Mission Indians Tribal Participant(s).</p> <p>The Lead Agency and/or applicant shall, in good faith, consult with San Manuel Band of Mission Indians on the disposition and treatment of any artifacts or other cultural materials encountered during the project.</p> <p>After the notification of discovery to the San Manuel Band of Mission Indians and assessments/evaluations have occurred, the following treatment/disposition of the TCRs shall occur:</p> <ul style="list-style-type: none"> <li>▪ Preservation-In-Place of the TCRs, if feasible as determined through coordination between the project archeologist, Master Developer or Site Developers, as applicable, and San Manuel Band of Mission Indians, is the preferred method of treatment. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity.</li> </ul> | <p>Less than Significant with Mitigation Incorporated</p> |

| Resource Impact | Level of Significance | Mitigation Measure(s)  | Level of Significance after Mitigation Implemented |
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|                 |                       | <ul style="list-style-type: none"> <li>▪ Should Preservation-In-Place not be feasible, the landowner shall accommodate the process for on-site reburial of the discovered items with the San Manuel Band of Mission Indians. This shall include measures and provisions to protect the future reburial area from any future impacts. During the course of construction, all recovered resources shall be temporarily curated in a secure location on site. The removal of any artifacts from the project site shall require the approval of the San Manuel Band of Mission Indians and all resources subject to such removal must be thoroughly inventoried with a tribal representative from San Manuel Band of Mission Indians to oversee the process. Reburial shall not occur until all cataloguing and basic recordation have been completed.</li> <li>▪ If Preservation-In-Place and reburial are not feasible, the landowner(s) shall relinquish ownership of all TCRs and a curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 shall be established. The collections and associated records shall be transferred, including title, to said curation facility by the landowner, and accompanied by payment of the fees necessary for permanent curation.</li> <li>▪ Any historic archaeological material that is not Native American in origin (non-TCRs) shall be curated at a public, non-profit institution with a research interest in the materials within the County of the discovery, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.</li> <li>▪ If discoveries were made during the project, a Monitoring Report shall be submitted to the County by the Archaeologist at the completion of grading, excavation, and ground-disturbing activities on the site. Said report will document monitoring and archaeological efforts conducted by the archaeologist and San Manuel Band of Mission Indians within 60 days of completion of grading. This report shall document the impacts to the known resources on the property, describe how each mitigation measure was fulfilled, document the type of cultural resources recovered, and outline the treatment and disposition of such resources. All reports produced will be submitted to the County of San Bernardino, appropriate Information Center, and San Manuel Band of Mission Indians.</li> </ul> <p><b>MM TCR-3: Procedures for Burials and Funerary Remains.</b> In accordance with California Health and Safety Code §7050.5, if human remains or funerary objects are encountered during any activities associated with the project, work in the</p> |  |

| Resource Impact  | Level of Significance        | Mitigation Measure(s)  | Level of Significance after Mitigation Implemented |
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|  |                              | <p>immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted within 24 hours of the discovery. The project lead/foreman shall designate an Environmentally Sensitive Area (ESA) physical demarcation/barrier 100 feet around the resource and no further excavation or disturbance of the site shall occur while the County Coroner makes his/her assessment regarding the nature of the remains. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with Public Resources Code §5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant (MLD) from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative will then determine, in consultation with the property owner, the disposition of the human remains.</p> <p>Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code §5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties. It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code §6254 (r).</p> |  |
| <b>Section 4.17, Utilities and Service Systems</b>   |                              |  |  |
| <p><b>Impact 4.17-1:</b><br/>Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of</p> | <p>Less than Significant</p> | <p>No mitigation is required.</p>  | <p>N/A</p>   |

| Resource Impact  | Level of Significance | Mitigation Measure(s)      | Level of Significance after Mitigation Implemented |
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| which could cause significant environmental effects?   |                       |                            |  |
| <b>Impact 4.17-2:</b><br>Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?   | Less than Significant | No mitigation is required. | N/A  |
| <b>Impact 4.17-3:</b><br>Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments? | Less than Significant | No mitigation is required. | N/A  |
| <b>Impact 4.17-4:</b><br>Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?  | Less than Significant | No mitigation is required. | N/A  |
| <b>Impact 4.17-5:</b><br>Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?   | Less than Significant | No mitigation is required. | N/A  |
| <b>Section 4.18, Wildfire</b>  |                       |                            |  |
| <b>Impact 4.18-1:</b><br>If located in or near SRA or lands classified as Very High FHSZ, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?  | Less than Significant | No mitigation is required. | N/A  |
| <b>Impact 4.18-2:</b><br>If located in or near SRA or lands classified as Very High FHSZ, would the Project, due to slope, prevailing winds, and other factors, exacerbate wildlife risks, and thereby expose Project occupants to pollutant                               | Less than Significant | No mitigation is required. | N/A  |

| Resource Impact  | Level of Significance | Mitigation Measure(s)      | Level of Significance after Mitigation Implemented |
|--|-----------------------|----------------------------|--|
| concentrations from a wildfire or the uncontrolled spread of a wildfire?   |                       |                            |  |
| <p><b>Impact 4.18-3:</b><br/>                     If located in or near SRA or lands classified as Very High FHSZ, would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</p> | Less than Significant | No mitigation is required. | N/A  |
| <p><b>Impact 4.18-4:</b><br/>                     If located in or near SRA or lands classified as Very High FHSZ, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</p>  | Less than Significant | No mitigation is required. | N/A  |



## 2.0 INTRODUCTION

### 2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

This document is a Draft Environmental Impact Report (EIR) prepared for the City of Grand Terrace (City or Lead Agency) for The Gateway at Grand Terrace Specific Plan (Project) in compliance with the California Environmental Quality Act (CEQA), found at Public Resources Code (PRC) §§21000-21189.57. CEQA is a statute that requires local and state agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The regulations for CEQA, known as the CEQA Guidelines, are located within the California Code of Regulations (CCR) at Title 14, Division 6, Chapter 3, §§15000-15387. This Project entails the buildout of residential, commercial, and public facility development divided amongst 22 Planning Areas (PAs), on approximately 112 acres of land within the southwest portion of the City.

This Draft EIR evaluates the potentially significant environmental impacts resulting from implementation of the Project (refer to the Discretionary Actions and Approvals section in **Section 3.0, Project Description** for a list of anticipated responsible and trustee agencies and Project approvals). **Section 3.0, Project Description**, provides detailed descriptions of the construction and operational components of the Project. **Section 4.0, Environmental Impact Analysis**, discusses the regulatory environment, existing conditions, environmental impacts, and mitigation measures for the Project. Following public review of the Draft EIR, a Final EIR will be prepared, in which the City will respond to public comments on the Draft EIR.

According to §15121 of the CEQA Guidelines, an EIR is an informational document which will inform public agency decision-makers and the public of the significant environmental effects of a proposed project. The purpose of this Draft EIR for the Project is to review the existing conditions at and in the vicinity of the Project site; identify and analyze the potential environmental impacts; and suggest feasible mitigation measures to reduce significant adverse environmental effects where warranted, as described in **Section 4.1, Aesthetics** through **Section 4.18, Wildfire**. Additionally, **Section 6.0, Alternatives**, analyzes alternatives to reduce significant adverse environmental effects. The potential impacts analyzed include both temporary construction-related effects and the long-term effects of development, operation, and maintenance of the Project.

#### Lead Agency

##### City of Grand Terrace

This Draft EIR has been prepared in accordance with CEQA and the CEQA Guidelines. CEQA requires lead agencies to consider potential environmental effects that may occur with implementation of a project and to avoid or substantially lessen significant effects to the environment when feasible. When a project may have a significant effect on the environment, the lead agency with primary responsibility for carrying out or approving the project is required to prepare an EIR.

This Draft EIR is being prepared as a Program EIR in accordance with §15168 and §15164 of the CEQA Guidelines, which states the following:

- a) *General. A program EIR is an EIR, which may be prepared on a series of actions that can be characterized as one large project and are related either:*
  - 1) *Geographically,*
  - 2) *As logical parts in the chain of contemplated actions,*
  - 3) *In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
  - 4) *As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*
  
- b) *Advantages. Use of a Program EIR can provide the following advantages. The Program EIR can:*
  - 1) *Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,*
  - 2) *Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,*
  - 3) *Avoid duplicative reconsideration of basic policy considerations,*
  - 4) *Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and*
  - 5) *Allow reduction in paperwork.*
  
- c) *Use with Later Activities. Subsequent activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared.*
  - 1) *If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration. That later analysis may tier from the program EIR as provided in Section 15152.*
  - 2) *If the agency finds that pursuant to Section 15162, no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record. Factors that an agency may consider in making that determination include, but are not limited to, consistency of the later activity with the type of allowable land use, overall planned*

- density and building intensity, geographic area analyzed for environmental impacts, and covered infrastructure, as described in the program EIR.*
- 3) *An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*
  - 4) *Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.*
  - 5) *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.*
- d) *Use with Subsequent EIRs and Negative Declarations. A program EIR can be used to simplify the task of preparing environmental documents on later activities in the program. The program EIR can:*
- 1) *Provide the basis in an Initial Study for determining whether the later activity may have any significant effects.*
  - 2) *Be incorporated by reference to deal with regional influences, secondary effects, cumulative impacts, broad alternatives, and other factors that apply to the program as a whole.*
  - 3) *Focus an EIR on a later activity to permit discussion solely of new effects which had not been considered before.*
- e) *Notice with Later Activities. When a law other than CEQA requires public notice when the agency later proposes to carry out or approve an activity within the program and to rely on the program EIR for CEQA compliance, the notice for the activity shall include a statement that:*
- 1) *This activity is within the scope of the program approved earlier, and*
  - 2) *The program EIR adequately describes the activity for the purposes of CEQA.*

Additionally, §15164 of the CEQA Guidelines states the following:

- a) *The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*
- b) *An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.*

- c) *An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.*
- d) *The decision-making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.*
- e) *A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.*

Therefore, this Draft Program EIR will act as the primary environmental document for all entitlements associated with the Specific Plan, including all discretionary approvals requested or required to implement the Project. The City as Lead Agency can approve subsequent actions without additional environmental documentation unless otherwise required by §21166 of CEQA and §15162 of the CEQA Guidelines. Section 21166 of CEQA states that:

*When an environmental impact report has been prepared for a project pursuant to this division, no subsequent or supplemental environmental impact report shall be required by the lead agency or by any responsible agency, unless one or more of the following events occurs:*

- a) *Substantial changes are proposed in the project which will require major revisions of the environmental impact report.*
- b) *Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report.*
- c) *New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.*

Additionally, §15162 of the CEQA Guidelines states that:

- a) *When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:*
  - 1) *Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
  - 2) *Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
  - 3) *New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was*

*certified as complete or the negative declaration was adopted, shows any of the following:*

- a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
- b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
- c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
- d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*

### **Trustee, Responsible, and Cooperating Agencies**

Under CEQA, a trustee agency is a State agency that has jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. A responsible agency is an agency other than the lead agency that has responsibility for carrying out or approving a project. Responsible and trustee agencies are consulted by the CEQA lead agency to ensure the opportunity for input and also review and comment on the Draft EIR. Responsible agencies also use the CEQA document in their decision-making. Several agencies other than the City may require permits, approvals, and/or consultation in order to implement various elements of the Project, as listed in the Discretionary Actions and Approvals section in **Section 3.0, Project Description**.

### **Compliance with CEQA**

According to the CEQA Guidelines (14 CCR §15064[f][1]), preparation of an EIR is required whenever a project may result in a significant effect on the environment. An EIR is an informational document used to inform public agency decision-makers and the general public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project while substantially lessening or avoiding any of the significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project. CEQA requires that state and local government agencies consider the environmental effects of projects over which they have discretionary authority before taking action on those projects.

This Draft EIR identifies and analyzes the environmental effects of the Project to the degree of specificity appropriate to the current proposed actions, as required by §15146 of the CEQA Guidelines. The analysis considers the activities associated with the Project in order to determine the short-term and long-term environmental effects associated with their implementation. This EIR discusses both temporary and

permanent impacts and direct and indirect impacts of the Project, in addition to cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

Based on significance criteria, the effects of the Project are categorized as either “no impact,” “less than significant impact,” “less than significant with mitigation incorporated,” or “significant unavoidable impact” (refer to **Section 4.0, Environmental Impact Analysis**). Mitigation measures are recommended for potentially significant impacts, to avoid or lessen, to the extent feasible and possible, the Project’s environmental impacts. In the event the Project results in significant unavoidable impacts even with implementation of feasible mitigation measures, the decision-makers may approve the Project based on a “Statement of Overriding Considerations”; see CEQA Guidelines §15093. This determination requires the decision-makers to balance the benefits of the Project to determine if they outweigh identified unavoidable impacts.

A Statement of Overriding Considerations is required by CEQA Guidelines §15093 which provides, in part, the following:

- (a) CEQA requires that the decision-maker balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the Project. If the benefits of the Project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”*
- (b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.*
- (c) If an agency makes a Statement of Overriding Considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.*

## 2.2 PROPOSED PROJECT

The City previously prepared an Initial Study (IS) and a Notice of Preparation (NOP) for the Project. The documents were made available for public review from April 26, 2018 through May 25, 2018. Since then, the description and characteristics of the Project have evolved. As part of the updated Project, the City revised the NOP and circulated it for a 30-day public review period from February 8, 2021, through March 9, 2021. This Draft EIR is based on the revised NOP.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project’s PAs will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement. A summary of each of these discretionary approvals that are sought by the Project Applicant is provided below.

- 1. Specific Plan (SP 00-17)** – The Gateway at Grand Terrace Specific Plan document (Project) establishes the necessary plans, development standards, regulations, zoning, infrastructure requirements, design guidelines and implementation programs on which subsequent project-related development activities (i.e., future implementing development projects) are to be founded.
- 2. General Plan Amendment (GPA 17-01)** – A General Plan Amendment is required in order to amend the existing Mixed Use (MU) land use designation to a new General Plan land use designation – The Gateway at Grand Terrace Specific Plan (GSP) for the entire Project site. The proposed land uses within the proposed GSP land use designation would include Residential 4 – 20 dwelling units per acre (R 4-20), General Commercial (GC), Park, Open Space, drainage facilities, utilities, and roads. In addition, the Project area would also include Utility/R 4-20, Utility/GC, and Open Space Overlays.
- 3. Zone Change (ZC 17-02)** - The City's zoning map currently designates the Project site as Commercial Manufacturing (CM), Restricted Manufacturing (MR), and Industrial (M2). The Project proposes a Zone Change to amend the existing CM, MR, and M2 zoning designations to a new Zoning Designation – The Gateway at Grand Terrace Specific Plan (GSP) to implement a horizontal mixed-use development of residential, commercial, public facilities, and public park as set forth in the proposed Specific Plan.
- 4. Tentative Tract Map No. 20501 (TTM 18-01) for Conveyance Purposes** - In order to facilitate development of the PAs with the Specific Plan, a Tentative Tract Map for Conveyance Purposes is proposed in order to establish legal parcels for the PAs, dedicate right of way for public roadway construction, and establish easements for public utilities and other facilities. Subsequent maps will be required for any future development on the PAs to occur.
- 5. Development Agreement** - A Development Agreement is proposed to identify parties responsible for the construction of major infrastructure improvements, phasing schedule of development and infrastructure improvements, financial commitments for the construction of the infrastructure improvements, vesting of applicable codes and standards, and vesting of development impact fees for a specified term and appropriate extension metrics.

## 2.3 EIR SCOPE, ISSUES, AND CONCERNS

The City took the previous actions:

1. Prepared an IS for the proposed Project to provide an evaluation of the potentially significant impacts that could result from the Project which was made available for public review from April 26, 2018 through May 25, 2018.

The City also undertook the following action for the proposed Project:

1. Distributed an NOP and IS for the initial proposed Project to request input from interested parties on the scope of the evaluation to be undertaken in the Draft EIR. The NOP, along with the IS were distributed for a 30-day public review period from February 8, 2021, through March 9, 2021.
2. The City held a public scoping meeting on February 22, 2021, to request input from interested parties on the scope of the evaluation to be undertaken as part of the Draft EIR.

The baseline conditions for the environmental impacts which this Draft EIR evaluates to determine significance were established at the time the NOP and IS were released. Note that since then, the description and characteristics of the Project have evolved and are addressed in this Draft EIR.

The NOP and IS identified the following environmental resource categories from CEQA Guidelines Appendix G to be addressed in the Draft EIR:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities & Service Systems
- Wildfire

The NOP also noted that the Draft EIR would evaluate the potential for the Project to cause direct and indirect growth inducing impacts, and alternatives would be considered.

## Public Participation

In compliance with the CEQA Guidelines, the City has provided opportunities for various agencies and the public to participate in the environmental review process. During preparation of the Draft EIR, various Federal, State, regional, and local government agencies and other interested parties were contacted to solicit comments on the scope of review in this document. The NOP was sent to various responsible agencies, trustee agencies, and interested parties. Pursuant to CEQA Guidelines §15082, the City circulated the NOP directly to public agencies (including the State Clearinghouse Office of Planning and Research), special districts, and members of the public who had requested such notice. A total of 16 comment letters were received in response to the NOP during the comment period (see **Appendix L, NOP and Scoping Meeting Materials**). Comment letters were received from agencies, organizations, and individuals.



## Native American Consultation

The City contacted the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File (SLF). On February 22, 2021, the NAHC responded stating that a tribal sensitive area was located within the Project area. The NAHC suggested that 30 individuals representing 21 Native American tribal groups or individuals be contacted who may have knowledge of cultural resources within the Project area. The City mailed letters to each of these contacts requesting any information they may have regarding Native American cultural resources within the Project area. AB 52 and SB 18 consultation and correspondence (including the aforementioned response letter) is included as **Appendix C3**. Refer to **Section 4.16, Tribal Cultural Resources** for more details.

## Public Review of Draft EIR

The Draft EIR is available to the general public for review at the locations listed below and on the City's website at:

[https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning)

In accordance with CEQA Guidelines §§15087 and 15105, this Draft EIR will be circulated for a 45-day public review period. The public is invited to comment in writing on the information contained in this document. Interested agencies and members of the public are invited to provide written comments on the Draft EIR and are encouraged to provide information that they believe should be included in the EIR.

Comment letters should be sent to the City of Grand Terrace to:

Konrad Bolowich, City Manager/Acting Planning Director  
22795 Barton Road  
Grand Terrace, CA 92313

## Final EIR

Upon completion of the 45-day Draft EIR public review period, the City will evaluate all written comments received during the public review period on the Draft EIR. Pursuant to CEQA Guidelines §15088, the City will prepare written responses to comments relating to environmental issues. Pursuant to CEQA Guidelines §15132 (Contents of Final Environmental Impact Report), the Final EIR will be prepared and will include:

- a) The draft EIR or a revision of the draft;
- b) Comments and recommendations received on the Draft EIR either verbatim or in summary;
- c) A list of persons, organizations, and public agencies commenting on the Draft EIR;
- d) The responses of the Lead Agency's to significant environmental points raised in the review and consultation process; and
- e) Any other information added by the Lead Agency.

Additionally, pursuant to CEQA Guidelines §15088 (Evaluation of and Response to Comments), after the Final EIR is completed, the City of Grand Terrace will provide a written proposed response to each public agency on comments made by that public agency at least ten days prior to certifying the EIR.

### **Certification of the Final EIR**

The Draft EIR, as revised by the Final EIR, will be considered by the City of Grand Terrace City Council for certification, consistent with CEQA Guidelines §15090, which states:

- (a) Prior to approving a project, the lead agency shall certify that:*
- 1) The final EIR has been completed in compliance with CEQA;*
  - 2) The final EIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and*
  - 3) The final EIR reflects the lead agency's independent judgment and analysis.*

Regarding the adequacy of an EIR, according to CEQA Guidelines §15151, "An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."

## **2.4 ENVIRONMENTAL REVIEW PROCESS**

This Draft EIR, with an accompanying Notice of Completion (NOC) and Notice of Availability (NOA), is circulated to the State Clearinghouse, trustee agencies, responsible agencies, other government agencies, and interested members of the public for a 45-day review period as required by CEQA. During this period, public agencies and members of the public may provide written comments on the analysis and content of the Draft EIR. In reviewing a Draft EIR, readers should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and on ways in which the significant effects of the proposed Project might be avoided or mitigated. Following the close of the public comment period, a Final EIR will be prepared to respond to all substantive comments raising environmental issues surrounding the proposed Project. The Final EIR will be completed prior to the final public hearing to consider certification of the EIR and approval of the proposed Project. Concurrent with the City's consideration of the Final EIR, the Planning Commission will also consider the merits of the proposed Project itself. This consideration may render a request to revise the proposed Project, or an approval or denial. If the proposed Project is approved, the Planning Commission may require mitigation measures.

## 2.5 REPORT ORGANIZATION

This Draft EIR is organized into the following nine Sections:

**Section 1.0 Executive Summary**, provides a Project summary and summary of environmental impacts, and the proposed mitigation measures and alternatives.

**Section 2.0 Introduction**, provides CEQA compliance information.

**Section 3.0 Project Description**, provides Project history, as well as the existing environmental setting, Project characteristics and objectives, phasing, and anticipated permits and approvals that may be required for the Project.

**Section 4.0 Environmental Impact Analysis**, provides a discussion of the existing conditions for each of the environmental resource categories. This section also describes methodologies for significance determinations, identifies both short-term and long-term environmental impacts of the Project, recommends mitigation measures to reduce the significance of environmental impacts, and identifies any areas of potentially significant and unavoidable impacts. This section includes a discussion of cumulative impacts that could arise as a result of the implementation of the proposed Project.

This analysis of impacts for each resource examines the Project's temporary (i.e., construction) and permanent (i.e., operational) effects based on application of the significance criteria/thresholds outlined in each resource section. For each criterion, the analyses are generally divided into two main categories: (1) temporary impacts; and (2) permanent impacts. Each criterion is discussed in the context of Project components that share similar characteristics/geography. The impact conclusions consider the potential for changes in environmental conditions, as well as compliance with the regulatory framework enacted to protect the environment.

**Section 5.0 Other CEQA Considerations**, discusses significant and irreversible environmental changes and growth-inducing impacts.

**Section 6.0 Alternatives**, describes potential Project alternatives, including alternatives considered but rejected from further consideration, the No Project Alternative and two Project Alternatives, and identifies the Environmentally Superior Alternative.

**Section 7.0 Effects Found Not to Be Significant**, describes potential impacts that have been determined not to be significant throughout the EIR process.

**Section 8.0 Organizations and Preparation**, identifies the CEQA Lead Agency and EIR preparation team, as well as summarizes the EIR consultation process.

## 2.6 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with CEQA Guidelines §15148 or have been incorporated by reference in accordance with CEQA Guidelines §15150, which encourages incorporation by reference as a means of reducing redundancy and the length of environmental reports.

The following documents are hereby incorporated by reference into this EIR and are available for review online. Information contained within these documents has been utilized for various sections of this EIR.

**City of Grand Terrace General Plan (Adopted April 27, 2010).** The City of Grand Terrace General Plan (Grand Terrace GP) constitutes the City's long-term plans, goals, and objectives for development within the City's jurisdiction. The Grand Terrace GP addresses a broad range of issues relating to the City's physical, economic, and social development. It contains an evaluation of existing conditions and provides the long-term goals and policies necessary to guide growth and development in the direction that the community desires. The Grand Terrace GP serves as a decision-making tool to guide future growth and development decisions. The Grand Terrace GP addresses the following elements: Land Use Element, Circulation Element, Open Space and Conservation Element, Public Health and Safety Element, Noise Element, Public Services and Facilities Element, Housing Element, and Sustainable Development Element.

The Grand Terrace GP is available for review on the City's website at:

[https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning)

**City of Grand Terrace General Plan Draft and Final Program Environmental Impact Reports (Certified January 2010 and March 2010, respectively).** The Grand Terrace GP Draft Program EIR was prepared to assess the potential environmental impacts associated with the proposed Grand Terrace GP. The Program EIR summarizes potential environmental impacts associated with implementation of the Grand Terrace GP, including growth inducing and cumulative impacts. Information from the Grand Terrace GP EIR is incorporated herein, since it contains extensive information pertaining to impacts associated with the implementation of City policies and objectives. The Grand Terrace Final Program EIR contained comments and the City's response to comments on the Draft FEIR, the revisions to the Draft EIR, and the Mitigation Monitoring and Reporting Plan, containing all the mitigation measures presented in the Draft EIR.

The General Plan EIR documents are available for review on the City's website at:

[https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning)

**City of Grand Terrace Active Transportation Plan (October 2018).** The comprehensive Active Transportation Plan (ATP) provides recommended actions to; support increasing bicycling and walking in the City; support non-motorized travel infrastructure and options to support the projected population growth; and provide safer, walkable streets for the students into the City for school.

The City's ATP is available for review on the City's website at:

[https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning)

**City of Grand Terrace Municipal Code (updated January 12, 2023).** The City of Grand Terrace Municipal Code (Grand Terrace MC) is organized to make the laws of the City as accessible as possible to City officials, City employees, and private citizens. The Grand Terrace MC is referenced throughout this Draft EIR to establish the Project's baseline requirements according to the Specific Plan and Grand Terrace MC regulations.

The Grand Terrace MC can be accessed on the City's website at:

[https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning)

**Southern California Association of Governments 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy – Connect SoCal.** The Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) or “Connect SoCal” was adopted on September 2, 2020. Connect SoCal is SCAG’s long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies, and between the people whose collaboration can improve the quality of life for southern Californians. Connect SoCal addresses the cumulative impact of future development and associated infrastructure improvements for the SCAG region, which includes San Bernardino County and the City of Grand Terrace.

SCAG’s Connect SoCal can be accessed online at:

<https://scag.ca.gov/read-plan-adopted-final-plan>

## 3.0 PROJECT DESCRIPTION

### 3.1 PURPOSE

The City of Grand Terrace (City), as the Lead Agency under the California Environmental Quality Act (CEQA), has prepared this Draft Environmental Impact Report (EIR) for The Gateway at Grand Terrace Specific Plan (Project).

The following Project Description is provided in conformance with CEQA Guidelines §15124 (14 California Code of Regulations [CCR] §15124) which discusses the geographic setting, Project location, Project setting, current City land use and zoning designations, Project characteristics, Project objectives, and discretionary actions required to implement the Project. This information will be the basis for analyzing the Project's impacts on the existing physical environment in **Section 4.0, Environmental Impact Analysis** of this EIR. The Project Description contains the following:

1. The precise location and boundaries of the Project shown on a detailed map, along with a regional location map;
2. A statement of the objectives sought by the Project including the underlying purpose of the Project and Project benefits;
3. A description of the Project's technical, economic, and environmental characteristics along with engineering and public service facilities details; and
4. A statement describing the intended uses of the EIR, including a list of all necessary approvals and permits, a list of agencies that may use the document in their decision-making, and a list of related consultation and environmental review necessary under local, state, and federal laws, regulations, and policies.

The information presented within the Project Description will both accurately describe the Project and assist in further review and assessment of its potential environmental impacts.

### 3.2 LEAD AGENCY

The lead agency is the public or responsible agency with primary responsibility over a proposed project. Where two or more public agencies will be involved with a project, CEQA Guidelines §15051 establishes criteria for identifying the lead agency. In accordance with CEQA Guidelines §15051(b)(1), "The Lead Agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose..." Based on the criterion above, the City is the lead agency for the Project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project.

### 3.3 PROJECT APPLICANT(S)/SPONSOR(S)

#### *Project Applicant(s):*

**Lewis Management Corp.**

1156 N. Mountain Avenue

Upland, CA 91786

Contact: Adam Collier, Project Manager

### 3.4 OVERVIEW AND BACKGROUND

During the early years of the City, most of the Project area was used for orchards. Over the years, some land was converted to dry farming or left vacant. For more than two decades, the City has attempted to foster development in the Specific Plan area (also known as the Southwest Commercial area). However, the lack of local and regional drainage facilities and roadway access has hampered development.

In 2010, the City of Grand Terrace General Plan (Grand Terrace GP) was updated to re-designate most of the Project site to Mixed Use. Approximately 53 acres of the Project's total acreage was acquired by the Grand Terrace Community Redevelopment Agency (RDA) between 2000 and 2011 with RDA tax increment funds. With the dissolution of redevelopment agencies in 2011, the City, as the Successor Agency for the RDA, developed a Long-Range Property Management Plan (LRPMP) to control the disposition of its real property assets.

In December 2016, the City and Lewis Land Developers, LLC, (Project Applicant) entered into a Disposition and Development Agreement (DDA) in which Lewis purchased approximately 55 acres of land from the City. The vision was to incorporate the 55 acres of land to the rest of the adjacent Lewis property. With the incorporation of the 55 acres, the Project site totals approximately 112 acres. As part of the DDA, Lewis agreed to prepare The Gateway at Grand Terrace Specific Plan document (Specific Plan).

#### **Memorandum of Understanding**

In April 2017, the City and Lewis entered into a Memorandum of Understanding (MOU), identifying the obligations of the parties relative to the street improvements, storm drain improvements, and fee credits/reimbursement, amongst other things. Subsequently, the City and Lewis entered into a 1<sup>st</sup> Amendment to the MOU in January 2020, clarifying the terms of the obligations and providing additional detail.

### 3.5 PROJECT LOCATION, SETTING, AND SURROUNDING LAND USES

#### **Regional Setting**

The City is located in the San Bernardino Valley within San Bernardino County approximately 60 miles east of Los Angeles; refer to **Exhibit 3-1, Regional Map**. The City occupies approximately 3.6 square miles and is bounded by the Santa Ana River to the northwest, Blue Mountain to the east, and the City of Colton to the north, east, and west. The City is located within Section 5 of Township 2 South, Range 4 West, of the U.S. Geological Survey (USGS) 7.5-inch quadrangle map San Bernardino South. Main Street within the City

marks the southern limit of the City and coincides with the boundary between San Bernardino and Riverside counties. Interstate 215 (I-215) traverses the northwest portion of the City. The City's Sphere of Influence encompasses the current City limits.

## Project Location

The Project consists of 32 parcels on approximately 112 acres. **Table 3-1, Project Assessor Parcel Numbers**, below identifies 32 parcels within the Project boundary.

**Table 3-1: Project Assessor Parcel Numbers**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| 1167-151-78 | 1167-151-12 | 1167-151-21 | 1167-151-64 |
| 1167-151-79 | 1167-151-13 | 1167-151-23 | 1167-151-73 |
| 1167-161-33 | 1167-171-11 | 1167-181-01 | 1167-151-71 |
| 1167-161-02 | 1167-171-12 | 1167-151-18 | 1167-151-11 |
| 1167-161-03 | 1167-151-20 | 1167-151-68 | 1167-151-14 |
| 1167-161-04 | 1167-151-22 | 1167-151-65 | 1167-151-24 |
| 1167-161-05 | 1167-181-12 | 1167-151-74 | 1167-151-17 |
| 1167-151-09 | 1167-181-13 | 1167-151-75 | 1167-151-10 |

The Project site is located in the southwest portion of the City and bounded by Commerce Way and an existing commercial parking lot to the north; the northern portion of Grand Terrace High School to the south; commercial and residential uses to the east; and I-215 to the west. The southern boundary of the Project is also in close proximity and approximately 0.27 mile north of Main Street.

Regional access is available via I-215 at Main Street and Barton Road. Local access is available via Taylor Street-Commerce Way, Michigan Street, Van Buren Street, De Berry Street, and Main Street. Refer to **Exhibit 3-2, Local Vicinity Map**.

## Existing Conditions

The Project site's geography is relatively flat elevation ranges from approximately 975 feet on the northeastern end of the site to approximately 945 feet on the southwestern corner. The Project site consists predominately of vacant land, as well as storage commercial uses, and six non-conforming residences. A concrete-lined storm channel carries runoff from a storm drain at the western end of De Berry Street, southwest beneath the Gage Canal and into the westward-flowing drainage way that crosses the Project area from the western end of Van Buren Street. This drainageway drains beneath I-215 in a concrete-lined channel, continues to the southwest beneath La Cadena Drive and flows into a debris basin approximately 0.8 mile off-site.

There is a decommissioned Union Pacific Railroad (UPR) line that traverses the Project site in a north/south direction that has been acquired by the City and would be used as part of the extension of Commerce Way from its existing terminus point south to the existing Taylor Street, and subsequent widening of the existing Taylor Street portion all the way south to its connection at Main Street. There are three wells owned by the City of Riverside located in the Project site that would remain but may be modified or relocated.



The existing non-lighted ball field northwest of Veterans Freedom Park is proposed to be relocated northwest of the Grand Terrace High School sports fields and constructed as a new lighted baseball field and a public playground. An existing Southern California Edison (SCE) substation located south of the Project site would remain in addition to the SCE power lines that cross the Project site north of the substation. Riverside Canal Power Company owns the property where a decommissioned power station was located. Two billboard signs adjacent to I-215 would remain. There is a total of six existing single-family residences with associated accessory structures along De Berry Street and Van Buren Street. Five out of the six residences are currently occupied. The remaining building is vacant.

### **Existing and Proposed Land Use Designation and Zoning**

The City's General Plan (Grand Terrace GP) currently designates the Project site as Mixed Use (MU). The MU designation allows for multiple types of land uses which include commercial, business park, residential, open space, and recreational uses. Compatible uses should be placed horizontally or vertically on the site. All mixed-use projects are required to submit a specific plan or planned development to demonstrate compatibility between the proposed uses as well as buffering from adjacent properties. The proposed Specific Plan (SP 00-17) has been prepared pursuant to California Government Code §65454.

Although the existing MU land use designation would allow for a variety of uses on a single site, a General Plan Amendment (GPA 17-01) is required to accommodate the higher density residential developments. Accordingly, the proposed GPA would amend the existing MU land uses designation to a new General Plan land use designation - the Gateway at Grand Terrace Specific Plan (GSP) for the entire Project site.

According to the City's zoning map, the Project site is currently zoned as Commercial Manufacturing (CM), Restricted Manufacturing (MR), and Industrial (M2). The Project proposes a Zone Change (ZC 17-02) to amend the existing CM, MR, and M2 zoning to a new zoning – Gateway at Grand Terrace Specific Plan (GSP) to implement a horizontal mixed-use development of residential, commercial, public facilities, and public park as set forth in the proposed Specific Plan.

The following **Table 3-2, Project Site and Surrounding Existing Land Use Designations and Zoning** describes the current land use designations and zoning for both the Project and surrounding areas. In addition, refer to **Exhibit 3-3, Existing General Plan Land Use Designations, Exhibit 3-4, Existing Zoning Designation, Exhibit 3-5, Proposed General Plan Land Use Designation, and Exhibit 3-6, Proposed Zoning Designation** for more details.

**Table 3-2: Project Site and Surrounding Existing Land Use Designations and Zoning**

| Location  | Existing Land Use <sup>1</sup>  | Existing Zoning <sup>2</sup>  | Proposed Land Use                            | Proposed Zoning                              |
|---|---|---|--|--|
| Project Site  | Mixed Use   | Commercial Manufacturing (CM)<br>Restricted Manufacturing (RM)<br>Industrial (M-2)                                  | Gateway at Grand Terrace Specific Plan (GSP) | Gateway at Grand Terrace Specific Plan (GSP) |
| North   | General Commercial<br>Industrial                                      | General Commercial (C2)<br>Commercial Manufacturing (CM)  | -  | -  |
| South   | Industrial<br>Public  | Restricted Manufacturing (MR)<br>Industrial (M-2)<br>Public Facilities (PUB)  | -  | -  |
| East  | General Commercial<br>Low Density Residential<br>Industrial<br>Public | Single Family (R1-7.2)<br>Commercial Manufacturing (CM)<br>Restricted Manufacturing (MR)<br>Public Facilities (PUB) | -  | -  |
| West*   | Industrial Park<br>Light Industrial                                   | Industrial Park (I-P)<br>Light Industrial (M-1)   | -  | -  |
| <p>*City of Colton General Plan – Land Use Plan and Zoning Map<br/> Source: City of Grand Terrace. (2011). <i>General Plan Land Use Map</i>. Available at: <a href="https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&amp;%20Development/Planning/general_plan_land_use_map_9-1-2017.pdf">https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&amp;%20Development/Planning/general_plan_land_use_map_9-1-2017.pdf</a> (accessed April 2023).<br/> City of Grand Terrace. (2017). <i>Zoning Map</i>. Available at: <a href="https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&amp;%20Development/Planning/zoning_map_sep_2017.pdf">https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&amp;%20Development/Planning/zoning_map_sep_2017.pdf</a> (accessed April 2023).</p> |   |   |  |  |

### 3.6 PROJECT CHARACTERISTICS

The Project being evaluated in this Program Draft EIR is a Specific Plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

#### The Gateway at Grand Terrace Specific Plan Overview

Upon adoption, the Specific Plan would serve as the new GP land use and zoning designations and as the regulatory document for future development within the Project site. While the Grand Terrace Municipal Code (Grand Terrace MC) Title 18 establishes development standards for the entire City's overall zones,

<sup>1</sup> City of Grand Terrace. Amended September 27, 2016. *General Plan Land Use Map*. Retrieved from [https://p1cdn4static.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/general\\_plan\\_land\\_use\\_map\\_9-1-2017.pdf](https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/general_plan_land_use_map_9-1-2017.pdf). Accessed January 4, 2022.

<sup>2</sup> City of Grand Terrace. Amended October 11, 2016. *Zoning Map*. Retrieved from: [https://p1cdn4static.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/zoning\\_map\\_sep\\_2017.pdf](https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/zoning_map_sep_2017.pdf). Accessed January 4, 2022.

the proposed GSP zone designation establishes the necessary plans, land uses, development standards, regulations, zoning, infrastructure requirements, design guidelines and implementation programs subsequent development activities. It is intended that site and architectural review, grading permits and building permits, or any other action requiring ministerial or discretionary approval applicable to this area be consistent with this Specific Plan. Some elements of the development program may be enforced through conditions, covenants, and restrictions (CC&Rs) established in conjunction with the subdivision maps for the property.

### Planning Areas and Land Uses

The proposed Specific Plan would be adopted by resolution by the City and would allow a mix of commercial, residential, public utilities and public park development within 22 Planning Areas (PA[s]). As shown in **Table 3-3, Gateway at Grand Terrace Specific Plan Statistical Summary by Planning Area** below, each PA has been assigned a number and a designated land use with maximum density and intensity.

Although the proposed Specific Plan would allow up to a maximum of 786 dwelling units and a maximum of 455,049.50 square feet of commercial development, the development standards, site constraints, roads, and infrastructure, limit the potential number of dwelling units to 695 and the commercial square-footage to 335,700 square-feet. **Table 3-3** summarizes the maximum assigned density units (DUs) that would be developed within the Project area. **Table 3-4, Land Use Percentages** below provides a summary of the distribution of land uses within the Project site. **Table 3-5, Error! Reference source not found.** summarizes the projected maximum net development when taken into account the development standards, site constraints, roads, and infrastructure. **Exhibit 3-7, Project Planning Areas** visualizes the land uses within the Project area.

**Table 3-3: Gateway at Grand Terrace Specific Plan Statistical Summary by Planning Area**

| Planning Area | Land Use Designation                      | Gross Acres | Dev. Acres | Probable Density (Max FAR) | Max Dev. SF per Dev. Acre | Max Residential Density du/ac | Max Assigned DUs |
|---------------|---|-------------|------------|----------------------------|---------------------------|-------------------------------|------------------|
| 1             | General Commercial                        | 9.18        | 6.4        | 0.35                       | 97,574.4                  |                               |                  |
| 2             | General Commercial                        | 3.05        | 3          | 0.35                       | 45,738                    | -                             | -                |
| 3             | Utilities with General Commercial Overlay | 3.3         | 0.09       | 0.35                       | 1,372.14                  | -                             | -                |
| 4             | General Commercial (Billboards)           | 2.83        | 0          | N/A                        | 0                         | -                             | -                |
| 5             | Drainage Facilities                       | 4.36        | 0.03       | N/A                        | -                         | -                             | -                |
| 6             | General Commercial                        | 8.4         | 6.42       | 0.35                       | 97,879.32                 | -                             | -                |
| 7             | General Commercial                        | 0.4         | 0.4        | 0.35                       | 6,098.4                   | -                             | -                |
| 8             | General Commercial                        | 4.6         | 3.68       | 0.35                       | 56,105.28                 | -                             | -                |
| 9             | General Commercial                        | 4.6         | 4.6        | 0.75                       | 150,282                   | -                             | -                |
| 10            | Utilities                                 | 0.62        | 0          | N/A                        | -                         | -                             | -                |
| 11            | Residential                               | 14.55       | 12.38      | N/A                        | -                         | 20 du/ac                      | 248 DUs          |
| 12            | Residential                               | 8.64        | 7.7        | N/A                        | -                         | 20 du/ac                      | 154 DUs          |
| 13            | Utilities                                 | 1.26        | 0          | N/A                        | -                         | -                             | -                |
| 14            | Utilities with Residential Overlay        | 0.58        | 0.4        | N/A                        | -                         | 20 du/ac                      | 8 DUs            |

| Planning Area     | Land Use Designation               | Gross Acres   | Dev. Acres   | Probable Density (Max FAR) | Max Dev. SF per Dev. Acre | Max Residential Density du/ac | Max Assigned DUs |
|-------------------|------------------------------------|---------------|--------------|----------------------------|---------------------------|-------------------------------|------------------|
| 15                | Utilities with Residential Overlay | 0.37          | 0.37         | N/A                        | -                         | 20 du/ac                      | 7 DUs            |
| 16                | Residential                        | 0.52          | 0.52         | N/A                        | -                         | 20 du/ac                      | 10 DUs           |
| 17                | Utilities                          | 2.51          | 0            | N/A                        | -                         | -                             | -                |
| 18                | Drainage Facilities                | 9.24          | 1.07         | N/A                        | -                         | -                             | -                |
| 19                | Residential                        | 16.05         | 15.46        | N/A                        | -                         | 20 du/ac                      | 309 DUs          |
| 20                | Residential                        | 2.51          | 2.5          | N/A                        | -                         | 20du/ac                       | 50 DUs           |
| 21                | Utilities                          | 2.38          | 0            | N/A                        | -                         | -                             | -                |
| 22                | Park                               | 4.97          | 4.97         | N/A                        | -                         | -                             | -                |
| Open Space        |                                    | 1.90          |              | N/A                        |                           |                               |                  |
| Van Buren Street  |                                    | 1.94          | -            | N/A                        | -                         | -                             | -                |
| De Berry Street   |                                    | 1.95          | -            | N/A                        | -                         | -                             | -                |
| Taylor Street     |                                    | 1.19          | -            | N/A                        | -                         | -                             | -                |
| <b>Total Area</b> |                                    | <b>111.90</b> | <b>69.99</b> |                            | <b>455,049.5</b>          | -                             | <b>786</b>       |

**Table 3-4: Land Use Percentages**

| Land Use                       | Gross AC     | Max Dev SF       | Max Assigned DU | %           |
|--------------------------------|--------------|------------------|-----------------|-------------|
| Residential                    | 43.22        | -                | 786             | 38.6%       |
| Commercial                     | 36.36        | 455,059.5        | -               | 32.5%       |
| Park                           | 4.97         | -                | -               | 4.4%        |
| Riverside Canal and Open Space | 4.36         | -                | -               | 3.9%        |
| Drainage Facilities            | 11.15        | -                | -               | 10%         |
| Utilities                      | 6.77         | -                | -               | 6.1%        |
| Roads                          | 5.08         | -                | -               | 4.5%        |
| <b>Total</b>                   | <b>111.9</b> | <b>455,059.5</b> | <b>786</b>      | <b>100%</b> |

**Table 3-5: Projected Maximum Net Development for Residential and Commercial Uses**

| Planning Area                  | Land Use Designation               | Gross Acres  | Dev. Acres   | Max Dev. SF | Max Assigned DUs | Projected Max Net Development |
|--------------------------------|------------------------------------|--------------|--------------|-------------|------------------|-------------------------------|
| <b>Residential Development</b> |                                    |              |              |             |                  |                               |
| 11                             | Residential                        | 14.55        | 12.38        | -           | 248              | 695 DUs                       |
| 12                             | Residential                        | 8.64         | 7.7          | -           | 154              |                               |
| 14                             | Utilities with Residential Overlay | 0.58         | 0.4          | -           | 8                |                               |
| 15                             | Utilities with Residential Overlay | 0.37         | 0.37         | -           | 7                |                               |
| 16                             | Residential                        | 0.52         | 0.52         | -           | 10               |                               |
| 19                             | Residential                        | 16.05        | 15.46        | -           | 309              |                               |
| 20                             | Residential                        | 2.51         | 2.5          | -           | 50               |                               |
| <b>Total Area</b>              |                                    | <b>43.22</b> | <b>39.33</b> | -           | <b>786</b>       | <b>695 DUs</b>                |
| <b>Commercial Development</b>  |                                    |              |              |             |                  |                               |
| 1                              | General Commercial                 | 9.18         | 6.4          | 97,574.4    | -                | 243,800 SF                    |
| 2                              | General Commercial                 | 3.05         | 3            | 45,738      | -                |                               |

| Planning Area     | Land Use Designation                      | Gross Acres  | Dev. Acres   | Max Dev. SF      | Max Assigned DUs | Projected Max Net Development |
|-------------------|---|--------------|--------------|------------------|------------------|-------------------------------|
| 3                 | Utilities with General Commercial Overlay | 3.3          | 0.09         | 1,372.14         | -                |                               |
| 6                 | General Commercial                        | 8.4          | 6.42         | 97,879.32        | -                |                               |
| 7                 | General Commercial                        | 0.4          | 0.4          | 6,098.4          | -                |                               |
| 8                 | General Commercial                        | 4.6          | 3.68         | 56,105.28        | -                |                               |
| 9                 | General Commercial                        | 4.6          | 4.6          | 150,282          | -                |                               |
| 4                 | General Commercial (Billboards)           | 2.83         | 0            | 0                | -                | 91,900 SF                     |
| <b>Total Area</b> |   | <b>36.36</b> | <b>24.59</b> | <b>455,049.5</b> | -                | <b>335,700 SF</b>             |

## Project Objectives

Section 15124(b) of the CEQA Guidelines indicates that an EIR should include “a statement of objectives sought by the proposed Project.” The Specific Plan was prepared to achieve the following Project objectives.

1. Authorize the redevelopment of a blighted and under-utilized property.
2. Organize a mix of land uses which will provide a variety of housing and businesses, spurring new jobs and services.
3. Implement development standards and design guidelines establishing a vibrant community.
4. Provide diversity of high-quality architecture and landscape with appropriate open space areas.
5. Provide for the distribution, location and extent, and intensity of major components of public and private roads, sewage, water, drainage, dry utilities, and other essential facilities within the Project area and/or needed to support the proposed land uses.
6. Establishes compatibility standards and guidelines to minimize negative impacts on adjacent properties.
7. Include operational and maintenance plans for financing improvements.
8. Provide the extension of Commerce Way from its current terminus point southward to Taylor Street and then Main Street.
9. Provide public recreational facilities to meet the needs of the community by incorporating a public park with a new baseball field and playground.

## Construction Phasing

Residential and commercial developments within the Project site are dependent upon market factors and the ability to attract future end-users. Where possible, infrastructure and physical improvements within the Project boundary may be installed in two overlapping or consecutive phases. As such, construction of the Project would be phased in a logical sequence, in response to market demands. The Specific Plan incorporates two phases, as shown in **Exhibit 3-8, Construction Phasing Plan**.

Phase One encompasses the southern half of the Specific Plan area that includes residential, a new public park with a lighted baseball field and a playground, a detention basin, and a new road - Commerce Way,

and associated improvements, starting from the connection point of Taylor Street and Main Street and continuing north to the northern boundary of the residential portion. In addition, Phase One will also include improvements of portions of De Berry and Van Buren streets, construction of the Phase One storm drain plan, new water lines, and connection to existing sewer lines.

The development of the proposed detention basin, the new Commerce Way improvements, and the new public park and trail in Phase One would also include obtaining Consent Agreements and right-of-way and drainage easements from Southern California Edison (SCE) for the outlet facility into the native channel. In return, the Project would grant SCE an access easement via a new maintenance road and turnaround area to their facilities located within PAs 10, 13, 17, and 21.

Phase Two includes the development of the commercial portion located in the northern half of the Specific Plan area and includes the extension of Commerce Way from Phase One terminus point north to the current terminus point of the existing Commerce Way, and construction of Phase Two storm drain.

The planning and design of each PA would address construction issues such as drainage, storm water management, utilities and parking, as described in this Specific Plan and required by mitigation measures adopted as part of this EIR.

Construction and implementation of any development project within the Project site would demonstrate that all required infrastructure and facilities would be timed to adequately service each individual development project. This may require construction of the facilities both on-site (within or adjacent to the PA) and/or off-site (within other PAs or outside of the Project site) to connect with existing facilities that would service that development. Therefore, these PAs are not symbolized in **Exhibit 3-8**.

## Proposed Land Use Components

As noted above, the Specific Plan land uses would allow the development of commercial, residential, public utilities and public park uses. At this time, no specific development plans are available for the Project; therefore, analysis of the Project's environmental impacts in this Draft EIR are addressed at a program level.

### Residential

The Project's residential component, located in PAs 11, 12, 14 through 16, 19, and 20, encompasses approximately 43 acres and could potentially comprise of a variety of residential product types (small-lot single-family development, attached or detached cluster-type or motor court residential development, townhomes, duplexes, and/or multi-level apartments), with an overall maximum density of 20 dwelling units per acre (du/ac). The residential use in the Project site accounts for approximately 39 percent of the total land uses in the Project site and allows up to a maximum of 786 dwelling units. However, as noted in **Table 3-5**, when considering the development standards, site constraints, roads, and infrastructure, the potential number of dwelling units to be developed is projected to be approximately 695 DUs, which would not exceed the maximum allowable number of 786 DUs. The residential portion would include a variety of housing types within the density range of 4 – 20 dwelling units per acre under the proposed Residential 4-20 DU/AC (R 4-20) land use.

## General Commercial

The General Commercial (GC) land use designation allows for the development of general commercial not limited to, retail, personal service, entertainment, office, and restaurants in PAs 1 through 3, and 6 through 9. PA 4 currently contains existing billboards that would continue to be utilized in the same manner and not be developed. The commercial uses in GC would serve as an enhanced continuation of the Barton Road Specific Plan and the I-215's commercial corridor.

The developable acreage in the commercial portion of the Specific Plan is approximately 25 acres and could be developed with up to 455,049.50 square feet of commercial uses. However, when considering the development standards, site constraints, roads, and infrastructure, the potential maximum square footage that could be developed is approximately 335,700 square feet.

## Drainage Facilities, Utilities, and Public Streets

Drainage facilities are located in PAs 5 and 18. Utilities are located in PAs 10, 13, 17, and 21. Public streets include the new Commerce Way, Van Buren, and De Berry. Drainage facilities, utilities, and public streets will be maintained by the City and/or other municipal agencies, special districts, or purveyors. The development of the proposed detention basin would also include obtaining consent agreements and right-of-way and drainage easements from SCE. In return, the Project would grant SCE access via a new maintenance road and turnaround area to their facilities located within PAs 10, 13, 17, and 21.

## Public Park and Open Space

The Park and Open Space designations apply to parcels within PAs 18 and 22 as well as the narrow strip of pedestrian and bicycle trail that provides connectivity between PA 22 development and the existing Veterans Freedom Park. PA 22 would include a City-owned and operated lighted baseball field with a tot-lot/playground within a tree-lined and "park-like" setting. Public Park Facilities can be joint use, providing for use by the Colton Joint Unified School District (CJUSD), and the City.

PA 18 would primarily serve as a detention basin for the entire Project site as part of the overall drainage facilities. It would also have an open space overlay which would not permit any building or structure to be constructed in the area. Due to its primary use as a detention basin, PA 18 would not have public access.

## Utilities

### Sewer

Sanitary sewer service is provided by the City through various agreements between the cities of Grand Terrace and Colton. The City of Colton leases the sewer lines to the City, maintains the sewer lines, and treats the wastewater. There are a number of existing gravity sewer lines in the vicinity of the Project site. The main sewer line in the area is an existing 12-inch trunk sewer line in De Berry Street that conveys flow from east to west through the Project and then increases to an 18-inch trunk sewer line before it crosses I-215. After crossing I-215, the sewer line flows north and increases in size before reaching the Colton Water Reclamation Facility. There is also a 10-inch gravity sewer line in Commerce Way that conveys flows south to the 18-inch trunk sewer line. A 10-inch sewer line in Taylor Street conveys flows

north to the 18-inch trunk sewer line. There are 8-inch gravity sewer lines in Van Buren Street and Pico Street that convey flows from east to west to the 10-inch gravity sewer line in Taylor Street. **Exhibit 3-9, Existing Sewer Plan** shows the existing sewer facilities.

Sewer improvements would be designed and sized to tie into the existing/backbone infrastructure to serve all future development within the Project site. Based on **Exhibit 3-9**, the existing backbone sewer infrastructure is adequately sized to accommodate these flows. Wastewater collected from the Specific Plan area would continue to be conveyed in the existing 18-inch sewer trunk line to the treatment plant in City of Colton.

A Sewer System Analysis was prepared to evaluate the capacity of the existing sewer system. The analysis concluded that the existing local collector sewers have adequate capacity to serve the developments within the Project site. All proposed improvements would be constructed to the requirements of the City of Grand Terrace and the City of Colton.

The sewer capacity analysis and proposed sewer facilities are further analyzed in **Section 4.17, Utilities and Service Systems**.

## Water

Domestic and irrigation water service for the City is provided by Riverside Highland Water Company (RHWC). RHWC is a private water company owned by its shareholders. The company maintains water main transmission lines, wells, reservoirs and service laterals throughout the City, portions of Colton, and portions of unincorporated San Bernardino and Riverside Counties and is directly responsible for their ongoing maintenance.

The Project site would rely on both existing and new water lines which are proposed along the eastern border of the Riverside Canal; southern border of PAs 11, 14 and 15; and south from PA 21 to the Taylor Street/Main Street intersection. **Exhibit 3-10, Conceptual Water Plan** shows the existing and proposed water facilities.

All proposed site-specific water improvements would be designed and analyzed as future development projects are reviewed and entitled. Hydraulic analysis of the proposed water lines would also be analyzed and improvements would be constructed to meet requirements of the City and RHWC.

All areas proposed for development would be equipped with fire suppression systems. Major development areas would be equipped with looped on-site mains to ensure adequate pressure for fire suppression. Fire hydrants would be installed at locations approved by the San Bernardino County Fire Protection District (SBCFPD). RHWC lines would be extended to loop around the Project site.

## Storm Drainage

The Project site is traversed by three major drainage courses that originate at the base of the foothills at De Berry Street, Van Buren Street, and Pico Street. The northern drainage course enters the site at the westerly end of De Berry Street. It then travels in a southwesterly direction and enters the San Bernardino County Flood Control District (SBCFCD) channel that eventually directs flows off-site under I-215. The



second drainage course enters the Project area on the north side of Van Buren Street near the easterly edge of PA 11. These storm water flows travel west and join the SBCFCD channel at the western edge of the Project area. A portion of this drainage course has been identified as a possible wetlands area. The third drainage course enters the Project area through the existing Grand Terrace High School near the southeasterly edge of PA 20. The westerly terminus of Pico Street overflows with storm water during large storm events and the storm water travels through the existing Grand Terrace High School towards Taylor Street and ultimately joins the Gage Canal at the western edge of the Project site.

The off-site tributary area consists of a watershed of approximately 32,320 acres including the majority of the City. All flows are directed to the low point within the Specific Plan area. Ultimately, drainage from the Project site flows to the Santa Ana River, excluding those flows directed to the Gage Canal.

Drainage improvements would be constructed in phases and throughout the Project site. Refer to the following information and **Exhibit 3-11, Conceptual Storm Drain Plan**, which shows the existing and proposed drainage facilities.

#### ***Phase One:***

One large regional detention basin within PA 18 with approximately 65-acre-feet of capacity would be constructed west of Taylor Street to provide regional storm water detention and treatment of the proposed storm drain systems in Van Buren and Pico Streets, as well as opportunities for groundwater recharge. The basin would be hydraulically connected, and two outfalls with one providing outlet to the San Bernardino County Flood Control District (SBCFCD) drainage area and another providing a secondary outlet to the Gage Canal. The development of the proposed detention basin in Phase One would also include obtaining consent agreements and right-of-way and drainage easements from SCE. In return, the Project would grant SCE access via a new maintenance road and turnaround area to their facilities located within PAs 10, 13, 17, and 21.

At De Berry Street, a local storm drain system at the intersection of De Berry Street and Commerce Way will capture flows from De Berry and connect to the existing SBCFCD storm drain line under Commerce Way, draining to the basin.

Within Van Buren Street, the proposed facilities include a 36-inch reinforced concrete pipe (RCP) from the regional basins to the Michigan Street intersection, with a local storm drain system and catch basins to protect the intersection from flooding and storm water velocity. Additional work will include installation of new curbs and driveways at sump conditions east of Michigan Street to protect property from flooding during major storms. The installation of the storm drain in Van Buren Street will de-water the existing natural drainage area.

#### ***Phase Two:***

In Pico Street, the proposed facilities include a 54-inch RCP from the regional basins along the northerly edge of Grand Terrace High School and stubbed to the westerly cul-de-sac in Pico. In the future, a 48-inch storm drain would be extended east to the intersection of Michigan Street, with a local storm drain system and catch basins to protect the intersection from flooding and storm water velocity and to alleviate

additional flooding. Along with the future 48-inch storm drain extension, new raised curbs would also be required at various sections along Pico Street to prevent flooding.

All proposed site-specific drainage improvements would be designed and analyzed as future projects are reviewed and entitled. All site drainage would ultimately discharge at the existing low point of Project site and then under I-215. All proposed improvements would be constructed to the requirements of the City and the SBCFCD.

## **Dry Utilities**

### **Electricity**

Electrical power service is provided by Southern California Edison (SCE) which maintains a system of above and below-ground transmission and distribution lines throughout the City. SCE also maintains a major substation within the City. The Val Vista Substation on Newport Road is a major switching station for SCE's Southern California grid. All new on-site lines would be placed underground, except when they relate to the existing electrical substation, and the existing transmission lines that cross the site at various locations.

### **Natural Gas**

Natural gas service is provided by Southern California Gas (SoCalGas) Company who maintains a system of natural gas mainlines and laterals throughout the City, primarily within public rights-of-way. Any additional necessary lines would be identified and constructed to meet the Project's future development demands.

### **Cable Television**

The cable service franchisee in the Project site is currently Time Warner; other cable companies may provide service if permitted by the City in the future. Time Warner maintains a system of above and below-ground lines throughout the City, primarily within public rights-of-way. All new on-site cable lines would be placed underground.

### **Waste Management**

The City maintains a franchise agreement with Burrtec Waste Industries, Inc. (Burrtec) for the collection and disposal of municipal solid wastes, organic, and recyclable materials generated by residences and businesses within the City. Burrtec provides weekly residential collection services for municipal solid waste, organic and mixed recyclables, and green waste. Collection services to commercial and industrial uses are provided from one to six times per week and include a wide range of waste and recyclable collection services. Additionally, there would be organic waste options to comply with current state mandates. All municipal solid waste collected in the City is taken to the San Bernardino County landfill system for disposal. The nearest landfills to the Project site are the San Timoteo Landfill and the Mid-Valley Landfill.

All residents and businesses in the Project site would comply with ongoing waste management programs/requirements implemented by the City (e.g., hazardous waste disposal, electronic and universal waste). The City has multiple waste events throughout the year to help residents with non-typical waste

needs. It is the responsibility of each property owner and/or tenant to start service for solid waste collection. Appropriate space would be provided for storage of solid waste on each Project-specific site.

## Mobility and Circulation

The Project's proposed circulation improvements would enhance local circulation and provide for new development. Commerce Way would be extended south from the existing terminus point to Taylor Street. As part of the Commerce Way extension, the existing Taylor Street roadway portion within the Project area would also be improved and widened all the way south to its connection at Main Street. The Specific Plan reinforces a pedestrian-friendly environment that includes new Class II on-street bike lanes, sidewalks and streets connecting the commercial area with the residential neighborhoods, parks, and schools. Refer to **Exhibit 3-12, Conceptual Circulation Plan** and **Section 4.15, Transportation** for the location of these streets. Additionally, public or private streets and alleys would provide circulation within the residential communities. The alignment of these internal streets and alleys would be established as part of the tentative tract map approval.

## Permitted Uses

The Specific Plan could be developed according to the uses listed in **Table 3-6, Permitted and Conditionally Permitted Uses**. **Table 3-5** provides a comprehensive list of allowable uses and establishes the Permitted (P), Temporarily Permitted (T), Conditionally Permitted (C), and Specially Event (SE) permitted land uses within each land use designation throughout the Project site.

**Table 3-6: Permitted and Conditionally Permitted Uses**

|   | Open Space | Park | Commercial | Residential (R 4-20) | Drainage Facilities |
|---|------------|------|------------|----------------------|---------------------|
| <b>Residential Uses</b>   |            |      |            |                      |                     |
| Single-family (including small-lot, detached/attached, cluster, and motor court)                              | -          | -    | -          | P                    | -                   |
| Multi-family units (including duplexes, condominiums, and apartments)   | -          | -    | -          | P                    | -                   |
| Senior citizen housing  | -          | -    | -          | P                    | -                   |
| <b>Residential Accessory Uses</b>   |            |      |            |                      |                     |
| Home occupation (as permitted per chapter 5.06)   | -          | -    | -          | P                    | -                   |
| Second-Family Unit (as permitted per Chapter 18.63)   | -          | -    | -          | P                    | -                   |
| Leasing offices   | -          | -    | -          | P                    | -                   |
| Residential community recreation facility   | -          | -    | -          | P                    | -                   |
| Other accessory uses directly related to primary Residential use (as approved by the Planning Director)       | -          | -    | -          | P                    | -                   |
| <b>Automotive related services (includes motorcycles, boats, recreational vehicles, trailers and campers)</b> |            |      |            |                      |                     |
| Retail sales of parts and supplies (No Wholesale)   | -          | -    | P          | -                    | -                   |
| Retail sales of heavy equipment and trucks  | -          | -    | C          | -                    | -                   |
| Rental agency   | -          | -    | C          | -                    | -                   |
| Sales (used vehicle sales, repair and maintenance activities only in conjunction with new dealers)            | -          | -    | C          | -                    | -                   |
| Sales (New vehicle sales)   | -          | -    | C          | -                    | -                   |
| New tire sales (inside tire storage only)   | -          | -    | C          | -                    | -                   |

|   | Open Space | Park | Commercial | Residential (R 4-20) | Drainage Facilities |
|---|------------|------|------------|----------------------|---------------------|
| Indoor Storage  | -          | -    | C          | -                    | -                   |
| Showrooms   | -          | -    | C          | -                    | -                   |
| <b>Research &amp; Development</b>   |            |      |            |                      |                     |
| Laboratories, research and development facilities   | -          | -    | P          | -                    | -                   |
| <b>Eating and Drinking Establishments</b>   |            |      |            |                      |                     |
| Bars, cocktail lounges, nightclubs, live entertainment  | -          | -    | C          | -                    | -                   |
| Catering  | -          | -    | P          | -                    | -                   |
| Microbrewery  | -          | -    | C          | -                    | -                   |
| Restaurants - With the incidental serving of beer and wine (without a cocktail lounge, bar, entertainment or dancing)                         | -          | -    | P          | -                    | -                   |
| With entertainment and/or serving of alcoholic beverages (other than beer and wine)   | -          | -    | C          | -                    | -                   |
| Fast food (without a drive-thru)  | -          | -    | P          | -                    | -                   |
| Fast food (with a drive-thru)   | -          | -    | C          | -                    | -                   |
| <b>Medical</b>  |            |      |            |                      |                     |
| Clinics, urgent care  | -          | -    | P          | -                    | -                   |
| Medical laboratories  | -          | -    | P          | -                    | -                   |
| Medical/dental offices  | -          | -    | P          | -                    | -                   |
| Optician and optometric shops   | -          | -    | P          | -                    | -                   |
| <b>Office and Administrative Uses</b>   |            |      |            |                      |                     |
| Banks, financial services and institutions  | -          | -    | P          | -                    | -                   |
| Business and office services  | -          | -    | P          | -                    | -                   |
| (Interior showroom  | -          | -    | P          | -                    | -                   |
| Realtors and real estate offices  | -          | -    | P          | -                    | -                   |
| Travel agencies   | -          | -    | P          | -                    | -                   |
| Professional office   | -          | -    | P          | -                    | -                   |
| <b>Recreation/Entertainment</b>   |            |      |            |                      |                     |
| Amusement arcades   | -          | -    | C          | -                    | -                   |
| Auditoriums   | -          | -    | C          | -                    | -                   |
| Bowling centers   | -          | -    | C          | -                    | -                   |
| Indoor fitness and sports facilities (health clubs, gymnasiums, fitness centers) 4,000 square feet or less                                    | -          | -    | C          | -                    | -                   |
| Greater than 4,000 square feet  | -          | -    | C          | -                    | -                   |
| Movie theaters  | -          | -    | C          | -                    | -                   |
| Museums   | -          | -    | P          | -                    | -                   |
| Music, exercise and dance studios   | -          | -    | P          | -                    | -                   |
| <b>Retail-Commercial Uses</b>   |            |      |            |                      |                     |
| Apparel stores (including jewelry stores)   | -          | -    | P          | -                    | -                   |
| General retail (i.e., art, music, collectibles, and video games stores)   | -          | -    | P          | -                    | -                   |
| Building materials, garden equipment and supplies (without outside storage) (including Nurseries & garden supply stores within enclosed area) | -          | -    | P          | -                    | -                   |

|   | Open Space | Park | Commercial | Residential (R 4-20) | Drainage Facilities |
|---|------------|------|------------|----------------------|---------------------|
| Building materials, garden equipment and supplies (with outside storage)  | -          | -    | C          | -                    | -                   |
| Convenience stores (including Liquor/Alcohol sales)   | -          | -    | C          | -                    | -                   |
| Daycare centers (child or adult) and Nursing and residential care facilities  | -          | -    | C          | -                    | -                   |
| Electronic, appliance, and office stores (including small electronic, appliance, and office repair shops)           | -          | -    | P          | -                    | -                   |
| Food and beverage stores (including Farmers Markets and bakeries)   | -          | -    | P          | -                    | -                   |
| Furniture and home furnishing stores (including household goods stores and antique stores)                          | -          | -    | P          | -                    | -                   |
| General merchandise stores (including Leather goods and luggage stores)   | -          | -    | P          | -                    | -                   |
| Health and personal care stores and services (including Drug stores and pharmacies)                                 | -          | -    | P          | -                    | -                   |
| Hardware stores (including locksmith shops)   | -          | -    | P          | -                    | -                   |
| Hobby and craft shops (including costume design, art, music and photography supply stores)                          | -          | -    | P          | -                    | -                   |
| Pet shops   | -          | -    | P          | -                    | -                   |
| Publishing, printing, blueprinting, and reproduction services   | -          | -    | P          | -                    | -                   |
| Schools, business, hospitality, & professional (including art, barber, beauty, performing arts, and hotels)         | -          | -    | C          | -                    | -                   |
| Showroom (room used to display goods for sale)  | -          | -    | C          | -                    | -                   |
| Smoke shops   | -          | -    | C          | -                    | -                   |
| Sporting goods stores   | -          | -    | P          | -                    | -                   |
| Veterinary (domestic, no boarding) (w/boarding requires CUP)  | -          | -    | P          | -                    | -                   |
| Veterinary w/boarding   | -          | -    | C          | -                    | -                   |
| <b>Personal Services</b>  |            |      |            |                      |                     |
| Barbers, hair salons, nail shops  | -          | -    | P          | -                    | -                   |
| Dry cleaners, tailor shops  | -          | -    | P          | -                    | -                   |
| Laundromats, self-service   | -          | -    | C          | -                    | -                   |
| Message centers and PO boxes  | -          | -    | P          | -                    | -                   |
| Photography or portrait studio, by appointment only   | -          | -    | P          | -                    | -                   |
| Public and Quasi Public Facilities (places of worship and non-profit organizations)                                 | -          | -    | C          | -                    | -                   |
| Government offices and facilities (administration buildings)  | P          | P    | P          | P                    | -                   |
| Police and fire stations  | P          | -    | P          | P                    | -                   |
| Rail Transit Station  | -          | -    | -          | -                    | -                   |
| <b>Utilities</b>  |            |      |            |                      |                     |
| Public Utilities, distribution and support facilities   | P          | P    | P          | P                    | -                   |
| <b>Other Uses</b>   |            |      |            |                      |                     |
| Wireless telecommunications facilities  | C          | -    | -          | -                    | C                   |
| Other uses which are determined by the planning commission to be similar in nature to a use listed in this section; | -          | -    | C          | -                    | -                   |

|   | Open Space | Park | Commercial | Residential (R 4-20) | Drainage Facilities |
|---|------------|------|------------|----------------------|---------------------|
| <b>Temporary Uses</b>   |            |      |            |                      |                     |
| Food trucks (recurrent) – 1 year permit maximum   |            |      | C          |                      |                     |
| Mobile food services including food trucks (special event) - Special Event Permit   | -          | -    | SE         | -                    | -                   |
| Temporary uses which are determined by the Director not to have significant long-term impact on the environment. (Uses such as parking lot sales, Christmas tree sales, seasonal sales, rummage sales, and others with review through the land use approval or administrative site and architectural approval process in accordance with Chapter 18.63, Site and Architectural Review.) | P          |      | P          | -                    | -                   |
| Temporary construction offices (as approved by Director)  | P          | P    | P          | P                    | -                   |
| Outdoor displays/uses may take place in front of business on-site, which have been approved with a conditional use permit. Temporary special event permits will be required for display of associated balloons, banners and special event signs.  | C          | -    | C          | -                    | -                   |
| <i>Notes:</i><br>P = Permitted Use<br>C = Conditional Use Permit<br>T = Temporary Use Permit<br>SE= Special Event Permit  |            |      |            |                      |                     |

**Prohibited Uses**

**Table 3-7, Prohibited Uses** establishes a list of land uses, activities and facilities throughout the Project site that are not allowed. All prohibited uses are prohibited in every land use designation.

**Table 3-7: Prohibited Uses**

| Prohibited Uses in the Gateway at Grand Terrace Specific Plan Area    |
|---|
| Adult-oriented retail/exotic dance clubs                              |
| Check cashing services  |
| Marijuana sales and cultivation                                       |
| Massage parlors and/or massage related uses                           |
| Motels (temporary lodging with exterior doors and halls)              |
| Pallet yards  |
| Pawn Shops  |
| Recycling collection services   |
| Tattoo and piercing parlors   |
| Thrift stores   |
| Tire storage (outdoor)  |
| Uses that include the storage of hazardous and/or flammable materials |
| Unlisted uses as defined by GTMC Section 18.79 “Unlisted Uses”        |

**Discretionary Actions and Approvals**

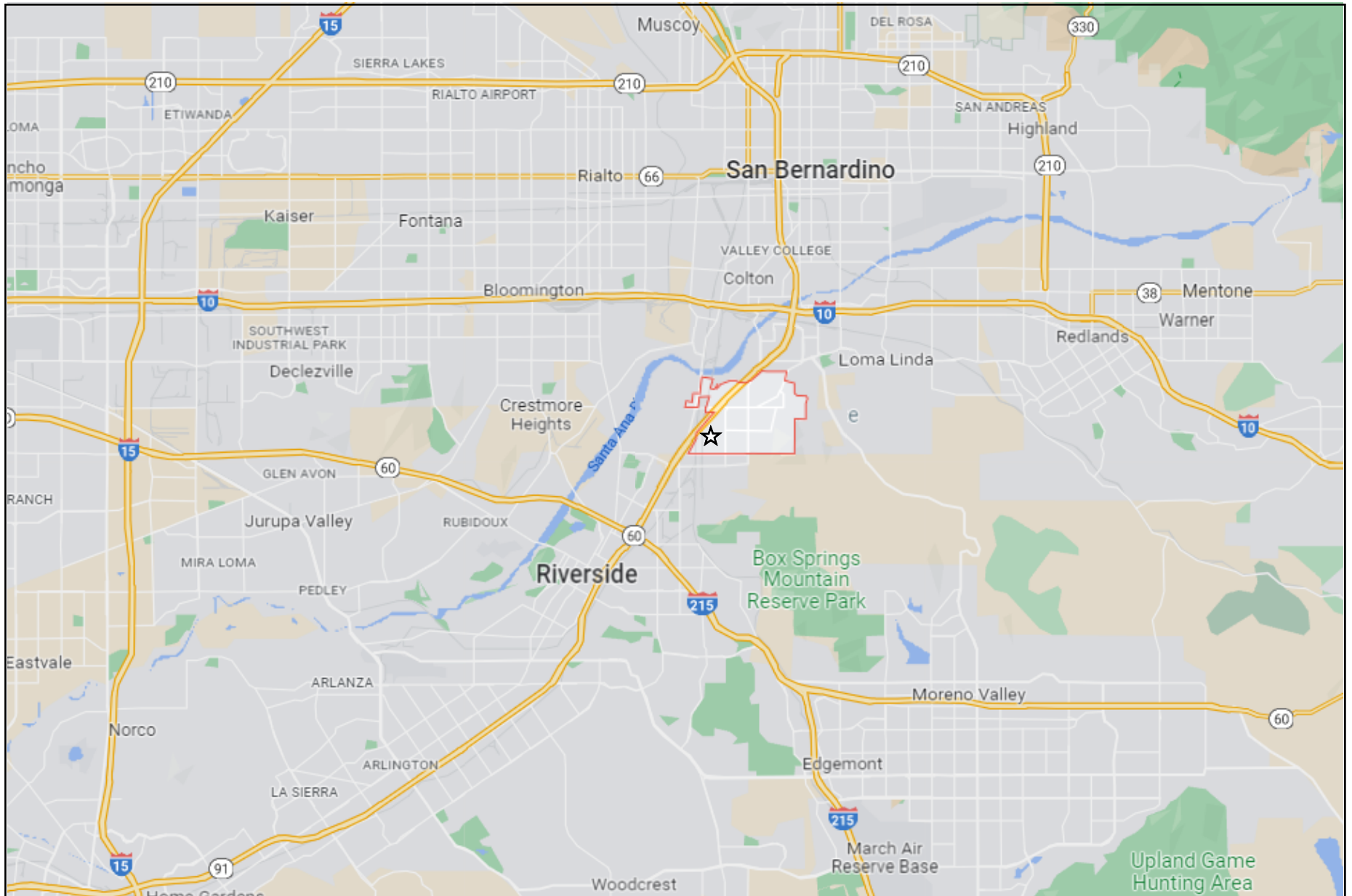
The following approvals and permits are required from the City to implement the Project:

- Certify the EIR with the determination that the EIR has been prepared in compliance with the requirements of CEQA (SCH No. 2021020110).

- Adopt the Gateway at Grand Terrace Specific Plan (00-17).
- Introduce and subsequently adopt an Ordinance for a General Plan Amendment (17-01) to change existing General Plan land use designation from Mixed Use to GSP. The land use designations within the GSP Zone would include Residential 4 – 20 dwelling units per acre (R 4-20), General Commercial (GC), Park, Open Space, Drainage Facilities, Utilities, and Roads. In addition, the Project area would include Utility/ R 4-20, Utility/GC, and Open Space Overlays.
- Introduce and subsequently adopt an Ordinance for a Zone Change (17-02) to change the existing zones from CM – Commercial Manufacturing, M2 – Industrial, and MR – Restricted Manufacturing to Gateway at Grand Terrace Specific Plan (GSP).
- Approve the Tentative Tract Map (18-01) for is for conveyance purposes and to establish legal parcels for the PAs 11, 12, 14, 15, 16, 18, 19, 20, and 22 within the proposed Specific Plan, dedicate right of way for public roadway construction, and establish easements for public utilities and other facilities. Subsequent maps will be required for any future development on all other PAs within the Specific Plan to occur.
- Adopt a Development Agreement.

Approvals and permits that may be required by other agencies include:

- A National Pollutant Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB) to ensure that construction site drainage velocities are equal to or less than the pre-construction conditions and downstream water quality is not worsened.
- Approval of a Storm Water Pollution Prevention Plan (SWPPP).
- Approval of a Water Supply Assessment (WSA).
- Issuance of a Water Will Serve Letter and approval of water improvement plan by the RHWC.
- Issuance of a Sewer Will Serve Letter and approval of sewer improvement plan by the City of Colton.
- California Department of Fish and Wildlife, a Fish and Game Code Section 1602 Streambed Alteration Agreement.
- Approval of fugitive dust control plan by the South Coast Air Quality Management District.
- Approval of an encroachment permit from the County of Riverside for roadway and traffic signal improvements at the intersection of Main Street and Taylor Street.
- Approval of a construction permit from the SBCFCD for storm drain connections to the existing SBCFCD channel.
- Approval of an encroachment permit from Caltrans for storm drain connections/improvements within Caltrans right-of-way.
- Approval of Consent Agreements and right-of-way and drainage easements from Southern California Edison (SCE).



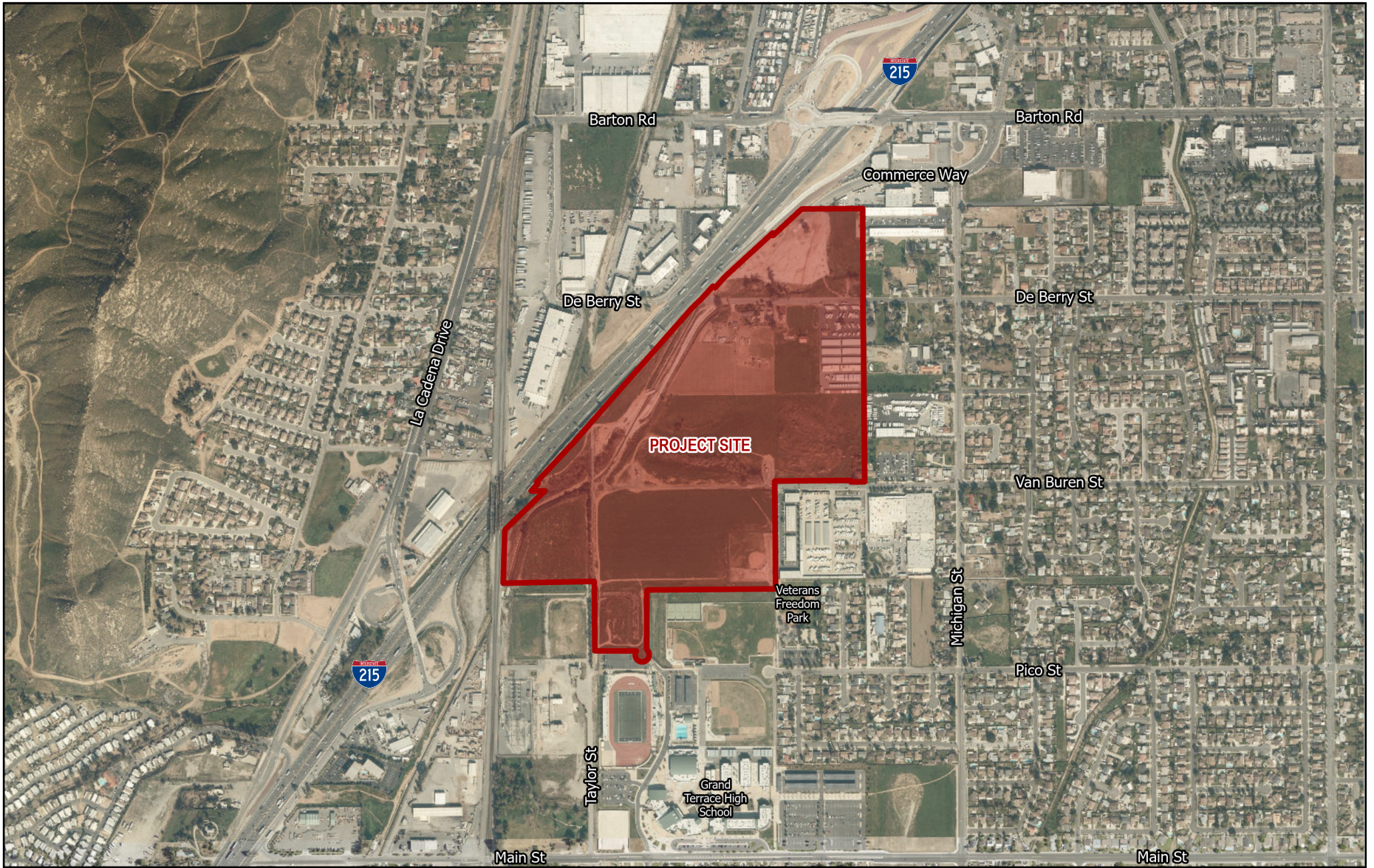
Source: Google Maps



Not to Scale

Kimley»Horn





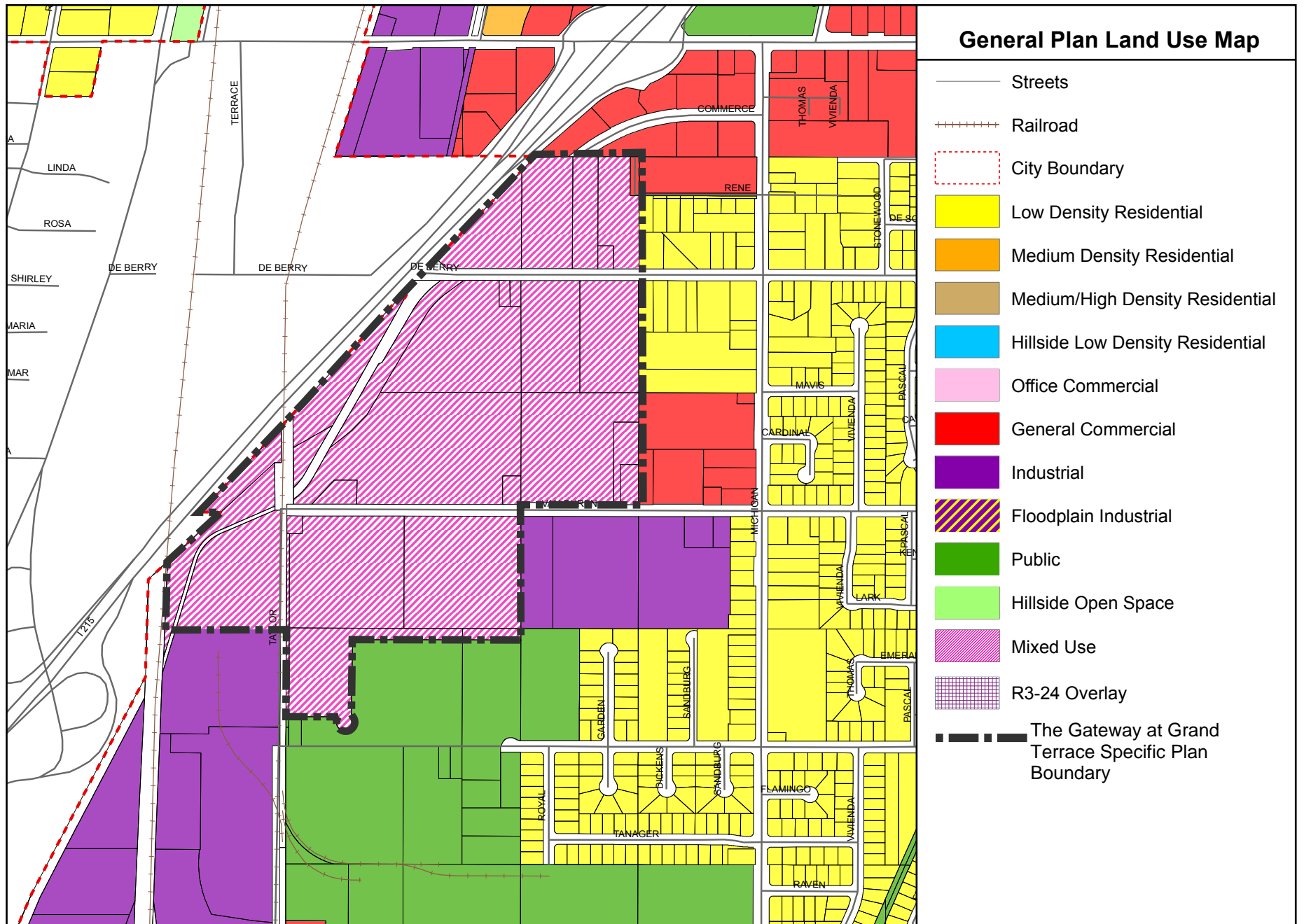
Source: ESRI, 2022

**Exhibit 3-2: Local Vicinity Map**  
City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



Not to Scale

**Kimley»Horn**



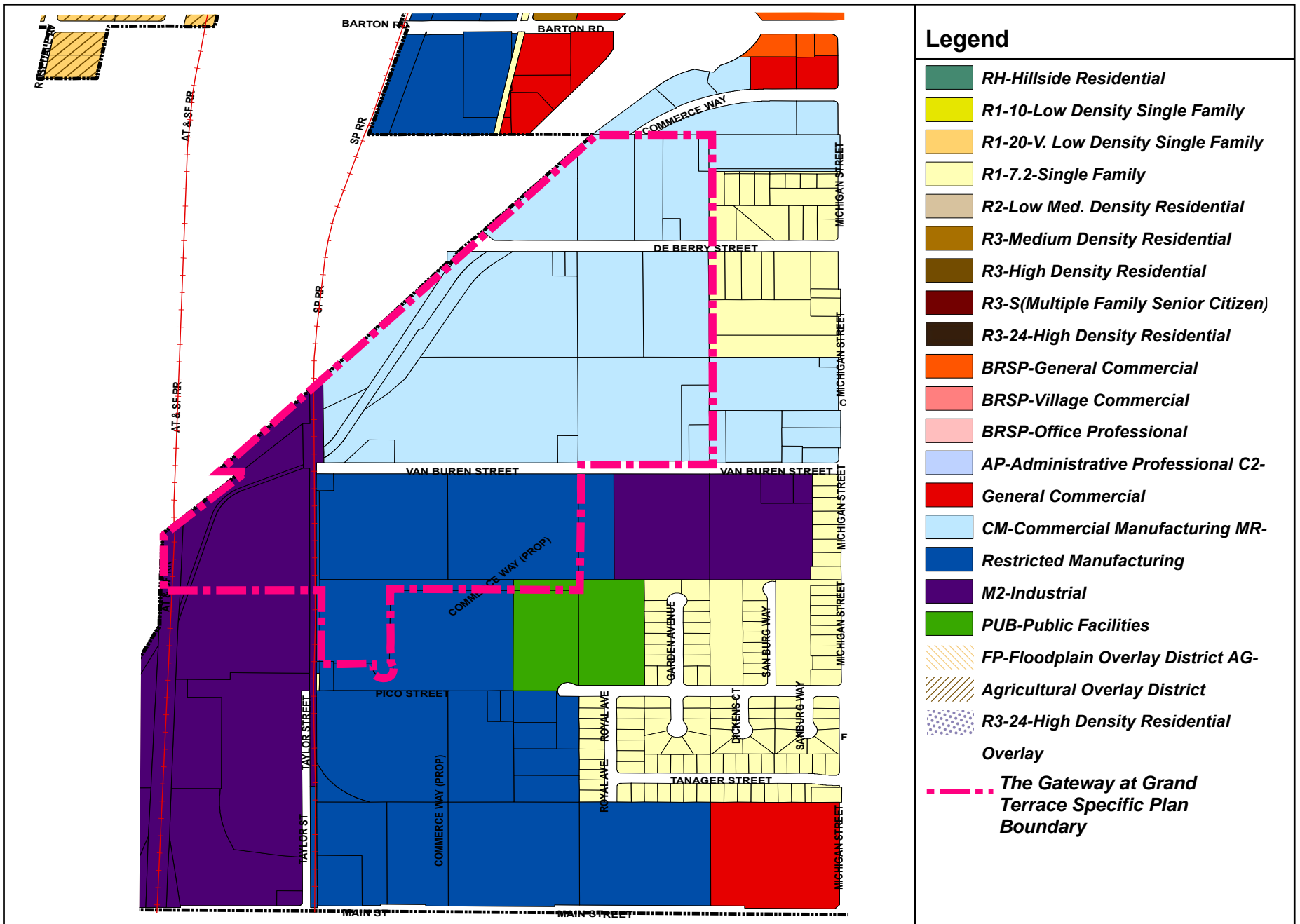
Source: Grand Terrace General Plan (2017). Land Use Map

**Exhibit 3-3: Existing General Plan Land Use Designations**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



Not to Scale

**Kimley»Horn**



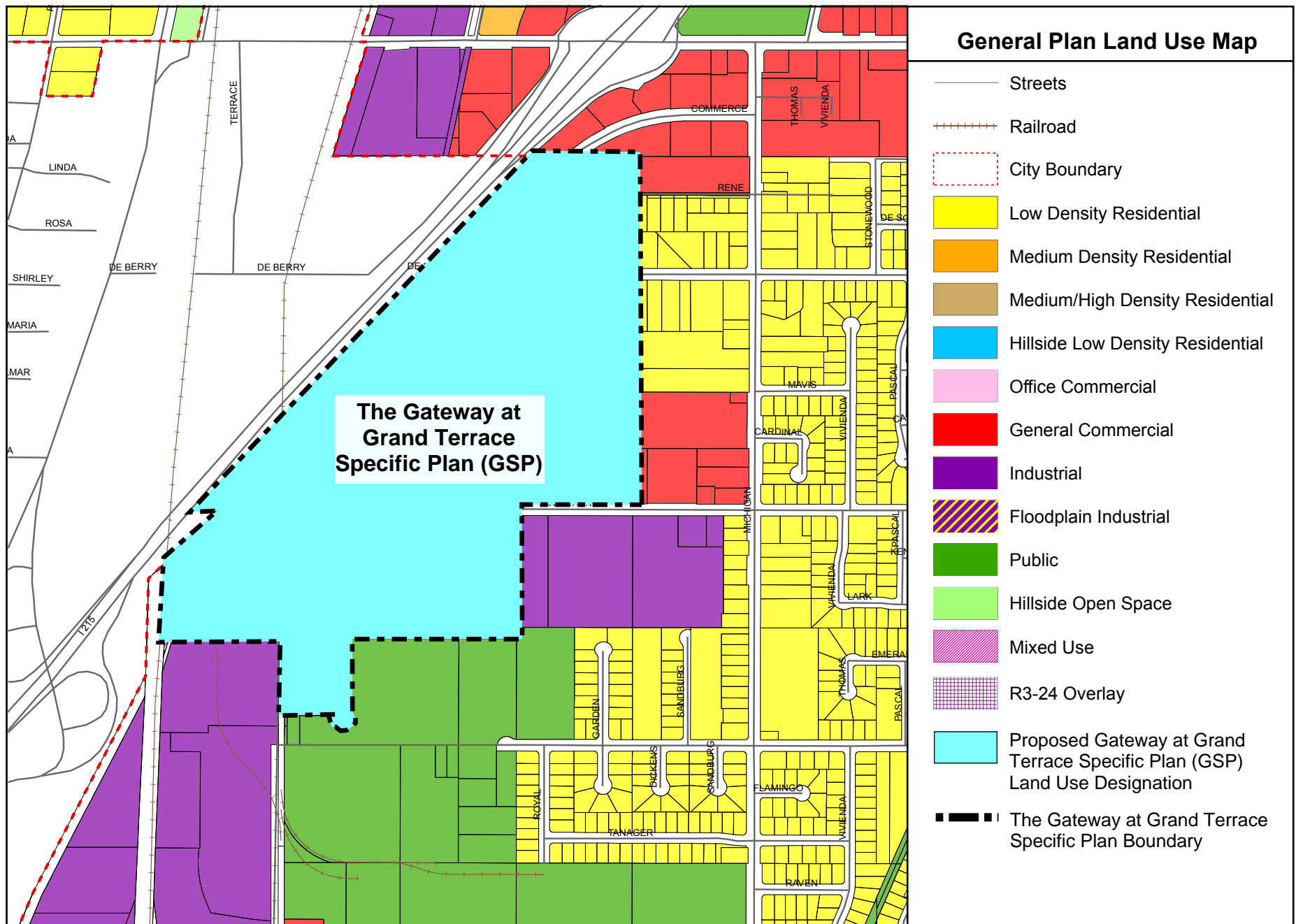
Source: City of Grand Terrace. (2017). Zoning Map

**Exhibit 3-4:** Existing Zoning Designations  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



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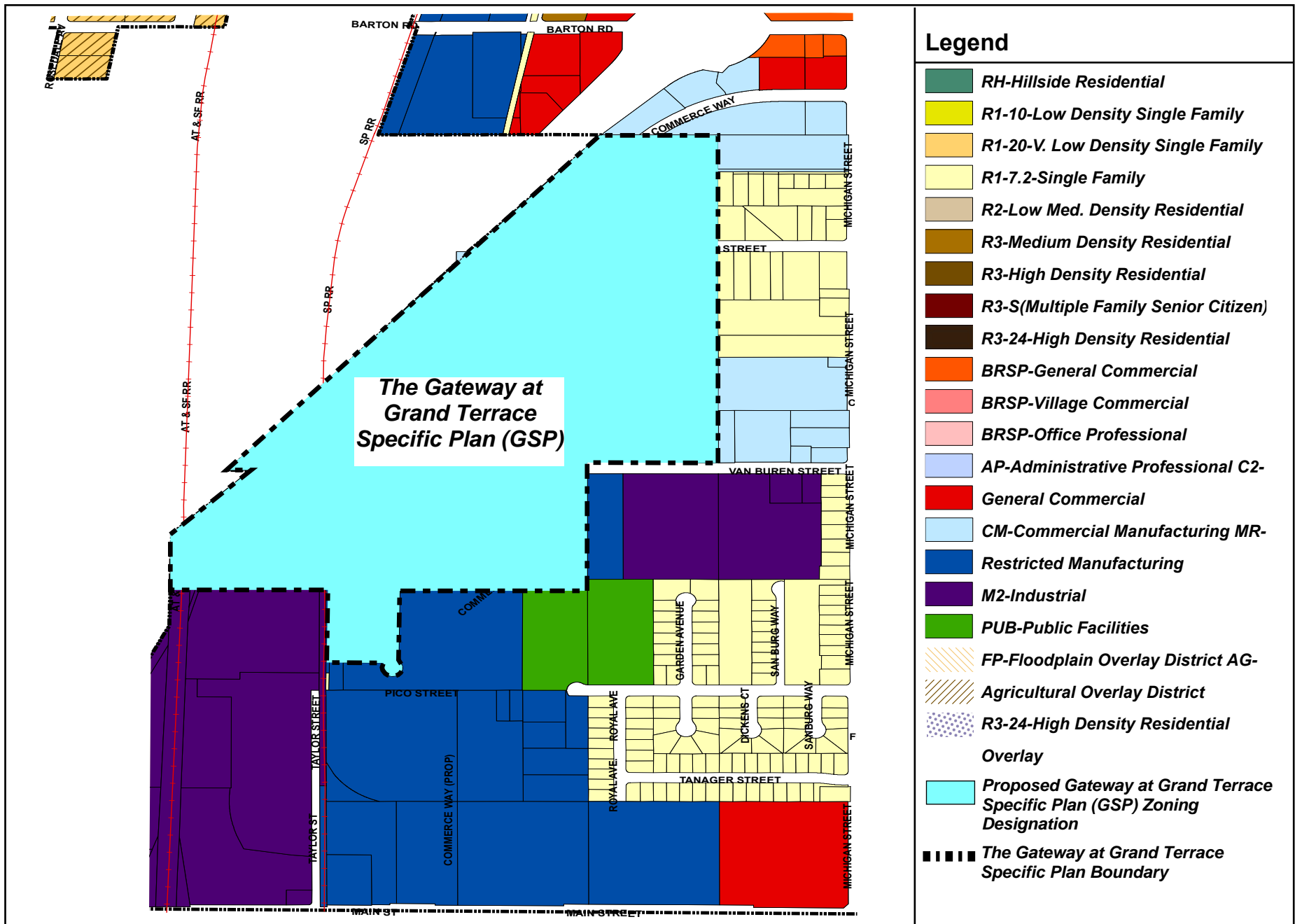


**Exhibit 3-5: Proposed General Plan Land Use Designation**  
 City of Grand Terrace  
 The Gateway at Grand Terrace Specific Plan



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Not to Scale



Source: City of Grand Terrace. (2017). Zoning Map

**Exhibit 3-6: Proposed Zoning Designation**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



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# LEGEND

SPECIFIC PLAN BOUNDARY

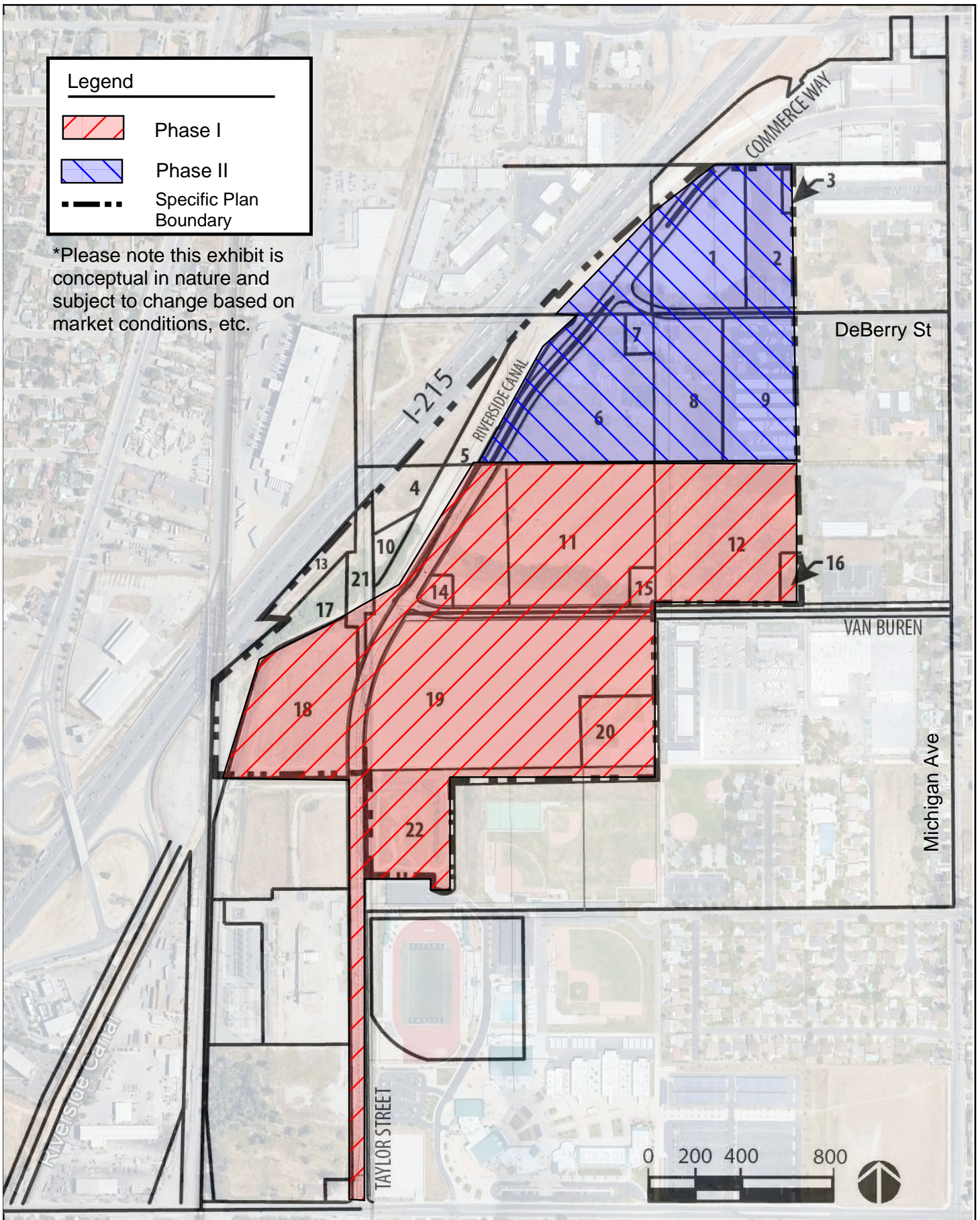
- GENERAL COMMERCIAL (GC)
- RESIDENTIAL 4-20 DU/AC (R 4-20)
- PARK
- DRAINAGE FACILITIES
- OPEN SPACE
- UTILITIES
- PROPOSED ROADS
- EXISTING ROADS

## OVERLAYS

- UTILITY / R 4-20
- UTILITY / GC
- OPEN SPACE

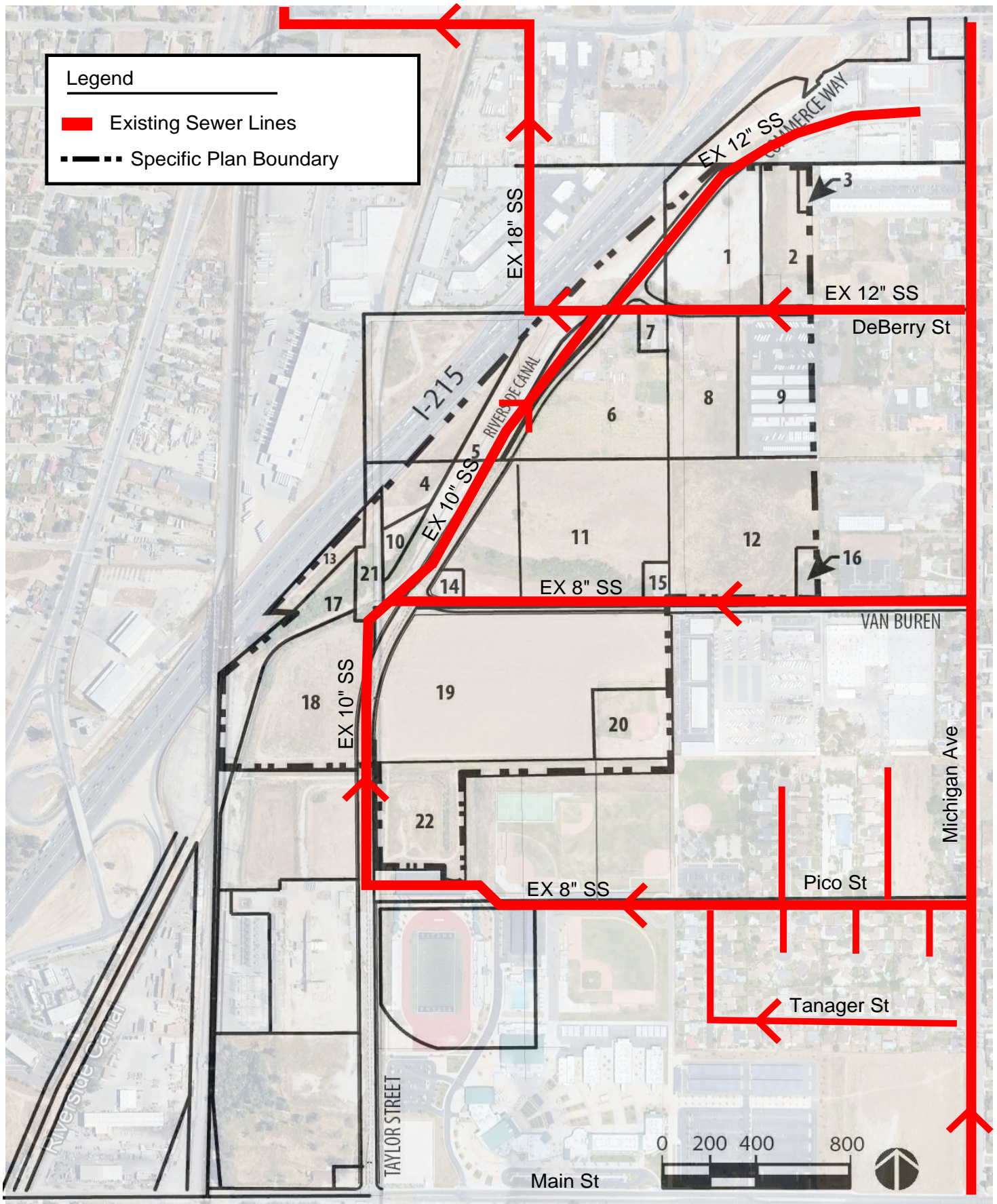


Source: *The Gateway at Grand Terrace*. (2023). Figure 3.1-2



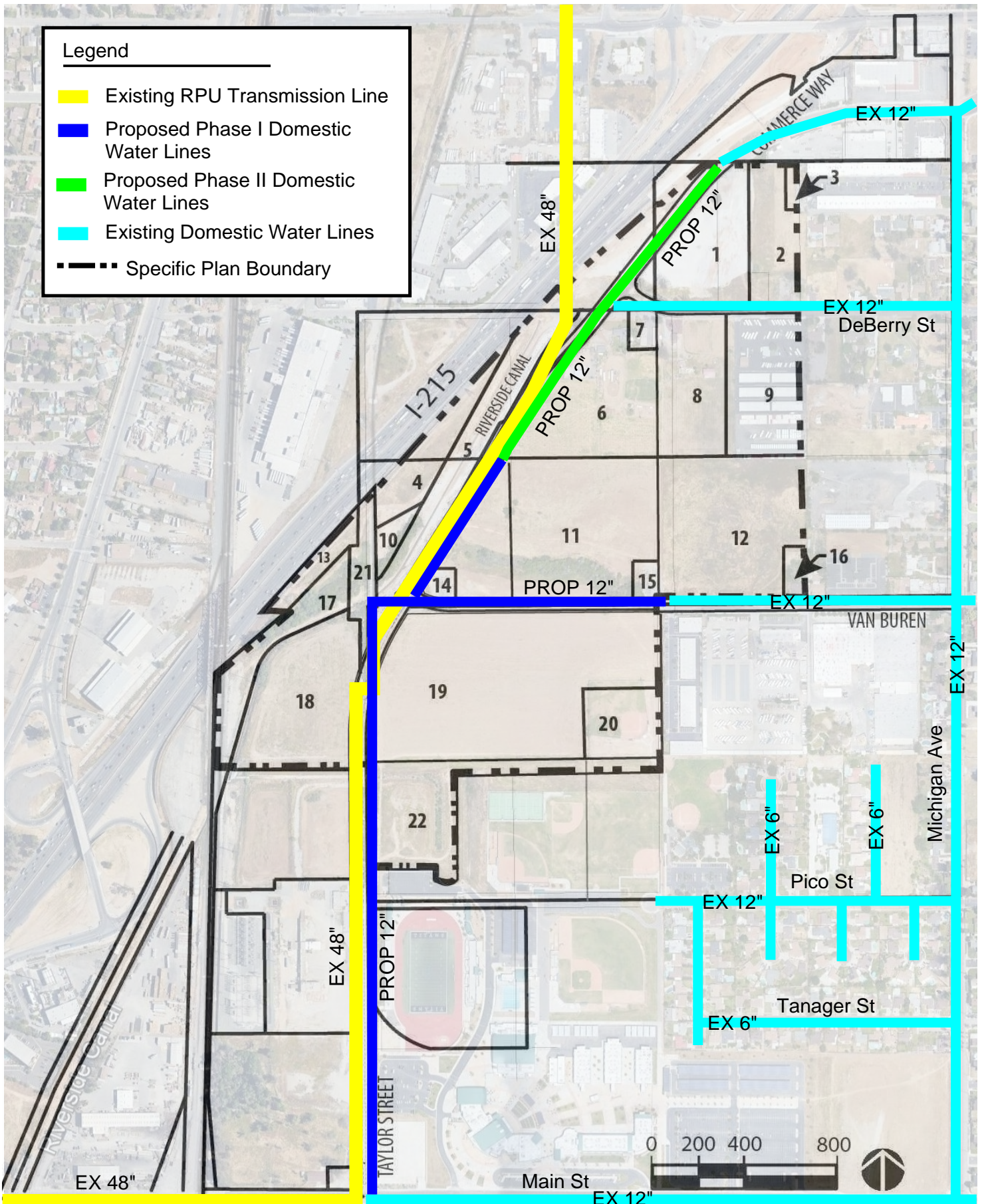
Source: The Gateway at Grand Terrace Specific Plan (2022).

**Exhibit 3-8: Construction Phasing Plan**  
 City of Grand Terrace  
 The Gateway at Grand Terrace Specific Plan



Source: The Gateway at Grand Terrace Specific Plan. (2022). Figure 3.4-1





Source: The Gateway at Grand Terrace Specific Plan. (2022). Figure 3.5-1

**Exhibit 3-10: Conceptual Water Plan**  
 City of Grand Terrace  
 The Gateway at Grand Terrace Specific Plan



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# LEGEND

SPECIFIC PLAN BOUNDARY

PLANNING AREAS

## CONCEPTUAL STORM DRAIN SYSTEM

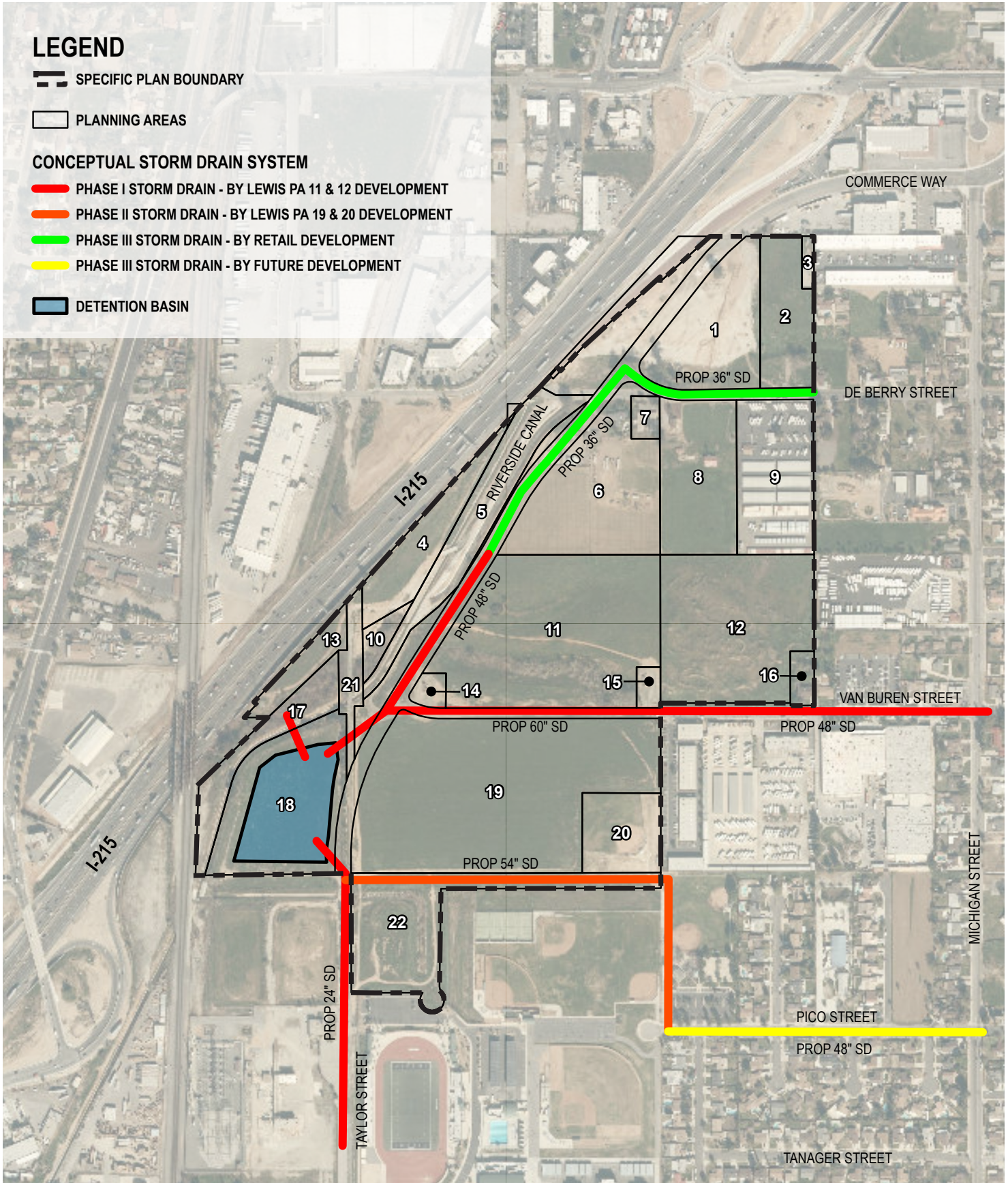
PHASE I STORM DRAIN - BY LEWIS PA 11 & 12 DEVELOPMENT

PHASE II STORM DRAIN - BY LEWIS PA 19 & 20 DEVELOPMENT

PHASE III STORM DRAIN - BY RETAIL DEVELOPMENT

PHASE III STORM DRAIN - BY FUTURE DEVELOPMENT

DETENTION BASIN

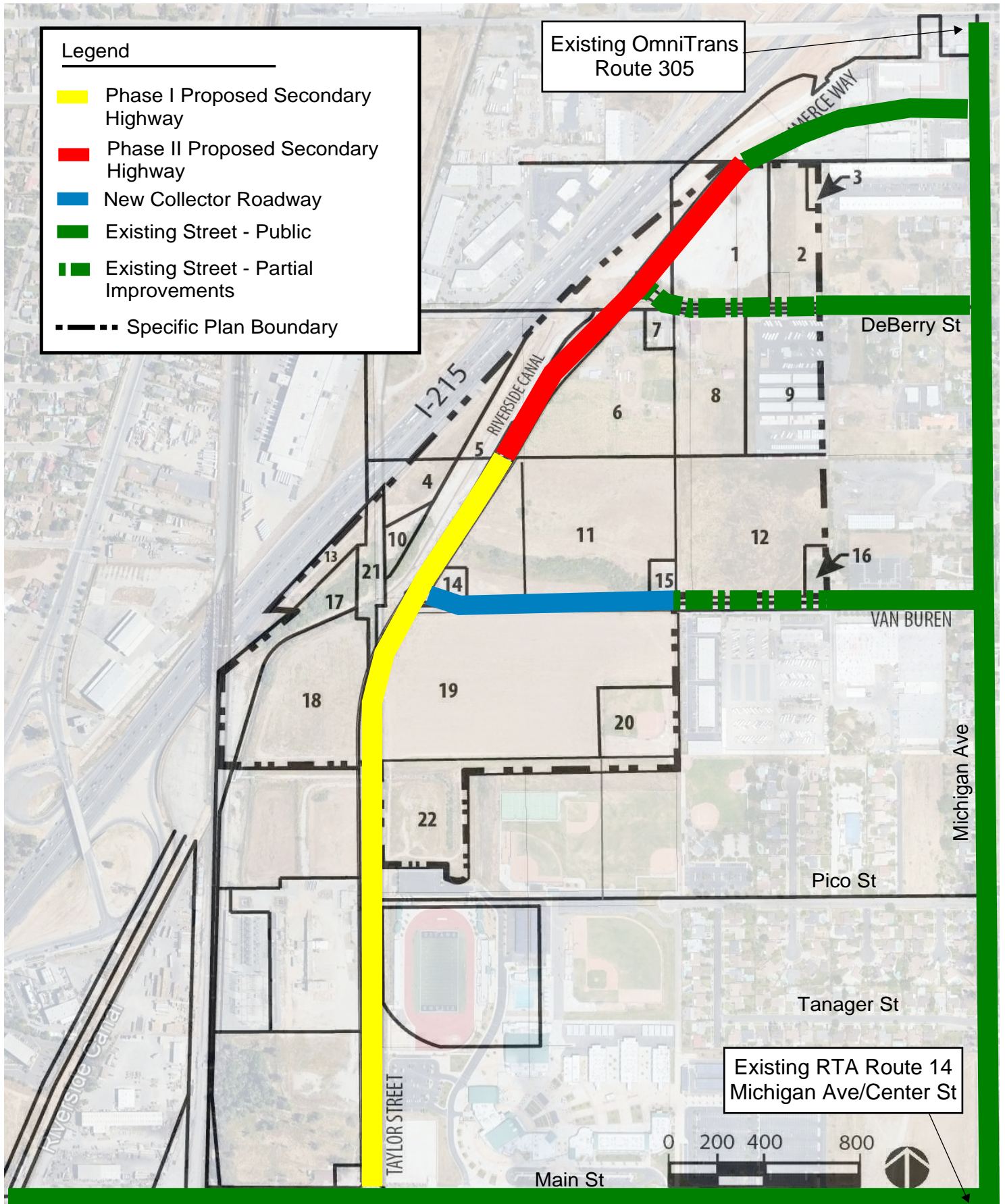


Source: The Gateway at Grand Terrace Specific Plan. (2023). Figure 3.3-1

### Exhibit 3-11: Conceptual Storm Drain Plan

City of Grand Terrace

The Gateway at Grand Terrace Specific Plan



Source: The Gateway at Grand Terrace Specific Plan. (2022). Figure 3.2.3

## 4.0 ENVIRONMENTAL IMPACT ANALYSIS

Organized by environmental resource category, this Environmental Impact Report (EIR) examines The Gateway at Grand Terrace Specific Plan (Project)'s impact on the existing environmental conditions, analyzes the Project's effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid potentially significant impacts associated with implementation of the Project. **Section 5.0, Other CEQA Considerations**, discusses significant and irreversible environmental changes and growth inducing impacts and **Section 7.0, Effects Not Found to Be Significant**, discusses environmental resource categories not discussed in detail.

### 4.0.1 SECTION CONTENT AND DEFINITION OF TERMS

This section contains separate subsections for each environmental resource categories that was determined through the Notice of Preparation (NOP) scoping process with a Public Scoping Meeting held on February 22, 2021. Sixteen public and agency comments were received during the NOP public review period which extended from February 8, 2021, to March 9, 2021. Environmental resource categories evaluated, and their corresponding EIR sections are:

- Section 4.1: Aesthetics
- Section 4.2: Air Quality
- Section 4.3: Biological Resources
- Section 4.4: Cultural Resources
- Section 4.5: Energy
- Section 4.6: Geology and Soils
- Section 4.7: Greenhouse Gas Emissions
- Section 4.8: Hazards and Hazardous Materials
- Section 4.9: Hydrology and Water Quality
- Section 4.10: Land Use and Planning
- Section 4.11: Noise
- Section 4.12: Population and Housing
- Section 4.13: Public Services
- Section 4.14: Recreation
- Section 4.15: Transportation
- Section 4.16: Tribal Cultural Resources
- Section 4.17: Utilities and Service Systems
- Section 4.18: Wildfire

Environmental resource categories that are not discussed in detail in this EIR because the Project would not impact these resources are Agricultural and Forestry Resources, and Mineral Resources (refer to **Section 7.0, Effects Not Found to Be Significant**).

Each potentially significant environmental resource category is addressed in a separate EIR Section (4.1 through 4.18) and is organized into the following Subsections:

- "Introduction" establishes the baseline conditions on the Project's impacts to each specific environmental resource category.
- "Environmental Setting" provides an overview of the existing physical environmental conditions in the study area that could be affected by implementation of the Project (i.e., the "affected environment").

- “Regulatory Setting” identifies the plans, policies, laws, and regulations that are relevant to each resource area and describes permits and other approvals necessary to implement the Project. The EIR addresses possible conflicts between the Project and the requirements of Federal, State, regional, or local agencies, including consistency with adopted land use plans, policies, or other regulations for the area. Therefore, this subsection summarizes or lists the potentially relevant regulations, as well as policies and objectives such as from the City of Grand Terrace General Plan and Municipal Code.
- “Significance Criteria Under CEQA” provides the criteria used in this document to define the level at which an impact would be considered significant in accordance with CEQA. Significance criteria used in this EIR are based on the checklist presented in Appendix G of the State CEQA Guidelines, factual or scientific information and data, and regulatory standards of Federal, State, and local agencies.
- “Project Impacts and Mitigation” provides impact thresholds pursuant to Appendix G of the State CEQA Guidelines followed by an analysis of the specific environmental resource categories that the Project may impact. Following the analysis, a conclusion is presented regarding the level of significance of each impact. Mitigation Measures” are recommended as feasible to avoid, minimize, offset, or otherwise compensate for significant and potentially significant impacts of the Project. Each mitigation measure is identified by resource area, numerically, and sequentially. For example, mitigation measures in **Section 4.2, Air Quality**, are numbered AQ-1, AQ 2, AQ-3 and so on. Pursuant to CEQA, the EIR provides a brief discussion of potentially significant impacts resulting from a given mitigation measure, if applicable.
- “Significant Unavoidable Impacts” identifies environmental impacts that may remain significant even with implementation of reasonable and feasible mitigation measures.
- “Cumulative Impacts” identifies potential environmental impacts of past, present and reasonably foreseeable future projects, in combination with the Project; and
- “References” that were used for content and analysis purposes are listed in this Subsection.

The level of impact of the Project is determined by comparing estimated effects with baseline conditions, in light of the thresholds of significance identified in the EIR. Under CEQA, the existing environmental setting normally represents baseline conditions against which impacts are compared to determine significance. The environmental baseline is typically set as the date of NOP distribution, unless more recent data is determined appropriate for utilization in the EIR. Project component-specific analyses are conducted to evaluate each potential impact on the existing environment. In cases where properties within the Project were not surveyed due to ownership issues and lack of accessibility, the Project’s impacts to those properties are discussed at a programmatic level. The analyses also specify why impacts are found to be significant, potentially significant, or less than significant, or why there is no environmental impact.

14 CCR §15382 and Public Resources Code (PRC) §21068 defines a significant effect on the environment as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the Project. A potentially significant effect is one that, if it were to occur, would be considered a significant impact; however, the occurrence of the impact is uncertain. PRC §21100(b)(3)

states that mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy, shall be included in the EIR. Subsection (d) of PRC §21100 adds that for the purposes of this section (PRC §21100), any significant effect on the environment shall be limited to substantial, or potentially substantial, adverse changes in physical conditions which exist within the area as defined in PRC §21060.5. Therefore, a “potentially significant” effect and “significant” effect are treated the same under CEQA in terms of procedural requirements and the need to identify feasible mitigation. 14 CCR §15364 and PRC §21061.1 states that “feasible” means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors. A mitigation measure is determined to be feasible if it would avoid or substantially lessen a significant effect on a resource (PRC §21082.3). A “less than significant” impact is one that would not result in a substantial adverse change in the physical environment (applicable significance thresholds would not be exceeded in consideration of existing laws, ordinances, standards, or regulations).

Both direct and indirect effects of the Project are evaluated for each environmental resource category (14 CCR §15126.2 and PRC §21065.3). Direct effects are those that are caused by the action and occur at the same time and place. Indirect effects are reasonably foreseeable consequences that may occur at a later time or at a distance that is removed from the Project area, such as growth-inducing effects and other effects related to changes in land use patterns, population density, or growth rate, and related effects on the physical environment.

Cumulative impacts are discussed below and at the end of each individual environmental resource category.

There are no mitigation measures proposed when there is no impact, or the impact is determined to be “less than significant” prior to mitigation (14 CCR §15126.4(a)(3)). Where sufficient feasible mitigation is not available to reduce impacts to a less than significant level, the impacts are identified as remaining “significant and unavoidable.”

## 4.0.2 CUMULATIVE IMPACTS ANALYSIS

### CEQA Requirements

Under the CEQA Guidelines, “a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts” (14 CCR §15130(a)(1)). According to CEQA, an EIR must discuss cumulative impacts if the incremental effect of a project, combined with the effects of other projects is “cumulatively considerable” (14 CCR §15130(a)). Together, these projects compose the cumulative scenario which forms the basis of the cumulative impact analysis.

Cumulative impacts analysis should highlight past actions that are closely related either in time or location to the project being considered, catalogue past projects, and discuss how they have harmed the environment and discuss past actions even if they were undertaken by another agency or another person. Both the severity of impacts and the likelihood of their occurrence are to be reflected in the discussion, “but the discussion need not provide as great detail as is provided for the effects attributable to the

Project alone. The discussion should be guided by standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact” (14 CCR §15130(b)).

For purposes of this EIR, the proposed Project would cause a cumulatively considerable and therefore significant cumulative impact if:

- The cumulative effects of other past, current, and probable future projects without the Project are not significant and the Project’s incremental impact is substantial enough, when added to the cumulative effects, to result in a significant impact.
- The cumulative effects of other past, current, and probable future projects without the Project are already significant and the Project would result in a cumulatively considerable contribution to the already significant effect. The standards used herein to determine whether the contribution is cumulatively considerable include the existing baseline environmental conditions, and whether the Project would cause a substantial increase in impacts, or otherwise exceed an established threshold of significance.

The approach and geographic scope of the cumulative impact evaluation vary depending on the environmental topic area being analyzed. Each section of the DEIR introduces a brief summary of the approach relevant to that environmental resource category. For most environmental resource categories, the list approach is used. The list of potentially relevant projects as well as methodology and relevant planning documents are discussed in each impact section’s discussion of “Cumulative Impacts.”

The cumulative analysis must be in sufficient detail to be useful to the decision maker in deciding whether, or how, to alter the Project to lessen cumulative impacts. **Table 4-1, Cumulative Projects List** provides a list of projects that were used in assessing the potential for cumulative impacts from the proposed Project. Most of the projects included in the cumulative analysis are undergoing, or will be required to undergo, their own independent environmental review under CEQA. Significant adverse impacts of the cumulative projects would be required to be reduced, avoided, or minimized through the application and implementation of mitigation measures. The net effect of these mitigation measures is assumed to be a general lessening of contribution to cumulative impacts. This discussion, found at the end of each impact section, provides an analysis of overall cumulative effects of the Project taken together with other past, present, and reasonably foreseeable probable future projects.

### Geographic Scope

In respect to this EIR analysis, cumulative effects can generally be geographically classified as localized, site-specific resource issues, regional, watershed level resource issues and global resource issues. At the localized, site-specific resource scale, the Project’s cumulative impacts have been analyzed for all 18 resource topics.

Each of the cumulative impact categories is analyzed and regulated by different agencies and associated regulatory or policy documents, in order to best protect the resource in question. The analysis of cumulative effects considers a number of variables, including geographic (spatial) limits, time (temporal) limits, and the characteristics of the resource being evaluated. The geographic scope of each analysis is

based on the topography surrounding the Project site and the natural boundaries of the resource affected, rather than jurisdictional boundaries. The geographic scope of cumulative effects will often extend beyond the scope of the direct effects, but not beyond the scope of the direct and indirect effects of the Project. The EIR addresses the Project's potentially significant impacts, recommends Project-specific mitigation measures, and then also identifies existing or recommended measures to address potential cumulative impacts.

### Cumulative Approach

There are two commonly used approaches, or methodologies, for establishing the cumulative impact setting or scenario. One approach is to use a "list of past, present, and probable future projects producing related or cumulative impacts including, if necessary, those projects outside the control of the agency, ..." (14 CCR §15130(b)(1)(A) and PCR §21083(b)(2)). The other is to use a "summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect" (14 CCR §15130(b)(1)(B) and PCR §21100(e)). This EIR uses the list-based approach to provide a broad understanding and context for analyzing the cumulative effects of a project.

From a broad perspective, the Project is located in the southwest portion of the City, east of I-215 within San Bernardino County (County). The Project would establish necessary plans, development standards, regulations, infrastructure requirements, design guidelines and implementation programs for the development of commercial, residential, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements, on 112 gross acres of land.

Specific cumulative projects were developed in consultation with City staff and incorporated into the Project Traffic Impact Analysis (TIA) (refer to **Section 4.15, Transportation**, and **Appendix J1, Traffic Impact Analysis**). Appendix B: Cumulative Projects of **Appendix J1**, shows the cumulative projects used in the traffic study from the City of Riverside, City of Rialto, City of Grand Terrace, City of Jurupa Valley, City of Colton, and County of Riverside which were then factored into the cumulative analysis for related quantitative environmental issues such as air quality and noise.

Taken together, the projects identified below and included in the TIA cumulative analysis, together with previously certified local planning program EIR, provide context as to the nature of potential cumulative projects. The intent of the cumulative impact discussions is to provide sufficient information to inform decision-makers and the public, rather than "tiering" off of prior CEQA documents for cumulative impacts.

### Types of Projects Considered

Impacts associated with implementation of the Project would be near- and long-term as the proposed Project would include future construction and operational activities associated with the Project buildout. The following projects represent past, present and probable future projects that could result in cumulative impacts when combined with the Project. Related projects and other possible development in the Project area determined as having the potential to interact with the proposed Project to the extent that a significant cumulative effect may occur are outlined in **Table 4-1, Cumulative Projects List**.



**Table 4-1: Cumulative Projects List**

| Project/Case Number  | ITE Land Use  | Jurisdiction          |
|--|---|-----------------------|
| P14-1033 P14-1034  | (150) - Warehousing   | City of Riverside     |
| P17-0506 P17-0507  | (710) - General Office Building<br>(150) - Warehousing                                | City of Riverside     |
| P18-0020 P18-0021 P18-0022 P18-0023  | (240) - Mobile Home Park  | City of Riverside     |
| P18-0595   | (110) - General Light Industrial  | City of Riverside     |
| P19-0325   | (710) - General Office Building<br>(151) - Mini-Warehouse                             | City of Riverside     |
| P20-0482 P20-0483  | (150) - Warehousing   | City of Riverside     |
| PR-2021-000932   | (150) - Warehousing   | City of Riverside     |
| PR-2021-000708   | (150) - Warehousing   | City of Riverside     |
| PR-2021-001122   | (150) - Junior/Community College  | City of Riverside     |
| PR-2022-001255   | (937) - Coffee/Donut Shop with Drive-Through Window                                   | City of Riverside     |
| Angelus Block  | (140) - Manufacturing<br>(710) - General Office Building                              | City of Rialto        |
| Conditional Use 21-01, Site and Architectural 20-08, Variance 20-01, Sign Program 20-05  | (822) - Strip Retail Plaza  | City of Grand Terrace |
| Conditional Use Permit 19-01, Site and Architectural 19-03, and Environmental 19-05  | (130) - Industrial Park   | City of Grand Terrace |
| Tentative Tract map 21-01, Site and Architectural Review 21-005, and Environmental 21-03   | (210) - Single-Family Detached Housing  | City of Grand Terrace |
| Site and Architectural Review 19-05, Conditional Use Permit 19-04, Minor Deviation 19-01, and  | (130) - Industrial Park   | City of Grand Terrace |
| General Plan Amendment 20-02, Specific Plan Amendment 20-02, Conditional Use Permit 20-01, Site and Architectural Review 20-03 and Environmental 20-03 | (220) - Multifamily Housing - Low Rise<br>(310) – Hotel<br>(822) - Strip Retail Plaza | City of Grand Terrace |
| General Plan 20-01, Zoning Code Amendment 20-01, Specific Plan 20-01, Tentative Tract Map, Site  | (210) - Single-Family Detached Housing  | City of Grand Terrace |
| Site and Architectural Review 18-09, Variance 18-001, and Environmental 18-08  | (220) - Multifamily Housing - Low Rise  | City of Grand Terrace |
| Conditional Use Permit 17-08, Site and Architectural 15-04 and Environmental 15-07   | (710) - General Office Building   | City of Grand Terrace |
| PP10269R1  | (710) - General Office Building   | County of Riverside   |
| PP25125  | (932) - High-Turnover (Sit-Down) Restaurant   | County of Riverside   |
| CUP03763   | (945) - Convenience Store/Gas Station   | County of Riverside   |
| PP23256  | (150) – Warehousing<br>(710) - General Office Building                                | County of Riverside   |
| TR24410  | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR28957  | (210) - Single-Family Detached Housing  | County of Riverside   |
| PPT210011  | (220) - Multifamily Housing - Low Rise  | County of Riverside   |
| PP24778  | (220) - Multifamily Housing - Low Rise  | County of Riverside   |
| PUP00884   | (560) - Church  | County of Riverside   |
| TR29170  | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR29168  | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR32291  | (210) - Single-Family Detached Housing  | County of Riverside   |

| Project/Case Number         | ITE Land Use  | Jurisdiction          |
|-----------------------------|---|-----------------------|
| TR30909                     | (522) - Middle School/Junior High School<br>(520) - Elementary School<br>(210) - Single-Family Detached Housing | County of Riverside   |
| TR30908                     | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR34592                     | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR29741                     | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR29597                     | (520) - Elementary School<br>(210) - Single-Family Detached Housing   | County of Riverside   |
| TR29598                     | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR29599R1                   | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR29740M1                   | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR29600                     | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR29740                     | (210) - Single-Family Detached Housing  | County of Riverside   |
| TR33410                     | (210) - Single-Family Detached Housing  | County of Riverside   |
| SP00208                     | (210) - Single-Family Detached Housing<br>(522) - Middle School/Junior High School<br>(820) Shopping Center     | County of Riverside   |
| CUP210007                   | (882) - Marijuana Dispensary  | County of Riverside   |
| CUP210012                   | (190) Marijuana Cultivation and Processing Facility   | County of Riverside   |
| CUP210001                   | (882) - Marijuana Dispensary  | County of Riverside   |
| CUP190007                   | (882) - Marijuana Dispensary  | County of Riverside   |
| CUP200007                   | (190) Marijuana Cultivation and Processing Facility   | County of Riverside   |
| PPT200017                   | (220) - Multifamily Housing - Low Rise  | County of Riverside   |
| PPT200016                   | (945) - Convenience Store/Gas Station   | County of Riverside   |
| Agua Mansa Road Development | (110) - General Light Industrial  | City of Jurupa Valley |
| DAP-001-668                 | (130) - Industrial Park   | City of Colton        |
| DAP-001-706                 | (944) - Gasoline/Service Station  | City of Colton        |
| DAP-001-654                 | (942) - Automobile Care Center  | City of Colton        |
| DAP-001-667                 | (310) - Hotel   | City of Colton        |
| DAP-001-602                 | (130) - Industrial Park   | City of Colton        |
| DAP-001-378                 | (210) - Single-Family Detached Housing  | City of Colton        |
| DAP-001-548 & 535           | (110) - General Light Industrial  | City of Colton        |
| DAP-001-646                 | (220) - Multifamily Housing - Low Rise  | City of Colton        |
| DAP-001-743                 | (150) - Warehousing   | City of Colton        |
| DAP-001-740                 | (942) - Automobile Care Center  | City of Colton        |
| DAP-001-730                 | (254) - Assisted Living   | City of Colton        |
| DAP-001-725                 | (253) - Congregate Care Facility  | City of Colton        |
| DAP-001-713                 | (650) - Free-Standing Emergency Room  | City of Colton        |
| DAP-001-707                 | (842) - Recreational Vehicle Sales  | City of Colton        |
| DAP-001-756                 | (150) - Warehousing   | City of Colton        |
| DAP-001-754                 | (942) - Automobile Care Center  | City of Colton        |
| DAP-001-748                 | (210) - Single-Family Detached Housing<br>(215) - Single-Family Attached Housing                                | City of Colton        |
| DAP-001-722                 | (220) - Multifamily Housing - Low Rise  | City of Colton        |
| DAP-001-745                 | (890) - Furniture Store   | City of Colton        |
| DAP-001-623                 | (150) - Warehousing   | City of Colton        |

## 4.1 AESTHETICS

### 4.1.1 INTRODUCTION

The purpose of this section is to describe the existing regulatory and environmental conditions related to aesthetics and other visual resources located in the vicinity of The Gateway at Grand Terrace Specific Plan (Project), within the City of Grand Terrace (City), and identify how Project implementation could result in potential environmental impacts. This section also recommends mitigation measures, as necessary, to avoid or reduce the significance of impacts. Aesthetic and other visual resources include both natural and built-up environments. Impacts could result from substantial adverse effects on a scenic vista, substantial damage to scenic resources (e.g., trees, rock outcroppings, or historic buildings) within a state scenic highway, and/or substantial degradation of the site and/or its surroundings' visual character, and/or from the creation of a new source of substantial light or glare.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

The affected environment discussion is based largely on the following documentation:

- City of Grand Terrace General Plan (Grand Terrace GP)
- City of Grand Terrace General Plan Draft Environmental Impact Report
- City of Grand Terrace Municipal Code (Grand Terrace MC)
- The Gateway at Grand Terrace Specific Plan (proposed Specific Plan)

### Visual Resource Concepts

The visual sensitivity of a landscape can be affected by the viewing distances at which it is seen and the type of viewshed. There are two types of viewsheds – static and dynamic. Static viewsheds can be seen from a single viewpoint and are frequently spotty with foreground and background views visible and the middle-ground obscured by landform, vegetation, or structures. However, most landscapes contain some vegetation or structures that obscure views and restrict the potential viewshed. Dynamic viewsheds are presented as a continuously unfolding series of viewsheds, such as from a commuter traveling on a highway. The faster a person moves the smaller the area on which they are able to focus their attention.

At 25 miles per hour (mph), a driver can see a view approximately 100 degrees wide; at 45 mph, the view drops to 65 degrees; and at 65 mph, it drops to a narrow 40 degrees, substantially reducing what is seen.

Proximity affects visual sensitivity as well. The further away a scene or object is from a viewer, the less exposure that viewer has. Conversely, the closer the viewer is to a scene or object, the more exposure the viewer has. The closer a resource is to the viewer, the more dominant it is and the greater its importance to the viewer. Distance zones can be used to determine the importance of views. There are three different distance zones; the foreground – views are 0.25 to 0.5 mile from the viewer; middle ground – views extend from the foreground zone to 3 to 5 miles from the viewer; and background – views extend from the middle ground zone to the limit of visibility. Additionally, fewer viewers means less exposure, and many viewers means more exposure. Furthermore, the duration viewers are exposed to the scene or object have an effect on viewer sensitivity as well. The more narrow the view and faster one travels, the shorter the duration and lessen the impact.<sup>1</sup>

#### 4.1.2 ENVIRONMENTAL SETTING

The total Project area encompasses approximately 112 acres. The Project site's geography is relatively flat and consists of elevations ranging from approximately 975 feet on the northeastern end of the site to approximately 945 feet on the southwestern corner. The Project site consists predominately of vacant land, as well as storage commercial uses, and six non-conforming residences. A concrete-lined storm channel carries runoff from a storm drain at the western end of De Berry Street, southwest beneath the Gage Canal and into the westward-flowing drainage way that crosses the Project area from the western end of Van Buren Street. This drainageway drains beneath Interstate 215 (I-215) in a concrete-lined channel, continues to the southwest beneath La Cadena Avenue, and flows into a debris basin approximately 0.8 mile off-site.

There is a decommissioned Union Pacific Railroad (UPR) line that traverses the Project area in a north/south direction that has been acquired by the City and will be used as part of the extension of Commerce Way from its existing terminus point south to the existing Taylor Street, and subsequent widening of the existing Taylor Street portion all the way south to its connection at Main Street. There are three wells owned by the City of Riverside located in the Project area that would remain but may be modified or relocated.

The existing non-lighted ball field northwest of Veterans Freedom Park is proposed to be relocated northwest of the Grand Terrace High School sports fields and constructed as a new lighted baseball field and a public playground. An existing Southern California Edison (SCE) substation located adjacent to the Project's southern boundary would remain in addition to the SCE power lines that cross the Project north of the substation. Riverside Canal Power Company owns the property where the decommissioned power station was located. Two billboard signs adjacent to I-215 would remain. There is a total of five occupied and one vacant residential structure with associated accessory structures on De Berry Street and Van Buren Street.

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<sup>1</sup> Federal Highway Administration (FHWA). Guidelines for the Visual Impact Assessment of Highway Projects. 2015. Retrieved from: [https://www.environment.fhwa.dot.gov/env\\_topics/other\\_topics/VIA\\_Guidelines\\_for\\_Highway\\_Projects.aspx](https://www.environment.fhwa.dot.gov/env_topics/other_topics/VIA_Guidelines_for_Highway_Projects.aspx). (accessed February 2023)

## Scenic Views

The City is located between two hillsides, Blue Mountain (elevation approximately 2,495 feet) to the east and the La Loma Hills (elevation approximately 1,400 feet) to the west, both offering scenic views that attract its residents.<sup>2</sup> Blue Mountain is a scenic resource which has become the symbol of the City, providing it with a scenic backdrop. Scenic views are also offered to the City by the San Gabriel and the San Bernardino Mountains to the north.

## Scenic Highways

Scenic highways and routes are a unique component of the circulation system as they traverse areas of unusual scenic or aesthetic value. No highways within the City are eligible or officially designated state or county scenic highways.<sup>3</sup> Therefore, the provisions of the California Scenic Highway Program (CSHP) do not apply.

## Light and Glare

Light and glare in the Project area are typical of that found in urban environments. Sources of light and glare adjacent to the Project site include commercial, industrial, and residential land uses. Stationary sources of light and glare in the Project area is generated from building interiors and exterior sources (i.e., building illumination, security lighting, parking lot lighting, and landscape lighting). The Project area is also influenced by light and glare from vehicle headlights, streetlights, and other sources that are present throughout the City.

### 4.1.3 REGULATORY SETTING

#### State

##### California Department of Transportation

The CSHP was created in 1963 to preserve and protect highway corridors in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. The California Department of Transportation (Caltrans) designates highways based on how much of the landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which views are compromised by development.

Caltrans manages the CSHP, which is intended to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. State laws governing State Scenic Highways are found in Streets and Highways Code §§260 to 263. A highway may be designated as scenic based on certain criteria, including how much of the natural landscape can be seen by travelers, the landscape's scenic quality, and the extent to which development intrudes on the traveler's enjoyment of the view. The CSHP's Scenic Highway System List identifies scenic highways that are either eligible for

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<sup>2</sup> City of Grand Terrace. *History*. (2022). Retrieved from: <https://www.grandterrace-ca.gov/visitors/history> (accessed November 4, 2022).

<sup>3</sup> Caltrans. (2018). *State Scenic Highway Map*. Retrieved from: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca> (accessed November 4, 2022).

designation or have already been designated as such. Section 261 requires local government agencies to take the following actions to protect the scenic appearance of a scenic corridor:

- Regulate land use and density of development
- Provide detailed land and site planning
- Prohibit off-site outdoor advertising and control on-site outdoor advertising
- Pay careful attention to and control of earthmoving and landscaping
- Scrutinize the design and appearance of structures and equipment

Official designation requires a local jurisdiction to enact a scenic corridor protection program that protects and enhances scenic resources.

## Local

### City of Grand Terrace General Plan

The purpose of the Grand Terrace GP Land Use Element and Open Space and Conservation Element is to define and establish a system which ensures a balance between economic growth and environmental protection for the City. These elements combined provide conservation, management policies, and action programs that will preserve the highest priority resources, while balancing the land needs of an ever-expanding population. The element's goals and policies applicable to the Project are listed below.

#### ***Land Use Element***

This Element provides overall guidance to all properties within the City through the distribution of land uses, by type, including residential, commercial, industrial, institutional, and open space. The Land Use Element identifies each land use designation's location and intensity, and its interrelationship with other land uses. The Land Use Element translates the City's long-range vision for development in the City and provides a Land Use Plan, goals, policies, and implementation programs to achieve that vision.

**Goal 2.1:**            **Provide for balanced growth which seeks to provide a wide range of employment and housing opportunities and maintenance of a healthy, diversified community.**

**Policy 2.1.5**        Enhancement of the City's image shall be undertaken by the establishment of City entrances and development of unified streetscapes.

**Policy 2.1.6**        Mixed use development which can demonstrate superior use of land, more efficient utilization of public facilities, and more effective conservation of natural resources shall be strongly encouraged by the City of Grand Terrace.

**Goal 2.5:**            **Provide for the preservation of natural resources and open space.**

**Policy 2.5.2**        Areas designated as Open Space shall be preserved to provide long term recreation opportunities as well as the preservation of scenic and environmental resources and the protection of public health and safety.

### ***Open Space and Conservation Element***

This Element focuses on attributes that contribute to the preservation of natural resources, such as the protection of sensitive habitat, the management of production resources, such as mineral deposits, agriculture, or groundwater recharge, and recreation and visual aesthetics. Concurrently, open space may be used to manage public safety hazards such as seismic activity, high fire hazards, and flood hazards. and quality of life in the communities and neighborhoods where people live. The following goal and policies are applicable to aesthetics.

**Goal 4.2:**               **Natural resources in the City of Grand Terrace shall be protected and preserved by utilizing open space designations or related regulations.**

**Policy 4.2.2**            The City shall establish land use regulations to preserve and protect any identified natural resources.

**Policy 4.2.3**            The City shall cooperate with the County of San Bernardino and other participating cities in identifying regional natural resource areas and developing appropriate mitigation measures to protect these resources.

### **City of Grand Terrace Municipal Code<sup>4</sup>**

The purpose of this Title is to promote the growth of the City in an orderly manner and to promote and protect the public health, safety, comfort, and general welfare.

Title 18 §18.60.040 Design Standards, Lighting:

- Lighting shall be designed to reflect away from residential districts and public roadways.
- Light standards shall not exceed eighteen feet in height measured from the finished grade of the parking surface.
- No lighting shall create illumination on an adjacent property which exceeds five foot-candles (measured at ground level).

Title 18 §18.74.080 Illumination<sup>5</sup>:

- No operation, activity, sign, or lighting fixture shall create illumination on adjacent property that exceeds three foot-candles, whether the illumination is direct or indirect light from the source, as measured from the property line.

### **4.1.4 SIGNIFICANCE CRITERIA UNDER CEQA**

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning aesthetics. The questions presented in the Environmental Checklist Form have been utilized

<sup>4</sup> City of Grand Terrace Municipal Code. Retrieved from: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeId=TIT18ZO\\_CH18.60OREPA\\_18.60.040DEST](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeId=TIT18ZO_CH18.60OREPA_18.60.040DEST). (accessed February, 2023)

<sup>5</sup> Grand Terrace MC. Title 18. (2021). Retrieved from: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeId=TIT18ZO\\_CH18.74PEST\\_18.74.080IL](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeId=TIT18ZO_CH18.74PEST_18.74.080IL) (accessed November 4, 2022).

as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria, as the basis for determining the impact's level of significance concerning aesthetics. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoids or reduces the potentially significant environmental impact. Where impacts remain significant despite compliance with the regulatory framework, feasible mitigation measures are recommended to avoid or reduce the Project's potentially significant environmental impacts.

The baseline conditions and impact analyses are based on a site visit conducted by Kimley-Horn personnel in March 2022, a review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. The determination that a Project component would or would not result in "substantial" adverse effects on scenic resources or visual character considers the site's aesthetic resource value and the severity of the Project component's visual impact (e.g., the nature and duration of the impact). For example, a Project component resulting in a severe impact on a site with a low aesthetic resource value would result in a less than significant impact concerning scenic or visual character. In other words, new conspicuous structures or visual changes in areas with a low aesthetic resource value may not necessarily result in substantial adverse effects on visual resources.

As previously discussed, the visual sensitivity can be impacted by viewing distances, number of viewers, duration of exposure, and speed at which viewers travel. The Project site is visible to various users. The sensitivity of those viewers changes with the length of time that the viewer would be within a Project site's static or dynamic viewpoints. Viewers of a Project site include nearby residents, recreational users, travelers, and commuters.

### 4.1.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.1-1:** *Would the Project have a substantial adverse effect on a scenic vista?*

**Level of Significance: Less Than Significant**



## Construction and Operations

Scenic views from the Project site includes the Blue Mountain to the east as well as views of the San Gabriel and San Bernardino Mountains to the north. As previously discussed, the City is located between two hillsides with elevations peaking at less than 2,495 feet, Blue Mountain to the east and La Loma Hills to the west, which both offer scenic views that attract its residents.<sup>6</sup> Although Blue Mountain provides terrain that offers scenic views that attract residents and visitors to the City, it is not officially designated as a scenic vista. Furthermore, the Grand Terrace GP does not officially designate any scenic vistas near the Project site. The Project site is predominately vacant with six non-conforming residences and existing public facilities. The surrounding area is currently developed with varying intensities of residential, commercial, institutional, and public park uses.

Due to the lack of officially designated scenic vistas, the Project site is not considered a visually sensitive area. The Project site is located approximately 1.4 miles west from Blue Mountain, and although Project buildout has the potential to obstruct dynamic views of Blue Mountain for motorists on I-215, the Project site would not significantly alter this condition; the existing view is already partially obstructed by trees, the hills adjacent to the east of Barton Road, a railroad bridge, concrete walls, and various other structures along I-215. For those traveling on I-215, changes to the scenic view would be less than significant, due to the existing partial obstruction as noted. Also those using I-215 are traveling at high speeds and as previously discussed, those traveling at high speeds on a freeway are likely have a low visual sensitivity for the landscape. Additionally, the Project would be located at a lower grade than I-215, and all buildings constructed within the Project site would be designed to not exceed maximum height standards for nonresidential and residential development pursuant to the proposed Specific Plan and Grand Terrace MC. Adherence to height standards of the Specific Plan and Grand Terrace MC would ensure Project buildout would not substantially degrade views of scenic resources surrounding the Project site, including Blue Mountain or the background ridgelines.

While development pursuant to the Grand Terrace GP Update may be visible to some observers, it would not substantially degrade views of Blue Mountain or the background ridgelines. Furthermore, there are no officially designated scenic vistas within the Project vicinity and compliance with Grand Terrace GP Policies that protect the scenic value of the Project area would also reduce impacts related to scenic vistas and no mitigation would be required.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.1-2: Would the Project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway?***

***Level of Significance: No Impact***

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<sup>6</sup> City of Grand Terrace. *History*. (2022). Retrieved from: <https://www.grandterrace-ca.gov/visitors/history>. (accessed November 2022).

## Construction and Operations

Scenic highways and routes are a unique component of the circulation system as they traverse areas of unusual scenic or aesthetic value. As previously mentioned, no State Designated Scenic Highway traverses the Project site nor is the Project in the vicinity of a State Designated Scenic Highway.<sup>7</sup> Therefore, the provisions of the CSHP do not apply. Scenic Route 38 (SR-38) is the nearest route eligible to be a State Designated Scenic Highway, and is located approximately nine miles northeast of the Project site. Due to distance and topography, the Project is not visible from the Eligible State Designated Scenic Highway portion of SR-38.

As previously mentioned, the Project site is relatively flat and consists predominately of vacant lands. Project development would most likely remove the existing trees and vegetation on-site and add new vegetation as proposed in the landscaping plan. The existing trees on site are not considered a landmark and do not consist of a group of distinctive trees accented in a setting as a focus of attention and are therefore not considered a scenic resource.<sup>8</sup> The Project area is not within a State Scenic Highway, and therefore, the Project would not damage scenic resources (i.e., trees, rock outcroppings, or historic buildings). No impact would occur.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.1-3: Would the Project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

***Level of Significance: Less Than Significant***

Public Resources Code (PRC) §21071 defines an urbanized area as:

- A. An incorporated city that meets either of the following criteria:
  1. Has a population of at least 100,000 persons.
  2. Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.

The current population of the City is 13,372 persons and therefore does not meet criterion A-1<sup>9</sup>. However, the City is contiguous with the City of Riverside (population 317,224) and the City of San Bernardino

<sup>7</sup> Caltrans. (2018). State Scenic Highway Map. Retrieved from: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. (accessed November 4 2022).

<sup>8</sup> Caltrans. Chapter 27 – Visual & Aesthetics Review. Retrieved from: <https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-1-guidance-for-compliance/ch-27-visual-aesthetics-review>. (accessed February, 2023)

<sup>9</sup> World Population Review, City of Grand Terrace. (2022). Retrieved from: <https://worldpopulationreview.com/us-cities/grand-terrace-ca-population>. (accessed November 4, 2022).

(population 224,537), which combined, far exceeds 100,000 persons, meeting criterion A-2.<sup>10,11</sup> This discussion will therefore analyze whether or not the Project would conflict with applicable zoning and other regulations governing scenic quality for a project within an urbanized area.

## Construction and Operations

The Project proposes several entitlements that include a Zone Change and General Plan Amendment, Specific Plan adoption, Tentative Tract Map, and a Development Agreement. The City's zoning map currently designates the Project site as Commercial Manufacturing (CM), Restricted Manufacturing (MR), and Industrial (M2). The Project proposes a Zone Change (ZC 17-02) to amend the existing zoning from CM, MR, and M2 to Gateway at Grand Terrace Specific Plan (GSP). The Project also proposes a General Plan Amendment (GPA; 17-01) to change the existing land use designation from Mixed Use (MU) to Gateway at Grand Terrace Specific Plan (GSP) to accommodate for horizontal mixed-use development of residential, commercial, public facilities, and public park. Project construction and operations would be in compliance with the land use plan, policies, development standards, and design guidelines outlined in the Specific Plan and would provide the site-specific requirements for future development within the area. The Project would also comply with the general standards, lighting standards, and the policies represented in the Grand Terrace GP (refer to **Section 4.1.3, Regulatory Setting** above). For a consistency analysis with general plan goals and policies, refer to **Table 4.10-2, General Plan Consistency Analysis** in **Section 4.10, Land Use and Planning**. Furthermore, the City's Zoning Code shall apply to all properties within the Project area, including but not limited to design review, use permits, appeals, amendments, and public notice and hearing provisions. The City's Zoning Code<sup>12</sup> also provides density ranges and development standards which would contribute to consistency in visual quality and character. With application of the Grand Terrace GP goals and policies and the City's Zoning Code, development would not substantially degrade the existing visual character or quality of the City and its surroundings.

Consistent with standard construction practices, equipment, vehicles, and materials are expected to be staged within a designated area on the Project site during construction. Although equipment staging could potentially be viewed from adjacent properties, this would be temporary and would cease upon completion of construction. Therefore, short-term construction impacts associated with the existing visual character and quality would be less than significant.

Additionally, the Project site includes a Southern California Edison (SCE) electrical substation and basins in the southern portion of the site, a public storage facility and a materials stockyard in the northern portion of the site, and the Gage Canal along the northwestern portion of the site. There is a decommissioned Union Pacific Railroad line that traverses the Project area in a north/south direction that has been acquired and would be used as part of the extension of Commerce Way. The existing SCE substation would remain in addition to the SCE power lines that cross the Project site north of the

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<sup>10</sup> World Population Review, City of Riverside (2022). Retrieved from: <https://worldpopulationreview.com/us-cities/riverside-ca-population>. (accessed November 4, 2022).

<sup>11</sup> World Population Review, City of San Bernardino (2022). Retrieved from: <https://worldpopulationreview.com/us-cities/san-bernardino-ca-population>. (accessed November 4, 2022).

<sup>12</sup> City of Grand Terrace Zoning Map. (2017). Retrieved from: [https://www.grandterrace-ca.gov/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/zoning\\_map\\_sep\\_2017.pdf](https://www.grandterrace-ca.gov/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/zoning_map_sep_2017.pdf). (accessed November 4, 2022).

substation. All new on-site lines would be placed underground, except when they relate to the existing electrical substation and the existing transmission lines that cross the site at various locations. Two billboard signs adjacent to I-215 would remain. There is a total of five occupied and one vacant residential structure with associated accessory structures on De Berry Street and Van Buren Street which would be removed prior to Specific Plan development occurring in those areas. Although the Project would alter the current visual character or quality of the Project site and its surroundings, the changes would not result in degradation, nor would they impact significant resources with proper guidelines and standards implemented.

The proposed Specific Plan provides general standards that would ensure landscaping design to be incorporated to soften the feel of the buildings and parking lots while enhancing the visual aspect of the Project area. Furthermore, landscape design would promote the aesthetic character value of the community by defining, unifying, and enhancing the pedestrian-friendly areas. Commercial parking areas would be designed to create aesthetically pleasing spaces throughout the Project area as well, and commercial development would incorporate strong entry treatments, exceptional visitor access, attractive landscaping, and clear graphics and signage to further enhance the aesthetic quality. Additionally, commercial development would include plazas and courtyards to enhance the visual interest of the Project site. Residential neighborhoods would be developed to create aesthetically pleasing elements that would be consistent with the selected overall architectural character for the neighborhood. Therefore, through compliance of development standards, design standards and guidelines, Grand Terrace GP policies, Specific Plan standards, and the City's Zoning Code, the Project would not conflict with applicable zoning and other regulations governing scenic quality in an urbanized area. Therefore, a less than significant impact would occur.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.1-4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

***Level of Significance: Less Than Significant***

### **Construction and Operations**

Lighting effects are associated with the use of artificial light during the evening and nighttime hours. Light and glare in the Project area are typical of that found in urban environments. Sources of light and glare adjacent to the Project Site include commercial, industrial, and residential land uses. Stationary sources of light and glare in the Project area is generated from building interiors and exterior sources (i.e., building illumination, security lighting, parking lot lighting, and landscape lighting). The Project area is also influenced by light and glare from vehicle headlights, streetlights, and other sources that are present throughout the City. Light introduction can be a nuisance to adjacent residential areas, diminish the clear night sky's view and, if uncontrolled, can cause disturbances. The Project is analyzed below for its potential to generate obtrusive light infusing spill light, glare, and sky glow. With respect to obtrusive lighting, the

degree of impact would vary widely depending on the amount of light generated, light sources heat, presence of barriers/obstructions, type/design of light source, and weather conditions.

The Project would consist of residential, commercial, public facilities, and public park land uses which would create a new source of substantial light to the surrounding areas by converting predominately vacant land to mixed-use development. The Project would provide a public park facility that would include a new lighted baseball field with a public playground, pedestrian and bike trails, a detention basin, and a mix of commercial/retail and restaurant development. Although the Project would require lighting for parking areas, pedestrian walkways, architectural and landscape features to provide safety, security, and ambiance, the Project would also be required to use anti-glare materials to minimize glare impacts in the surrounding area (refer to lighting standards in **Section 4.1.3, Regulatory Setting** above).

Grand Terrace MC Title 18 §18.60.040 Design Standards requires lighting be designed to reflect away from residential districts and public roadways and not exceed 18 feet in height measured from the finished grade of the parking surface. Additionally, Grand Terrace §18.74.080 Illumination requires lighting not create illumination on an adjacent property which exceeds five foot-candles (measured at ground level). Additionally, no operation, activity, sign, or lighting fixture would create illumination on adjacent property that exceeded three foot-candles, whether the illumination is direct or indirect light from the source, as measured from the property line (refer to **Section 4.1.3, Regulatory Setting**). All future Project development would be subject to Grand Terrace MC §§18.60.040, 18.74.080, and 18.80.140 which establish lighting standards and illumination requirements that would reduce the impacts from light and glare. Lighting for the proposed public park would be regulated by Grand Terrace MC §12.32.140 which would limit park use to between the hours of 6:00 a.m. and 10:00 p.m., unless a special permit is acquired.

Additionally, the Project would comply to the lighting standards presented in the Specific Plan which ensure exterior lighting would be located and designed to minimize direct glare outside of the specific area of use and lighting sources would be shielded, diffused, or directed to avoid glare to pedestrians and motorists. Light standards within the public right-of-way used for lighting the sidewalks and streets would be designed to be 24 feet in height and pedestrian paths that are separate from sidewalks would be lighted by pole, string lights, directed uplighting, urban art, or bollard-type fixtures which would be pedestrian-scaled (typically limited to a maximum height of 18 feet for pole lights, or six feet for bollards).

Additionally, all development would be required to prepare a comprehensive lighting plan, in conjunction with other site plans, for City review and approval. Although the Project would create a new source of light and glare in the area, all development within the Project area would be subject to the applicable urban lighting design standards set forth in the Specific Plan and Grand Terrace MC. Therefore, adherence with applicable Specific Plan and Grand Terrace MC design standards would ensure that the Project's light and glare impacts are less than significant.

### **Mitigation Measures**

No mitigation measures are required.

#### 4.1.6 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable aesthetic impacts have been identified.

#### 4.1.7 CUMULATIVE IMPACTS

When evaluating cumulative aesthetic impacts, several factors must be considered. The cumulative study area for aesthetic impacts is the viewshed that includes the Project area and its surroundings (refer to **Table 4-1, Cumulative Projects List** located in **Section 4.0, Environmental Impact Analysis**). The context in which a project is being viewed would also influence the aesthetic impact's significance. The contrast a project has with its surrounding environment may be reduced by the presence of other cumulative projects. If most of an area is or is becoming more urbanized, the contrast of a project with the natural surrounding may be less since it would not stand out in contrast as much.

A significant cumulative impact would occur if cumulative projects would adversely impact views of a scenic vista or scenic resources within a designated State Scenic Highway. Although the Project would change the current visual quality of the Project site, changes do not necessarily result in degradation, nor would it impact resources within a State Scenic Highway.

In order for a cumulative aesthetic impact to occur, the cumulative nature of the Project site taken with other projects, as seen together or in proximity to each other must be cumulatively considerable. In the case of the Project, the potential aesthetic impacts related to views, aesthetics, and light and glare are less than significant. Mitigation measures beyond the required conformance to applicable policies and guidance in the Specific Plan and Grand Terrace GP, are not required. Project-related and cumulative impacts would be less than significant.

#### 4.1.8 REFERENCES

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## 4.2 AIR QUALITY

### 4.2.1 INTRODUCTION

The section identifies existing conditions in The Gateway at Grand Terrace Specific Plan (Project) area and evaluates the Project's potential to conflict with an air quality plan; violate any air quality standards; result in a cumulative increase of a criteria pollutant; expose sensitive receptors to pollutants; and create objectionable odors. Mitigation to avoid/reduce impacts is identified, as needed. This section describes the existing air quality setting and evaluates potential impacts on air quality as they relate to the Project. Information given in this section is based on:

- Kimley-Horn and Associates, Inc. (2023). *Air Quality Assessment*.
- Kimley-Horn and Associates, Inc. (2022). *Health Risk Assessment*

The air quality and health risk assessments and associated calculations are provided in **Appendix A**.

The City received comments on the Project during the NOP public comment period in regard to air quality impacts. The South Coast Air Quality Management District (SCAQMD) requested that the Project utilize AQMD's CEQA Air Quality Handbook when preparing the air quality assessment and use CalEEMod's land use emissions software, to identify any potential adverse air quality impacts that could occur from the Project. The SCAQMD also recommended that mitigation measures be implemented to reduce any significant adverse air quality impacts and that the Project utilize health risk reduction strategies to reduce significant exposure to people. In addition, the Colton Joint Unified School District (CJUSD) requested that the EIR analyze short-term, long-term, and cumulative air quality impacts from all phases of the Project. In addition, the CJUSD requested that the Project prepare a health risk assessment (HRA) to address potential exposure of students and staff at nearby schools to risks related to increased pollutant concentrations. Impacts concerning air quality are further discussed in **Section 4.2.4** of this Draft EIR Section.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.



## 4.2.2 ENVIRONMENTAL SETTING

### Climate and Meteorology

The California Air Resources Board (CARB) divides the State into 15 air basins that share similar meteorological and topographical features. The Project is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, as well as all of Orange County. The SCAB is on a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean on the southwest and high mountains forming the remainder of the perimeter.<sup>1</sup> Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. These factors along with applicable regulations are discussed below.

The SCAB is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. This usually mild weather pattern is occasionally interrupted by periods of extreme heat, winter storms, and Santa Ana winds. The annual average temperature throughout the 6,645-square-mile SCAB ranges from low 60 to high 80 degrees Fahrenheit with little variance. With more oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas.

Contrasting the steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rainfall occurs between the months of November and April. Summer rainfall is reduced to widely scattered thundershowers near the coast, with slightly heavier activity in the east and over the mountains.

Although the SCAB has a semiarid climate, the air closer to the Earth's surface is typically moist because of the presence of a shallow marine layer. Except for occasional periods when dry, continental air is brought into the SCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog are frequent and low clouds known as high fog are characteristic climatic features, especially along the coast. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SCAB.

Wind patterns across the SCAB are characterized by westerly or southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is typically higher during the dry summer months than during the rainy winter. Between periods of wind, air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During winter and fall, surface high-pressure systems over the SCAB, combined with other meteorological conditions, result in very strong, downslope Santa Ana winds. These winds normally continue for a few days before predominant meteorological conditions are re-established.

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

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<sup>1</sup> Kimley-Horn and Associates, Inc. (2023). *Air Quality Assessment*. Page 6. See **Appendix A**.

In addition to the characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two distinct types of temperature inversions control the vertical depth through which air pollutants are mixed. These inversions are the marine inversion and the radiation inversion. The height of the base of the inversion at any given time is called the “mixing height.” The combination of winds and inversions is a critical determinant leading to highly degraded air quality for the SCAB in the summer and generally good air quality in the winter.

## Air Pollutants of Concern

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by state and federal laws. These regulated air pollutants are known as “criteria air pollutants” and are categorized into primary and secondary pollutants.

Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), reactive organic gases (ROG), nitrogen oxide (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and lead are primary air pollutants. Of these, CO, NO<sub>x</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are criteria pollutants. ROG and NO<sub>x</sub> are criteria pollutant precursors and form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. For example, the criteria pollutant ozone (O<sub>3</sub>) is formed by a chemical reaction between ROG and NO<sub>x</sub> in the presence of sunlight. O<sub>3</sub> and nitrogen dioxide (NO<sub>2</sub>) are the principal secondary pollutants. Sources and health effects commonly associated with criteria pollutants are summarized in **Table 4.2-1, Air Contaminants and Associated Public Health Concerns**.

**Table 4.2-1: Air Contaminants and Associated Public Health Concerns**

| Pollutant  | Major Man-Made Sources  | Human Health Effects  |
|--|---|---|
| Particulate Matter (PM <sub>10</sub> and PM <sub>2.5</sub> ) | Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.   | Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; asthma; chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility.          |
| Ozone (O <sub>3</sub> )                                      | Formed by a chemical reaction between reactive organic gases/volatile organic compounds (ROG or VOC) <sup>1</sup> and nitrogen oxides (NO <sub>x</sub> ) in the presence of sunlight. Motor vehicle exhaust industrial emissions, gasoline storage and transport, solvents, paints and landfills. | Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing, and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.                                |
| Sulfur Dioxide (SO <sub>2</sub> )                            | A colorless gas formed when fuel containing sulfur is burned and when gasoline is extracted from oil. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.   | Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain. |
| Carbon Monoxide (CO)   | An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.   | Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.   |
| Nitrogen Dioxide (NO <sub>2</sub> )                          | A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor  | Respiratory irritant; aggravates lung and heart problems. Precursor to O <sub>3</sub> . Contributes to global warming and nutrient overloading which  |

| Pollutant  | Major Man-Made Sources  | Human Health Effects  |
|--|---|---|
|  | vehicles, electric utilities, and other sources that burn fuel.   | deteriorates water quality. Causes brown discoloration of the atmosphere.   |
| Lead (Pb)  | Lead is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers. | Exposure to lead occurs mainly through inhalation of air and ingestion of lead in food, water, soil, or dust. It accumulates in the blood, bones, and soft tissues and can adversely affect the kidneys, liver, nervous system, and other organs. Excessive exposure to lead may cause neurological impairments such as seizures, mental retardation, and behavioral disorders. Even at low doses, lead exposure is associated with damage to the nervous systems of fetuses and young children, resulting in learning deficits and lowered IQ. |
| <sup>1</sup> Volatile Organic Compounds (VOCs or Reactive Organic Gases [ROG]) are hydrocarbons/organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including ROGs and VOCs. Both ROGs and VOCs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. The major sources of hydrocarbons are combustion engine exhaust, oil refineries, and oil-fueled power plants; other common sources are petroleum fuels, solvents, dry cleaning solutions, and paint (via evaporation). |   |   |
| Source: Ibid. pages 6-7 – Table 1  |   |   |

### Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that can cause short-term (acute) or long-term (i.e., chronic, carcinogenic or cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes more than 200 compounds, including particulate emissions from diesel-fueled engines.

CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine. Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

### Ambient Air Quality

CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. These stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. Existing levels of ambient air quality, historical trends, and projections near the Project are documented by measurements made by the SCAQMD, the

air pollution regulatory agency in the SCAB that maintains air quality monitoring stations which process ambient air quality measurements.

Pollutants of concern in the SCAB include O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The closest air monitoring station to the Project that monitors ambient concentrations of these pollutants is the Mira Loma Van Buren Monitoring Station (located approximately 9 miles from the Project). Local air quality data from 2019 to 2021 are provided in **Table 4.2-2, Ambient Air Quality Data**, which lists the monitored maximum concentrations and number of exceedances of state or national air quality standards for each year.

**Table 4.2-2: Ambient Air Quality Data**

| Criteria Pollutant   | 2019   | 2020   | 2021   |
|--|--------|--------|--------|
| <b>Ozone (O<sub>3</sub>)<sup>1</sup></b>   |        |        |        |
| 1-hour Maximum Concentration (ppm)   | 0.131  | 0.140  | 0.116  |
| 8-hour Maximum Concentration (ppm)   | 0.099  | 0.117  | 0.094  |
| <i>Number of Days Standard Exceeded</i>  |        |        |        |
| CAAQS 1-hour (>0.09 ppm)   | 26     | 51     | 20     |
| NAAQS 8-hour (>0.070 ppm)  | 64     | 89     | 53     |
| <b>Carbon Monoxide (CO)<sup>1</sup></b>  |        |        |        |
| 1-hour Maximum Concentration (ppm)   | 1.98   | 1.83   | 1.96   |
| <i>Number of Days Standard Exceeded</i>  |        |        |        |
| NAAQS 1-hour (>35 ppm)   | 0      | 0      | 0      |
| CAAQS 1-hour (>20 ppm)   | 0      | 0      | 0      |
| <b>Nitrogen Dioxide (NO<sub>2</sub>)<sup>1</sup></b>   |        |        |        |
| 1-hour Maximum Concentration (ppm)   | 0.0581 | 0.0533 | 0.0533 |
| <i>Number of Days Standard Exceeded</i>  |        |        |        |
| NAAQS 1-hour (>0.100 ppm)  | 0      | 0      | 0      |
| CAAQS 1-hour (>0.18 ppm)   | 0      | 0      | 0      |
| <b>Particulate Matter Less Than 10 Microns (PM<sub>10</sub>)<sup>1</sup></b>   |        |        |        |
| National 24-hour Maximum Concentration   | 118.8  | 162.5  | 98.7   |
| State 24-hour Maximum Concentration  | 115.7  | 158.2  | 96.1   |
| State Annual Average Concentration (CAAQS=20 µg/m <sup>3</sup> )   | —      | —      | —      |
| <i>Number of Days Standard Exceeded</i>  |        |        |        |
| NAAQS 24-hour (>150 µg/m <sup>3</sup> )  | 0      | 1      | 0      |
| CAAQS 24-hour (>50 µg/m <sup>3</sup> )   | 14     | 16     | 15     |
| <b>Particulate Matter Less Than 2.5 Microns (PM<sub>2.5</sub>)<sup>1</sup></b>   |        |        |        |
| National 24-hour Maximum Concentration   | 54.7   | 60.9   | 77.6   |
| State 24-hour Maximum Concentration  | 58.2   | 66.4   | 86.4   |
| <i>Number of Days Standard Exceeded</i>  |        |        |        |
| NAAQS 24-hour (>35 µg/m <sup>3</sup> )   | 10     | 12     | 13     |
| NAAQS = National Ambient Air Quality Standards; CAAQS = California Ambient Air Quality Standards; ppm = parts per million.<br>µg/m <sup>3</sup> = micrograms per cubic meter; — = not measured |        |        |        |
| <sup>1</sup> Measurements taken at the Mira Loma Van Buren Monitoring Station at 5130 Poinsettia Place, Mira Loma, California 92220 (CARB# 33165)  |        |        |        |
| Source: Ibid. page 9 – Table 2   |        |        |        |

## Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than is the general population. Sensitive receptors that are in proximity to localized sources of TACs are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The Project site is mainly surrounded by undeveloped/commercial land uses to the north and commercial/residential to

the east, south, and west. Planning Area (PA) 22 is bounded by the Grand Terrace High School parking lot to the south, and 90 feet from the nearest sensitive use area (i.e., tennis courts and baseball fields). Sensitive land uses nearest to the Project are shown in **Table 4.2-3, Sensitive Receptors**. Each sensitive receptor listed in **Table 4.2-3**, was analyzed in the Project's Air Quality and Health Risk Assessments for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> and is further discussed in Impact 4.2-3 below.

**Table 4.2-3: Sensitive Receptors**

| Receptor Description      | Distance and Direction from the Project  |
|---------------------------|--|
| Single-family Residences  | Adjacent to the east   |
| Veterans Freedom Park     | Adjacent to the southeast  |
| Single-family Residences  | 240 feet to the southeast  |
| Grand Terrace High School | 90 feet to the south from nearest sensitive use area (i.e., tennis courts and baseball fields) |

Source: Ibid. page 10 – Table 3

### 4.2.3 REGULATORY SETTING

Air quality within the Project area is regulated by several jurisdictions including the U.S. Environmental Protection Agency (EPA), CARB, and the SCAQMD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation. Although U.S. EPA regulations may not be superseded, both state and local regulations may be more stringent.

#### Federal

##### Federal Clean Air Act

Air quality is federally protected by the Federal Clean Air Act (FCAA) and its amendments. Under the FCAA, the U.S. EPA developed the primary and secondary National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants including O<sub>3</sub>, NO<sub>2</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead. Proposed projects in or near nonattainment areas could be subject to more stringent air-permitting requirements. The FCAA requires each state to prepare a State Implementation Plan (SIP) to demonstrate how it will attain the NAAQS within the federally imposed deadlines.

The U.S. EPA can withhold certain transportation funds from states that fail to comply with the planning requirements of the FCAA. If a state fails to correct these planning deficiencies within two years of Federal notification, the U.S. EPA is required to develop a Federal implementation plan for the identified nonattainment area or areas. The provisions of 40 Code of Federal Regulations (CFR) Parts 51 and 93 apply in all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a maintenance plan. Applicable federal standards are summarized in **Table 4.2-4, State and National Ambient Air Quality Standards**.

The FCAA was amended in 1990 to address the numerous air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. 188 specific pollutants and chemical groups were initially identified as hazardous air pollutants (HAPs), and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and for the issuance of stationary source operating permits.

In 2001, the U.S. EPA issued its first Mobile Source Air Toxics Rule, which identified 21 mobile source air toxic (MSAT) compounds as being HAPs that required regulation. A subset of six of these MSAT compounds were identified as having the greatest influence on health and included benzene, 1,3-butadiene, formaldehyde, acrolein, acetaldehyde, and DPM. More recently, the U.S. EPA issued a second MSAT Rule in February 2007, which generally supported the findings in the first rule and provided additional recommendations of compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike the criteria pollutants, toxics do not have NAAQS making evaluation of their impacts more subjective.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) were incorporated into a greatly expanded program for controlling toxic air pollutants. The provisions for the attainment and maintenance of the NAAQS were substantially modified and expanded. Other revisions included provisions regarding stratospheric O<sub>3</sub> protection, increased enforcement authority, and expanded research programs.

Section 112 of the FCAA Amendments governs the federal control program for HAPs. NESHAPs are issued to limit the release of specified HAPs from specific industrial sectors. These standards are technology-based, meaning that they represent the best available control technology an industrial sector could afford. The level of emissions controls required by NESHAPs are not based on health risk considerations because allowable releases and resulting concentrations have not been determined to be safe for the general public. The FCAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

### **Emission Standards for Off-Road Diesel Engines**

To reduce emissions from off-road diesel equipment, the U.S. EPA established a series of cleaner emission standards for new off-road diesel engines. Tier 1 standards were phased in from 1996 to 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006. Tier 3 standards were phased in from 2006 to 2008. Tier 4 standards, which generally require add-on emission control equipment to attain them, were phased in from 2008 to 2015.

### **Federal Emissions Standards for On-Road Trucks**

To reduce emissions from on-road, heavy-duty diesel trucks, the U.S. EPA established a series of increasingly strict emission standards for new engines, starting in 1988. The U.S. EPA promulgated the standards with the 2007 Heavy-Duty Highway Rule.<sup>2</sup> The particulate matter (PM) emission standard of 0.01 gram per horsepower-hour (g/hp-hr) is required for new vehicles beginning with model year 2007. Also, the NO<sub>x</sub> and nonmethane hydrocarbon (NMHC) standards of 0.20 g/hp-hr and 0.14 g/hp-hr, respectively, were phased in together between 2007 and 2010 on a percent of sales basis: 50 percent from 2007 to 2009 and 100 percent in 2010.

On December 20, 2022, the U.S. EPA adopted the Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards. The standards further reduce air pollution, including pollutants that create O<sub>3</sub> and PM, from heavy-duty vehicles and engines starting in model year 2027. The final

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<sup>2</sup> Kimley-Horn and Associates, Inc. (2022). *Health Risk Assessment*. Page 10. See **Appendix A**.

program includes new and more stringent emissions standards that cover a wider range of heavy-duty engine operating conditions when compared to today's standards, and it also requires these more stringent emissions standards to be met for a longer period of time of when these engines operate on the road. Specifically, the standards include emission-related warranty requirements and a longer regulatory useful life to ensure that more stringent standards are met for a longer period of time while the engines are in use.

## State

### California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) consists of the CARB, the Department of Pesticide Regulation (DPR), the Department of Resources Recycling and Recovery (CalRecycle), the Department of Toxic Substances Control (DTSC), the Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resources Control Board (SWRCB).

CARB administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in **Table 4.2-4**, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates.

The California Clean Air Act (CCAA) requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the SIP for meeting federal clean air standards for the State of California. Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events such as wildfires, volcanoes, etc. are not considered violations of a state standard, and are not used as a basis for designating areas as nonattainment. The applicable State standards are summarized in **Table 4.2-4**.

**Table 4.2-4: State and National Ambient Air Quality Standards**

| Pollutant  | Averaging Time         | State Standards <sup>1</sup>       | Federal Standards <sup>2</sup>     |
|--|------------------------|------------------------------------|------------------------------------|
| Ozone (O <sub>3</sub> ) <sup>2, 5, 7</sup>                         | 8 Hour                 | 0.070 ppm (137 µg/m <sup>3</sup> ) | 0.070 ppm                          |
|  | 1 Hour                 | 0.09 ppm (180 µg/m <sup>3</sup> )  | NA                                 |
| Carbon Monoxide (CO)   | 8 Hour                 | 9.0 ppm (10 mg/m <sup>3</sup> )    | 9 ppm (10 mg/m <sup>3</sup> )      |
|  | 1 Hour                 | 20 ppm (23 mg/m <sup>3</sup> )     | 35 ppm (40 mg/m <sup>3</sup> )     |
| Nitrogen Dioxide (NO <sub>2</sub> )                                | 1 Hour                 | 0.18 ppm (339 µg/m <sup>3</sup> )  | 0.10 ppm <sup>11</sup>             |
|  | Annual Arithmetic Mean | 0.030 ppm (57 µg/m <sup>3</sup> )  | 0.053 ppm (100 µg/m <sup>3</sup> ) |
| Sulfur Dioxide (SO <sub>2</sub> ) <sup>8</sup>                     | 24 Hour                | 0.04 ppm (105 µg/m <sup>3</sup> )  | 0.14 ppm (365 µg/m <sup>3</sup> )  |
|  | 1 Hour                 | 0.25 ppm (655 µg/m <sup>3</sup> )  | 0.075 ppm (196 µg/m <sup>3</sup> ) |
|  | Annual Arithmetic Mean | NA                                 | 0.03 ppm (80 µg/m <sup>3</sup> )   |
| Particulate Matter (PM <sub>10</sub> ) <sup>1, 3, 6</sup>          | 24-Hour                | 50 µg/m <sup>3</sup>               | 150 µg/m <sup>3</sup>              |
|  | Annual Arithmetic Mean | 20 µg/m <sup>3</sup>               | NA                                 |
| Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>3, 4, 6, 9</sup> | 24-Hour                | NA                                 | 35 µg/m <sup>3</sup>               |

| Pollutant   | Averaging Time          | State Standards <sup>1</sup>     | Federal Standards <sup>2</sup> |
|---|-------------------------|----------------------------------|--------------------------------|
|   | Annual Arithmetic Mean  | 12 µg/m <sup>3</sup>             | 12 µg/m <sup>3</sup>           |
| Sulfates (SO <sub>4-2</sub> )                                   | 24 Hour                 | 25 µg/m <sup>3</sup>             | NA                             |
| Lead (Pb) <sup>10, 11</sup>                                     | 30-Day Average          | 1.5 µg/m <sup>3</sup>            | NA                             |
|   | Calendar Quarter        | NA                               | 1.5 µg/m <sup>3</sup>          |
|   | Rolling 3-Month Average | NA                               | 0.15 µg/m <sup>3</sup>         |
| Hydrogen Sulfide (H <sub>2</sub> S)                             | 1 Hour                  | 0.03 ppm (42 µg/m <sup>3</sup> ) | NA                             |
| Vinyl Chloride (C <sub>2</sub> H <sub>3</sub> Cl) <sup>10</sup> | 24 Hour                 | 0.01 ppm (26 µg/m <sup>3</sup> ) | NA                             |

## Notes:

ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; mg/m<sup>3</sup> = milligrams per cubic meter; – = no information available.

<sup>1</sup> California standards for O<sub>3</sub>, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM<sub>10</sub>, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM<sub>10</sub> annual standard), then some measurements may be excluded. Measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe carbon monoxide standard is 6.0 ppm, a level one-half the national standard and two-thirds the State standard.

<sup>2</sup> National standards shown are the "primary standards" designed to protect public health. National standards other than for O<sub>3</sub>, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour O<sub>3</sub> standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour O<sub>3</sub> standard is attained when the 3-year average of the 4<sup>th</sup> highest daily concentrations is 0.070 ppm or less. The 24-hour PM<sub>10</sub> standard is attained when the 3-year average of the 99<sup>th</sup> percentile of monitored concentrations is less than 150 µg/m<sup>3</sup>. The 24-hour PM<sub>2.5</sub> standard is attained when the 3-year average of 98<sup>th</sup> percentiles is less than 35 µg/m<sup>3</sup>.

<sup>3</sup> Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM<sub>10</sub> is met if the 3-year average falls below the standard at every site. The annual PM<sub>2.5</sub> standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard. NAAQS are set by the EPA at levels determined to be protective of public health with an adequate margin of safety.

<sup>4</sup> On October 1, 2015, the national 8-hour O<sub>3</sub> primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the fourth-highest maximum daily 8-hour O<sub>3</sub> concentration per year, averaged over three years, is equal to or less than 0.070 ppm. EPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the O<sub>3</sub> level in the area.

<sup>5</sup> The national 1-hour O<sub>3</sub> standard was revoked by the EPA on June 15, 2005.

<sup>6</sup> In June 2002, CARB established new annual standards for PM<sub>2.5</sub> and PM<sub>10</sub>.

<sup>7</sup> The 8-hour California O<sub>3</sub> standard was approved by the CARB on April 28, 2005 and became effective on May 17, 2006.

<sup>8</sup> On June 2, 2010, the EPA established a new 1-hour SO<sub>2</sub> standard, effective August 23, 2010, which is based on the 3-year average of the annual 99<sup>th</sup> percentile of 1-hour daily maximum concentrations. The existing 0.030 ppm annual and 0.14 ppm 24-hour SO<sub>2</sub> NAAQS however must continue to be used until one year following EPA initial designations of the new 1-hour SO<sub>2</sub> NAAQS.

<sup>9</sup> In December 2012, EPA strengthened the annual PM<sub>2.5</sub> NAAQS from 15.0 to 12.0 µg/m<sup>3</sup>. In December 2014, the EPA issued final area designations for the 2012 primary annual PM<sub>2.5</sub> NAAQS. Areas designated "unclassifiable/attainment" must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

<sup>10</sup> CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure below which there are no adverse health effects determined.

<sup>11</sup> National lead standards, rolling 3-month average: final rule signed October 15, 2008. Final designations effective December 31, 2011.

Sources: Kimley-Horn and Associates, Inc. (2023). *Air Quality Assessment*. Page 12 – Table 4. See **Appendix A**

CARB's statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807 the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology (T-BACT) to minimize emissions. CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a HRA and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings.



In September 1992, the AB 2588 was amended by Senate Bill (SB) 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

SB 535, Disadvantaged Communities, passed in 2012 and updated June 2017, specifically targeted disadvantaged communities in California for investment of proceeds from the State's cap-and-trade program to improve public health, quality of life, and economic opportunity in California's most burdened communities, while also reducing pollution. SB 535 directed that 25 percent of the proceeds from the Greenhouse Gas Reduction Fund go to projects that provide a benefit to disadvantaged communities. The legislation gave CalEPA responsibility for identifying those communities. In 2016, the Legislature passed AB 1550, which now requires that a minimum 25 percent of proceeds from the fund be spent on projects located in disadvantaged communities. CalEPA has prepared a list of disadvantaged communities for the purpose of SB 535 and CalEnviroScreen is a general mapping tool developed by OEHHA to help identify California communities that are most affected by sources of pollution.

### **Diesel Risk Reduction Plan**

The identification of DPM as a TAC in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP) in October 2000. The DRRP's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline.<sup>3</sup> CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects.<sup>4</sup> The DRRP includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

### **Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles**

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM and oxides of nitrogen (NO<sub>x</sub>) emissions from existing diesel vehicles operating in California. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to most privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks and there are several extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

### **Heavy-Duty Vehicle Idling Emission Reduction Program**

The purpose of the CARB ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to DPM and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles. The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for

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<sup>3</sup> Kimley-Horn and Associates, Inc. (2022). *Health Risk Assessment*. Page 10. See **Appendix A**.

<sup>4</sup> *Ibid.* Page 10.

greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system (APS) for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, requires that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to “neutral” or “park,” and the parking brake is engaged.

### **CARB 2017 Technical Advisory (Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways)**

CARB published a Technical Advisory in 2017 to provide planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. Near-roadway development is a result of a variety of factors, including economic growth, demand for built environment uses, and the scarcity of developable land in some areas. The Technical Advisory notes that research has demonstrated the public health, climate, financial, and other benefits of compact, infill development along transportation corridors, and demonstrates that planners, developers, and local governments can pursue infill development while simultaneously reducing exposure to traffic-related pollution. On-site strategies to remove air pollution identified in the Technical Advisory include the use of particle filtration systems (i.e., high efficiency filtration in mechanical ventilation systems), solid barriers, and vegetation.

### **California Energy Commission - Title 24 Building Energy Efficiency Standards**

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in California Code of Regulations (CCR) Title 24 Part 6, were established in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are conceptually divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards the energy budgets - that vary by climate zone (of which there are 16 in California) and building type; thus, the Standards are tailored to local conditions, and provide flexibility in how energy efficiency in buildings can be achieved. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that provide a recipe or a checklist compliance approach.

The 2019 Energy Standards include requirements for mandatory mechanical ventilation intended to improve indoor air quality in homes, and requirements for Minimum Efficiency Reporting Value (MERV) 13 air filtration on space conditioning systems, and ventilation systems that provide outside air to a dwelling’s occupiable space. The Residential Compliance Manual for the 2019 Building Energy Efficiency Standards notes that air filter efficiencies of at least MERV 13 protect occupants from exposure to the smaller airborne particles (i.e., PM<sub>2.5</sub>) that are known to adversely affect respiratory health. CCR Title 24 Part 6 requires a particle size efficiency rating equal to or greater than 85 percent in the 1.0 to 0.3 µm range.

These standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. On August 11, 2021, the California Energy Commission (CEC) adopted the 2022 Energy Code which encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

### CalEnviroScreen

The OEHHA has developed CalEnviroScreen 4.0, which is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the State. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

According to CalEnviroScreen, the Project site and the surrounding residences are located within Census Tract 6071007106, which is within the 70<sup>th</sup> percentile.<sup>5</sup> It should be noted that the CalEnviroScreen scores are not an expression of health risk, and do not provide quantitative information on increases in cumulative impacts for specific sites or projects. Further, as a comparative screening tool, the results do not provide a basis for determining when differences between scores are significant in relation to public health or the environment.

### CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020, requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- **Zero-Emission Truck Sales:** Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- **Company and Fleet Reporting:** Large employers including retailers, manufacturers, brokers, and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations.

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<sup>5</sup> Ibid. Page 12.

This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

### **Executive Order N-79-20**

Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045, where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment “requiring increasing volumes” of new zero emission vehicles (ZEVs) “towards the target of 100 percent.” The executive order directs the CalEPA, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

## **Regional**

### **South Coast Air Quality Management District**

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. The agency’s primary responsibility is ensuring that state and national ambient air quality standards are attained and maintained in the SCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, and many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The CCAA provides the SCAQMD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example of this would be the motor vehicles at an intersection, a mall, and on highways. As a State agency, CARB regulates motor vehicles and fuels for their emissions.

The SCAQMD is also the lead agency in charge of developing the AQMP, with input from the Southern California Association of Governments (SCAG) and CARB. The AQMP is a comprehensive plan that includes control strategies for stationary and area sources, as well as for on-road and off-road mobile sources. SCAG has the primary responsibility for providing future growth projections and the development and implementation of transportation control measures. CARB, in coordination with federal agencies, provides the control element for mobile sources.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. The purpose of the AQMP is to set forth a comprehensive and integrated program that would lead the SCAB into compliance

with the federal 24-hour  $PM_{2.5}$  air quality standard, and to provide an update to the SCAQMD's commitments towards meeting the national 8-hour  $O_3$  standards. Specifically, the 2016 AQMP covers the following federal standards: 1979 1-hour  $O_3$  NAAQS, 1997 8-hour  $O_3$  NAAQS, 2006 24-hour  $PM_{2.5}$  NAAQS, 2008 8-hour  $O_3$  NAAQS, and the 2012 annual  $PM_{2.5}$  NAAQS.

On October 1, 2015, the U.S. EPA strengthened the NAAQS for ground-level  $O_3$ . The 2022 AQMP, adopted by the SCAQMD Governing Board on December 2, 2022, was developed to address the requirements for meeting the 2015 8-hour  $O_3$  standard. The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low  $NO_x$  technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other FCAA measures to achieve the 2015 8-hour  $O_3$  standard. The 2022 AQMP incorporates the latest scientific and technological information and planning assumptions, including the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* and updated emission inventory methodologies for various source categories. The 2022 AQMP requires CARB's adoption before submittal for the U.S. EPA's final approval, which is expected to occur sometime in 2023.

The SCAQMD has published the CEQA Air Quality Handbook (approved by the SCAQMD Governing Board in 1993 and augmented with guidance for Local Significance Thresholds [LST] in 2008). The SCAQMD guidance helps local government agencies and consultants to develop environmental documents required by CEQA and provides identification of suggested thresholds of significance for criteria pollutants for both construction and operation (see discussion of thresholds below). With the help of the CEQA Air Quality Handbook and associated guidance, local land use planners and consultants are able to analyze and document how proposed and existing projects affect air quality in order to meet the requirements of the CEQA review process. The SCAQMD periodically provides supplemental guidance and updates to the handbook on their website.

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. Under federal law, SCAG is designated as a Metropolitan Planning Organization and under State law as a Regional Transportation Planning Agency and a Council of Governments.

The state and national attainment status designations for the SCAB are summarized in **Table 4.2-5, South Coast Air Basin Attainment Status**. The SCAB is currently designated as a nonattainment area with respect to the State  $O_3$ ,  $PM_{10}$ , and  $PM_{2.5}$  standards, as well as the national 8-hour  $O_3$  and  $PM_{2.5}$  standards. The SCAB is designated as attainment or unclassified for the remaining state and national standards.

**Table 4.2-5: South Coast Air Basin Attainment Status**

| Pollutant   | State          | National                  |
|---|----------------|---------------------------|
| Ozone (O <sub>3</sub> )<br>(1 Hour Standard)                  | Non-Attainment | Non-Attainment (Extreme)  |
| Ozone (O <sub>3</sub> )<br>(8 Hour Standard)                  | Non-Attainment | Non-Attainment (Extreme)  |
| Particulate Matter (PM <sub>2.5</sub> )<br>(24 Hour Standard) | –              | Non-Attainment (Serious)  |
| Particulate Matter (PM <sub>2.5</sub> )<br>(Annual Standard)  | Non-Attainment | Non-Attainment (Moderate) |
| Particulate Matter (PM <sub>10</sub> )<br>(24 Hour Standard)  | Non-Attainment | Attainment (Maintenance)  |
| Particulate Matter (PM <sub>10</sub> )<br>(Annual Standard)   | Non-Attainment | –                         |
| Carbon Monoxide (CO)<br>(1 Hour Standard)                     | Attainment     | Attainment (Maintenance)  |
| Carbon Monoxide (CO)<br>(8 Hour Standard)                     | Attainment     | Attainment (Maintenance)  |
| Nitrogen Dioxide (NO <sub>2</sub> )<br>(1 Hour Standard)      | Attainment     | Unclassifiable/Attainment |
| Nitrogen Dioxide (NO <sub>2</sub> )<br>(Annual Standard)      | Attainment     | Attainment (Maintenance)  |
| Sulfur Dioxide (SO <sub>2</sub> )<br>(1 Hour Standard)        | Attainment     | Unclassifiable/Attainment |
| Sulfur Dioxide (SO <sub>2</sub> )<br>(24 Hour Standard)       | Attainment     | –                         |
| Lead (Pb)<br>(30 Day Standard)                                | –              | Unclassifiable/Attainment |
| Lead (Pb)<br>(3 Month Standard)                               | Attainment     | –                         |
| Sulfates (SO <sub>4-2</sub> )<br>(24 Hour Standard)           | Attainment     | –                         |
| Hydrogen Sulfide (H <sub>2</sub> S)<br>(1 Hour Standard)      | Unclassified   | –                         |

Source: Kimley-Horn and Associates, Inc. (2023). *Air Quality Assessment*. Page 14 – Table 5. See **Appendix A**

The following is a list of SCAQMD rules that are required of construction activities associated with the Project:

- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible PM are prohibited from crossing any property line. This rule is intended to reduce PM<sub>10</sub> emissions from any transportation, handling,

construction, or storage activity that has the potential to generate fugitive dust. PM<sub>10</sub> suppression techniques are summarized below.

- a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
  - b) All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
  - c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
  - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
  - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- **Rule 445 (Wood Burning)** – Rule 445 prohibits permanently installed wood-burning devices into any new development. A wood-burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.
  - **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

### Air Toxics Control Plan

The Air Toxics Control Plan (March 2000, revised March 26, 2004) is a planning document designed to examine the overall direction of the SCAQMD's air toxics control program. It includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control strategies that are deemed viable and are within the SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be implemented by other agencies will be developed in a cooperative effort, and the progress will be reported back to the Board periodically.

### Multiple Air Toxics Exposure Study

The SCAQMD conducted an in-depth analysis of the TACs and their resulting health risks for all of southern California. The Multiple Air Toxics Exposure Study in the SCAB (MATES V) (August 2021) shows that carcinogenic risk from air toxics in the SCAB, based on the average concentrations at the 10 monitoring sites, is approximately 40 percent lower than the monitored average in MATES IV and 84 percent lower than the average in MATES II.

MATES V is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with the SCAB emissions. Therefore, MATES V study represents the baseline health risk for a

cumulative analysis. MATES V estimates the average excess cancer risk level from exposure to TACs is 424 in one million basin-wide. In comparison, the MATES IV basin average risk was 897 per million. These model estimates were based on monitoring data collected at ten fixed sites within the SCAB. None of the fixed monitoring sites are near the Project site. However, MATES V has extrapolated the excess cancer risk levels throughout the SCAB by modeling the specific grids. MATES V modeling predicted an excess cancer risk of 410 in one million for the Project area.<sup>6</sup> DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 72 percent of the total risk shown in MATES V in this area.

## Local

### City of Grand Terrace General Plan

The City of Grand Terrace General Plan contains the following goals and policies from the Open Space & Conservation Element that address air quality and are pertinent to the Project:

**Goal 4.7:** Support air quality planning through land use policies, outreach efforts, and participation in regional air quality planning.

**Policy 4.7.1** The City shall evaluate and implement traffic flow improvements and construction management practices that reduce locally generated vehicle emissions.

**Policy 4.7.2** The City shall encourage the use of public transportation through coordination with local and regional transit providers.

**Policy 4.7.3** The City shall encourage land use planning and urban design that reduces vehicle trips through mixed use development, consolidation of commercial uses along arterial highways, and pedestrian connection between residential and commercial uses.

**Policy 4.7.5** The City shall encourage employers to develop and implement trip reduction plans including alternate work schedules, rideshare programs, telecommuting, and employee education programs.

**Policy 4.7.6** The City shall implement policies and procedures designed to reduce emissions generated by construction activities including enforcement of SCAQMD Rule 403.

**Policy 4.7.7** The City shall promote energy conservation efforts in new and existing residences and businesses.

The City of Grand Terrace General Plan contains the following goals and policies from the Sustainable Development Element that address air quality and are pertinent to the Project:

**Goal 9.3:** Support sustainable development through good urban design practices.

**Policy 9.3.1** Incorporate “green” building practices into the review of all new or renovated development projects.

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<sup>6</sup> Kimley-Horn and Associates, Inc. (2022). *Health Risk Assessment*. Page 14. See **Appendix A**.



## Grand Terrace Municipal Code

The Grand Terrace Municipal Code establishes the following air quality provisions relative to the Project.

### ***Section 18.74.040 – Odor.***

No operation or activity shall be permitted to emit odorous gases or other odorous matter in such quantities as to be dangerous, injurious, noxious, or otherwise objectionable which is detectable with or without the aid of instruments at or beyond the property line.

### ***Section 18.74.050 – Particulate matter and air contaminants standards.***

The operation of facilities shall not directly or indirectly discharge air contaminants into the atmosphere, including smoke, sulfur compounds, dust, soot, carbon, noxious acids, gases, mist, odors, or PM, or other air contaminants or combinations which exceed any local, state, or federal air quality standards or which might be obnoxious or offensive to anyone residing or conducting business either on-site or abutting the subject site. Particulate matter shall not be discharged into the atmosphere in excess of the standards of Federal and State requirements.

## Laws, Ordinances and Regulations (LORs)

LORs are existing requirements that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical LORs include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate.

### **LOR AQ-1**

Prior to the issuance of grading permits, the City Engineer shall confirm that the Grading Plan, Building Plans and Specifications require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD's) Rules 402 and 403 to minimize construction emissions of dust and particulates. The measures include, but are not limited to, the following:

- Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
- All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.

- LOR AQ-2** Pursuant to SCAQMD Rule 1113, the Project Applicant shall require by contract specifications that the interior and exterior architectural coatings (paint and primer including parking lot paint) products used would have a volatile organic compound (VOC) rating of 50 grams per liter or less.
- LOR AQ-3** Require diesel-powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations (CCR) §2449.
- LOR AQ-4** Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape requirements (Chapter 15.56 of the City's Municipal Code).
- LOR AQ-5** The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6). These standards are updated, normally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (§110.10) require buildings to be designed to have 15 percent of the roof area "solar ready" that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.
- LOR AQ-6** The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:
- Design buildings to be water efficient. Install water-efficient fixtures in accordance with §4.303 (residential) and §5.303 (nonresidential) of the California Green Building Standards Code Part 11.
  - Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with §4.408.1 (residential) and §5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
  - Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with §4.410 (residential) and §5.410 (nonresidential) of the California Green Building Standards Code Part 11.
  - Provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles. At least eight percent of the total parking spaces are required to be designated in accordance §5.106.5.2 (nonresidential), Designated Parking for Clean Air Vehicles, of the California Green Building Standards Code Part 11
- To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with §4.106.4 (residential electric vehicle charging) of the

California Green Building Standards Code Part 11 and nonresidential construction shall comply with §5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

#### 4.2.4 SIGNIFICANCE CRITERIA UNDER CEQA

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable state or federal ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.
- Exceed SCAQMD Thresholds.

#### SCAQMD Thresholds

The significance criteria established by SCAQMD may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality during construction and operational activities of land use development projects, as shown in **Table 4.2-6, South Coast Air Quality Management District Emissions Thresholds**. In addition, SCAQMD also established thresholds for cumulative construction and operational activities, which is further discussed in **Section 4.2.5** below.

**Table 4.2-6: South Coast Air Quality Management District Emissions Thresholds**

| Criteria Air Pollutants and Precursors  | Maximum Pounds Per Day |                     |
|---|------------------------|---------------------|
|   | Construction-Related   | Operational-Related |
| Reactive Organic Gases (ROG)            | 75                     | 55                  |
| Carbon Monoxide (CO)                    | 550                    | 550                 |
| Nitrogen Oxides (NO <sub>x</sub> )      | 100                    | 55                  |
| Sulfur Oxides (SO <sub>x</sub> )        | 150                    | 150                 |
| Coarse Particulates (PM <sub>10</sub> ) | 150                    | 150                 |
| Fine Particulates (PM <sub>2.5</sub> )  | 55                     | 55                  |

Source: Kimley-Horn and Associates, Inc. (2023). *Air Quality Assessment*. Page 17 – Table 6. See **Appendix A**

#### Localized Carbon Monoxide

In addition to the daily thresholds listed above, development associated with the Project would also be subject to the ambient air quality standards. These are addressed through an analysis of localized CO impacts. The significance of localized impacts depends on whether ambient CO levels near the Project site are above state and national CO standards (the more stringent California standards are 20 parts per

million (ppm) for 1-hour and 9 ppm for 8-hour). The SCAB has been designated as attainment under the 1-hour and 8-hour standards.

### Localized Significance Thresholds

In addition to the CO hotspot analysis, the SCAQMD developed LSTs in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific emissions. The SCAQMD developed LSTs for emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a project without expecting to cause or substantially contribute to an exceedance of the most stringent state or national ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. The City of Grand Terrace is located within SCAQMD SRA 34. **Table 4.2-7, Local Significance Thresholds for Construction/Operations (Maximum Pounds Per Day)** shows the LSTs for a 1-acre, 2-acre, 4-acre (interpolated), and 5-acre project in SRA 34. Because the nearest sensitive receptors are adjacent to the east of the Project site, the thresholds for distances of 25 meters or less are listed below.

**Table 4.2-7: Local Significance Thresholds for Construction/Operations (Maximum Pounds Per Day)**

| Project Size | Nitrogen Oxide (NO <sub>x</sub> ) | Carbon Monoxide (CO) | Coarse Particulates (PM <sub>10</sub> ) | Fine Particulates (PM <sub>2.5</sub> ) |
|--------------|-----------------------------------|----------------------|---|--|
| 1 Acre       | 118/118                           | 667/667              | 4/1                                     | 3/1                                    |
| 2 Acres      | 170/170                           | 972/972              | 7/2                                     | 4/1                                    |
| 4 Acres      | 207/207                           | 2,392/2,392          | 17/5                                    | 9/3                                    |
| 5 Acres      | 270/270                           | 1,746/1,746          | 14/4                                    | 8/2                                    |

Source: Ibid. Page 18 – Table 7

LSTs associated with all acreage categories are provided in **Table 4.2-7** for informational purposes. **Table 4.2-7** shows that the LSTs increase as acreages increase. It should be noted that LSTs are screening thresholds and are therefore conservative. The construction LST acreage is determined based on daily acreage disturbed. The operational LST acreage is based on the total area of the Project site. Although the Project site is greater than five acres, the 5-acre operational LSTs are conservatively used to evaluate the Project.

### Methodology

This air quality impact analysis considers construction and operational impacts associated with the Project. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod) 2020.4 (current adopted version at time of preparing impact analysis). CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Air quality impacts were assessed according to methodologies recommended by CARB and the SCAQMD.

Construction equipment, trucks, worker vehicles, and ground-disturbing activities associated with Project construction would generate emissions of criteria air pollutants and precursors. Daily regional construction emissions are estimated by assuming construction occurs at the earliest feasible date (i.e., a conservative estimate of construction activities) and applying off-road, fugitive dust, and on-road emissions factors in CalEEMod. The Project is a Specific Plan, and no development proposals are included at this time. Build out of the Specific Plan would occur in multiple phases over several years and future development would be subject to project-specific City discretionary review and approval. However, for analysis purposes construction was conservatively analyzed to be completed within two phases.<sup>7</sup>

Project operations would result in emissions of area sources (consumer products, architectural coating, and landscape equipment), energy sources (natural gas usage), mobile sources (motor vehicles from Project generated vehicle trips), and off-road equipment. Project-generated operational emissions would be predominantly associated with motor vehicle use. Emissions from each of these categories are discussed below.

- **Area Sources.** Area source emissions would be generated due to consumer products, on-site equipment, architectural coating, and landscaping that were previously not present on the site. Consumer products are various solvents used in non-industrial applications, which emit VOCs during product use. These typically include cleaning supplies, kitchen aerosols, cosmetics, and toiletries. It should be noted that the default area source VOC emission factor developed for CalEEMod is based on a statewide factor. The CalEEMod default emissions rates were used.
- **Energy Sources.** Energy source emissions would be generated due to electricity and natural gas usage associated with the Project. Primary uses of electricity and natural gas by the Project would be from space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. Energy source emissions were calculated in CalEEMod. No changes were made to the default energy usage consumption rates or emissions factors.
- **Mobile Sources.** Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are all pollutants of regional concern. NO<sub>x</sub> and ROG react with sunlight to form O<sub>3</sub>, known as photochemical smog. Additionally, wind currents readily transport PM<sub>10</sub> and PM<sub>2.5</sub>. However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions are based on the trip generation within the Project Transportation Impact Analysis (**Appendix J**) and incorporated into CalEEMod as recommended by the SCAQMD. The Project's generated traffic was obtained from the Project's Transportation Impact Analysis Report for The Gateway Specific Plan at Grand Terrace prepared by Fehr and

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<sup>7</sup> Emissions in future years (i.e., due to a later construction start date or operational opening year) would be lower due to phased-in emissions standards, inspection and maintenance requirements, and fleet turnover). Specifically, Project construction was modeled to start in 2023 (Phase 1) and 2025 (Phase 2) but would likely commence at a later date. As such, construction impacts would be less than those analyzed due to the use of more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to state regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, Project-related construction air quality impacts would be lower than the impacts disclosed herein. For emissions modeling purposes, conservatively analyzing the emissions using an earlier construction start date (i.e., 2023 and 2025), provides for a worst-case analysis and full disclosure of potential air quality impacts, as required by CEQA.

Peers (October 2022). Project trip generation from the transportation report is based on the following Institute of Transportation Engineers (ITE) land use categories:

- ITE Land Use 220: Multifamily Housing (Low-rise) (375 dwelling units, 2,528 total daily vehicle trips).
- ITE Land Use 210: Single-Family Detached Housing (160 dwelling units, 1,509 total daily vehicle trips).
- ITE Land Use 215: Single-Family Attached Housing (160 dwelling units, 1,152 total daily vehicle trips).
- ITE Land Use 820: Shopping Center (232.8 thousand square feet, 8,616 total daily vehicle trips).
- ITE Land Use 151: Mini-Warehouse (91.9 thousand square feet, 133 total daily vehicle trips).
- ITE Land Use 932: High-Turnover (Sit-Down) Restaurant (five thousand square feet, 536 total daily vehicle trips).
- ITE Land Use 934: Fast-Food Restaurant with Drive-Through (six thousand square feet, 2,805 total daily vehicle trips)

The Project would generate a total of 17,279 daily trips. When accounting for internal capture and diverted trips, the Project would generate 14,535 daily trips. Mobile source emissions reflect the Project's net 14,535 daily trips.

As discussed above, the SCAQMD provides significance thresholds for emissions associated with proposed Project construction and operations. The proposed Project's construction and operational emissions are compared to the daily criteria pollutant emissions significance thresholds in order to determine the significance of a project's impact on regional air quality.

The localized effects from the Project's on-site emissions were evaluated in accordance with the SCAQMD's LST methodology, which uses on-site mass emissions rate look-up tables and Project-specific modeling. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable national or state ambient air quality standards and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

## 4.2.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.2-1:** *Would the Project conflict with or obstruct implementation of the applicable air quality plan?*

**Level of Significance:** *Significant and Unavoidable*

As part of its enforcement responsibilities, the U.S. EPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based

programs. Similarly, under State law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the state and national ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project is located within the SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the FCAA, to reduce emissions of criteria pollutants for which the SCAB is in nonattainment. To reduce such emissions, the SCAQMD drafted the 2016 AQMP and 2022 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving CAAQS and NAAQS. The primary purpose of the 2022 AQMP is to identify, develop, and implement strategies and control measures to meet the 2015 8-hour O<sub>3</sub> NAAQS. Air quality management planning is a regional and multi-agency effort including the SCAQMD, the CARB, the SCAG, and the U.S. EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2020-2045 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined by the following indicators:

- **Consistency Criterion No. 1:** The Project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The Project will not exceed the assumptions in the AQMP, or increments based on the years of the Project build-out phase.

According to the SCAQMD's CEQA Air Quality Handbook, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with CAAQS and NAAQS.

The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. As shown in **Table 4.2-8, Construction-Related Emissions**, the Project would not exceed construction emission standards with the exception of ROG. Therefore, **MM AQ-1** would be implemented to reduce ROG emissions which requires the use of "Super-Compliant" low VOC paint for interior and exterior architectural coatings and paintings. Additionally, operational emissions would exceed the operational standard for ROG and NO<sub>x</sub> despite the implementation of all feasible mitigation, as shown in **Table 4.2-9, Unmitigated Operational Emissions** and **Table 4.2-10, Mitigated Operational Emissions**. **MM AQ-2** through **AQ-5** are included to reduce operational emissions to the greatest amount feasible. However, even with mitigation, operational emissions would remain above the SCAQMD threshold. Therefore, the Project would potentially contribute to an existing air quality violation. Thus, the Project is not consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans.

The Project site has currently a Mixed-Use land use and the following existing zoning: Commercial Manufacturing (CM), Restricted Manufacturing (RM), Public Facilities (PUB), and Industrial (M-2). The Project site is primarily vacant and/or used for storage with six non-conforming residences. The Project would include plans, development standards, regulations, zoning, infrastructure requirements, design guidelines, and implementation programs on which subsequent Project-related development (i.e., future implementing development projects) would adhere to. Future development uses on the Project site would consist of residential, commercial, and public facilities.

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Project would result in a change of land use designations not reflected in the AQMP. Therefore, the Project is conservatively assumed to generate emissions not reflected within the current 2022 AQMP regional emissions inventory for the SCAB and is considered to be inconsistent with the AQMP. Thus, the Project is not consistent with the second criterion.

As noted above (and discussed further in Threshold 4.3-2, below), Project implementation would result in air pollutant emissions (ROG and NO<sub>x</sub>) that exceed SCAQMD's operational emission thresholds. Although mitigation would reduce emissions by the greatest feasible amount, Project emissions levels would remain significant and would contribute to the nonattainment designations in the SCAB. Therefore, the Project would be inconsistent with the AQMP, resulting in a significant and unavoidable impact despite the implementation of mitigation.

### **Mitigation Measures**

**MM AQ-1**      **Low VOC Paint (Construction).** During construction, the Project shall utilize "Super-Compliant" low VOC paints which have been reformulated to exceed the regulatory VOC limits (i.e., have a lower VOC content than what is required) put forth by SCAQMD's Rule 1113 for all architectural coatings. Super-Compliant low VOC paints shall be no more than 10g/L of VOC. Prior to issuance of building permits, the City of Grand Terrace Building and Safety Division shall confirm that plans include the following specifications:

- All architectural coatings will be super-compliant low VOC paints.
- Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
- Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
- For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain. Set aside the can of cleanup water and take it to the hazardous waste center ([www.cleanup.org](http://www.cleanup.org)).
- Use compliant low-VOC cleaning solvents to clean paint application equipment.



- Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.
- Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable.
- Use high-pressure/low-volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.

**MM AQ-2**

**Vehicle Trip Reduction.** Develop a qualifying Commute Trip Reduction (CTR)/Transportation Demand Management (TDM) plan to reduce mobile GHG emissions for all uses. The TDM plan shall be approved by the City of Grand Terrace prior to the issuance of building permits and incorporated into the Project's Codes Covenants and Restrictions (CC&Rs). The TDM plan shall discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The following measures shall be incorporated into the TDM plan.

**TDM Requirements for Non-Residential Uses:**

- The Project Applicant shall consult with the local transit service provider on the need to provide infrastructure to connect the Project with transit services. Evidence of compliance with this requirement may include correspondence from the local transit provider(s) regarding the potential need for installing bus turnouts, shelters, or bus stops at the site.
- The portion of the TDM plan for non-residential uses shall include, but not be limited to the following potential measures: ride-matching assistance, preferential carpool parking, flexible work schedules for carpools, half-time transportation coordinators, providing a website or message board for coordinating rides, designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles, and including bicycle end of trip facilities. This list may be updated as new methods become available. Verification of this measure shall occur prior to building permit issuance for the commercial uses.

**TDM Requirements for Residential Units:**

- **Owner-Occupied Units.** Upon a residential dwelling being sold or offered for sale, the Project Applicant shall notify and offer to the buyer or prospective buyer, as soon as it may be done, materials describing public transit, ridesharing, and nonmotorized commuting opportunities available in the vicinity of the Project. Such information shall be transmitted no later than the close of escrow. This information shall be submitted to the City of Grand Terrace Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.
- **Rental Units.** Upon a residential dwelling being rented or offered for rent, the Project Applicant shall notify and offer to the tenant or prospective tenant, materials describing public transit, ridesharing, and nonmotorized commuting

opportunities in the vicinity of the development. The materials shall be approved by the City of Grand Terrace. The materials shall be provided no later than the time the rental agreement is executed. This information shall be submitted to the City of Grand Terrace Planning Division for review and approval, prior to the issuance of the first certificate of occupancy.

**MM AQ-3**      **Prohibition of Fireplaces.** The installation of wood-burning and natural gas devices shall be prohibited. The purpose of this measure is to limit emissions of ROG, NO<sub>x</sub>, particulate matter and visible emissions from wood-burning and natural gas devices used for primary heat, supplemental heat, or ambiance. This prohibition shall be noted on the deed and/or lease agreements for future property owners/tenants to obey.

**MM AQ-4**      **Electric Landscape Equipment.** Prior to the issuance of occupancy permits, the Planning Division shall confirm that the Project's Codes Covenants and Restrictions (CC&Rs) and/or tenant lease agreements include contractual language that all landscaping equipment used onsite shall be 100 percent electrically powered. All residential and non-residential properties shall be equipped with exterior electrical outlets to accommodate this requirement. This requirement shall be included in the third-party vendor agreements for landscape services for the building owner and tenants, as applicable.

**MM AQ-5**      **Low VOC Paint (Operations).** The Project Applicant shall require by contract specifications commercial development to use interior and exterior architectural coatings (paint and primer including parking lot paint) products that have a volatile organic compound rating of 10 grams per liter (g/L) or less (i.e., "Super-Compliant" low VOC paints which have been reformulated to exceed the regulatory VOC limits). Contract specifications shall be reviewed and approved by the City of Grand Terrace prior to the issuance of occupancy permits. This measure shall be made a condition of approval for continued upkeep of the property.

**Impact 4.2-2:**      *Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?*

**Level of Significance: Significant and Unavoidable**

## Construction Emissions

Construction associated with the Project would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area include O<sub>3</sub>-precursor pollutants (i.e., ROG and NO<sub>x</sub>) and PM<sub>10</sub> and PM<sub>2.5</sub>. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of

construction equipment, especially on unpaved surfaces. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water. Although the Project is a Specific Plan that could consist of individual smaller development projects, a specific development is not proposed at this time. Construction and operations of the PAs would be project-specific and future development would be subject to project-specific City discretionary review and approval. However, construction activities associated with the Project are conservatively estimated to be completed within two phases: Phase 1 and Phase 2. For analysis purposes, Phase 1 was anticipated to commence in July 2023 for a duration of 16 months and Phase 2 was anticipated to commence in January 2025 for a duration of 24 months. Construction-generated emissions associated with the Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Predicted maximum daily construction-generated emissions for the Project are summarized in **Table 4.2-8**.

**Table 4.2-8: Construction-Related Emissions**

| Construction Year  | Emissions (Maximum Pounds Per Day) |                 |           |                 |                  |                   |
|--|------------------------------------|-----------------|-----------|-----------------|------------------|-------------------|
|  | ROG                                | NO <sub>x</sub> | CO        | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Phase 1</b>   |                                    |                 |           |                 |                  |                   |
| <b>Unmitigated Emissions<sup>1</sup></b>   |                                    |                 |           |                 |                  |                   |
| Year 2023  | 5.12                               | 52.13           | 40.01     | 0.09            | 28.46            | 13.31             |
| Year 2024  | 76.28                              | 67.64           | 95.07     | 0.25            | 23.91            | 9.27              |
| <i>SCAQMD Threshold</i>  | 75                                 | 100             | 550       | 150             | 150              | 55                |
| <b>Exceed SCAQMD Threshold?</b>  | <b>Yes</b>                         | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |
| <b>Mitigated Emissions<sup>2</sup></b>   |                                    |                 |           |                 |                  |                   |
| Year 2023  | 5.12                               | 52.13           | 40.01     | 0.09            | 12.47            | 6.40              |
| Year 2024  | 20.60                              | 67.64           | 95.07     | 0.25            | 17.50            | 6.82              |
| <i>SCAQMD Threshold</i>  | 75                                 | 100             | 550       | 150             | 150              | 55                |
| <b>Exceed SCAQMD Threshold?</b>  | <b>No</b>                          | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |
| <b>Phase 2</b>   |                                    |                 |           |                 |                  |                   |
| <b>Unmitigated Emissions<sup>1</sup></b>   |                                    |                 |           |                 |                  |                   |
| Year 2025  | 2.97                               | 27.98           | 26.98     | 0.06            | 20.95            | 11.16             |
| Year 2026  | 96.35                              | 23.32           | 35.49     | 0.07            | 2.81             | 1.40              |
| <i>SCAQMD Threshold</i>  | 75                                 | 100             | 550       | 150             | 150              | 55                |
| <b>Exceed SCAQMD Threshold?</b>  | <b>Yes</b>                         | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |
| <b>Mitigated Emissions<sup>2</sup></b>   |                                    |                 |           |                 |                  |                   |
| Year 2025  | 2.97                               | 27.98           | 26.98     | 0.06            | 8.56             | 4.79              |
| Year 2026  | 11.48                              | 23.32           | 35.49     | 0.07            | 2.71             | 1.37              |
| <i>SCAQMD Threshold</i>  | 75                                 | 100             | 550       | 150             | 150              | 55                |
| <b>Exceed SCAQMD Threshold?</b>  | <b>No</b>                          | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |
| ROG = Reactive Organic Gases; NO <sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; SO <sub>2</sub> = Sulfur Dioxide; PM <sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM <sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less<br>Note: (1) SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to <b>Appendix A</b> for Model Data Outputs.<br>(2) Mitigation includes the incorporation of <b>MM AQ-1</b> which requires the use of "Super-Compliant" low VOC paints.<br>Source: Ibid. Page 23 – Table 8 |                                    |                 |           |                 |                  |                   |

Fugitive dust emissions may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the Project vicinity. Uncontrolled dust from construction can become a nuisance and potential health hazard to those living and working nearby.

SCAQMD Rules 402 and 403 (prohibition of nuisances, watering of inactive and perimeter areas, track out requirements, etc.), are applicable to the Project and were applied in CalEEMod to minimize fugitive dust emissions. While impacts would be considered less than significant, the Project would be subject to SCAQMD Rules 402 and 403 for reducing fugitive dust.

**Table 4.2-8** shows that unmitigated construction emissions would exceed the SCAQMD threshold for the ROG (VOC). The majority of ROG emissions are generated during the architectural coatings phase of construction. **MM AQ-1** would reduce ROG emissions which requires the use of “Super-Compliant” low VOC paint for interior and exterior architectural coatings and paintings. The Project would also be subject to SCAQMD Rules 402, 403, and 1113. As shown above, **MM AQ-1** would reduce construction impacts below the SCAQMD’s thresholds. Therefore, the Project’s construction-related emissions would be reduced to a less than significant level.

## Operational Emissions

### Unmitigated Operations

Project-generated emissions would be primarily associated with area source emissions, energy emissions, and mobile emissions, such as the use of landscape maintenance equipment and architectural coatings. Long-term operational emissions attributable to the Project are summarized in **Table 4.2-9**. **Table 4.2-9** shows that Project emissions would exceed SCAQMD thresholds for ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Therefore, regional unmitigated operational emissions would result in a potentially significant long-term regional air quality impact.

**Table 4.2-9: Unmitigated Operational Emissions**

| Source   | Emissions (Maximum Pounds Per Day) |                 |               |                 |                  |                   |
|--|------------------------------------|-----------------|---------------|-----------------|------------------|-------------------|
|  | ROG                                | NO <sub>x</sub> | CO            | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Area Source Emissions  | 212.24                             | 15.08           | 410.79        | 0.90            | 53.41            | 53.41             |
| Energy Emissions   | 0.54                               | 4.71            | 2.42          | 0.03            | 0.38             | 0.38              |
| Mobile   | 48.75                              | 67.36           | 483.36        | 1.08            | 109.39           | 29.72             |
| <b>Total Emissions</b>   | <b>261.54</b>                      | <b>87.15</b>    | <b>896.57</b> | <b>2.02</b>     | <b>163.18</b>    | <b>83.50</b>      |
| <i>SCAQMD Threshold</i>  | 55                                 | 55              | 550           | 150             | 150              | 55                |
| <b>Exceeds Threshold?</b>  | <b>Yes</b>                         | <b>Yes</b>      | <b>Yes</b>    | <b>No</b>       | <b>Yes</b>       | <b>Yes</b>        |
| <small>ROG = Reactive Organic Gases; NO<sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; SO<sub>2</sub> = Sulfur Dioxide; PM<sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM<sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less</small> |                                    |                 |               |                 |                  |                   |
| <small>Source: Ibid. Page 24 – Table 9</small>   |                                    |                 |               |                 |                  |                   |

### Mitigated Operations

As noted above, **Table 4.2-9** shows unmitigated operational emissions would exceed the SCAQMD thresholds for ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The exceedance of ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions are primarily from area and mobile sources. Mitigation measures would be required to reduce emissions to the maximum extent feasible; however, emissions of motor vehicles are controlled by State and national standards and the Project has no control over these standards.

**MMs AQ-2** through **AQ-5** have been identified to reduce operational emissions. **MM AQ-2** requires the implementation of a Transportation Demand Management (TDM) program to reduce single occupant vehicle trips and encourage transit. **MM AQ-3** prohibits the use of any kind of fireplaces, and **MM AQ-4**

requires all landscaping equipment used onsite shall be 100 percent electrically powered. **MM AQ-5** requires the use of low VOC paint for interior and exterior architectural coatings and paintings. **Table 4.2-10** shows that despite the implementation of **MMs AQ-2** through **AQ-5**, operational emissions related to ROG and NO<sub>x</sub> would remain above the SCAQMD’s thresholds, therefore impacts would be significant and unavoidable.

**Table 4.2-10: Mitigated Operational Emissions**

| Source                             | Emissions (Maximum Pounds Per Day) |                 |               |                 |                  |                   |
|------------------------------------|------------------------------------|-----------------|---------------|-----------------|------------------|-------------------|
|                                    | ROG                                | NO <sub>x</sub> | CO            | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Area Source Emissions <sup>1</sup> | 27.25                              | 0.52            | 43.58         | 0.00            | 0.24             | 0.24              |
| Energy Emissions                   | 0.47                               | 4.10            | 2.12          | 0.03            | 0.33             | 0.33              |
| Mobile <sup>2, 3</sup>             | 48.54                              | 66.81           | 479.18        | 1.07            | 108.29           | 29.42             |
| <b>Total Emissions</b>             | <b>76.25</b>                       | <b>71.43</b>    | <b>524.88</b> | <b>1.10</b>     | <b>108.86</b>    | <b>29.99</b>      |
| <i>SCAQMD Threshold</i>            | <i>55</i>                          | <i>55</i>       | <i>550</i>    | <i>150</i>      | <i>150</i>       | <i>55</i>         |
| <b>Exceeds Threshold?</b>          | <b>Yes</b>                         | <b>Yes</b>      | <b>No</b>     | <b>No</b>       | <b>No</b>        | <b>No</b>         |

ROG = Reactive Organic Gases; NO<sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; SO<sub>2</sub> = Sulfur Dioxide; PM<sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM<sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less

1. Incorporates implementation of a prohibition of fireplaces, electric landscape equipment, and low VOC paint pursuant to MM AQ-3, MM AQ-4, and MM AQ-5.

2. Incorporates implementation of a Transportation Demand Management (TDM) program pursuant to MM AQ-2.

3. Per the Executive Order N-79-20, by 2035 all passenger cars/trucks sold in the State of California be zero emission (ZEV). According to the Office of Governor Gavin Newsom, of all new vehicles sold in California in 2022, 18.8% were ZEVs. However, there are no formal projections of zero emissions vehicles anticipated to be on the road over the course of the Project and the model does not account for it. Therefore, these projections are conservative and likely higher than actual emissions would be.

Source: Ibid. Page 25 – Table 10

**Mitigation Measures**

Refer **MM AQ-1** through **MM AQ-5** in Impact 4.2-1 above.

**Impact 4.2-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?**

**Level of Significance: Less Than Significant**

**Localized Construction Significance Analysis**

The Project is a Specific Plan, and no development proposals are included at this time. Build out of the Specific Plan would occur in multiple phases over several years. However, construction activities associated with the Project are conservatively estimated to be completed within two phases: Phase 1 and Phase 2. For analysis purposes, Phase 1 was anticipated to commence in July 2023 for a duration of 16 months and Phase 2 was anticipated to commence in January 2025 for a duration of 24 months.

The nearest sensitive receptor to both Phase 1 and Phase 2 construction sites are residential buildings located adjacent to the east of the Project site boundary. To identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific emissions.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 4.2-11, Equipment-Specific Grading Rates** is used to determine the maximum daily disturbed acreage for comparison to LSTs. The appropriate SRA for the localized significance thresholds is Central San Bernardino Valley (SRA 34) since this area includes the Project. LSTs apply to NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to five acres in size. CalEEMod construction modeling anticipates disturbing a maximum of four acres in a single day. As the LST guidance provides thresholds for projects disturbing 1-, 2-, and 5-acres in size and the thresholds increase with size of the site, the LSTs for a 4.0-acre threshold were interpolated and utilized for this analysis.

**Table 4.2-11: Equipment-Specific Grading Rates**

| Construction Phase                | Equipment Type | Equipment Quantity | Acres Graded per 8-Hour Day | Operating Hours per Day | Acres Graded per Day |
|-----------------------------------|----------------|--------------------|-----------------------------|-------------------------|----------------------|
| Grading                           | Tractors       | 2                  | 0.5                         | 8                       | 1.0                  |
|                                   | Graders        | 1                  | 0.5                         | 8                       | 0.5                  |
|                                   | Dozers         | 1                  | 0.5                         | 8                       | 0.5                  |
|                                   | Scrapers       | 2                  | 1                           | 8                       | 2.0                  |
| <b>Total Acres Graded per Day</b> |                |                    |                             |                         | <b>4.0</b>           |

Source: Ibid. Page 30 – Table 11

The SCAQMD’s methodology states that “off-site mobile emissions from the Project should not be included in the emissions compared to LSTs.” Therefore, only emissions included in the CalEEMod “on-site” emissions outputs were considered. The nearest sensitive receptors to both Phase 1 and Phase 2 construction sites are residential buildings located adjacent to the east of the Project site boundary. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. SCAQMD’s LST guidance recommends using the 25-meter threshold for receptors located 25 meters or less from the project site. Therefore, the LSTs for four acres at 25 meters were used for the construction analysis which is consistent with the SCAQMD LST methodology. **Table 4.2-12, Localized Significance of Construction Emissions** presents the results of unmitigated localized emissions during each construction activity. **Table 4.2-12** shows that emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors.

**Table 4.2-12: Localized Significance of Construction Emissions**

| Construction Activity                                       | Emissions (Maximum Pounds Per Day) |       |                  |                   |
|---|------------------------------------|-------|------------------|-------------------|
|   | NO <sub>x</sub>                    | CO    | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <b>Phase 1</b>  |                                    |       |                  |                   |
| Demolition (2023)   | 21.48                              | 19.64 | 3.10             | 1.25              |
| Site Preparation (2023)                                     | 27.52                              | 18.24 | 8.55             | 4.91              |
| Grading (2023)  | 34.52                              | 28.05 | 4.83             | 2.66              |
| Grading (2024)  | 32.38                              | 27.72 | 4.75             | 2.58              |
| Building Construction (2024)                                | 13.44                              | 16.17 | 0.61             | 0.58              |
| Paving (2024)   | 9.52                               | 14.63 | 0.47             | 0.43              |
| Architectural Coating (2024)                                | 1.22                               | 1.81  | 0.06             | 0.06              |
| Demolition/Site Preparation (2023)                          | 49.01                              | 37.89 | 11.65            | 6.15              |
| Building Construction/ Paving/ Architectural Coating (2024) | 24.19                              | 32.60 | 1.14             | 1.07              |

| Construction Activity  | Emissions (Maximum Pounds Per Day) |           |                  |                   |
|--|------------------------------------|-----------|------------------|-------------------|
|  | NO <sub>x</sub>                    | CO        | PM <sub>10</sub> | PM <sub>2.5</sub> |
| <i>Maximum Daily Emissions</i>   | 49.01                              | 37.89     | 11.65            | 6.15              |
| <i>SCAQMD Localized Screening Threshold (adjusted for 4.0 acres at 25 meters)</i>  | 237                                | 1,488     | 12               | 7                 |
| <b>Exceed SCAQMD Threshold?</b>  | <b>No</b>                          | <b>No</b> | <b>No</b>        | <b>No</b>         |
| <b>Phase 2</b>   |                                    |           |                  |                   |
| Demolition - 2025  | 19.20                              | 19.42     | 2.99             | 1.12              |
| Site Preparation - 2025  | 25.23                              | 17.91     | 8.37             | 4.74              |
| Grading - 2025   | 27.94                              | 26.33     | 4.54             | 2.39              |
| Building Construction - 2026   | 12.47                              | 16.08     | 0.53             | 0.50              |
| Paving - 2026  | 8.58                               | 14.58     | 0.42             | 0.39              |
| Architectural Coating - 2026   | 1.15                               | 1.81      | 0.05             | 0.05              |
| Demolition/Site Preparation -2023  | 44.43                              | 37.33     | 11.36            | 5.86              |
| Building Construction/ Paving/ Architectural Coating - 2024  | 22.20                              | 32.47     | 1.00             | 0.93              |
| <i>Maximum Daily Emissions</i>   | 44.43                              | 37.33     | 11.36            | 5.86              |
| <i>SCAQMD Localized Screening Threshold (adjusted for 4.0 acres at 25 meters)</i>  | 237                                | 1,488     | 12               | 7                 |
| <b>Exceed SCAQMD Threshold?</b>  | <b>No</b>                          | <b>No</b> | <b>No</b>        | <b>No</b>         |
| NO <sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; PM <sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM <sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less<br>1. SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reduction percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment. Refer to <b>Appendix A</b> for Model Data Outputs. |                                    |           |                  |                   |
| Source: Ibid. Page 31 – Table 12   |                                    |           |                  |                   |

### Localized Operational Significance Analysis

According to the SCAQMD LST methodology, LSTs would apply to the operational phase of a project only if it includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities).

LSTs thresholds for receptors located at 25 meters or less in SRA 34 were utilized in this analysis because the closest receptor is located adjacent to the east. Although the Project site is approximately 131 acres, the 5-acre LST threshold was also conservatively used for the Project, as the LSTs increase with the size of the site. **Table 4.2-13, Localized Significance of Operational Emissions** shows that the maximum daily emissions of these pollutants during operations would not result in significant concentrations of pollutants on-site and thus not at nearby sensitive receptors.

**Table 4.2-13: Localized Significance of Operational Emissions**

| Activity  | Emissions (Maximum Pounds Per Day) |           |                  |                   |
|---|------------------------------------|-----------|------------------|-------------------|
|   | NO <sub>x</sub>                    | CO        | PM <sub>10</sub> | PM <sub>2.5</sub> |
| On-Site Emissions   | 4.62                               | 45.70     | 0.56             | 0.56              |
| <i>SCAQMD Localized Screening Threshold (adjusted for 5 acres at 25 meters)</i>   | 270                                | 1,746     | 4                | 2                 |
| <b>Exceed SCAQMD Threshold?</b>   | <b>No</b>                          | <b>No</b> | <b>No</b>        | <b>No</b>         |
| NO <sub>x</sub> = Nitrogen Oxides; CO = Carbon Monoxide; PM <sub>10</sub> = Particulate Matter 10 microns in diameter or less; PM <sub>2.5</sub> = Particulate Matter 2.5 microns in diameter or less<br>Source: Ibid. Page 32 – Table 13 |                                    |           |                  |                   |

## Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need for an EIR's air quality analysis to provide sufficient information connecting a project's significant air quality emissions to human health impacts or explain why such information could not be ascertained. *Sierra Club v. County of Fresno* (2018) 6 Cal.5<sup>th</sup> 502 ("Friant Ranch"). The SCAQMD has set its CEQA significance thresholds based on the FCAA, which defines a major stationary source (in extreme O<sub>3</sub> nonattainment areas such as the SCAB) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program<sup>8</sup> was created by the FCAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based NAAQS. The NAAQS establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, SCAQMD has determined that projects that do not exceed the SCAQMD's LSTs and mass emissions thresholds would not violate any air quality standards, or contribute substantially to an existing or projected air quality violation or to a criteria pollutant health impact. The health effects commonly associated with criteria pollutants are summarized in **Table 4.2-1**.

NO<sub>x</sub> and ROG are precursor emissions that form O<sub>3</sub> in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O<sub>3</sub> may be formed at a distance downwind from the sources. Breathing ground-level O<sub>3</sub> can result health effects that include reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O<sub>3</sub> concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggest that O<sub>3</sub> can make asthma symptoms worse and can increase sensitivity to asthma triggers.

There are significant challenges with correlating specific health effects that will occur as a result of a project's significant criteria air pollutant emissions. Generally, models that correlate criteria air pollutant concentrations with specific health effects focus on regulatory decision-making that will apply throughout an entire air basin or region. These models focus on the region-wide health effects of pollutants so that regulators can assess the costs and benefits of adopting a proposed regulation that applies to an entire category of air pollutant sources, rather than the health effects related to emissions from a specific proposed project or source. Because of the scale of these analyses, any one project is likely to have only very small incremental effects which may be difficult to differentiate from the effects of air pollutant concentrations in an entire air basin. In addition, such modeling efforts are costly, and the value of a project-specific analysis may be both modest in relation to that cost and not particularly useful. For regional pollutants, it is difficult to trace a particular project's criteria air pollutant emissions to a specific health effect. Moreover, the modeled results may be misleading because the margin of error in such modeling is large enough that, even if the modeled results report a given health effect, the model is

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<sup>8</sup> Ibid. Page 32



sufficiently imprecise that the actual effect may differ from the reported results; that is, the modeled results suggest precision, when in fact available models cannot be that precise on a project level.

As discussed above, the mass emissions thresholds developed by SCAQMD and used by CEQA lead agencies throughout southern California to determine potential significance of project-related regional changes in the environment are not directly indicative of exceedances of applicable ambient air standards. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O<sub>3</sub> or PM. The effects on ground-level ambient concentrations of pollutants that may be breathed by people are also influenced by the spatial and temporal patterns of the emission sources. In other words, the effect on O<sub>3</sub> and PM concentrations from a given mass of pollutants emitted in one location may vary from the effect if that same mass of pollutants was emitted in an entirely different location in the SCAB. The same effect may be observed when the daily and seasonal variation of emissions is taken into account. Regional-scale photochemical modeling, typically performed only for NAAQS attainment demonstration and rule promulgation, account for these changes in the spatial, temporal, and chemical nature of regional emissions.

Emissions from the construction and operation of the Project would vary by time of day, month, and season, and the majority of Project-related emissions, being generated by mobile sources driving to and from the site, would be emitted throughout a wide area defined by the origins and destinations of people traveling to and from the Project. As SCAQMD has stated, “it takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels over an entire region.”<sup>9</sup>

Specifically, for extremely large regional projects, the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NO<sub>x</sub> and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O<sub>3</sub>. Based on its recent experiences applying regional scale models to relatively small increase in emissions, SCAQMD’s Amicus Brief in the Friant Ranch case stated: “[A] project emitting only 10 tons per year of NO<sub>x</sub> or VOC is small enough that its regional impact on ambient ozone levels may not be detected in the regional air quality models that are currently used to determine ozone levels.”<sup>10</sup> The Brief makes it clear that SCAQMD does not believe that there must be a quantification of a project's health risks in CEQA documents prepared for individual projects since it would be difficult to quantify health impacts for criteria pollutants. Also, the Project does not generate anywhere near 6,620 pounds per day of NO<sub>x</sub> or 89,190 pounds per day of ROG (VOC) emissions, which SCAQMD stated was a large enough emission to quantify O<sub>3</sub>-related health impacts. Therefore, the Project’s emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

The SCAQMD’s 2022 AQMP focuses on the 2015 8-hour O<sub>3</sub> standard with achieving attainment in 2037. The largest source of NO<sub>x</sub> emissions (an O<sub>3</sub> precursor) in 2018 were related to on-road sources. The 2022 AQMP also emphasizes a shift in focus beyond on-road emissions to off-road sources. The 2022 AQMP identifies a 67 percent NO<sub>x</sub> reduction beyond what we would achieve through current programs by 2037

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<sup>9</sup> Ibid. Page 34

<sup>10</sup> Ibid. Page 34

and about 83 percent below current levels. In order to achieve this, the SCAQMD identifies the need for widespread adoption of zero emissions (ZE) technologies across all mobile sectors and stationary sources.

The control strategy for the 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low NO<sub>x</sub> technologies and (2) developing new ZE and ultra-low NO<sub>x</sub> technologies for use in cases where the technology is not currently available. SCAQMD will prioritize distribution of incentive funding in environmental justice (EJ) areas and seek opportunities to focus benefits on the most disadvantaged communities. The 2022 AQMP includes a total of 49 control measures. In addition to the NO<sub>x</sub> measures, the 2022 AQMP relies on co-benefits from climate and energy efficiency programs for further reductions, limited strategic measures for VOC reductions, and other actions.

The SCAQMD's air quality modeling demonstrates that NO<sub>x</sub> reductions prove to be much more effective in reducing O<sub>3</sub> levels and will also lead to significant improvement in PM<sub>2.5</sub> concentrations. NO<sub>x</sub>-emitting stationary sources regulated by the SCAQMD include Regional Clean Air Incentives Market (RECLAIM) facilities (e.g., refineries, power plants, etc.), natural gas combustion equipment (e.g., boilers, heaters, engines, burners, flares) and other combustion sources that burn wood or propane.

As previously discussed, localized effects of on-site Project emissions on nearby receptors for the Project would be less than significant (refer to **Tables 4.2-12** and **4.2-13**). The LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable state or national ambient air quality standard. The LSTs were developed by the SCAQMD based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations. However, as discussed above, neither the SCAQMD nor any other air district currently have methodologies that would provide Lead Agencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions. Information on health impacts related to exposure to O<sub>3</sub> and PM emissions published by the U.S. EPA and CARB have been summarized above and discussed in the Regulatory Setting section. Health studies are used by these agencies to set the NAAQS and CAAQS.

While the Project is expected to exceed the SCAQMD's numeric regional mass daily thresholds for ROG and NO<sub>x</sub>, this does not in itself constitute a significant health impact to the population adjacent to the Project and within the SCAB. The reason for this is that the mass daily thresholds are in pounds per day emitted into the air whereas health effects are determined based on the concentration of emissions in the air at a particular receptor (e.g., parts per million by volume of air, or micrograms per cubic meter of air).

The NAAQS and CAAQS were developed to protect the most susceptible population groups from adverse health effects and were established in terms of parts per million or micrograms per cubic meter for the applicable emissions. As stated earlier, the mass emission thresholds were established primarily in conjunction with federal permitting "major source" thresholds. If emissions were below these "de

minimis” emission rates, then the Project is presumed to conform with the NAAQS.<sup>11</sup> While based on the status of an air basin level of attainment of the health-based NAAQS, emissions in excess of the mass emission thresholds from one project does not mean the air basin would experience measurably higher ground level concentrations, or more frequent occurrences of ground level concentrations in exceedance of standards, or delay timely attainment of a particular NAAQS.

Ozone concentrations are dependent upon a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level O<sub>3</sub> concentrations in relation to the NAAQS and CAAQS, none of the known O<sub>3</sub> health-related information can be directly correlated to the pounds/day or tons/year of emissions estimated from a single, proposed project.

This discussion identifies health concerns related to PM, CO, O<sub>3</sub>, and NO<sub>2</sub> emissions. Due to the uncertainty in the relationship between project-level mass emissions and regional O<sub>3</sub> formation as well as limitations with currently available technical tools, health effects associated with the Project cannot be ascertained with any specificity. No meaningful conclusion can be drawn with respect to potential health effects from the Project’s potential criteria pollutant emissions.

### **Carbon Monoxide Hotspots**

An analysis of CO “hot spots” is needed to determine whether the change in the level of service of an intersection resulting from the Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined. Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard.

The SCAB was re-designated as attainment in 2007 and is no longer addressed in the SCAQMD’s AQMP. The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD CO Hotspot Analysis, the Wilshire Boulevard and Veteran Avenue intersection, one of the most congested intersections in southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm national standard. The Project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD’s CO Hotspot Analysis. As the CO hotspots were not experienced at the Wilshire Boulevard and Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections resulting from 17,279 additional vehicle

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<sup>11</sup> Ibid. Page 35

trips attributable to the Project and distributed throughout the roadway network. Therefore, impacts would be less than significant.

### **Construction-Related Diesel Particulate Matter**

Construction of the Project would result in the generation of DPM emissions from the use of required off-road diesel equipment required. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting HRAs are associated with longer-term exposure periods of nine, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The California OEHHA has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time which would limit the exposure of any proximate individual sensitive receptor to TACs.

Additionally, construction is subject to and would comply with California regulations (e.g., California Code of Regulations, Title 13, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Given the temporary and intermittent nature of construction activities likely to occur within specific locations in the Project site (i.e., construction is not likely to occur in any one location for an extended time), the dose of DPM of any one receptor is exposed to would be limited. Therefore, considering the relatively short duration of DPM-emitting construction activity at any one location, and the highly dispersive properties of DPM, sensitive receptors would not be exposed to substantial concentrations of construction-related TAC emissions.

A HRA (**Appendix A**) was conducted based on the SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis and the SCAQMD Risk Assessment Procedures and the guidance from OEHHA. Construction-related activities would result in Project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment for demolition; site preparation (e.g., clearing, grading); building construction; paving; application of architectural coatings; on-road truck travel; and other miscellaneous activities. For construction activity, DPM is the primary TAC of concern. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they would not stay on the site for long durations. Diesel exhaust from construction equipment operating at the site poses a health risk to nearby sensitive receptors.

PM<sub>10</sub> exhaust construction emissions rates in grams per second were calculated from the total annual on-site exhaust emissions reported in CalEEMod during construction. Construction exhaust emissions over the entire construction period were used in AERMOD, a U.S. EPA-approved dispersion model, to approximate construction DPM emissions. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources. AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Uniform Cartesian receptors were used to evaluate the locations of the maximally exposed sensitive receptors. Surface and upper air meteorological data from the Banning Monitoring Station provided by the SCAQMD was selected as being the most representative meteorology. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project. The modeling and analysis were prepared in accordance with the SCAQMD Modeling Guidance for AERMOD.<sup>12</sup>

Risk levels were calculated based on the California OEHHA guidance document, *Air Toxics Hot Spots Program Risk Assessment Guidelines* (February 2015). SCAQMD's threshold for cancer risk is ten in-one-million and the acute or chronic noncancer hazard index is one. Projects that do not exceed these thresholds would not result in a significant impact.

The HRA determined that the off-site construction health risk impacts would be 7.61, 2.72, 0.18, and 1.06 in one million for off-site resident, on-site resident, worker, and student exposure, respectively. Acute and chronic impacts were also evaluated in the HRA. An acute or chronic hazard index of 1.0 is considered individually significant. The HRA determined that the highest maximum chronic and acute hazard index at offsite receptors during construction would be 0.010 and 0.377, respectively. The highest maximum chronic and acute hazard index at on-site receptors during construction would be 0.007 and 0.306, respectively. Therefore, construction risk levels would be below SCAQMD thresholds and impacts would be less than significant. Refer to the Project HRA in **Appendix A** for further information concerning results, and model data.

### **Diesel Particulate Matter from Interstate 215**

Project operations would not generate TACs and therefore will have no impact under CEQA to evaluate to either on-site or off-site receptors. However, as noted above, a Project HRA was prepared and evaluated impacts from Interstate (I-) 215 to future potential receptors located on the Project site. Pursuant to California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4<sup>th</sup> 369, under CEQA, agencies are not required to analyze the impact of existing environmental conditions on a project's future users or residents, unless the proposed project risks exacerbate those environmental hazards or conditions that already exist. Nevertheless, the following mobile source health risk analysis has been prepared as an information item for land use decision-making but is not a CEQA required analysis condition.

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<sup>12</sup> Ibid. Page 37

The Project would place sensitive receptors within 1,000 feet of I-215 (mobile TAC sources). Potential risks from traffic emissions generated along this roadway were evaluated using an analysis methodology that considers local traffic conditions, site-specific meteorology, and future exposures.

Based on the AERMOD outputs, the highest expected annual average diesel PM<sub>10</sub> emission concentrations from diesel truck traffic at the closest residential receptor on the Project site would be 0.0447 µg/m<sup>3</sup> during opening year. The CCR Title 24 Part 6 requires new development to use Minimum Efficiency Reporting Value (MERV) 13 air filtration on space conditioning systems and ventilation systems that provide outside air to the occupiable space of a dwelling. A MERV 13 air filtration system has an average particle size removal efficiency of approximately 75 percent for 0.3 to 1.0 µg/m<sup>3</sup> (DPM) and 90 percent for 1.0 to 10 µg/m<sup>3</sup> (PM<sub>10</sub> and PM<sub>2.5</sub>) based on American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 52.2. The filters would be installed in residential units prior to occupancy, and maintenance with filters of the same value would be included in the Project's operation and maintenance manual. The Project's MERV 13 air filtration systems would reduce the highest expected annual average diesel PM<sub>10</sub> emission concentrations conservatively by 75 percent to 0.0112 µg/m<sup>3</sup> during opening year. The highest expected hourly total organic gases (TOG) emission concentrations from automobile traffic at the Project site would be 0.555 µg/m<sup>3</sup> (no reduction was applied to TOG concentrations).

As noted above, SCAQMD's threshold for cancer risk is ten in-one-million and the acute or chronic noncancer hazard index is one. The Project HRA determined that the calculated carcinogenic risk at the Project site from DPM and TOG due to freeway emissions is 9.92 in one million for proposed on-site residents and 7.00 in one million for workers. The calculations conservatively assume no cleaner technology or lower emissions in future years. Therefore, the carcinogenic risk associated with the Project would be less than significant. Acute and chronic impacts were also evaluated in the HRA. An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index associated with both DPM and TOG emissions at the Project site would be 0.03 and 0.05, respectively. As a result, noncarcinogenic hazards are calculated to be within acceptable limits. Therefore, impacts would be less than significant. The HRA determined that on-site receptors would not be exposed to TAC concentrations from I-215 that would result in health risk impacts that exceed SCAQMD thresholds.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.2-4:** *Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

**Level of Significance: No Impact**

### **Construction**

Odors that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

*A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

During construction, emissions from construction equipment, such as diesel exhaust, and VOCs from architectural coatings and paving activities may generate odors. However, these odors would be temporary, are not expected to affect a substantial number of people and would disperse rapidly. Therefore, impacts related to odors associated with the Project's construction-related activities would be less than significant.

## Operations

The SCAQMD CEQA Air Quality Handbook identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, the Project would not create objectionable odors.

### Mitigation Measures

No mitigation is required.

## 4.2.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Even with implementation of regulatory requirements, standard conditions of approval, and implementation of reasonable and feasible mitigation measures, the Project would result in unavoidable significant impacts with respect to air quality plan consistency (Impact 4.2-1), operational emissions (Impact 4.2-2), and cumulative long-term impacts.

## 4.2.7 CUMULATIVE IMPACTS

### Regional

In accordance with SCAQMD's methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Cumulative projects in the local area include new development and general growth in the project area. The greatest source of emissions in the SCAB is mobile sources. Due to the extent of the area potentially impacted from cumulative project emissions (i.e., the SCAB), SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds.

### Cumulative Short-Term Construction Emissions

The SCAB is designated nonattainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> for State standards and nonattainment for O<sub>3</sub> and PM<sub>2.5</sub> for national standards. **Appendix D** of the SCAQMD White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (2003) notes that projects that result in

emissions that do not exceed the project-specific SCAQMD regional thresholds of significance should result in a less than significant impact on a cumulative basis unless there is other pertinent information to the contrary. Therefore, if a project is estimated to result in emissions that do not exceed the thresholds, the project's contribution to the cumulative impact on air quality in the SCAB would not be cumulatively considerable. As shown in **Table 4.2-8**, mitigated construction emissions of the Project would not exceed the SCAQMD significance thresholds, and the construction impacts would be less than significant with implementation of **MM AQ-1**. Therefore, the proposed Project would not generate a cumulatively considerable contribution to air pollutant emissions during construction.

### **Cumulative Long-Term Operational Emissions**

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to the SCAB's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in **Tables 4.2-9** and **4.2-10**, the Project operational emissions (primarily mobile source emissions) would exceed SCAQMD thresholds despite implementation of mitigation. As a result, operational emissions associated with the Project would result in a cumulatively considerable contribution to significant cumulative air quality impacts. Emissions of motor vehicles are controlled by State and national standards and the Project has no control over these standards, however it can mitigate mobile emissions by attempting to reduce vehicles trips. As further discussed in **Section 4.7, Greenhouse Gas Emissions**, mobile emissions will be reduced as zero-emission vehicles are phased in due to regulations such as Executive Order N-79-20. LORs and implementation of **MMs AQ-2** through **AQ-5** would reduce emissions by reducing vehicles trips, prohibition of fireplaces, electric landscape equipment, and implementation of low VOC paint. No additional feasible mitigation measures beyond **MMs AQ-2** through **AQ-5** have been identified to further reduce emissions, and impacts would remain significant.

### **4.2.8 REFERENCES**

City of Grand Terrace. (2010). *City of Grand Terrace General Plan*. [https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning).

Kimley-Horn and Associates, Inc. (2023). *Air Quality Assessment*.

Kimley-Horn and Associates, Inc. (2022). *Health Risk Assessment*.



## 4.3 BIOLOGICAL RESOURCES

### 4.3.1 INTRODUCTION

This section describes effects on biological resources that may result from the implementation of The Gateway at Grand Terrace Specific Plan (Project), within the City of Grand Terrace (City). The following discussion addresses existing environmental conditions in the affected areas, identifies and analyzes environmental impacts of the Project, and recommends measures to reduce or avoid significant impacts anticipated from implementation of the Project. In addition, existing laws and regulations relevant to biological resources are described. In some cases, compliance with these existing laws and regulations will serve to reduce or avoid certain impacts that might otherwise occur with the implementation of the Project.

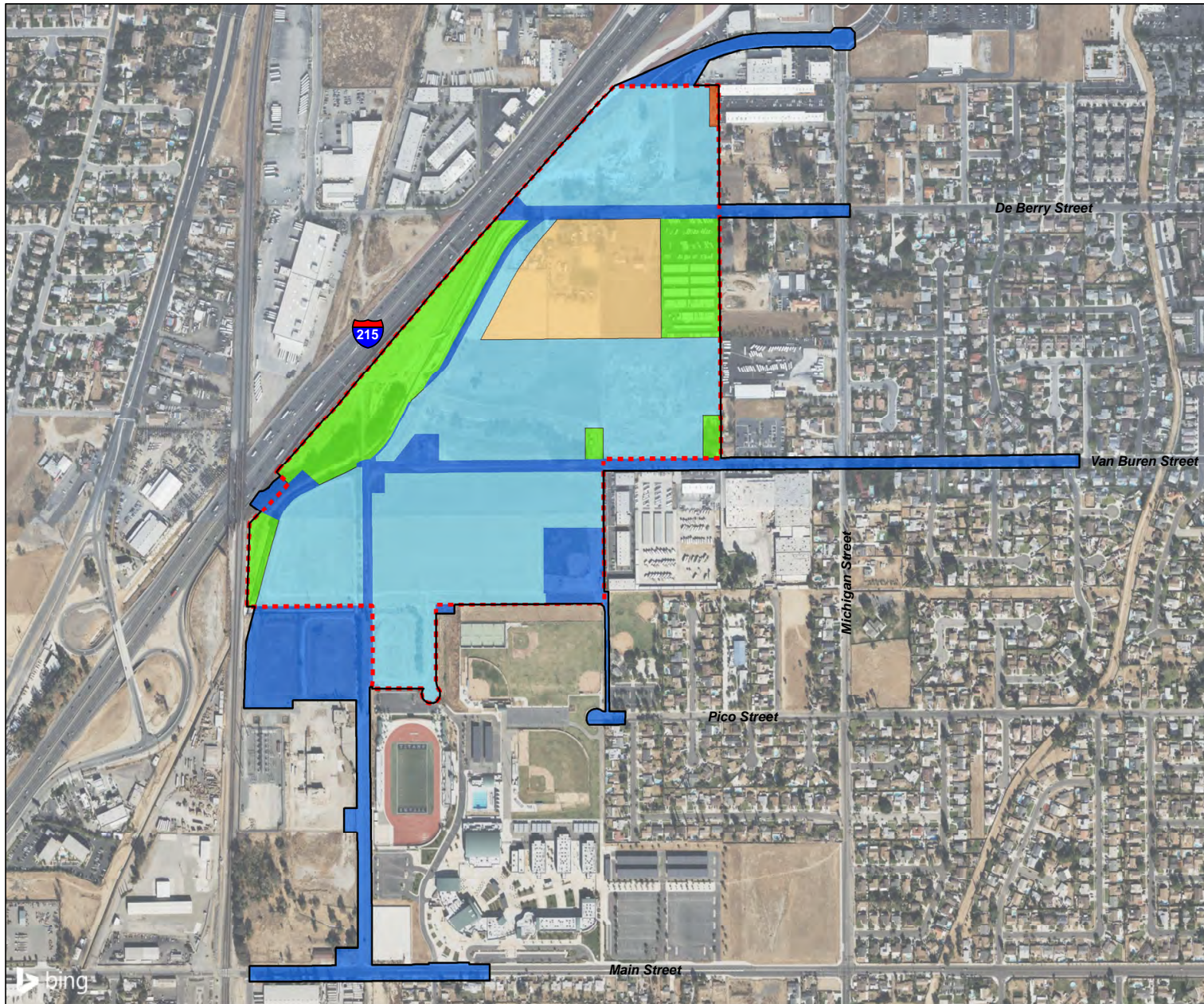
The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

The setting, context, and impact analysis in this section are largely based on the following documentation:

- *Biological Technical Report (BTR) for The Gateway at Grand Terrace Specific Plan*, Glenn Lukos Associates (GLA), Inc., November 1, 2022 (attached as **Appendix B**).

The study area (herein referred to as the Project Study Area) analyzed in the BTR includes Phase 1 - and Phase 2 on-site disturbances, Phase 1- and Phase 2- off-site disturbance areas, and portions of the Project site boundaries that would not be impacted (characterized as "Not Impacted"). More specifically, Phase 1 on-site area includes PAs 1, 2, 11, 12, 18, 19, and 22 and a portion of the proposed Taylor Street/Commerce Way extension. Phase 1 off-site area includes portions of Van Buren Street, De Berry Street, Taylor Street/Commerce Way proposed extension, and PA 17 within the Project site boundaries. Phase 1 off-site area also includes portions of the aforementioned roadways, Taylor Street, Main Street, Pico Street, and vacant land located outside the Project site boundaries. Lastly, Phase 2 on-site area includes PAs 6 through 8. Phase 2 off-site area includes PA 3. Refer to **Exhibit 4.3-1, Biological Resources Study Areas** for depiction of the overall Project Study Area and to **Section 3.0, Project Description** that describes the off-site impacts associated with the Project.



- Study Area Boundary - 124.99 ac.
- Specific Plan Boundary - 102.59 ac.
- Phase 1 Onsite Disturbance - 64.11 ac.
- Phase 1 Offsite Disturbance - 32.28 ac.
- Phase 2 Onsite Disturbance 11.49 ac.
- Phase 2 Offsite Disturbance - 0.25 ac.
- Not Impacted - 16.85 ac.

Source: Glenn Lukos Associates, 2022

**Exhibit 4.3-1: Biological Resources Study Areas**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



Not to Scale

### 4.3.2 ENVIRONMENTAL SETTING

#### Vegetation/Land Use Types

The vegetation mapping conducted for the Project Study Area identified six different categories of vegetation/land use types within the Project area. **Table 4.3-1, Summary of On-site Vegetation/Land Use Types**, summarizes the vegetation/land use categories and the corresponding on-site areas. Additionally, **Table 4.3-2, Summary of Off-site Vegetation/Land Use Types**, summarizes the vegetation/land use categories and the corresponding off-site acreages. Refer to **Exhibit 4.3-2, Vegetation Map** that illustrates the different types of vegetation within the Project Study Area.

**Table 4.3-1: Summary of On-site Vegetation/Land Use Types**

| Vegetation/Land Use Type | Phase 1 (Acres) | Phase 2 (Acres) | Not Impacted (Acres) | Total (Acres) |
|--------------------------|-----------------|-----------------|----------------------|---------------|
| Disturbed/Developed      | 11.04           | 5.27            | 9.07                 | <b>25.38</b>  |
| Disturbed/Ruderal        | 47.03           | 6.22            | 5.96                 | <b>59.21</b>  |
| Freshwater Marsh         | 0.08            | 0               | 0                    | <b>0.08</b>   |
| Non-native Grassland     | 3.90            | 0               | 0                    | <b>3.90</b>   |
| Ornamental               | 0.61            | 0               | 0.16                 | <b>0.77</b>   |
| Riparian Woodland        | 1.45            | 0               | 1.66                 | <b>3.11</b>   |
| <b>Total</b>             | <b>64.11</b>    | <b>11.49</b>    | <b>16.85</b>         | <b>92.45</b>  |

Source: Ibid. p. 25 - Table 4-1

**Table 4.3-2: Summary of Off-site Vegetation/Land Use Types**

| Vegetation/Land Use Type | Phase 1 (Acres) | Phase 2 (Acres) | Total (Acres) |
|--------------------------|-----------------|-----------------|---------------|
| Disturbed/Developed      | 21.40           | 0.24            | <b>21.64</b>  |
| Disturbed/Ruderal        | 9.58            | 0.01            | <b>9.59</b>   |
| Freshwater Marsh         | 0               | 0               | <b>0</b>      |
| Non-native Grassland     | 0.32            | 0               | <b>0.32</b>   |
| Ornamental               | 0.49            | 0               | <b>0.49</b>   |
| Riparian Woodland        | 0.46            | 0               | <b>0.46</b>   |
| <b>Total</b>             | <b>32.25</b>    | <b>0.25</b>     | <b>32.50</b>  |

Source: Ibid. p. 25 - Table 4-2

#### Disturbed/Developed

Approximately 47.02 acres of the Project Study Area is categorized as disturbed/developed, of which 25.38 acres is located on-site and 21.64 acres is located off-site. Disturbed/Developed on- and off-site areas include portions of existing paved roads (De Berry Street, Van Buren Street, Taylor Street and Main Street) and other facilities, rural residential areas, a storage facility, a stockyard, a baseball field, and flood control channels. This land use type also includes concrete channels associated with the Riverside Canal and a separate flood control channel. The Riverside Canal enters the Project site at the western terminus of De Berry Street adjacent to Interstate (I-) 215. The canal extends through the western portion of the property and then extends off-site. A separate concrete-lined flood control channel originates within the property at De Berry Street, paralleling the Riverside Canal before crossing under the canal into a riparian drainage.

## Disturbed/Ruderal

Approximately 68.8 acres of the Project Study Area consists of disturbed areas dominated by non-native vegetation associated with ruderal areas, including 59.21 acres on-site and 9.59 acres off-site. Ruderal vegetation includes Russian thistle (*Salsola tragus*), summer mustard (*Hirschfeldia incana*), London rocket (*Sisymbrium irio*), tree tobacco (*Nicotiana glauca*), tumbling pigweed (*Amaranthus albus*), Australian saltbush (*Atriplex semibaccata*), and cheeseweed (*Malva parviflorus*).

## Freshwater Marsh

The on-site portion of the Project Study Area contains a drainage ditch that conveys water from a storm drain outlet just north of Grand Terrace High School. Flows are conveyed first north and then west before entering a storm drain that extends under the Riverside Canal. Approximately 0.08 acre of the ditch is vegetated with freshwater marsh dominated with southern cattail (*Typha domingensis*).

## Non-Native Grassland

Approximately 4.22 acres of the Project Study Area is categorized as non-native grassland, including 3.9 acres on-site and 0.32 acre off-site. The grassland areas are dominated by non-native grasses, with other non-native herbaceous species. The areas of non-native grassland are concentrated around the slopes of the on-site drainage that have not been historically farmed. Areas to the north and south have previously supported agricultural uses and are generally dominated by nonnative, ruderal species that include non-native grasses.

## Ornamental

Approximately 1.26 acres of the Project Study Area is vegetated with ornamental (non-native) trees and shrubs, including 0.77 acre on-site and 0.49 acre off-site. The ornamental (non-native) trees and shrubs are planted between the northerly extension of Taylor Street and the existing basins up to the Riverside Canal.

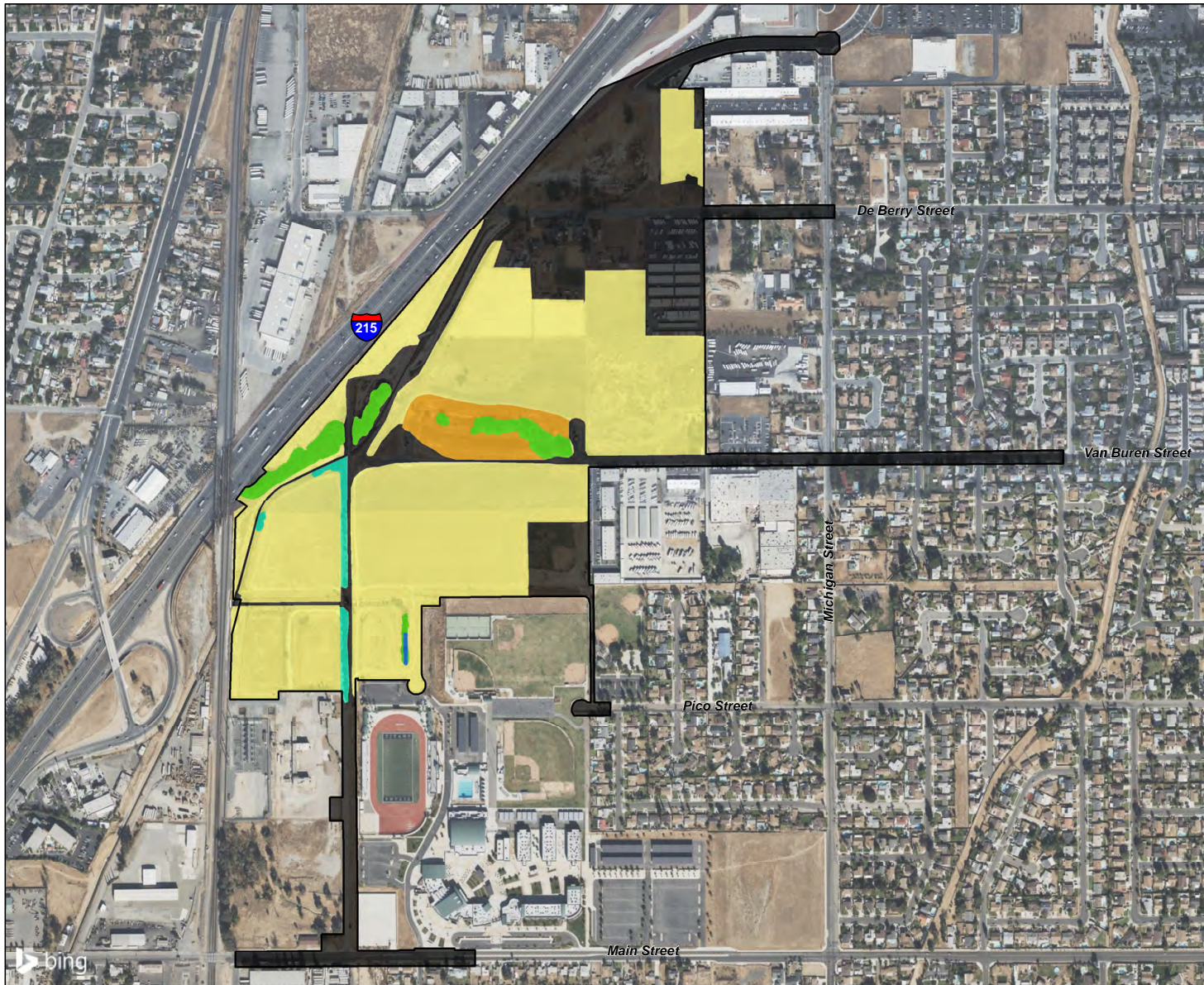
## Riparian Woodland








Approximately 3.57 acres of the Project Study Area is categorized as riparian woodland, including 3.11 acres on-site and 0.46 acre within the Phase I off-site area. The riparian habitat is associated with a drainage feature that originates in the eastern portion of the Project site at Van Buren Street. The drainage feature extends west to a point where it crosses under the Riverside Canal and joins with another feature that then continues southwest before exiting the Project site into a culvert under I-215. The upper portion of the riparian woodland has a substantial non-native component of Shamel ash (*Fraxinus uhdei*) along with several black walnut trees (*Juglans sp.*) and Fremont cottonwood, also known as the western cottonwood (*Populus fremontii*).

There are two species of black walnut that are native to California, including Southern California black walnut (*Juglans californica*) and Northern California black walnut (*Juglans hindsii*). Although Northern California black walnut occurs primarily in Northern California, there are numerous records of Northern California black walnut in Southern California, including a number of records in southwestern San Bernardino County and western Riverside County. However, the origins of these individuals vary, including

those that were planted versus those that could be native, as Northern California black walnut was widely planted in California as a street tree and as a rootstock for English walnut (*J. regia*). Northern California black walnut was regarded by CNPS as a rare species in California (California Rare Plant Rank [CRPR] 1B) until 2019 due to confusion in the extent of natural occurrences of Northern California black walnut in California. In 2019, CNPS deleted Northern California black walnut as a CRPR 1B species and it is no longer considered rare. The Southern California black walnut is designated by CNPS as a CRPR 4.2 species (S4 State Rank), with the majority of the occurrences located in Southern California, including some records in southwestern San Bernardino County and western Riverside County.

GLA reviewed the walnut trees at the Project site, analyzing the growth form, leaf characteristics and fruit (walnut) size. In conclusion and based on the information available, the walnut plants at the Project site identify as the Northern California black walnut but with perhaps a result of introgression between the two species. However, none of the individuals identified purely as the Southern California black walnut.



-  Study Area Boundary
-  Disturbed/Developed
-  Disturbed/Ruderal
-  Freshwater Marsh
-  Non-Native Grassland
-  Ornamental
-  Riparian Woodland

Source: GLA. (2022). Biological Technical Report

**Exhibit 4.3-2: Vegetation Map**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



Not to Scale

**Kimley»Horn**

## Wildlife

The undeveloped portions of the Project Study Area have the potential to support a variety of amphibians, reptiles, birds, and mammals. Since the Project site is disturbed throughout and is surrounded by urban development, much of the wildlife species expected in the Project Study Area are generally those that are associated with urban areas. However, due to the presence of riparian habitat and the grassland areas, the Project Study Area has the potential to support less common wildlife, including some special-status species. Birds observed during the general surveys included European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Carduelis psaltria*), common raven (*Corvus corax*), Cassin's kingbird (*Tyrannus vociferans*), northern mockingbird (*Mimus polyglottos*), red-tailed hawk (*Buteo jamaicensis*), ruby-crowned kinglet (*Regulus calendula*), Anna's hummingbird (*Calypte anna*), house finch (*Carpodacus mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), black phoebe (*Sayornis nigricans*), bushtit (*Psaltriparus minimus*), and yellow-rumped warbler (*Dendroica coronata*). Mammals observed at the site included desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), California ground squirrel (*Otospermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*).

## Special-Status Vegetation Communities/Habitats

The CNDDDB identifies the following eight special-status vegetation communities for the San Bernardino South quadrangle (and surrounding maps): Riversidian Alluvial Fan Sage Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. As noted above, the Project Study Area contains approximately 3.57 acres of riparian habitat, which has been generally categorized in this report as Riparian Woodland and is considered significant under CEQA. The riparian community contains tree and shrub species that are associated with Southern Riparian Forest, Southern Riparian Scrub, or Southern Willow Scrub communities. Although the on-site vegetation was classified as Riparian Woodland due to the non-native components and vegetation structure, the vegetation did not fit the definition of those specific special-status communities.

## Special-Status Plants

No special-status plants were detected during surveys conducted for the Project Study Area, and none are expected to occur based on the lack of suitable habitat, with exception to the discussion of the Southern California black walnut (versus the Northern California black walnut) summarized above. **Table 4.3-3, Special-Status Plants Evaluated for the Project Study Area** provides a list of special-status plants evaluated for the Project Study Area through habitat assessments and surveys. Species were evaluated based on the following factors: 1) species identified by the CNDDDB and NPS as occurring (either currently or historically) on or in the vicinity of the Project Study Area, and 2) any other special-status plants that are known to occur within the vicinity of the Project Study Area, or for which potentially suitable habitat occurs within the Project Study Area.<sup>1</sup>

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<sup>1</sup> Ibid. Pages 26-30

**Table 4.3-3: Special-Status Plants Evaluated for the Project Study Area**

| Species Name   | Status  | Species Requirements   | Potential for Occurrence                          |
|--|---|--|---|
| Brand's star phacelia<br><i>Phacelia stellaris</i>                 | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | <b>Habitat:</b> Coastal dunes and coastal sage scrub.<br><b>Lifeform:</b> Annual herb<br><b>Blooming Period:</b> March-June  | Does not occur due to a lack of suitable habitat. |
| Bristly sedge<br><i>Carex comosa</i>                               | Federal: None<br>State: None<br>CNPS: Rank 2B.1 | <b>Habitat:</b> Coastal prairie, marshes and swamps (lake margins), and valley and foothill grassland.<br><b>Lifeform:</b> Perennial rhizomatous herb<br><b>Blooming Period:</b> May- September                                | Does not occur due to a lack of suitable habitat. |
| California satintail<br><i>Imperata brevifolia</i>                 | Federal: None<br>State: None<br>CNPS: Rank 2B.1 | <b>Habitat:</b> Mesic soils in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub.<br><b>Lifeform:</b> Perennial rhizomatous herb<br><b>Blooming Period:</b> September- May | Does not occur due to a lack of suitable habitat. |
| Chaparral ragwort<br><i>Senecio aphanactis</i>                     | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | <b>Habitat:</b> Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> January- April   | Does not occur due to a lack of suitable habitat. |
| Coulter's goldfields<br><i>Lasthenia glabrata ssp. coulteri</i>    | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | <b>Habitat:</b> Playas, vernal pools, marshes and swamps (coastal salt).<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> February- June   | Does not occur due to a lack of suitable habitat. |
| Gambel's water cress<br><i>Nasturtium gambelii</i>                 | Federal: FE State: ST<br>CNPS: Rank 1B.1        | <b>Habitat:</b> Marshes and swamps (freshwater or brackish).<br><b>Lifeform:</b> Perennial rhizomatous herb<br><b>Blooming Period:</b> April- October  | Does not occur due to a lack of suitable habitat. |
| Horn's milk-vetch<br><i>Astragalus hornii var. hornii</i>          | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | <b>Habitat:</b> Lake margins with alkaline soils, meadows and seeps, and playas.<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> May- October   | Does not occur due to a lack of suitable habitat. |
| Los Angeles sunflower<br><i>Helianthus nuttallii ssp. parishii</i> | Federal: None<br>State: None<br>CNPS: Rank 1A   | <b>Habitat:</b> Marshes and swamps (coastal salt and freshwater).<br><b>Lifeform:</b> Perennial rhizomatous herb<br><b>Blooming Period:</b> August- October  | Does not occur due to a lack of suitable habitat. |
| Marsh sandwort<br><i>Arenaria paludicola</i>                       | Federal: FE State: SE<br>CNPS: Rank 1B.1        | <b>Habitat:</b> Bogs and fens, freshwater marshes and swamps.<br><b>Lifeform:</b> Perennial Stoloniferous herb<br><b>Blooming Period:</b> May-August   | Does not occur due to a lack of suitable habitat. |
| Mesa horkelia<br><i>Horkelia cuneata var. puberula</i>             | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | <b>Habitat:</b> Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.<br><b>Lifeform:</b> Perennial Herb<br><b>Blooming Period:</b> February- September                                     | Does not occur due to a lack of suitable habitat. |
| Nevin's barberry<br><i>Berberis nevinii</i>                        | Federal: FE State: SE<br>CNPS: Rank 1B.1        | <b>Habitat:</b> Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.<br><b>Lifeform:</b> Perennial evergreen shrub<br><b>Blooming Period:</b> February- June                          | Does not occur due to a lack of suitable habitat. |
| Parish's bush-mallow<br><i>Malacothamnus parishii</i>              | Federal: None<br>State: None<br>CNPS: Rank 1A   | <b>Habitat:</b> Chaparral and coastal scrub<br><b>Lifeform:</b> Perennial deciduous shrub<br><b>Blooming Period:</b> June-July   | Does not occur due to a lack of suitable habitat. |



| Species Name  | Status  | Species Requirements  | Potential for Occurrence                          |
|---|---|---|---|
| Parish's desert-thorn<br><i>Lycium parishii</i>                       | Federal: None<br>State: None CNPS:<br>Rank 2B.3 | <b>Habitat:</b> Coastal sage scrub, Sonoran Desert scrub<br><b>Lifeform:</b> Perennial Shrub<br><b>Blooming Period:</b> March-April   | Does not occur due to a lack of suitable habitat. |
| Parish's gooseberry<br><i>Ribes divaricatum var. parishii</i>         | Federal: None<br>State: None CNPS:<br>Rank 1A   | <b>Habitat:</b> Riparian woodland<br><b>Lifeform:</b> Perennial deciduous shrub<br><b>Blooming Period:</b> February-April   | Does not occur due to a lack of suitable habitat. |
| Parry's spineflower<br><i>Chorizanthe parryi var. parryi</i>          | Federal: None<br>State: None CNPS:<br>Rank 1B.1 | <b>Habitat:</b> Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> April-June  | Does not occur due to a lack of suitable habitat. |
| Peruvian dodder<br><i>Cuscuta obtusiflora var. Oglanulosa</i>         | Federal: None<br>State: None CNPS:<br>Rank 2B.2 | <b>Habitat:</b> Marshes and swamps (freshwater). Annual vine (parasitic).<br><b>Lifeform:</b> Annual Vine (parasitic)<br><b>Blooming Period:</b> July-October   | Does not occur due to a lack of suitable habitat. |
| Plummer's mariposa lily<br><i>Calochortus plummerae</i>               | Federal: None<br>State: None CNPS:<br>Rank 4.2  | <b>Habitat:</b> Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.<br><b>Lifeform:</b> Perennial bulbiferous herb<br><b>Blooming Period:</b> May-July                  | Does not occur due to a lack of suitable habitat. |
| Prairie wedge grass<br><i>Sphenopholis obtusata</i>                   | Federal: None<br>State: None CNPS:<br>Rank 2B.2 | <b>Habitat:</b> Mesic soils in cismontane woodland, meadows and seeps.<br><b>Lifeform:</b> Perennial Herb<br><b>Blooming Period:</b> April-July   | Does not occur due to a lack of suitable habitat. |
| Pringle's monardella<br><i>Monardella pringlei</i>                    | Federal: None<br>State: None CNPS:<br>Rank 1A   | <b>Habitat:</b> Sandy soils in coastal sage scrub.<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> May-June  | Does not occur due to a lack of suitable habitat. |
| Robinson's pepper grass<br><i>Lepidium virginicum var. robinsonii</i> | Federal: None<br>State: None CNPS:<br>Rank 4.3  | <b>Habitat:</b> Chaparral, coastal sage scrub<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> January-July   | Does not occur due to a lack of suitable habitat. |
| Salt marsh bird's-beak<br><i>Chloropyron maritimum ssp. maritimum</i> | Federal: FE State: SE<br>CNPS: Rank 1B.2        | <b>Habitat:</b> Coastal dune, coastal salt marshes and swamps.<br><b>Lifeform:</b> Annual Herb (hemiparasite)<br><b>Blooming Period:</b> May- October   | Does not occur due to a lack of suitable habitat. |
| Salt Spring checkerbloom<br><i>Sidalcea neomexicana</i>               | Federal: None<br>State: None CNPS:<br>Rank 2B.2 | <b>Habitat:</b> Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.<br><b>Lifeform:</b> Perennial Herb<br><b>Blooming Period:</b> March-June  | Does not occur due to a lack of suitable habitat. |
| San Bernardino aster<br><i>Symphotrichum defoliatum</i>               | Federal: None<br>State: None CNPS:<br>Rank 1B.2 | <b>Habitat:</b> Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).<br><b>Lifeform:</b> Perennial rhizomatous herb<br><b>Blooming Period:</b> July-November | Does not occur due to a lack of suitable habitat. |
| San Diego ambrosia<br><i>Ambrosia pumila</i>                          | Federal: FE State: None<br>CNPS: Rank 1B.1      | <b>Habitat:</b> Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.<br><b>Lifeform:</b> Perennial Herb (rhizomatous)<br><b>Blooming Period:</b> April-October  | Does not occur due to a lack of suitable habitat. |

| Species Name  | Status  | Species Requirements   | Potential for Occurrence   |   |   |
|---|---|--|--|---|---|
| Santa Ana River woolly star<br><i>Eriastrum densifolium</i><br><i>ssp. sanctorum</i>  | Federal: FE State: SE<br>CNPS: Rank 1B.1                              | <b>Habitat:</b> Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.<br><b>Lifeform:</b> Perennial Herb<br><b>Blooming Period:</b> April-September   | Does not occur due to a lack of suitable habitat.  |   |   |
| Slender-horned spineflower<br><i>Dodecahema leptoceras</i>  | Federal: FE State: SE<br>CNPS: Rank 1B.1                              | <b>Habitat:</b> Sandy soils in alluvial scrub, chaparral, cismontane woodland.<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> April-June   | Does not occur due to a lack of suitable habitat.  |   |   |
| Smooth tarplant<br><i>Centromadia</i><br><i>pungens ssp. laevis</i>   | Federal: None<br>State: None CNPS: Rank 1B.1                          | <b>Habitat:</b> Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.<br><b>Lifeform:</b> Annual Herb<br><b>Blooming Period:</b> April-September         | Does not occur due to a lack of suitable habitat.  |   |   |
| Southern California black walnut<br><i>Juglans californica</i>  | Federal: None<br>State: None CNPS: Rank 4.2                           | <b>Habitat:</b> Chaparral, cismontan woodland, coastal sage scrub, alluvial surfaces.<br><b>Lifeform:</b> Perennial deciduous tree<br><b>Blooming Period:</b> March-August   | Potential to occur due to the presence of suitable habitat, but no Southern California black walnut trees were identified on the Project Site during survey performed by GLA.<br><br>See the above discussion under Riparian Woodland and <b>Appendix B</b> regarding the presence of black walnut trees at the Project site and the identification of Northern California black walnut versus Southern California black walnut. |   |   |
| Thread-leaved brodiaea<br><i>Brodiaea filifolia</i>   | Federal: FT State: SE<br>CNPS: Rank 1B.1                              | <b>Habitat:</b> Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.<br><b>Lifeform:</b> Perennial bulbiferous herb<br><b>Blooming Period:</b> March-June | Does not occur due to a lack of suitable habitat.  |   |   |
| <p><b>Status</b></p> <table border="0"> <tr> <td> <p><b>Federal</b><br/>FE- Federally Endangered<br/>FT- Federally Threatened<br/>FC- Federal Candidate</p> </td> <td> <p><b>State</b><br/>SE- State Endangered<br/>ST- State Threatened</p> </td> </tr> </table> |   |  |  | <p><b>Federal</b><br/>FE- Federally Endangered<br/>FT- Federally Threatened<br/>FC- Federal Candidate</p> | <p><b>State</b><br/>SE- State Endangered<br/>ST- State Threatened</p> |
| <p><b>Federal</b><br/>FE- Federally Endangered<br/>FT- Federally Threatened<br/>FC- Federal Candidate</p>   | <p><b>State</b><br/>SE- State Endangered<br/>ST- State Threatened</p> |  |  |   |   |

| Species Name   | Status | Species Requirements | Potential for Occurrence |
|--|--------|----------------------|--------------------------|
| <b>CNPS</b>  |        |                      |                          |
| Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.             |        |                      |                          |
| Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.                        |        |                      |                          |
| Rank 2A – Plants presumed extirpated in California, but common elsewhere.                            |        |                      |                          |
| Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.           |        |                      |                          |
| Rank 3 – Plants about which more information is needed (a review list).                              |        |                      |                          |
| Rank 4 – Plants of limited distribution (a watch list).  |        |                      |                          |
| <b>CNPS Threat Code Extension</b>  |        |                      |                          |
| .1 – Seriously endangered in California (over 80% occurrences threatened)                            |        |                      |                          |
| .2 – Fairly endangered in California (20-80% occurrences threatened)                                 |        |                      |                          |
| .3 – Not very endangered in California (<20% of occurrences threatened, or no current threats known) |        |                      |                          |
| Source: Ibid. pp. 29-32 Table 4-3  |        |                      |                          |

### Special-Status Animals

No special-status animals were detected within the Project Study Area during the general and focused surveys, although some species have a potential to occur within certain undeveloped portions of the Project Study area. **Table 4.3-4, Special Status Animals Evaluated for the Project Study Area** provides a list of special-status animals evaluated for the Project Study Area through general biological surveys and habitat assessments. Species were evaluated based on the following factors, including: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project Study Area, and 2) any other special-status animals that are known to occur within the vicinity of the Project Study Area, for which potentially suitable habitat occurs on the Project Study Area.<sup>2</sup>

**Table 4.3-4: Special Status Animals Evaluated for the Project Study Area**

| Species Name  | Status                      | Habitat Requirements  | Occurrence  |
|---|-----------------------------|---|---|
| <b>Invertebrates</b>  |                             |   |   |
| Delhi-sands flower-loving fly<br><i>Raphiomidas 11erminates abdominalis</i> | Federal: FE<br>State: None  | Fine, sandy soils often associated with wholly or partially consolidated dunes referred to as the “Delhi” series. Vegetation consists of a sparse cover, including Californica buckwheat, California croton, deerweed, and evening primrose.              | Does not occur due to a lack of suitable habitat. |
| Riverside fairy shrimp<br><i>Streptocephalus woottoni</i>                   | Federal: FE<br>State: None  | Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.  | Does not occur due to a lack of suitable habitat. |
| Vernal pool fairy shrimp<br><i>Branchinecta lynchi</i>                      | Federal: FT<br>State: None  | Seasonal vernal pools   | Does not occur due to a lack of suitable habitat. |
| <b>Fish</b>   |                             |   |   |
| Arroyo chub<br><i>Gila orcutti</i>  | Federal: None<br>State: SSC | Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.   | Does not occur due to a lack of suitable habitat. |
| Santa Ana speckled dace<br><i>Rhinichthys osculus ssp. 3</i>                | Federal: None<br>State: SSC | Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20° C. Usually inhabits shallow cobble and gravel riffles. | Does not occur due to a lack of suitable habitat. |

<sup>2</sup> Ibid. Pages 30-34

| Species Name  | Status                      | Habitat Requirements   | Occurrence  |
|---|-----------------------------|--|---|
| Santa Ana sucker<br><i>Catostomus santaanae</i>                           | Federal: FT<br>State: None  | Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates. | Does not occur due to a lack of suitable habitat. |
| <b>Amphibians</b>   |                             |  |   |
| California red-legged frog<br><i>Rana draytonii</i>                       | Federal: FT<br>State: SSC   | Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.  | Does not occur due to a lack of suitable habitat. |
| Southern mountain yellow-legged frog<br><i>Rana muscosa</i>               | Federal: FE<br>State: SE    | Streams and small pools in ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.   | Does not occur due to a lack of suitable habitat  |
| Western spadefoot<br><i>Spea hammondi</i>                                 | Federal: None<br>State: SSC | Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.   | Does not occur due to a lack of suitable habitat  |
| <b>Reptiles</b>   |                             |  |   |
| California glossy snake<br>Arizona elegans occidentalis                   | Federal: None<br>State: SSC | Inhabits arid scrub, rocky washes, grasslands, chaparral.  | Does not occur due to a lack of suitable habitat. |
| Coastal whiptail<br><i>Aspidoscelis tigris stejnegeri (multiscutatus)</i> | Federal: None<br>State: SSC | pen, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.  | Does not occur due to a lack of suitable habitat. |
| Coast horned lizard<br><i>Phrynosoma blainvillii</i>                      | Federal: None<br>State: SSC | Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.   | Does not occur due to a lack of suitable habitat. |
| Coast patch-nosed snake<br><i>Salvadora hexalepis virgulata</i>           | Federal: None<br>State: SSC | Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.   | Does not occur due to a lack of suitable habitat. |
| Granite spiny lizard<br><i>Sceloporus orcuttii orcuttii</i>               | Federal: None<br>State: SSC | Chaparral, scrub, and riparian habitats, but closely tied to fractured granodiorite rock outcrops.   | Does not occur due to a lack of suitable habitat. |
| Red-diamond rattlesnake<br><i>Crotalus ruber</i>                          | Federal: None<br>State: SSC | Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.   | Does not occur due to a lack of suitable habitat. |
| San Diego banded gecko<br><i>Coleonyx variegatus abbotti</i>              | Federal: None<br>State: SSC | Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.  | Does not occur due to a lack of suitable habitat. |
| Southern California legless lizard<br><i>Anniella stebbinsi</i>           | Federal: None<br>State: SSC | Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats than any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans.                   | Does not occur due to a lack of suitable habitat. |
| Southern rubber boa<br><i>Charina umbratica</i>                           | Federal: None<br>State: ST  | Restricted to the San Bernardino and San Jacinto Mountain, in a variety of montane forest habitats. Found in vicinity of streams or wet meadows. Requires loose, moist soil for burrowing. Seeks cover in rotting logs.  | Does not occur due to a lack of suitable habitat. |
| Two-striped garter snake<br><i>Thamnophis hammondi</i>                    | Federal: None<br>State: SSC | Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.   | Does not occur due to a lack of suitable habitat. |

| Species Name   | Status                      | Habitat Requirements  | Occurrence   |
|--|-----------------------------|---|--|
| Western pond turtle<br><i>Emys marmorata</i>                                     | Federal: None<br>State: SSC | Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks. | Does not occur due to a lack of suitable habitat.  |
| <b>Birds</b>   |                             |   |  |
| Bald eagle (nesting & wintering)<br><i>Haliaeetus leucocephalus</i>              | Federal: None<br>State: SSC | Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.  | Does not occur due to a lack of suitable habitat.  |
| Burrowing owl (burrow sites & some wintering sites)<br><i>Athene cunicularia</i> | Federal: BCC<br>State: SSC  | Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.  | Confirmed absent during focused surveys.   |
| California black rail<br><i>Laterallus jamaicensis coturniculus</i>              | Federal: BCC<br>State: SSC  | Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.   | Does not occur due to a lack of suitable habitat.  |
| Coastal California gnatcatcher<br><i>Poliioptila californica californica</i>     | Federal: FT<br>State: SSC   | Low elevation coastal sage scrub and coastal bluff scrub.   | Does not occur due to a lack of suitable habitat.  |
| Golden eagle (nesting & wintering)<br><i>Aquila chrysaetos</i>                   | Federal: BCC<br>State: FP   | In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.  | Does not occur due to a lack of suitable habitat.  |
| Grasshopper sparrow (nesting)<br><i>Ammodramus savannarum</i>                    | Federal: None<br>State: SSC | Open grassland and prairies with patches of bare ground.  | Does not occur due to a lack of suitable habitat.  |
| Least Bell's vireo (nesting)<br><i>Vireo Bellii pusillus</i>                     | Federal: FE<br>State: SE    | Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.   | Potential to occur due to the presence of suitable habitat, but the least Bell's vireo was confirmed absent during focused surveys |
| Loggerhead shrike (nesting)<br><i>Lanius ludovicianus</i>                        | Federal: BCC<br>State: SSC  | Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.         | Potential to occur due to the presence of suitable habitat.  |
| Long-eared owl (nesting)<br><i>Asio otus</i>                                     | Federal: None<br>State: SSC | Riparian habitats are required by the long-eared owl, but it also uses live- oak thickets and other dense stands of trees.  | Does not occur due to a lack of suitable habitat.  |
| Olive-sided flycatcher (nesting)<br><i>Contopus cooperi</i>                      | Federal: BCC<br>State: SSC  | Breeds in montane and northern coniferous forests, at forest edges and openings, such as meadows and ponds. Winters at forest edges and clearings where tall trees or snags are present.  | Does not occur due to a lack of suitable habitat.  |

| Species Name  | Status                                 | Habitat Requirements   | Occurrence  |
|---|--|--|---|
| Short-eared owl (nesting)<br><i>Asio flammeus</i>                                 | Federal: None<br>State: SSC            | Open country, including prairie, meadows, tundra, moorlands, marshes, savanna, and open woodland. Nests on the ground.   | Does not occur due to a lack of suitable habitat.   |
| Southwestern willow flycatcher (nesting)<br><i>Empidonax traillii extimus</i>     | Federal: FE<br>State: SE               | Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.  | Potential to occur due to the presence of suitable habitat, but the southwestern willow flycatcher was confirmed absent during focused surveys. |
| Swainson's hawk (nesting)<br><i>Buteo swainsoni</i>                               | Federal: BCC<br>State: ST              | Summer in wide open spaces of the American West. Nest in grasslands but can use sage flats and agricultural lands. Nests are placed in lone trees.   | Does not occur due to a lack of suitable habitat.   |
| Tricolored blackbird (nesting colony)<br><i>Agelaius tricolor</i>                 | Federal: BCC<br>State: ST              | Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.  | Does not occur due to a lack of suitable habitat.   |
| Western yellow-billed cuckoo (nesting)<br><i>Coccyzus americanus occidentalis</i> | Federal: FT, BCC<br>State: SE          | Dense, wide riparian woodlands with well-developed understories.   | Does not occur due to a lack of suitable habitat.   |
| White-tailed kite (nesting)<br><i>Elanus leucurus</i>                             | Federal: None<br>State: FP             | Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.   | Potential to occur due to the presence of suitable habitat.   |
| Yellow-breasted chat (nesting)<br><i>Icteria virens</i>                           | Federal: None<br>State: SSC            | Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.   | Potential to occur due to the presence of suitable habitat.   |
| Yellow warbler (nesting)<br><i>Setophaga petechia</i>                             | Federal: BCC<br>State: SSC             | Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats. | Present.  |
| <b>Mammals</b>  |  |  |   |
| American badger<br><i>Taxidea taxus</i>   | Federal: None<br>State: SSC            | Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.   | Does not occur due to a lack of suitable habitat.   |
| Los Angeles pocket mouse<br><i>Perognathus longimembris brevinasus</i>            | Federal: None<br>State: SSC            | Fine, sandy soils in coastal sage scrub and grasslands.  | Does not occur due to a lack of suitable habitat.   |
| Northwestern San Diego pocket mouse<br><i>Chaetodipus fallax fallax</i>           | Federal: None<br>State: SSC            | Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.  | Potential to occur due to the presence of suitable habitat.   |
| Pallid bat<br><i>Antrozous pallidus</i>   | Federal: None<br>State: SSC<br>WBWG: H | Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.  | Does not occur due to a lack of suitable habitat.   |
| Pocketed free-tailed bat<br><i>Nyctinomops femorosaccus</i>                       | Federal: None<br>State: SSC<br>WBWG: M | Rocky areas with high cliffs in pine- juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.   | Does not occur due to a lack of suitable habitat.   |
| San Bernardino kangaroo rat<br><i>Dipodomys merriami</i>                          | Federal: FE<br>State: SC, SSC          | Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans   | Does not occur due to a lack of suitable habitat.   |

| Species Name   | Status                                   | Habitat Requirements   | Occurrence   |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
|--|--|--|--|----------------|--------------|--------------------------|----------------------|--------------------------|----------------------|------------------------------------|----------------------|------------------------|--|-------------------------------------|----------------------------------|
| <i>parvus</i>  |  | and floodplains, and along washes with nearby sage scrub.  |  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| San Diego black-tailed jackrabbit<br><i>Lepus californicus bennettii</i>   | Federal: None<br>State: SSC              | Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.  | Potential to occur due to the presence of suitable habitat.  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| San Diego desert woodrat<br><i>Neotoma lepida intermedia</i>   | Federal: None<br>State: SSC              | Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.   | Does not occur due to a lack of suitable habitat.  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| Southern grasshopper mouse<br><i>Onychomys torridus ramona</i>   | Federal: None<br>State: SSC              | Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.   | Does not occur due to a lack of suitable habitat.  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| Stephens' kangaroo rat<br><i>Dipodomys stephensi</i>   | Federal: FE<br>State: ST                 | Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.  | Does not occur due to a lack of suitable habitat.  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| Western mastiff bat<br><i>Eumops perotis californicus</i>  | Federal: None<br>State: SSC<br>WBWG: H   | Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels. | Potential to occur due to the presence of suitable habitat, but the western mastiff bat was confirmed absent during focused surveys. |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| Western red bat<br><i>Lasiurus blossevillii</i>  | Federal: None<br>State: SSC<br>WBWG: H   | Prefers riparian areas dominated by walnuts, oaks, willows, cottonwoods, and sycamores where they roost in broad-leafed trees.   | Potential to occur due to the presence of suitable habitat, but the western red bat was confirmed absent during focused surveys.     |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| Western yellow bat<br><i>Lasiurus xanthinus</i>  | Federal: None<br>State: SSC<br>WBWG: H   | Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.   | Potential to occur due to the presence of suitable habitat, but the western yellow bat was confirmed absent during focused surveys.  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| <p><b>Status</b></p> <table border="0"> <tr> <td><b>Federal</b></td> <td><b>State</b></td> </tr> <tr> <td>FE- Federally Endangered</td> <td>SE- State Endangered</td> </tr> <tr> <td>FT- Federally Threatened</td> <td>ST- State Threatened</td> </tr> <tr> <td>FPT- Federally Proposed Threatened</td> <td>SC – State Candidate</td> </tr> <tr> <td>FC – Federal Candidate</td> <td>CFP – California Fully-Protected Species</td> </tr> <tr> <td>BCC – Birds of Conservation Concern</td> <td>SSC – Species of Special Concern</td> </tr> </table> <p><b>Western Bat Working Group (WBWG)</b></p> <p>H – High Priority<br/>LM – Low-Medium Priority<br/>M – Medium Priority<br/>MH – Medium-High Priority</p> <p>Source: Ibid. pp. 33-39 Table 4-4.</p> |  |  |  | <b>Federal</b> | <b>State</b> | FE- Federally Endangered | SE- State Endangered | FT- Federally Threatened | ST- State Threatened | FPT- Federally Proposed Threatened | SC – State Candidate | FC – Federal Candidate | CFP – California Fully-Protected Species | BCC – Birds of Conservation Concern | SSC – Species of Special Concern |
| <b>Federal</b>   | <b>State</b>                             |  |  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| FE- Federally Endangered   | SE- State Endangered                     |  |  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| FT- Federally Threatened   | ST- State Threatened                     |  |  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| FPT- Federally Proposed Threatened   | SC – State Candidate                     |  |  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| FC – Federal Candidate   | CFP – California Fully-Protected Species |  |  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |
| BCC – Birds of Conservation Concern  | SSC – Species of Special Concern         |  |  |                |              |                          |                      |                          |                      |                                    |                      |                        |  |                                     |                                  |

### Burrowing Owl

The Project Study Area has a low to moderate potential to support the burrowing owl due to the presence of generally suitable habitat, including suitable burrows. Burrowing owls are associated with shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Burrowing owls occupy abandoned ground

squirrel burrows as well as artificial structures such as culverts and underpasses. Burrowing owls were not detected during focused surveys and thus the burrowing owl is currently considered absent from the Project Study area.

### **Least Bell's Vireo**

The Project Study Area has a low potential to support the Least Bell's vireo. The Least Bell's vireo occupies dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest. Breeding generally requires an understory layer of shrubs (such as mulefat), for vireos to build their nests. The upper part of the riparian drainage at the Project site has a relatively low potential to support breeding vireos due to the general lack of a stratified canopy. However, the absence could not be ruled out. The downstream riparian habitat has a relatively higher potential to support breeding vireos based on the vegetation structure. The Least Bell's vireo was not detected during focused surveys and so the least Bell's vireo is currently considered absent from the Project Study Area.

### **Southwestern Willow Flycatcher**

The Project Study area has a low potential to support the southwestern willow flycatcher. The southwestern willow flycatcher is one of three subspecies known from California; however, the southwestern willow flycatcher is the only subspecies that breeds in southern California. The southwestern willow flycatcher occupies riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs. A key component of southwestern willow flycatcher habitat is a perennial water source. The upper part of the riparian drainage is not expected to support the southwestern willow flycatcher due to the relative narrowness of the habitat and the lack of perennial flows. However, the downstream portion of the habitat has a relatively higher potential to support the southwestern willow flycatcher, although the potential for occurrence is still very low due to the relatively small size of the habitat and proximity to development, including I-215. The southwestern willow flycatcher was not detected during focused surveys and so the southwestern willow flycatcher is currently considered absent from the Project Study Area.

### **Loggerhead Shrike**

The loggerhead shrike has a low to moderate potential to occur due to the presence of suitable habitat in the Project Study Area. The loggerhead shrike forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs. For breeding, shrikes typically construct nests in trees or shrubs with dense foliage that protects the nests. The average height of nests above the ground ranges from approximately 2.5 to 4 feet. Although much of the Project Study Area is developed or disturbed, the relative openness of the Project Study provides good foraging habitat for the shrike. However, the potential breeding habitat is limited due to disturbed nature of the Project Study Area and relative lack of suitable vegetation. Of the trees that are located at the site, the majority do not exhibit the foliage density that would support shrike breeding, or at a height that is typical of shrike nest building.



### **White-Tailed Kite**

The white-tailed kite has a low potential to occur at the Project Study Area. The white-tailed kite utilizes low elevation open grasslands, savannah-like habitats, agricultural areas, and wetlands for foraging; while using dense canopies for nesting and cover, such as oak woodlands. The Project Study Area provides foraging habitat for white-tailed kites. Although the Project Study Area does not contain native woodlands that would be typical of kite breeding habitat, the ornamental trees located in the western portion of the Project Study Area provides a low potential for kite nesting. The trees located in the riparian drainages are not expected to support kite nesting due to a lack of appropriate vegetation structure. However, since there are no recognized survey protocols focused nesting survey for the white-tailed kite was not performed.

### **Yellow-Breasted Chat**

The yellow-breasted chat has a low potential to breed at the Project Study Area. The chat utilizes dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. The upper part of the riparian drainage provides limited opportunity for the chat due to the relative narrowness and openness of the habitat. However, the lower part of the drainage provides relatively better-quality habitat (relatively wider and denser vegetation) with a potential to support the chat.

### **Yellow Warbler**

The yellow warbler was detected at the Project Study Area during biological surveys, within the area of riparian woodland. Yellow warblers breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland.

### **Northwestern San Diego Pocket Mouse**

The northwestern San Diego pocket mouse has a low potential to occur at the Project Study Area. The pocket mouse is found in coastal sage scrub, sage scrub/grassland ecotones, and chaparral. Although the Project Study Area is surrounded by development and is isolated from other open space, the grassland areas of the Project Study Area have some potential to support remnant, disconnected populations of the northwestern San Diego pocket mouse.

### **San Diego Black-Tailed Jackrabbit**

The San Diego black-tailed jackrabbit has a low to moderate potential to occur at the Project Study Area. The San Diego black-tailed jackrabbit occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats. Jackrabbits typically are not found in high grass or dense brush where it is difficult for them to locomote, and the openness of open scrub habitat probably is preferred over dense chaparral. The openness of such habitat allows jackrabbits to escape predators and humans by fast, often long-distance sprints. Black-tailed-jackrabbits typically do not burrow but instead take shelter at the base of shrubs in shallow depressions called forms. The jackrabbit was not detected in the Project Study Area and because of the relative openness of the site jackrabbit would have likely been detected if they were present at the time of the various biological surveys. Furthermore, the Project Study Area does not contain

shrubs that the forms would typically be associated with. As such, the Project Study Area does contain habitat to support the general use of jackrabbits, but breeding opportunities are limited because of the lack of shrubs that would be associated with breeding habitat.

## Bats

Three species of bats were detected at the Project area including the Mexican free-tailed bat (*Tadarida brasiliensis*), big brown bat (*Eptesicus fuscus*), and the canyon bat (*Parastrellus hesperus*). No special-status bats such as the western mastiff bat, western red bat, and western yellow bat were detected at the Project Study Area. The Project Study Area does not contain structures with the potential for use as maternity roosts; however, some mature trees within the Project Study Area could have the potential for maternity roosting depending on the presence of cavities, etc. Besides maternity roosting, trees located within the Project area have the potential for use as foraging roosts.

## Critical Habitat

The Project Study Area is not located within any USFWS-designated Critical Habitat areas.

## Native Wildlife Nursery Sites

Native wildlife nurseries are intended as sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. The Project Study Area supports reproduction of locally common species and potentially individuals of special-status wildlife species; however, does not have the potential to support a regionally important wildlife nursery site such as a heronry, colonial nesting site (i.e., northern harrier), or colonial maternal bat roost.

## Nesting Birds

The Project Study Area contains trees, shrubs, and ground cover that provide suitable habitat for nesting migratory birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.

## Jurisdictional Waters

The Project contains several drainage features with potential to be considered as jurisdictional waters by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or California Department of Fish and Wildlife (CDFW). Refer to **Section 4.3.3, Regulatory Setting**, below for more information regarding jurisdictional waters under USACE, RWQCB and CDFW.

## USACE Jurisdiction

Potential USACE jurisdiction at the Project Study Area is approximately 0.88 acre, of which 0.08 acre consists of federal wetlands and 0.8 acre consists of non-wetland waters. A total of 4,174 linear feet of streambed is present. Three drainage features (Drainage A, B, and C) were evaluated within the Project Study Area. Drainages A, B, and C are potential waters of the U.S. (WoUS) exhibiting an ordinary high-water mark (OHWM) with several characteristics of stream flow including destruction of terrestrial

vegetation, break in bank slope, change in soil characteristics, debris wracking, and/or water marks. **Table 4.3-5, Potential USACE Jurisdiction Associated with the Project Study Area (On-site)** and **Table 4.3-6, Potential USACE Jurisdiction Associated with the Project Study Area (Off-site)**, summarizes potential USACE jurisdictional waters associated with the Project Study Area. A description of the potential USACE jurisdictional drainage features associated with the Project Study Area is outlined in **Section 4.3.3** below and illustrated in **Exhibit 4.3-3, Potential USACE/RWQCB Jurisdictional Delineation**.

**Table 4.3-5: Potential USACE Jurisdiction Associated with the Project Study Area (On-site)**

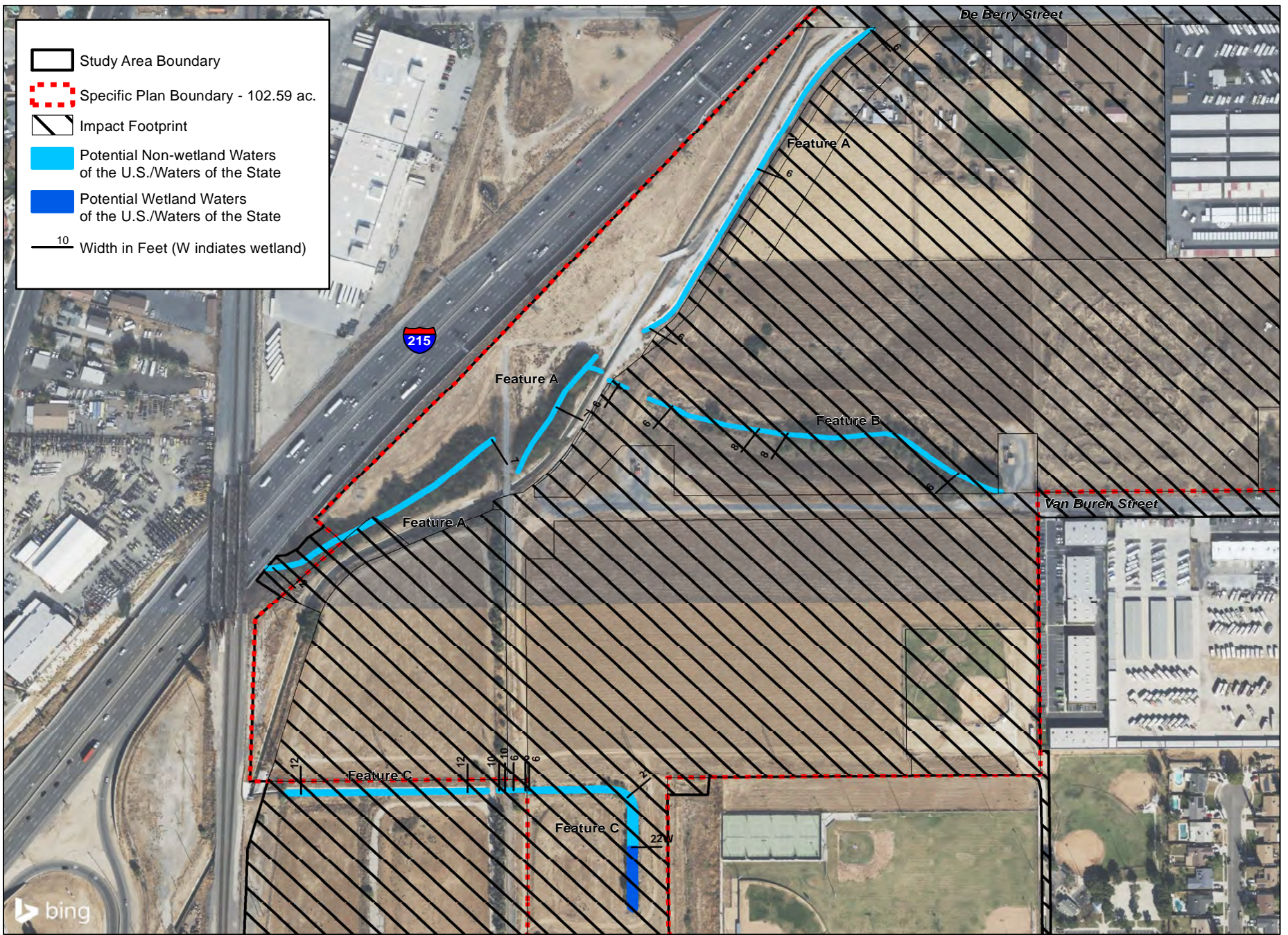
| Drainage Name | Potential USACE Non-Wetland Waters (Acres) | Potential USACE Jurisdictional Wetlands (Acres) | Total Potential USACE Jurisdiction (Acres) | Length (Linear Feet) |
|---------------|--|---|--|----------------------|
| Drainage A    | 0.29                                       | 0.00  | 0.29                                       | 1,806                |
| Drainage B    | 0.15                                       | 0.00  | 0.15                                       | 978                  |
| Drainage C    | 0.15                                       | 0.08  | 0.23                                       | 565                  |
| <b>Total</b>  | <b>0.59</b>                                | <b>0.08</b>                                     | <b>0.67</b>                                | <b>3,349</b>         |

Source: Ibid. p. 42 - Table 4-5.

**Table 4.3-6: Potential USACE Jurisdiction Associated with the Project Study Area (Off-site)**

| Drainage Name | Potential USACE Non-Wetland Waters (Acres) | Potential USACE Jurisdictional Wetlands (Acres) | Total Potential USACE Jurisdiction (Acres) | Length (Linear Feet) |
|---------------|--|---|--|----------------------|
| Drainage A    | 0.06                                       | 0.00  | 0.06                                       | 266                  |
| Drainage B    | 0.00                                       | 0.00  | 0.00                                       | 0                    |
| Drainage C    | 0.15                                       | 0.00  | 0.15                                       | 559                  |
| <b>Total</b>  | <b>0.21</b>                                | <b>0.00</b>                                     | <b>0.21</b>                                | <b>825</b>           |

Source: Ibid. p. 43 - Table 4-6.



Source: GLA. (2022). Biological Technical Report

**Exhibit 4.3-3: Potential USACE/RWQCB Jurisdictional Delineation**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



### ***Drainage A***

Potential USACE jurisdiction associated with Drainage A totals approximately 0.35 acre, none of which consist of federal wetlands. This drainage is depicted as an unnamed blue-line stream on the USGS San Bernardino South, California, quadrangle. Drainage A originates as a concrete-lined flood control channel that enters the site in the northwestern corner from a storm drain outlet at the western terminus of the existing De Berry Street. The concrete channel extends for approximately 995 linear feet through the Project site before entering a culvert that crosses under the Riverside Canal and then continues southwest before exiting the property into a culvert under I-215. Drainage A supports an OHWM ranging in width between six and 12 feet. The concrete-lined portion of the channel is unvegetated, and therefore does not support wetlands. The downstream portion of Drainage A, which is northwest of the Riverside Canal, is vegetated with riparian species including Goodding's black willow and mulefat. While riparian vegetation is present, this portion of Drainage A was determined to not support wetlands due to the lack of appropriate indicators.

### ***Drainage B***

Potential USACE jurisdiction associated with Drainage B totals approximately 0.15 acre, none of which consist of federal wetlands. Drainage B originates from the eastern portion of the Project site at a storm drain outlet at the western terminus of the existing Van Buren Street. The drainage extends west for 978 linear feet until it crosses under the Riverside Canal and flows into Drainage A. Drainage B supports an OHWM ranging in width between six and eight feet. The majority of the drainage supports riparian habitat, including both native and non-native tree species. Vegetation associated with Drainage B includes non-native Shamel ash along with walnut trees that appear to be a hybrid of the native Southern California black walnut and the non-native English walnut. Intermixed with the ash and walnut trees are individuals of western cottonwood.

### ***Drainage C***

Potential USACE jurisdiction associated with Drainage C totals approximately 0.38 acre, of which 0.08 acre consists of federal wetlands and 0.3 acre consists of non-wetland WoUS. Drainage C consists of a human-made drainage ditch that originates from a storm drain outlet in the southeastern portion of the Project site just north of Grand Terrace High School. The channel inverts of the drainage ditch are lined with riprap, with an unlined earthen bed, a portion of which supports potentially jurisdictional wetlands in the form of freshwater marsh. From the outlet, the drainage ditch extends north and then turns west to a point where it crosses under the Riverside Canal and connects to the downstream flood control channel. Drainage C supports an OHWM ranging in width from six to 22 feet. Vegetation associated with the western portion of Drainage C mainly consists of ruderal upland vegetation including Russian thistle, Summer mustard, London rocket, and Cheeseweed. The wetland (southeastern) portion of Drainage C is dominated by Southern cattails, and Tall flat sedge, with occasional Mulefat and Goodding's black willow.

### ***Riverside Canal***

The Riverside Canal is an irrigation canal that was constructed in the late 1800s to convey water from the Santa Ana River to citrus ranches in the City of Riverside. The canal is a closed irrigation system and does not connect to WoUS. Instead, the canal terminates at a location near the Citrus State Historical Park

where remaining water is pumped into the municipal water system. Since the canal is a closed irrigation system and does not connect to WoUS, it therefore would not itself be considered as potential WoUS by the USACE pursuant to Clean Water Act (CWA) Section 404.

**RWQCB Jurisdiction**

The RWQCB jurisdiction associated with Project Study Area totals 0.88 acre, of which 0.08-acre consists of State wetlands and 0.8-acre consists of non-wetland waters. A total of 4,174 linear feet of streambed is present.

RWQCB jurisdiction includes three drainage features (Drainages A, B, and C) which have been evaluated within the Project Study Area. Drainages A, B, and C exhibit an OHWM with several characteristics of stream flow including destruction of terrestrial vegetation, terracing, change in soil characteristics, debris wracking, and/or water marks. Drainages A, B, and C have been determined to be potential USACE jurisdictional waters subject to regulation pursuant to Section 401 and 404 of the CWA. Therefore, these drainages do not need to be addressed separately pursuant to Section 13260 of the California Water Commission (CWC), the Porter-Cologne Act. There are no isolated, nonfederal waters associated with the Project site.

**Table 4.3-7, RWQCB Jurisdiction Associated with the Project Study Area (On-site)** and **Table 4.3-8, RWQCB Jurisdiction Associated with the Project Study Area (Off-site)**, summarizes RWQCB jurisdictional waters associated with the Project Study Area. A description of the RWQCB jurisdictional drainage features associated with the Project Study Area is outlined below and illustrated in **Exhibit 4.3-3**.

**Table 4.3-7: RWQCB Jurisdiction Associated with the Project Study Area (On-site)**

| Drainage Name | RWQCB Non-Wetland Waters (Acres) | RWQCB Jurisdictional Wetlands (Acres) | Total RWQCB Jurisdiction (Acres) | Length (Linear Feet) |
|---------------|----------------------------------|---------------------------------------|----------------------------------|----------------------|
| Drainage A    | 0.29                             | 0.00                                  | 0.29                             | 1,806                |
| Drainage B    | 0.15                             | 0.00                                  | 0.15                             | 978                  |
| Drainage C    | 0.15                             | 0.08                                  | 0.23                             | 565                  |
| <b>Total</b>  | <b>0.59</b>                      | <b>0.08</b>                           | <b>0.67</b>                      | <b>3,349</b>         |

Source: Ibid. p. 45 Table 4-7

**Table 4.3-8: RWQCB Jurisdiction Associated with the Project Study Area (Off-site)**

| Drainage Name | RWQCB Non-Wetland Waters (Acres) | RWQCB Jurisdictional Wetlands (Acres) | Total RWQCB Jurisdiction (Acres) | Length (Linear Feet) |
|---------------|----------------------------------|---------------------------------------|----------------------------------|----------------------|
| Drainage A    | 0.06                             | 0.00                                  | 0.06                             | 266                  |
| Drainage B    | 0.00                             | 0.00                                  | 0.00                             | 0                    |
| Drainage C    | 0.15                             | 0.00                                  | 0.15                             | 559                  |
| <b>Total</b>  | <b>0.21</b>                      | <b>0.00</b>                           | <b>0.21</b>                      | <b>825</b>           |

Source: ibid. p. 45 - Table 4-8.

**Drainages A, B, and C**

RWQCB jurisdiction associated with Drainage A totals approximately 0.35 acre, none of which consist of State wetlands. RWQCB jurisdiction associated with Drainage B totals approximately 0.15-acre, none of which consist of State wetlands. Lastly, RWQCB jurisdiction associated with Drainage C totals

approximately 0.38-acre, of which 0.08-acre consists of State wetlands and 0.3-acre consists of non-wetland waters.

**Riverside Canal**

Since the canal is a closed irrigation system and does not connect to other jurisdictional waters, it would not itself be considered as a jurisdictional water.

**CDFW Jurisdiction**

CDFW jurisdiction associated with the Project Study Area totals approximately 4.13 acres, of which 3.66 acres consist of riparian streambed and 0.47 acre consists of non-riparian streambed. A total of 4,174 linear feet of streambed is present. CDFW jurisdiction includes all areas within RWQCB jurisdiction including Drainages A, B, and C, as described above. CDFW jurisdiction is extended to the top of the bank of the streambed and/or the dripline of riparian vegetation (where applicable).

**Table 4.3-9, CDFW Jurisdiction Associated with the Project Study Area (On-site)** and **Table 4.3-10, CDFW Jurisdiction Associated with the Project Study Area (Off-site)**, summarizes CDFW jurisdictional waters associated with the Project Study Area. A description of the CDFW jurisdictional drainage features associated with the Project Study Area is outlined below and illustrated in **Exhibit 4.3-4, Potential CDFW Jurisdictional Delineation**.

**Table 4.3-9: CDFW Jurisdiction Associated with the Project Study Area (On-site)**

| Drainage Name | CDFW Non-Riparian Stream (Acres) | CDFW Riparian Stream (Acres) | Total CDFW Jurisdiction (Acres) | Length (Linear Feet) |
|---------------|----------------------------------|------------------------------|---------------------------------|----------------------|
| Drainage A    | 0.14                             | 1.65                         | 1.79                            | 1,806                |
| Drainage B    | 0.08                             | 1.33                         | 1.41                            | 978                  |
| Drainage C    | 0.10                             | 0.21                         | 0.31                            | 565                  |
| <b>Total</b>  | <b>0.32</b>                      | <b>3.19</b>                  | <b>3.51</b>                     | <b>3,349</b>         |

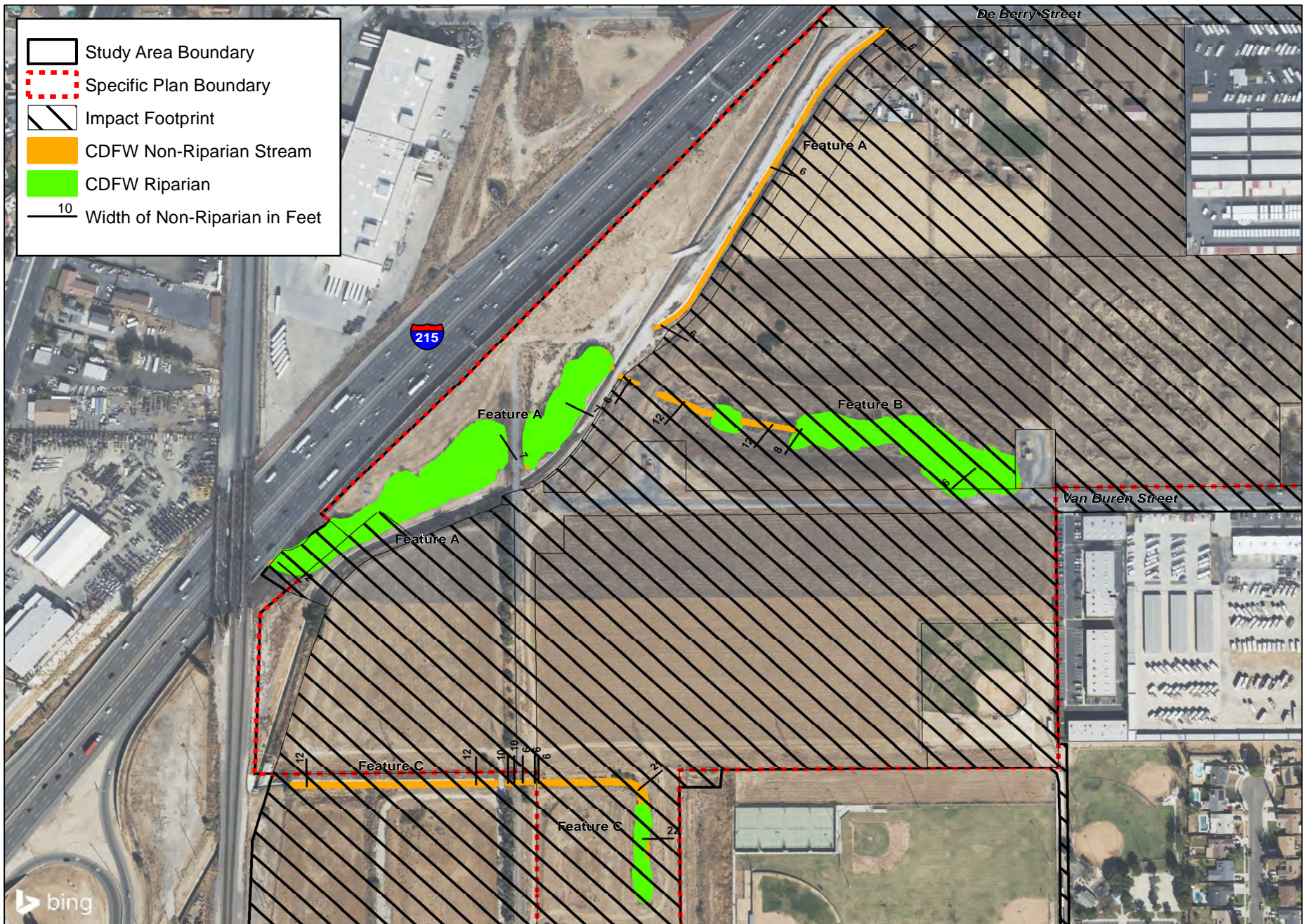
Source: Ibid. p. 47 - Table 4-9

**Table 4.3-10: CDFW Jurisdiction Associated with the Project Study Area (Off-site)**

| Drainage Name | CDFW Non-Riparian Stream (Acres) | CDFW Riparian Stream (Acres) | Total CDFW Jurisdiction (Acres) | Length (Linear Feet) |
|---------------|----------------------------------|------------------------------|---------------------------------|----------------------|
| Drainage A    | 0.00                             | 0.42                         | 0.42                            | 266                  |
| Drainage B    | 0.00                             | 0.05                         | 0.05                            | N/A <sup>(1)</sup>   |
| Drainage C    | 0.15                             | 0.00                         | 0.15                            | 559                  |
| <b>Total</b>  | <b>0.15</b>                      | <b>0.47</b>                  | <b>0.62</b>                     | <b>825</b>           |

(1) The off-site 0.05-acre represents the edge of canopy associated with the center line of the stream, and so it is not applicable to again report a linear measurement for that portion since it was already counted as part of the on-site.

Source: Ibid. p. 47 - Table 4-10



Source: GLA. (2022). Biological Technical Report

**Exhibit 4.3-4: Potential CDFW Jurisdictional Delineation**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



Not to Scale

**Kimley»Horn**



### ***Drainages A, B, and C***

CDFW jurisdiction associated with Drainage A totals approximately 2.21 acres, of which 2.07 acres consist of riparian streambed and 0.14-acre consists of non-riparian streambed. This drainage is depicted as an unnamed blue-line stream on the USGS San Bernardino South, California, quadrangle. CDFW jurisdiction associated with Drainage B totals approximately 1.46 acres, of which 1.38 acres consist of riparian streambed and 0.08-acre consists of non-riparian streambed. Lastly, CDFW jurisdiction associated with Drainage C totals approximately 0.46 acre, of which 0.21 acre consists of riparian streambed and 0.25 acre consists of non-riparian streambed.

### ***Riverside Canal***

Since the canal is a closed irrigation system and does not connect to CDFW jurisdictional drainage courses. It therefore would not itself be considered as a CDFW jurisdictional resource under Section 1600 et Seq. of the Fish and Game Code, as it is an artificial waterway lacking fish and wildlife values.

## **4.3.3 REGULATORY SETTING**

### **Federal**

#### **Federal Endangered Species Act**

The Federal Endangered Species Act (FESA) and subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. The FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species. “Take” is defined in Section 3(18) of FESA: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the USFWS, through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification that result in injury to, or death of species as forms of “take.” These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

#### **Federal Take Authorizations for Listed Species**

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).

- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.

### **Clean Water Act/Rivers and Harbors Act**

Section 401 requires that a project proponent for a Federal license or permit that allows activities resulting in a discharge to WoUS must obtain a State certification that the discharge complies with other provisions of CWA. The RWQCB administers the certification program in California.

Section 402 establishes a permitting system for the discharge of any pollutant (except dredge or fill material) into WoUS, commonly referred to as the National Pollutant Discharge Elimination System (NPDES) Permit process, described further below.

Section 404 establishes a permit program, administered by the USACE, regulating the discharge of dredged or fill material into WoUS, including wetlands. Refer to USACE regulatory information below for more information.

### **Migratory Bird Treaty Act (16 U.S.C. 701 through 719(c))**

The MBTA is the domestic law that affirms, or implements, the United States' commitment to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding season. The MBTA makes it unlawful to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States.

### **United States Army Corps of Engineers**

Pursuant to Section 404 of the CWA, the USACE regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in USACE regulations at 33 CFR Part 328.3(a) as:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) All interstate waters including interstate wetlands;*
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*

- (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
  - (ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
  - (iii) Which are used or could be used for industrial purpose by industries in interstate commerce...*
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
- (6) The territorial seas;*
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*
- (8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

*...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

### **Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.**

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s, USACE interpreted the interstate commerce requirement in a manner that restricted USACE jurisdiction on isolated (intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA) asserted that USACE jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of “waters of the United States” in USACE regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling in *Solid Waste Agency of Northern Cook County v. USACE, et al.* (SWANCC). In this case, the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the CWA.

The written opinion notes that the Court's previous support of the USACE's expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the USACE to regulate wetlands that are not adjacent to bodies of open water. The SWANCC opinion goes on to state:

*In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

### **Rapanos v. United States and Carabell v. United States**

On June 5, 2007, the EPA and USACE issued joint guidance<sup>3</sup> that addresses the scope of jurisdiction pursuant to the CWA in light of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). The information below was provided in the joint EPA/USACE guidance.

For sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPWs) tributary to TNWs and/or their adjacent wetlands, as set forth below, USACE must apply the "significant nexus" standard.

For "isolated" waters or wetlands, the joint guidance also requires an evaluation by the USACE and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the USACE.

The USACE and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters.
- Wetlands adjacent to traditional navigable waters.
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly touch such tributaries.

The USACE and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

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<sup>3</sup> Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*. Joint EPA and U.S. Army Corps of Engineers Memorandum (June 5, 2007). Retrieved from: [https://www.epa.gov/sites/default/files/2016-02/documents/cwa\\_jurisdiction\\_following\\_rapanos120208.pdf](https://www.epa.gov/sites/default/files/2016-02/documents/cwa_jurisdiction_following_rapanos120208.pdf)

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.
- Significant nexus includes consideration of hydrologic and ecologic factors.

## State

### California Environmental Quality Act (CEQA) Guidelines Section 15380

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. **Section 4.3.4** and **Section 4.3.6** below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA includes non-listed species that could potentially meet the criteria for state listing in its definition of "endangered" or "rare." For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered rare or endangered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

### California Endangered Species Act (California State Fish and Game Code Section 2050 et seq.)

The California Endangered Species Act (CESA) establishes the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the Fish and Game Commission as rare on or before January 1, 1985, is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by CDFW for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as

though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike FESA, CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating “No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.” Under the CESA, “take” is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Exceptions authorized by the state to allow “take” require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

The CESA mandates that State agencies should not approve projects that would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. There are no State agency consultation procedures under the CESA. For projects that affect both a State and Federal listed species, compliance with FESA would satisfy the CESA if the CDFW determines that the Federal incidental take authorization is “consistent” with the CESA under California State Fish and Game Code Section §2080.1. For projects that would result in a take of a State-only listed species, the project proponent must apply for a take permit under Section 2081(b).

### **State Take Authorizations for Listed Species**

State authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in the following way:

- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

### **Native Plant Protection Act (California State Fish and Game Code 1900 through 1913)**

California’s Native Plant Protection Act (NPPA) requires all State agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. Provisions of the NPPA prohibit the taking of listed plants from the wild and require notification of the CDFW at least 10 days in advance of any change in land use. This allows CDFW to salvage listed plant species that would otherwise be destroyed. The Project proponent is required to conduct botanical inventories and consult with CDFW during project planning to comply with the provisions of this Act and sections of CEQA that apply to rare or endangered plants.

### California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS’s Eighth Edition of the California Native Plant Society’s Inventory of Rare and Endangered Plants of California separates plants of interest into six ranks. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed six categories of rarity that are summarized in **Table 4.3-11, CNPS Ranks 1A, 1B, 2A, 2B, 3, & 4, and Threat Code Extensions** below.

**Table 4.3-11: CNPS Ranks 1A, 1B, 2A, 2B, 3, & 4, and Threat Code Extensions**

| CNPS Rank   | Comments   |
|---|--|
| Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere   | Thought to be extinct in California based on a lack of observation or detection for many years.  |
| Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere  | Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.   |
| Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere  | Species that are presumed extinct in California but more common outside of California  |
| Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere  | Species that are rare in California but more common outside of California  |
| Rank 3 – Plants About Which More Information Is Needed (A Review List)  | Species that are thought to be rare or in decline, but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.   |
| Rank 4 – Plants of Limited Distribution (A Watch List)  | Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the “Inventory” and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized. |
| Extension   | Comments   |
| .1 – Seriously endangered in California   | Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.   |
| .2 – Fairly endangered in California  | Species with 20-80% of occurrences threatened.   |
| .3 – Not very endangered in California  | Species with <20% of occurrences threatened or with no current threats known.  |
| Source: GLA. (2022). <i>BTR for The Gateway at Grand Terrace Specific Plan Project</i> . p. 17 - Table 3-1. See <b>Appendix B</b> . |  |

## Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine RWQCBs regulate the discharge of waste (dredged or fill material) into WoUS and waters of the State. WoUS are defined above in Section II.A and waters of the State are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to WoUS (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the RWQCB has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. CWA Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

## Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the State fall under the jurisdiction of the appropriate RWQCB. Under the act, the RWQCB must prepare and periodically update basin plans. Each basin plan sets forth water quality standards for surface water and groundwater as well as actions to control nonpoint and point sources of pollution, thereby achieving and maintaining these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to water quality certification or a waiver under Section 401 of the CWA.

## State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows:

*An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the State:

1. Natural wetlands;
2. Wetlands created by modification of a surface water of the state;<sup>4</sup> and
3. Artificial wetlands that meet any of the following criteria:<sup>5</sup>

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<sup>4</sup> “Created by modification of a surface water of the state” means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

<sup>5</sup> Artificial wetlands are wetlands that result from human activity.



- a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
- b. Specifically identified in a water quality control plan as a wetland or other water of the state;
- c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
- d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
  - i. Industrial or municipal wastewater treatment or disposal,
  - ii. Settling of sediment,
  - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
  - iv. Treatment of surface waters,
  - v. Agricultural crop irrigation or stock watering,
  - vi. Fire suppression,
  - vii. Industrial processing or cooling,
  - viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
  - ix. Log storage,
  - x. Treatment, storage, or distribution of recycled water, or
  - xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
  - xii. Fields flooded for rice growing.<sup>6</sup>

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

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<sup>6</sup> Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.

## California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1617 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

Sections 1600 through 1617. Under these sections of the California State Fish and Game Code, the Project proponent is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the California State Fish and Game Code, a "stream" is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. The CDFW also has jurisdiction over dry washes that carry water ephemerally during storm events.

Preliminary notification and project review generally occur during the environmental review process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the Project.

## Local

### City of Grand Terrace General Plan

The City of Grand Terrace General Plan (Grand Terrace GP) Open Space and Conservation Element focuses on attributes that contribute to the preservation of natural resources, such as the protection of sensitive habitat, the management of production resources, such as mineral deposits, agriculture, or groundwater

recharge, and recreation and visual aesthetics.<sup>7</sup> Concurrently, open space may be used to manage public safety hazards such as seismic activity, high fire hazards, flood hazards, and quality of life in the communities and neighborhoods where people live. The following goals and policies are applicable to biological resources.

**Goal 4.2**                    **Natural resources in the City of Grand Terrace shall be protected and preserved by utilizing open space designations or related regulations.**

**Policy 4.2.2**                The City shall establish land use regulations to preserve and protect any identified natural resources.

**Policy 4.2.5**                The City shall act to reasonably conserve and protect significant biological resources.

#### 4.3.4      **SIGNIFICANCE CRITERIA UNDER CEQA**

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning biological resources. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

### **Methodology and Assumptions**

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning biological resources. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the

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<sup>7</sup> City of Grand Terrace. (2010). Grand Terrace General Plan. *Open Space and Conservation Element*. Retrieved from: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/c4\\_open\\_space\\_conserv.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/c4_open_space_conserv.pdf) (accessed February 22, 2023).

potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

As noted in **Section 4.3.1**, the Project Study Area evaluated in the BTR is shown in **Exhibit 4.3-1**. The following impact analysis for the Project primarily focuses on a project-specific analysis for those portions of the Project Study Area currently owned or otherwise under control of the project Applicant (i.e., Phase 1 on- and off-site areas). Due to current ownership issues and lack of accessibility, potential impacts associated with the Phase 2 on- and off-site areas were determined at the programmatic level. The BTR (**Appendix C**) is determined to be adequate at a programmatic level to describe potential impacts to biological resources. Site-specific surveys would be required for any future development proposed within the Phase 2 on- and off-site areas, as noted in the mitigation measures below.

### Biological Field Surveys

The properties within the Project Study Area have evolved over the past years. At the programmatic level, the following surveys are referenced herein to describe findings for certain specific properties within the Project boundaries and are determined to be adequate at a programmatic level to identify biological resources for the overall Project area in accordance with CEQA requirements.

GLA assembled biological data consisting of the following main components:

- Performance of habitat assessments, and site-specific biological surveys, to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA.
- Performance of vegetation mapping for the Project area; and
- Delineation of aquatic resources (including wetlands and riparian habitat) subject to the jurisdiction of the USACE, RWQCB, and CDFW.

### Summary of Surveys

The focus of the biological surveys was determined through initial site reconnaissance, a review of the California Natural Diversity Database (CNDDDB), California Native Plant Society (CNPS) 8<sup>th</sup> edition online inventory, Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. General biological surveys and habitat assessments were conducted on foot where access was permitted; otherwise, the assessments were performed from adjacent properties and/or through the review of aerial imagery.

GLA conducted biological resources assessments of the Project Study Area in multiple years, starting with initial general biological surveys in 2017 followed by focused surveys in 2018 and 2021. The 2017 visits were performed to document existing conditions at the Project Study Area, and to note potential habitat for special status plant and animal species. The focused biological studies conducted in 2018 and 2021 were performed to document the presence of several special-status species and conduct a jurisdictional delineation. During all of GLA's surveys, observations of plant and animal species were noted.

Individual plants and wildlife species are evaluated in the BTR based on their “special-status.” For the purpose of this analysis, plants were considered “special-status” based on one or more of the following criteria:

- Listing through the FESA and/or CESA;
- Occurrence in the CNPS Rare Plant Inventory (Rank 1A/1B, 2A/2B, 3, or 4); and/or
- Occurrence in the CNDDDB inventory.

Wildlife species were considered “special-status” based on one or more of the following criteria:

- Listing through the Federal and/or State ESA; and
- Designation by the State as a Species of Special Concern (SSC) or California Fully Protected (CFP) species.

Vegetation communities and habitats were considered “special-status” based on one or more of the following criteria:

- Occurrence in the CNDDDB inventory
- Riparian habitat
- Due to the overall disturbed nature of the Project site, vegetation mapping generally did not follow standard classification systems such as the Manual of California Vegetation, Second Edition or MCVII, which is the California expression of the National Vegetation Classification, or Holland. Vegetation mapping was generally performed based on the dominant land uses, except where native vegetation was present, i.e., for the on-site drainage feature supporting riparian vegetation.

### 4.3.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.3-1:** *Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Level of Significance:** *Less than Significant with Mitigation Incorporated*

## Construction

### Impacts to Special-Status Plant Species

As discussed in **Section 4.3.2** above, the Project Study Area contains walnut trees that were identified as the Northern California black walnut, but with a note that one or more individual trees could be the result of introgression with the Southern California black walnut. The Southern California black walnut has a CNPS Rank of 4.2, indicating that it is a plant of limited distribution with greater than 20 percent of occurrences threatened. Regardless, the Project does not support pure individuals of the Southern California black walnut. Accordingly, Project development would not impact the Southern California black walnut as a special-status species. Furthermore, the Project Study Area does not have the potential to

support special-status plants as noted in **Table 4.3-4** above, due to lack of suitable habitat. Therefore, the development of the Project would not impact special-status plants species.

### Impacts to Special-Status Wildlife Species

Project development would remove habitats with the potential to support special-status wildlife species. As concluded in the BTR, the loss of habitat for the following species would be considered less than significant without mitigation based on multiple factors: the loggerhead shrike, white-tailed kite, yellow-breasted chat, yellow warbler, northwestern San Diego pocket mouse, and San Diego black-tailed jackrabbit. Those factors include the relatively low habitat value based on the majority of developed and disturbed lands, predominance of non-native vegetation, and adjacency to the developed areas (i.e., no connectivity to open space). Other factors, depending on the species, include the low potential for occurrence and/or low sensitivity of the species. Nevertheless, impacts to nesting birds are prohibited by the MBTA and California Fish and Game Code. Although there is a low potential for nesting birds to occur within the Phase I on- and off-site areas, the Project would be required to implement **MM BIO-1**, to avoid impacts to nesting birds. Therefore, with implementation of **MM BIO-1**, impacts to migratory/nesting birds would be reduced to a less than significant level.

Based on a review of the Phase 2 areas from adjacent properties and from reviewing aerial imagery, the Phase 2 on-site lands consist of existing rural residential parcels with associated fields that have a history of disturbance and support predominantly non-native vegetation. The BTR concluded that the Phase 2 on-site lands do not appear to support native vegetation communities as they are primarily disturbed areas.

The Phase 2 on-site lands also have a low potential to support foraging habitat for the white-tailed kite and loggerhead shrikes. Similarly, because the Phase 2 on-site lands have a low potential to support foraging and are currently disturbed, the loss of foraging habitat is not expected. The Phase 2 on-site lands also do not have a potential to support special-status bats, or riparian birds such as the least Bell's vireo and southwestern willow flycatcher. Impacts were determined to be less than significant and future development within the Phase 2 area would not be required to conduct focused surveys for those species.

The BTR concluded that the Phase 2 area could support the burrowing owl due to the presence of generally suitable habitat, including suitable burrows. As such, future development projects within the Phase 2 area would be required to adhere to **MM BIO-2**, which requires pre-construction surveys of all suitable habitat areas for burrowing owls, prior to any disturbance activities, to confirm the absence or occurrence of the species. Surveys would be conducted in accordance with the 2012 CDFW Staff Report on Burrowing Owl Mitigation. With implementation of **MM BIO-2**, impacts to the burrowing owl species would be reduced to less than significant levels.

### Operations

No impact to any candidate, sensitive, or special status species would occur during the Project operations. Operational impacts would be less than significant.

### **Mitigation Measures**

**MM BIO-1** To avoid impacts to nesting migratory and/or special-status birds, the removal of any vegetation with the potential to support nesting migratory and/or special-status birds should be performed outside of the nesting season (February 1 through August 31, but potentially earlier if the site can support nesting raptors). If vegetation must be removed during the nesting season, then a qualified biologist should perform a nesting bird survey no more than three days prior to the removal of any vegetation. If active nests are identified at the site, then the nests should be avoided with an adequate buffer as determined by the biologist until the nests are no longer active and the young can survive independently from the nest.

**MM BIO-2** A qualified biologist shall conduct a take avoidance (pre-construction) survey of all suitable habitat areas for burrowing owl. The survey shall follow the 2012 CDFW Staff Report on Burrowing Owl Mitigation, which indicates that a survey should be performed 14 to 30 days prior to any disturbance activities, with a follow up survey within 24 hours prior to the disturbance. If any burrowing owls are present at the time of the planned disturbance, then the burrowing owls will be passively excluded or passively relocated from the site to avoid direct harm to individual owls; however, exclusion/relocation of nesting owls must occur outside of the breeding season (February 1 to September 15) to avoid impacts to active nests. The exclusion/relocation of owls must be approved by CDFW. If applicable, a Burrowing Owl Exclusion/Relocation Plan should be prepared and submitted to CDFW for review and approval.

**Impact 4.3-2:** *Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

**Impact 4.3-3** *Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

***Level of Significance: Less than Significant with Mitigation Incorporated***

Because riparian habitats and protected wetlands often overlap with other state or federally protected lands, potential impacts to these two resources are analyzed together in the following discussion.

## **Construction**

### **Impacts to Sensitive Vegetation Communities**

As shown in **Tables 4.3-2** and **4.3-3**, the development of the Project's Phase 1 area would impact approximately 96.35 acres of land, including 64.1 acres on-site and 32.25 acres off-site. More specially, development of the Phase 1 area would impact 1.91 acres of Riparian Woodland and 0.08 acre of Freshwater Marsh. Riparian communities, in general, are regarded as special-status vegetation

communities by CDFW and could host potential riparian species (see **Table 4.3-5**). Thus, impacts to Riparian Woodland and Freshwater Marsh could be potentially significant with development of the Project’s Phase 1 area.

To reduce potentially significant impacts, **MM BIO-3** which is required during regulatory permit acquisition for future development, will include one or more of the following mitigation options to reduce impacts to sensitive vegetation communities: 1) avoidance and conservation of onsite waters; 2) establishment and/or enhancement of wetlands/riparian habitat onsite; 3) establishment and/or enhancement of wetlands/riparian habitat offsite; and/or 4) purchase of credits from an approved mitigation bank/in-lieu fee program. With implementation of **MM BIO-3**, impacts to sensitive vegetation communities would be reduced to less than significant levels.

**Impacts to Jurisdictional Waters**

The Project would impact drainage features that may be regulated by the USACE, RWQCB, and CDFW, including wetlands and riparian vegetation.

**USACE and RWQCB Jurisdiction**

As detailed in the following **Table 4.3-12, Impacts to USACE/RWQCB Jurisdictional Waters Associated with On-Site Phase 1 Area** and **Table 4.3-13, Impacts to USACE/RWQCB Jurisdictional Waters Associated with Off-Site Phase 1 Area**, development of the Project’s Phase 1 area would permanently impact approximately 0.59 acre of potential USACE and RWQCB jurisdiction (0.38 acre onsite and 0.21 acre offsite), including 0.08 acre of jurisdictional wetlands. On-site impacts would occur to the entirety of Drainage B and C.

**Table 4.3-12: Impacts to USACE/RWQCB Jurisdictional Waters Associated with On-Site Phase 1 Area**

| Drainage Name   | Non-Wetland Waters (Acres) | Wetlands (Acres) | Total Impacts (Acres) | Length (Linear Feet) |
|---|----------------------------|------------------|-----------------------|----------------------|
| Drainage B  | 0.15                       | 0.0              | 0.15                  | 963                  |
| Drainage C  | 0.15                       | 0.08             | 0.23                  | 565                  |
| <b>Total Impact</b>   | <b>0.30</b>                | <b>0.08</b>      | <b>0.38</b>           | <b>1,528</b>         |
| <b>Total Existing Potential Jurisdiction waters (Drainage A, B &amp; C)</b> | <b>0.59</b>                | <b>0.08</b>      | <b>0.67</b>           | <b>3,349</b>         |

Source: GLA. (2022). *Biological Technical Report for the Gateway at Grand Terrace Specific Plan*. Page 53 - Tables 5-3 and 5-5. See **Appendix B**.

**Table 4.3-13: Impacts to USACE/RWQCB Jurisdictional Waters Associated with Off-Site Phase 1 Area**

| Drainage Name   | Non-Wetland Waters (Acres) | Wetlands (Acres) | Total Impacts (Acres) | Length (Linear Feet) |
|---|----------------------------|------------------|-----------------------|----------------------|
| Drainage A  | 0.06                       | 0.0              | 0.06                  | 226                  |
| Drainage C  | 0.15                       | 0.0              | 0.15                  | 559                  |
| <b>Total Impact</b>   | <b>0.21</b>                | <b>0.0</b>       | <b>0.21</b>           | <b>825</b>           |
| <b>Total Existing Potential Jurisdiction waters (Drainage A, B &amp; C)</b> | <b>0.21</b>                | <b>0.0</b>       | <b>0.21</b>           | <b>825</b>           |

Source: GLA. (2022). *Biological Technical Report for the Gateway at Grand Terrace Specific Plan*. Pages 53 and 54 - Tables 5-4 and 5-6. See **Appendix B**.



**CDFW Jurisdiction**

As shown in **Table 4.3-14, Impacts to CDFW Jurisdictional Land and Riparian Vegetation Associated with On-Site Phase 1 Area** and **Table 4.3-15, Impacts to CDFW Jurisdictional Land and Riparian Vegetation Associated with Off-site Phase 1 Area**, the Project would permanently impact approximately 2.33 acres of land under CDFW jurisdiction (1.71 acres [1,525 linear feet] on-site and 0.62 acre [850 linear feet] off-site), including 1.99 acres of riparian vegetation. On-site impacts would occur to Drainage B and C. Off-site impacts would occur to Drainage A, B, and C.

**Table 4.3-14: Impacts to CDFW Jurisdictional Land and Riparian Vegetation Associated with On-Site Phase 1 Area**

| Drainage Name       | Non-Riparian Stream (Acres) | Riparian Stream (Acres) | Total Impacts (Acres) | Length (Linear Feet) |
|---------------------|-----------------------------|-------------------------|-----------------------|----------------------|
| Drainage B          | 0.08                        | 1.32                    | 1.40                  | 950                  |
| Drainage C          | 0.10                        | 0.21                    | 0.31                  | 565                  |
| <b>Total Impact</b> | <b>0.18</b>                 | <b>1.53</b>             | <b>1.71</b>           | <b>1,525</b>         |

Source: Ibid. Page 54 - Table 5-7.

**Table 4.3-15: Impacts to CDFW Jurisdictional Land and Riparian Vegetation Associated with Off-site Phase 1 Area**

| Drainage Name       | Non-Riparian Stream (Acres) | Riparian Stream (Acres) | Total Impacts (Acres) | Length (Linear Feet) |
|---------------------|-----------------------------|-------------------------|-----------------------|----------------------|
| Drainage A          | 0.0                         | 0.41                    | 0.42                  | 226                  |
| Drainage B          | 0.0                         | 0.05                    | 0.05                  | 25                   |
| Drainage C          | 0.15                        | 0.0                     | 0.15                  | 559                  |
| <b>Total Impact</b> | <b>0.15</b>                 | <b>0.46</b>             | <b>0.62</b>           | <b>850</b>           |

Source: Ibid. Page 54 - Table 5-8.

**Conclusion**

As discussed above, the construction of the Project would permanently impact 0.59 acre of potential USACE and RWQCB jurisdiction (including 0.08 acre of wetlands) and 2.33 acres of CDFW jurisdiction (including 1.99 acres of riparian vegetation). Therefore, Applicants of future development projects impacting these jurisdictional areas will be required to obtain a CWA Section 404 permit from the USACE, a Section 401 Water Quality Certification from the RWQCB, and a Streambed Alteration Agreement from the CDFW. Furthermore, the Project would implement **MM BIO-3** to mitigate impacts concerning jurisdictional waters. Since the Project would obtain the necessary permits from USACE, RWQCB, and CDFW and implement **MM BIO-3**, the Project’s construction impact to jurisdictional waters would be reduced to a less than significant level.

**Operations**

Once constructed, Project operations would not impact any riparian habitat, wetland, or other sensitive natural community. Therefore, impacts would be less than significant.

### **Mitigation Measures**

**MM BIO-3** In addition to obtaining permits from the USACE, RWQCB, and CDFW, impacts to CDFW jurisdiction will require a Streambed Alteration Agreement and the Project shall implement mitigation consisting of one or more of the following options (mitigation would be required at a minimum 1:1 ratio to offset impacts):

- 1) Avoidance and conservation of on-site waters;
- 2) Establishment and/or enhancement of wetlands/riparian habitat on-site;
- 3) Establishment and/or enhancement of wetlands/riparian habitat off-site;
- 4) Purchase of credits from an approved mitigation bank/in-lieu fee program.

**Impact 4.3-4:** *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

**Level of Significance: Less than Significant**

### **Construction and Operations**

The Project Study Area is surrounded by existing development including commercial manufacturing uses to the north; I-215 to the northwest; residential uses and industrial uses to the south (south of W. Main Street); commercial manufacturing uses, residential uses, manufacturing uses, industrial uses, Veteran's Freedom Park, and Grand Terrace High School, and vacant parcels to the east; and the BNSF railway followed by industrial and commercial uses to the west. Although a few vacant parcels are located east of the Project Study Area, the Project site does not function as a regional wildlife corridor or habitat linkage due to the existing freeway, railway, and surrounding urbanization. Thus, the Project site does not support regional wildlife movement, and therefore implementation of the Project would not substantially interfere with the movement of native fish or wildlife species.

Additionally, as concluded in the BTR, the Project has the potential to impact active bird nests if vegetation is removed during the nesting season (refer to Impact 4.3-1 for more information). However, general nesting habitat does not constitute as wildlife nursery sites under CEQA. and the BTR did not identify any wildlife nurseries in the Project Study Area. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.3-5:** *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

**Level of Significance: Less than Significant**

## Construction and Operations

Implementation of the Project would be subject to all applicable Federal, State, regional, and local policies and regulations related to the protection of biological resources as outlined above in **Section 4.3.3, Regulatory Setting**. However, there are no local policies or ordinances that apply to the Project area. All development facilitated by the Project would be constructed in compliance with the Specific Plan's residential and non-residential development standards pursuant to the Grand Terrace MC. The Project would support the preservation of biological resources pursuant to Grand Terrace GP Policies 4.2.2 and 4.2.5. The City does not have a tree preservation policy or ordinance. The Project proposes streetscape landscaping that includes, but is not limited to, canopy, skyline, understory, and background trees that could host new habitat for special-status species. Within commercially development areas, interior landscaping shall be installed to create shade and visual interest; parking lot screen and shade trees shall be located within landscape planters and perimeter buffers; and residential alleys shall include landscaped areas on both sides of the lane adjacent to selected garages and accent shrubs would be planted to highlight unit entries. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources and a less than significant impact would occur.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.3-6:** *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

**Level of Significance: No Impact**

## Construction and Operations

The Project and off-site improvement areas are not located within the boundaries of a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Project would not conflict with the provisions of such plans and no impact would occur.

### **Mitigation Measures**

No mitigation measures are required.

### **4.3.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant unavoidable biological resource impacts have been identified for the Project.

### **4.3.7 CUMULATIVE IMPACTS**

Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." (14 Cal Code Regs §15355).

For purposes of cumulative biological resources impact analysis, cumulative impacts are considered for cumulative development according to the related projects; see **Table 4-1, Cumulative Projects List**.

Development of the Project would contribute to the overall reduction of riparian woodland, non-native grassland, ornamental, and freshwater marsh vegetation in the region, which is habitat that is used, or can be used, as live-in and/or foraging areas for several species identified in **Table 4.3-4** above. The Project would also impact wetland and non-wetland WoUS/Waters of the State.

Compensatory mitigation for Project specific impacts to riparian and wetland resources would be required by agencies with jurisdiction over these resources and implemented in the course of the Project's development (**MM BIO-3**).

Compliance with existing regulations, permit conditions, local design standards and implementation of **MMs BIO-1** through **BIO-3** would reduce Project impacts to biological resources to a less than significant levels. Similarly, all future public or private projects would be required to adhere to applicable regulatory standards, design standards, and incorporate mitigation measures to reduce impacts concerning biological resources. Therefore, the Project would not result in a cumulatively considerable contribution to any potentially significant cumulative impact on biological resources.

#### 4.3.8 REFERENCES

- Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States*. Joint EPA and U.S. Army Corps of Engineers Memorandum (June 5, 2007). [https://www.epa.gov/sites/default/files/2016-02/documents/cwa\\_jurisdiction\\_following\\_rapanos120208.pdf](https://www.epa.gov/sites/default/files/2016-02/documents/cwa_jurisdiction_following_rapanos120208.pdf)
- City of Grand Terrace. (2010). Grand Terrace General Plan. *Open Space and Conservation Element*. [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/c4\\_open\\_space\\_conserv.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/c4_open_space_conserv.pdf)
- Glenn Lukos Associates (GLA). (2022). *Biological Technical Report for the Gateway at Grand Terrace Specific Plan*. See **Appendix B**.
- U.S. EPA. (N.D). *Section 404 Program*. [https://cfpub.epa.gov/watertrain/moduleFrame.cfm?parent\\_object\\_id=2802#:~:text=Federal%20regulations%20define%20wetlands%20as,in%20saturated%20soil%E2%80%9D%20%5B33CFR328.](https://cfpub.epa.gov/watertrain/moduleFrame.cfm?parent_object_id=2802#:~:text=Federal%20regulations%20define%20wetlands%20as,in%20saturated%20soil%E2%80%9D%20%5B33CFR328.)

## 4.4 CULTURAL RESOURCES

### 4.4.1 INTRODUCTION

This section describes the environmental and regulatory settings of cultural resources. Cultural resources relate to archaeological remains, historic buildings, traditional customs, tangible artifacts, historical documents, and public records, which are unique, may be historically significant, or are more locally important significant resources that make the City of Grand Terrace (City) unique. The evaluation of The Gateway at Grand Terrace Specific Plan (Project), including the potential impacts to cultural resources, is largely based on the following sources:

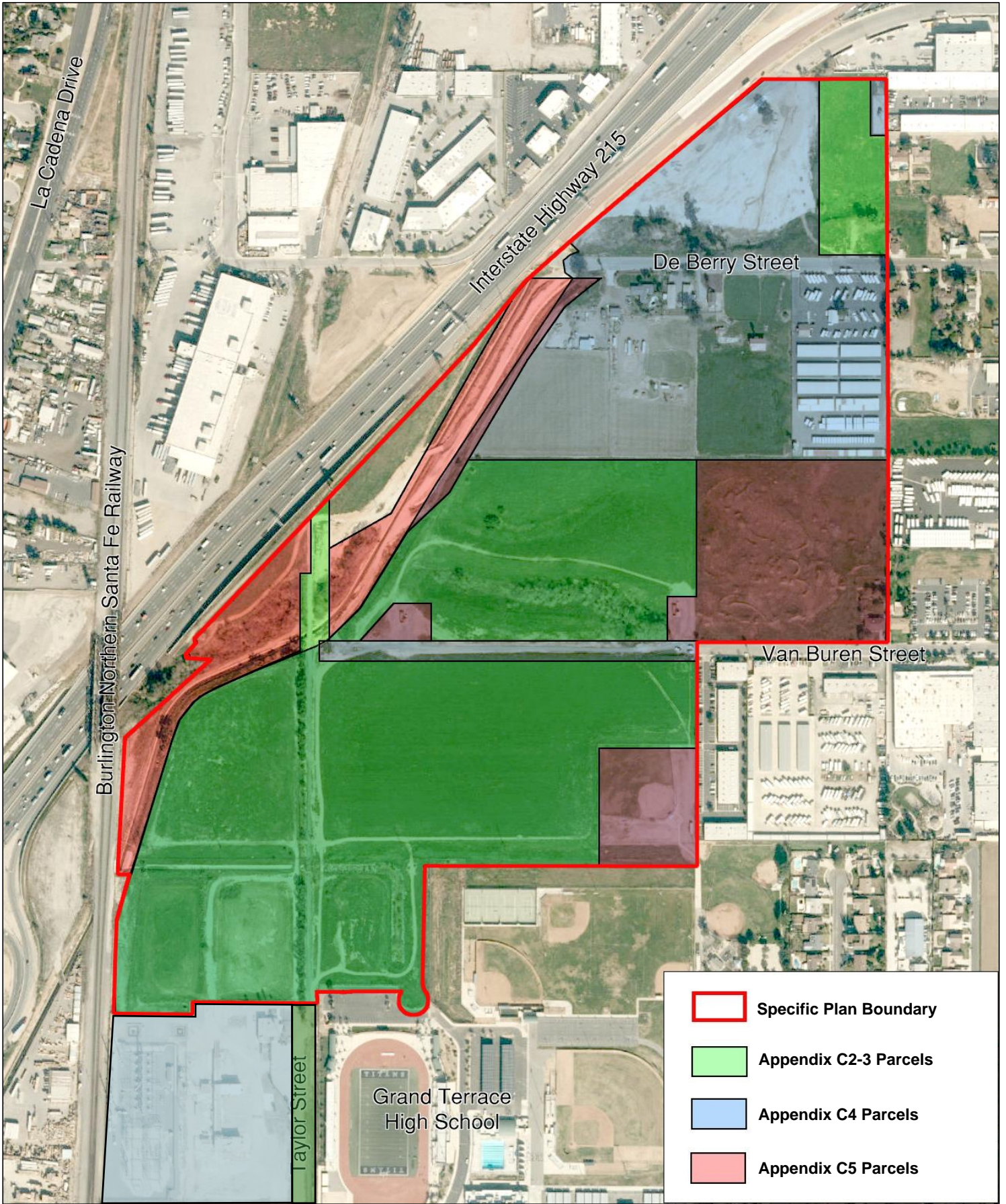
- BCR Consulting LLC (2022). *Updated Cultural Resources Records Search* (provided in **Appendix C1**).
- CRM Tech. (2017). *Historical/ Archaeological Resources Survey Report, Assessor's Parcel Numbers 1167-161-03 and -04*, April 25, 2017 (provided in **Appendix C2**).
- CRM Tech. (2017). *Historical/Archaeological Resources Survey Report, Intensive-level Survey*, April 28, 2017 (provided in **Appendix C3**).
  - Assessor's Parcel Numbers: 1167-151-22, -26, -28, -65, -68, -71, -74 and 1167-161-03 and -04 (referred herein as Appendix C2-3 parcels when parcels are described as a whole).
- CRM Tech. (2017). *Historical, Archaeological, and Paleontological Resources Reconnaissance*, September 13, 2017 (provided in **Appendix C4**).
  - Assessor's Parcel Numbers: 1167-151- 10, -11, -12, -13, -21, -23, -40, -41, -64, -75, -76, -77, and -79; 1167-161-02, -05, and -33; 1167-171-11 and -12; 1167-181-01,-12, and -13 (referred herein as Appendix C4 parcels when parcels are described as a whole).
- CRM Tech. (2022). *Update and Addendum to Cultural Resources Survey Report The Gateway at Grand Terrace Specific Plan City of Grand Terrace, San Bernardino County, California*, September 8, 2022 (provided in **Appendix C5**).
  - Assessor's Parcel Numbers: 1167-151-11, -14, -17, -18, -20, -21, -23, and -75; 1167-181-01, -12, and -13 (referred herein as Appendix C5 parcels when parcels are described as a whole).
- CRM Tech. (2022). *Summary of Cultural Resources Survey Coverage*, October 12, 2022 (provided in **Appendix C6**).
  - Assessor's Parcel Numbers: 1167-151- 10, -11, -12, -13, -14, -17, -18, -20, -21,- 22, -23, -26, -28, -40, -41, -64, -65, -68, -71, -74, -75, -76, -77, and -79; 1167-161-02, -03, -04, -05, and -33; 1167-171-11 and -12; 1167-181-01,-12, and -13.
- City of Grand Terrace General Plan (Grand Terrace GP).

The Project is a specific plan that serves as the regulatory mechanism to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

By statute, the California Environmental Quality Act (CEQA) is primarily concerned with two classes of cultural resources: “historical resources,” which are defined in Public Resources Code (PRC) §21084.1 and CEQA Guidelines §15064.5 and “unique archaeological resources,” which are defined in PRC §21083.2. The cultural evaluations were conducted in compliance with PRC §5024.1 to identify prehistoric archaeological and historic resources in the Project site area and evaluate potential impacts that could result from implementation of the Project.

The Project site, including the Appendix C2 through C5 parcels (Project area) have been analyzed for cultural resources based on the several reports listed above. Refer to **Exhibit 4.4-1: Cultural Resources Study Areas** for a depiction of which report’s survey area covered which portion of the Project site.



**Exhibit 4.4-1: Cultural Resources Study Areas**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*

## 4.4.2 ENVIRONMENTAL SETTING

### Ethnographic Setting

Please refer to **Section 4.16, Tribal Cultural Resources**, regarding the ethnography of Native American tribes within the Project area.

### City History

According to the Grand Terrace GP, the City is located along the border of the territories known to have been occupied by the Serrano, Gabrielino (Tongva), and Cahuilla Indians, with the Serrano to the north, Gabrielino to the west, and Cahuilla to the south and east. It is likely that all these groups passed through or exploited resources within the City limits at different times in prehistory.<sup>1</sup>

The City's roots extend back to Mexican land grants dating from the period between 1830 and 1840. In 1876, there were nine buildings in the Terrace-Colton area. The development of the City, or East Riverside as the Grand Terrace-Highgrove area was then called, was facilitated by the construction of the Gage Canal, a 22.5-mile canal that brought water to the area from the Santa Ana River marshlands below. With plenty of water, the City rapidly became an agricultural community with a heavy emphasis on citrus production. However, the severe freeze of 1913 destroyed many groves. Walnuts, a hardier tree, were planted as replacements along with peaches as a quick-profit crop.

The City of Grand Terrace GP identifies 19 previously recorded sites designated as cultural resource sites. Although a number of sites have been recorded as containing resources, there are no known areas of the City that have been previously identified as places of historical, cultural, or archaeological significance that should be identified as significant and be preserved as open space.<sup>2</sup>

Although a number of sites have been recorded as containing resources, there are no known areas of the City that have been previously identified as places of historical, cultural, or archaeological significance that should be identified as significant and be preserved as open space.<sup>3</sup>

### Historical Background Research – Project Site Setting

The land use in the Project vicinity was dominated by agriculture and various infrastructure features, such as roads, railroads, irrigation canals, and power transmission lines, throughout the historic period. Aside from these linear features of infrastructure and large expanses of agricultural fields, especially citrus groves, few other notable human-made features are known to have been present within the Project area between the 1850s and the 1960s.<sup>4</sup>

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<sup>1</sup> City of Grand Terrace. (2010). *City of Grand Terrace General Plan*. Pp. IV-5 to IV-6. Retrieved from: [https://www.grandterrace-ca.gov/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/city\\_of\\_gt\\_general\\_plan.pdf](https://www.grandterrace-ca.gov/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/city_of_gt_general_plan.pdf) (accessed December 6, 2022).

<sup>2</sup> Ibid. Page IV-6.

<sup>3</sup> Ibid. Page IV-6.

<sup>4</sup> CRM Tech. (2022). *Update and Addendum to Cultural Resources Survey Report The Gateway at Grand Terrace Specific Plan City of Grand Terrace*, Attachment A. (see **Appendix C5**).



One notable exception to this was accessor parcel number (APN): 1167-181-01, where a number of small buildings were present in a citrus grove during the 1930s-1950s era. Around 1971, the existing residence currently on that parcel was constructed, and all of the previous buildings and structures were removed. All other existing built-environment features in the vicinity of the Project site are evidently modern in origin, with the oldest being the aforementioned residence constructed in 1971. Two wells on APNs 1167-151-21 and -23, for example, were evidently established between 1985 and 1995, and the baseball field on APN 1167-151-75, a part of the Veterans Freedom Park, was completed in 2010-2012. Elsewhere in the Project area, farming operations continued until the circa 2002-2010 era, when most of the agricultural fields were gradually abandoned and associated features such as water storage tanks were removed.<sup>5</sup>

## Results

### Field Surveys

In 2017, an archaeologist carried out a field reconnaissance for the Project site by driving along each of the public roadways across the Project area and inspecting all built-environment features encountered and visible ground surface for any notable archaeological remains; see **Appendix C4** of the Draft EIR. Six historic-period sites have been recorded in the past as lying within, partially within, or adjacent to the planning area, as listed below:

- Riverside Upper Canal/Riverside-Warm Creek Canal (33-004495/36-007169);
- Southern Pacific Railroad (36-006101);
- Atchison, Topeka, and Santa Fe Railway (36-006847);
- Highgrove Steam-Electric Generating Plant (36-021711);
- Highgrove Substation (36-021712); and
- Single-Family Residence at 21992 De Berry Street.

In addition to the six previously recorded cultural resources, the archaeologist also identified the following four buildings or groups of buildings that have a recognizable level of historical character and to be at least 45 years of age. However, these buildings have been altered to some extent, most notably through replacement of windows, siding, and roofs. None of these properties were evaluated for historical significance under CEQA during this 2017 reconnaissance (**Appendix C4**). Therefore, they should be treated as potential “historical resources.” The four properties are as follows: :

- Single-family residence at 21875 De Berry Street (APN 1167-151-10);
- Two duplexes at 21877-21899 De Berry Street (APNs 1167-151-12 and -13);
- Single-family residence with outbuilding at 21911 De Berry Street (APN 1167-171-11);
- Former farm complex at 21971 De Berry Street (now a part of A Storage Place; APN 1167-171-12).

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<sup>5</sup> Ibid. Pages 6-7.

However, none of these properties were evaluated for historical significance under CEQA provisions during this 2017 reconnaissance (**Appendix C4**). Therefore, they should be treated as potential “historical resources.”

As a part of the 2017 field survey (**Appendix C3**), the previously recorded cultural resources within or adjacent to the Project area were visited to ascertain their current condition. Among them, the Highgrove Substation appears to be intact, but the adjacent Highgrove Steam-Electric Generating Plant was partially demolished around 2011, leaving only three buildings standing at the site. The associated Cage Park remains extant, although it is apparently no longer in use and suffers from neglect. The Southern Pacific Railroad has been dismantled across the entire Project area, and its former course is marked today by a gravel path with minor culverts over the various drainages. The Riverside Upper Canal/Riverside-Warm Creek Canal and the Atchison, Topeka, and Santa Fe Railway remain extant just outside the Project area boundary. As mentioned above, the Project area is predominately undeveloped and the surrounding land uses feature a mixture of residential, commercial, public facilities and parks, and business park development. The ground surface has been extensively disturbed by past agricultural operations, nearby construction activities, and periodic disking. Additionally, the open areas bear evidence of other disturbances, such dirt roads, bike path with dirt jumps, and modified drainages. No undisturbed native land surface was noted during the 2017 survey (**Appendix C3**).

Archaeologists conducted additional field surveys for the Project site on July 19 and September 8, 2022 (**Appendix C5**). The 2022 field surveys were conducted at a reconnaissance level by driving along the public roadways and visually inspecting the surrounding ground surface for any indication of potential cultural resources or notable changes since 2017 (**Appendix C3**), supplemented by pedestrian inspections of selected areas, such as where cultural resources were previously recorded, were conducted at an intensive-level by walking a series of parallel north-south transects spaced 15 meters (approximately 50 feet) apart. Ground visibility was mostly good to excellent (80-100 percent) in the Project area but was poor (5-10 percent) along a heavily overgrown drainage channel. On September 28, 2022, CRM Tech conducted a reconnaissance-level field survey by walking a series of parallel northeast-southwest transects spaced 20 meters (approximately 60 feet) apart. The rest of the northern portion of the Project site was treated with a more cursory field reconnaissance through visual inspection from the adjacent public right-of-way for the purpose of updating the results of the 2017 reconnaissance (**Appendix C4**).

No cultural resources of historic or prehistoric (i.e., Native American) origin were identified during either of the two Phase I studies (**Appendix C3** and **Appendix C5**). Based on these findings, the report that CRM Tech submitted on September 8, 2022 (**Appendix C5**), recommended that the southern portion of the Project site be cleared for cultural resources compliance unless buried archaeological materials are discovered during future earth-moving operations.

Due to current property ownerships and the resulting limitation of field access, only 3.05 acres in the northern portion of the Project site have been surveyed at an intensive level. That survey took place in 2017 on APNs 1167-161-03 and -04 near the northeastern corner of the Project site (see **Appendix C2**). During the survey, a single-family residence of circa 1945 vintage, located at 21992 De Berry Street, was recorded into the California Historical Resources Inventory as it was more than 50 years of age. Although, the field inspection revealed that the property retains most of its historical character. The survey (see

**Appendix C2)** concluded that the building on 21992 De Berry Street, neither appeared eligible for listing in the CRHR nor qualified as a “historical resource.” as no persons or specific events of recognized historic significance were identified in association with this residence, nor any prominent architects, designers, or builders.

### Summary of Existing Cultural Resources

A Summary of Cultural Resources Survey Coverage (**Appendix C6**) has been prepared by CRM Tech. The report included in **Appendix C6** summarizes the findings for past studies conducted on the Project site since 2017. The studies include a series of cultural resource studies conducted by CRM Tech and BCR Consulting LLC, including two Phase I intensive-level surveys in 2017 (Historical/Archaeological Resources Survey Report, Intensive-level Survey, included as **Appendix C3**, and Historical/ Archaeological Resources Survey Report, Assessor’s Parcel Numbers 1167-161-03 and -04, included as **Appendix C2**), a reconnaissance-level survey in 2017 (Historical, Archaeological, and Paleontological Resources Reconnaissance, included in **Appendix C4**) and a records search in 2019 (Attachment C of **Appendix C6**), and an update to one of the Phase I studies earlier this year (Updated Cultural Resources Records Search, **Appendix C5**). Documentation of the methods, results, and conclusions of these studies has been submitted to the City.

Specifically, the southern portion of the Project area, designated for residential development, parks/open space, drainage improvement, and other utilities, was surveyed entirely at an intensive level in 2017 and/or 2022 (**Appendix C3** and **C5**). During those studies, five cultural resources from the historic period, including four sites and an isolate (i.e., a locality with fewer than three artifacts) were identified within or partially within that portion of the planning area.

No cultural resources of prehistoric (i.e., Native American) origin were identified during either of the two Phase I studies (**Appendix C3** and **C5**). At the completion of those studies, all five of the cultural resources listed above were determined not to meet the statutory definition of “historical resources.” Therefore, they require no further consideration under CEQA provisions on cultural resources. Based on these findings, the report that CRM Tech submitted on September 8, 2022 (**Appendix C5**), along with attached supporting materials, recommended that the southern portion of the Project site be cleared for cultural resources compliance unless buried archaeological materials are discovered during future earth-moving operations (**Appendix C1**).

A comparison of the total coverage of these previous studies and the current project boundaries indicates that only a 2.83-acre parcel on the western edge of the Project site, namely APN 1167-151-09, had not been surveyed for cultural resources at either intensive or reconnaissance level prior to the current study (Figures 1, 2 of **Appendix C6**). On September 28, 2022, CRM TECH conducted a reconnaissance-level field survey on that parcel of vacant land by walking a series of parallel northeast-southwest transects spaced 20 meters (approximately 60 feet) apart. The rest of the northern portion of the Project area was treated with a more cursory field reconnaissance through visual inspection from the adjacent public right-of-way for the purpose of updating the results of the 2017 reconnaissance. This part of the fieldwork was carried out by CRM TECH on July 19, 2022.

Field observations in the northern portion of the Project area reveal that the previously recorded and evaluated residence at 21995 De Berry Street has since been demolished. The four buildings or groups of buildings noted during the 2017 reconnaissance remain extant today, although the residence at 21911 De Berry Street has evidently been abandoned. In addition, a small corrugated-metal building of unknown nature was noted on APN 1167-161-05 (no street address available), in the northeastern corner of the Project area. See **Appendices C1, C2, C5 and C6** for reference. The bulk of this portion of the Project area has not been surveyed adequately, especially for archaeological resources. A standard Phase I survey should be required on all un-surveyed parcels once the Project team gains sufficient access and prior to the approval of any specific projects on these properties.

### 4.4.3 REGULATORY SETTING

#### Federal

##### Section 106 of the National Historic Preservation Act

The National Historic Preservation Act (NHPA) was passed in 1966 and is codified in Title 16, Section 470 et seq. of the U.S. Code (USC). The goal of the Act is to ensure federal agencies act as responsible stewards of our nation's resources when their actions affect historic properties. Among the regulations of the NHPA, Section 106 requires federal agencies to consider the effects of their undertakings on historic properties and afford the Advisory Council on Historic Properties (ACHP) a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP. See Title 36 Code of Federal Regulations (CFR) Part 800, "Protection of Historic Properties."

Section 106 applies when two thresholds are met: 1) there is a federal or federally licensed action, including grants, licenses and permits, and 2) that action has the potential to affect properties listed in or eligible for listing in the NRHP. Section 106 requires each federal agency to identify and assess the effects of its actions on historic resources. The responsible federal agency must consult with appropriate state and local officials, Indian Tribes, applicants for federal assistance and members of the public, and consider their views and concerns about historic preservation issues when making final project decisions. The agency should also plan to involve the public and identify any other potential consulting parties. If the agency determines that it has no undertaking or that its undertaking is a type of activity that has no potential to affect historic properties, the agency has no further Section 106 obligations.

Pursuant to Section 106, impacts to a cultural site or artifact must be declared "significant," "potentially significant" or "not significant." Under NHPA regulations, impacts to "significant" archeological sites must be mitigated for, while "not significant" archeological remains need not. A "potentially significant" determination is utilized when there is not enough information to make a conclusive ruling. NHPA mitigation would not be necessary for archeological sites avoided during development.

##### National Register of Historic Places

The NRHP was established by the NHPA as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR 60.2). The NRHP

recognizes both historic-period and prehistoric archaeological properties that are significant at the national, state, and local levels.

To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. A property (districts, sites, buildings, structures, and objects of potential significance) is eligible for the NRHP if it is significant under one or more of the following four established criteria:

- **Criterion A:** It is associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B:** It is associated with the lives of persons who are significant in our past.
- **Criterion C:** It embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** It has yielded, or may be likely to yield, information important in prehistory or history.

Cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP unless they satisfy certain conditions. In general, a resource must be at least 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

The NRHP recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance. The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

### National Register Bulletin 38

The National Park Service has prepared guidelines to assist in the documentation of intangible cultural resources, to coordinate the incorporation of provisions for the consideration of such resources into departmental planning documents and administrative manuals, and to encourage the identification and documentation of such resources by state and federal agencies. National Register Bulletin 38 (NRB 38) is intended to be an aid in determining whether properties thought or alleged to have traditional cultural significance are eligible for inclusion in the NRHP and to assist federal agencies, State Historic Preservation Offices (SHPOs), Certified Local Governments, Native American Tribes, and other historic preservation practitioners who need to evaluate such properties when nominating them for inclusion in the NRHP or when considering their eligibility for the NRHP as part of the review process prescribed by the ACHP under Section 106 of the NHPA.<sup>6</sup>

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<sup>6</sup> U.S. Department of the Interior, National Park Service Cultural Resources. (1997). *National Register Bulletin*. Retrieved from: [https://www.nps.gov/subjects/nationalregister/upload/NRB-15\\_web508.pdf](https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf) (accessed March 2022).

## State

### California Health and Safety Code (Sections 7050.5, 7051, and 7054)

Sections 7050.5, 7051, and 7054 of the California Health and Safety Code (HSC) collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the PRC), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

### Senate Bill 18 and Assembly Bill 52

California Senate Bill (SB) 18 and Assembly Bill (AB) 52 that expands CEQA regarding tribal cultural resources, and require local governments to consult with Native American tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process are discussed further in **Section 4.16, Tribal Cultural Resources**.

### California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC §5024.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission (SHRC) determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in our past.
- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Furthermore, under PRC §5024.1 and 14 California Code of Regulations (CCR) §4852(c), a cultural resource must retain integrity to be considered eligible for the CRHR. Specifically, it must retain sufficient character or appearance to be recognizable as a historical resource and convey reasons of significance. Integrity is evaluated with regard to retention of such factors as location, design, setting, materials, workmanship, feeling, and association. Cultural sites that have been affected by ground-disturbing activities, such as

grazing and off-road vehicle use (both of which occur within the Project site), often lack integrity because they have been directly damaged or removed from their original location, among other changes.

Typically, a prehistoric archaeological site in California is recommended eligible for listing in the CRHR based on its potential to yield information important in prehistory or history (Criterion 4). Important information includes chronological markers such as projectile point styles or obsidian artifacts that can be subjected to dating methods or undisturbed deposits that retain their stratigraphic integrity. Sites such as these have the ability to address research questions.

### California Historic Building Code

The California Historic Building Code (CHBC) provides guidelines for the preservation, restoration, rehabilitation, relocation, and reconstruction of buildings or structures designated as qualified historical buildings or properties by a local, State, or Federal jurisdiction, as defined by CHBC §§8-218. The CHBC provides guidelines for long-term preservation efforts of qualified historical buildings or properties in order to allow owners to make improvements for access for persons with disabilities; to provide a cost-effective approach to preservation; and, to ensure overall safety of affected occupants or users.

As defined by the CHBC, a “qualified historical building” is “any building, site, structure, object, district, or collection of structures, and their associated sites, deemed of importance to the history, architecture, or culture of an area by an appropriate local, State, or Federal governmental jurisdiction. This includes designated buildings or properties on, or determined eligible for, official national, State, or local historical registers or official inventories, such as the NRHP, CRHR, State Historical Landmark, State Points of Historical Interest, and officially adopted city or county registers, inventories, or surveys of historical or architecturally significant sites, places, or landmarks.”<sup>7</sup>

### California Environmental Quality Act

CEQA is the principal statute governing environmental review of projects occurring in the state and is codified in PRC §21000 et seq. CEQA requires lead agencies to determine if a proposed project would have a significant effect on the environment, including significant effects on historical or archaeological resources.

Under CEQA (PRC §21084.1), a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. The CEQA Guidelines §15064.5 recognizes that historical resources include:

1. A resource listed in, or determined to be eligible by the SHRC, for listing in the CRHR;
2. A resource included in a local register of historical resources, as defined in PRC §5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); and
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific,

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<sup>7</sup> California Historic Building Code (Sections 18950 to 18961 of Division 13, Part 2.7 of California Health and Safety Code).

economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be a historical resource as defined in PRC §§5020.1(j) or 5024.1.

## Local

### City of Grand Terrace General Plan

#### ***Open Space and Conservation Element***

This Element focuses on attributes that contribute to the preservation of natural resources, such as the protection of sensitive habitat, the management of production resources, such as mineral deposits, agriculture, or groundwater recharge, and recreation and visual aesthetics. Concurrently, open space may be used to manage public safety hazards such as seismic activity, high fire hazards, and flood hazards, and quality of life in the communities and neighborhoods where people live. The following goal and policy are applicable to cultural resources.

**Goal 4.9:** **Comply with state and federal regulations to ensure the protection of historical, archaeological, and paleontological resources.**

**Policy 4.9.1** The City shall take reasonable steps to ensure that cultural resources are located, identified, and evaluated to assure that appropriate action is taken as to the disposition of these resources.

### City of Grand Terrace Municipal Code

City Municipal Code (Grand Terrace MC) Chapter 15.19, Historical Building Code, establishes the adoption of the 2019 CHBC by reference and is the historical building code of the City for regulating the preservation, restoration, rehabilitation, relocation or reconstruction of buildings or properties designated as qualified historical buildings or properties located in the City.

## 4.4.4 SIGNIFICANCE CRITERIA UNDER CEQA

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning cultural resources. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; or
- Disturb any human remains, including those interred outside of formal cemeteries.



## Methodology and Assumptions

### Cultural Resources Survey

A cultural resources survey report was conducted in 2017 for the Project site (see **Appendix C3** also included as Attachment A of **Appendix C5**). The 2017 survey report encompassed approximately 53 acres in total and included a historical/archaeological resources records search, historical background research, Native American consultation, and a systematic field survey. As a result of these research procedures, two previously recorded historic-period sites, the 1870-1886 Riverside Upper Canal/Riverside-Warm Creek Canal (Site 33-004495/36-007169) and the 1888 Southern Pacific Railroad (Site 36-006101), were found to be lying partially within the boundaries of the Project site as delineated at the time, but both of them were determined not to meet the statutory definition of “historical resources.”<sup>8</sup> Therefore, they require no further consideration under CEQA provisions on cultural resources.

Since the completion of the 2017 survey, an additional 22 acres have been incorporated into the Project area. The additional acreage consists of the Appendix C5 parcels, located along both the eastern and the western edges of the original Project area. The objective of the Update and Addendum to Cultural Resources Survey Report (**Appendix C5**), as an addendum to the 2017 Historical/Archaeological Resources Survey Report and 2019 records survey (Attachment C of **Appendix C6**), is to assist in identifying any “historical resources” that may be present within or adjacent to the Project area. Research procedures completed during this study included a review of data gathered during the 2017 study (**Appendix C3**) and the results of a 2019 records search (Attachment C of **Appendix C6**) for the Project site, initiated a Native American Sacred Lands File search, contacted the nearest Native American tribe, pursued historical background research on the additional properties, and carried out a field inspection of the entire Project area. As a result of the research procedures for the Update and Addendum to Cultural Resources Survey Report (**Appendix C5**), three previously undocumented historic-period resources were identified and recorded within the additional 22 acres of the Project area: Isolate 3910-1 (Isolated Railroad Spike), Site 3910-2 (Drainage Channel), and Site 3910-3 (Residence at 21996 Van Buren Street). However, these resources do not qualify as historical resources due to their lack of historical integrity, and none are eligible for listing in the CRHR. In conjunction with the findings of the 2017 survey (**Appendix C3**), the Update and Addendum Cultural Resources Survey (**Appendix C5**) concludes that no “historical resources” are known to be present within the additional 22 acres of the Project site.

### Cultural Resources Records

During the 2017 (**Appendix C3**), 2019 (Attachment C of **Appendix C6**), and 2022 (**Appendix C1**) records searches, CRM TECH and BCR Consulting examined maps and records on file at the SCCIC and the EIC for previously identified cultural resources and existing cultural resources studies in the Project vicinity. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or San Bernardino/Riverside County Landmarks, as well as those listed in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or the CHRIS.

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<sup>8</sup> Ibid. Page 1.

## 4.4.5 IMPACTS AND MITIGATION MEASURES

**Impact 4.4-1:** *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*

**Level of Significance:** *Less Than Significant with Mitigation Incorporated*

### Construction and Operations

A historic resource includes “Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record.” If a project may cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired) in the significance of a historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (14 CCR §15064.5(b)(1), §15064.5(b)(4)). The significance of a historic resource would be materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register, a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code.

As summarized above, the 2017 study records search (**Appendix C3**), concluded that the two previously recorded historic-period sites, the 1870-1886 Riverside Upper Canal/Riverside-Warm Creek Canal (33-004495/36-007169) and the 1888 Southern Pacific Railroad (36-006101) are ineligible due to the lack of historic integrity and no other “historical resources” are present within the Project area.

No cultural resources of prehistoric (i.e., Native American) origin were identified during either of the two Phase I studies (**Appendix C2** and **C3**). At the completion of those studies, all five of the potential cultural resources in those studies were determined not to meet the statutory definition of historical resources. Therefore, they require no further consideration under CEQA provisions on cultural resources.

Additionally, as concluded in the *Update and Addendum to Cultural Resources Survey Report* (**Appendix C5**), three previously undocumented historic-period resources were identified and recorded within the additional Project area:

- Isolate 3910-1 (Isolated Railroad Spike)
- Site 3910-2 (Drainage Channel)
- Site 3910-3 (Residence at 21996 Van Buren Street)

The Isolated Railroad Spike does not qualify as an historical or archaeological site due to the lack of contextual integrity. As such, it does not constitute potential “historical resources” and requires no further consideration.

The Drainage Channel's historic integrity has been compromised to relate to its period of origin as its present condition is poorly maintained and overgrown of the remaining unlined segment. There is no evidence that this minor drainage channel is closely associated with any persons or events of recognized historic significance, and it does not demonstrate any special merits in design, engineering, or construction, nor any archaeological data potential. Therefore, it does not meet any of the criteria for listing in the CRHR.

The residence at 21996 Van Buren Street was constructed near the end of the historic period and is most closely associated long-time (and current) property owner Laurence E. Halvin. Historical research has yielded no evidence that Mr. Halvin has attained a level of historical significance that would override the elapsed-time standard required by guidelines for the CRHR, and no other persons or any events of potential historical interest have been identified in close association with the building.

In summary, none of the three newly recorded cultural resources appear eligible for listing in the CRHR and all three of these sites were recorded outside but adjacent to the Project boundaries near the southwestern corner of the Project area, but none of them would be involved in Project development. Therefore, they do not qualify as historical resources for CEQA-compliance purposes.

Because not all structures onsite have been adequately surveyed under the NRHP guidelines for historic resources, to ensure the Project would not result in the alteration or destruction of a historic structure, object, or site, **MM CUL-1** is required, which specifies the mitigation framework for buildings in excess of 50 years of age. Therefore, with implementation of **MM CUL-1**, potential impacts regarding a substantial adverse change of a historical resource would be less than significant.

At the conclusion of site disturbance and construction activities associated with future development projects within the Planning Areas, no impact to known or unknown historical or cultural resources would occur during the Project operations. Operational impacts would be less than significant.

### **Mitigation Measures**

**MM CUL-1** Applications for future development facilitated by the Project, shall be required to comply with the following mitigation measure that established the framework for evaluating any buildings to be impacted that may be in excess of 50 years.

For any buildings/structures in excess of 50 years of age having its original structural integrity intact and not already fully evaluated in **Appendices C2** through **C5**, the applicant shall retain a qualified professional historian to determine whether the affected building/structure is historically significant. The evaluation of historic architectural resources shall be based on criteria such as age, location, context, association with an important person or event, uniqueness, or structural integrity, as indicated in State CEQA Guidelines §15064.5. A historical resource report shall be submitted by the applicant to the City for approval and shall include the methods used to determine the presence or absence of historical resources, evaluate the significance of any historical resources identified, identify potential impacts from the proposed project, and propose measures to mitigate any impacts. The City shall require implementation of appropriate measures based on the report to reduce impacts to

less than significant, if possible. If not possible to reduce impacts to less than significant, additional CEQA review shall be required.

**Impact 4.4-2: *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?***

***Level of Significance: Less Than Significant with Mitigation Incorporated***

### **Construction and Operations**

A significant impact would occur if grading and construction activities result in a substantial adverse change in the significance of a unique archaeological resource as defined in PRC §21083.2 or state CEQA Guideline §15064.5, if (1) a resource listed in or determined to be eligible by the SHRC, for listing in the CRHR (PRC §5024.1 and Title 14 CCR, §4850 et seq.) is adversely affected; and (2) if grading and construction activities would result in a substantial adverse change in the significance of an archaeological resource determined to be “historic” or “unique.” As defined in PRC §21083.2, a “unique” archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; and
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

According to the Update and Addendum to Cultural Resources Survey Report (**Appendix C5**), 97 recorded historical/archaeological sites, a “pending” site, and three isolates—i.e., localities with fewer than three artifacts—were identified within the one-mile radius around the Appendix C2, C3 and C4 parcels. Two of these sites, the Riverside Upper Canal/Riverside-Warm Creek Canal (33-004495/36-007169) and the former Southern Pacific Railroad (36-006101), were recorded as lying partially within the Project area. Three other sites, the former Atchison, Topeka, and Santa Fe (now Burlington Northern Santa Fe) Railway (36-006847), the Highgrove Steam-Electric Generating Plant (36-021711), and the Highgrove Substation (36-021712) were recorded on land adjacent to the Project boundaries.

Because of the lack of historic integrity, the entire Riverside Canal system, including the Riverside Upper Canal/Riverside-Warm Creek Canal, was determined not to be eligible for listing in the NRHP during a systematic historic significance evaluation in 2001, although that study further concluded that it might become eligible if the integrity was restored. Similarly, the various segments of the Southern Pacific Railroad that were previously recorded and evaluated, including the segment in the Project area, were found ineligible for the NRHP or the CRHR. The Atchison, Topeka, and Santa Fe Railway, the Highgrove Steam-Electric Generating Plant, and the Highgrove Substation were also considered ineligible by various previous studies pertaining to these sites. Of the other recorded historical/archaeological sites identified through the records search, 20 were prehistoric—i.e., Native American—in origin, consisting of bedrock

milling features, rock shelters, habitation debris, and yoni features. All of these prehistoric sites were found on the slopes of the La Loma Hills to the west, the nearest one being approximately a half-mile from the Project area. Two of the isolates were also of prehistoric origin, described as a granite mano and three mano fragments. The rest of the recorded sites, the “pending” site, and the third isolate dated to the historic period and included other irrigation works, buildings, bridges, structural remains, refuse scatters, roads, and power transmission lines. None of these sites or isolates was located in the immediate vicinity of the Project area. Therefore, it has been determined that they require no further consideration.

Construction of the Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. CRM TECH concurs with the original evaluation efforts as the current condition of the resources does not provide any additional data or information that would alter those recommendations. Additionally, none of the identified cultural resources within a one-mile radius of the Appendix C2-3 and C5 Parcels were found and no tribal cultural resources were identified within or adjacent to the Project area.

Based on these findings, no further cultural resources management is recommended for construction and operation of the Project. However, in the event that a potentially significant archaeological resource is encountered during Project-related ground-disturbing activities, **MM CUL-2** would apply to further minimize potential impacts to archaeological resources. **MM CUL-2** ensures that if buried cultural materials are discovered during earth-moving operations associated with the Project, all work in that area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. Therefore, with implementation of **MM CUL-2**, impacts regarding a substantial adverse change of an archaeological resource would be less than significant.

At the conclusion of site disturbance and construction activities associated with future development projects within the Planning Areas, no impact to known or unknown archaeological resources would occur during the Project operations. Operational impacts would be less than significant.

### **Mitigation Measures**

**MM CUL-2** If unanticipated archaeological resources are exposed or encountered during construction of the Project, all ground disturbing activities within 50 feet of the potential resource(s) shall be suspended. A qualified archaeologist, meeting the Secretary of the Interior’s Professional Qualification Standards, shall evaluate the significance of the find and determine whether or not additional study is warranted based on significance under CEQA. The evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. The treatment plan shall be reviewed and approved by the qualified archaeologist and submitted to the City for approval.

**Impact 4.4-3:** *Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

***Level of Significance: Less Than Significant with Mitigation Incorporated***

## Construction and Operations

The archaeological records search and field survey did not reveal any resources known to contain human remains within or near the Project site. While the Project site is not known to contain any cemeteries, ground-disturbing activities have the potential to reveal unknown human remains. Therefore, construction activities in the Project site could disturb human remains should any be discovered during ground-disturbing activities. If human remains are discovered, however, those remains would require proper treatment in accordance with applicable laws, including HSC §§7050.5-7055 and PRC §5097.98 and §5097.99. HSC §§7050.5-7055 that describe the general provisions for treatment of human remains. Specifically, HSC §7050.5 prescribes the requirements for the treatment of any human remains that are accidentally discovered during excavation of a site. HSC §7050.5 also requires that all activities cease immediately, and a qualified archaeologist and Native American monitor be contacted immediately. As required by state law, the procedures set forth in PRC §5087.98 would be implemented, including evaluation by the County Coroner and notification of the NAHC. The NAHC would then designate the Most Likely Descendant of the unearthed human remains.

It is unlikely that any human remains would be encountered given that the Project site is already disturbed. However, previously undiscovered human remains could be encountered during construction activities. If human remains are found during excavation, excavation would be halted in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains shall remain undisturbed until the County Coroner has investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with the established regulatory framework (i.e., HSC §§7050.5-7055 and PRC §§5097.98 and 5097.99) and the application of **MM TCR-3**, the Project's impacts concerning the potential to disturb human remains, would be reduced to a less than significant.

Ground disturbing activities would not be associated with Project operations. Therefore, operation of the Project would not further impact human remains and would not cause a substantial adverse effect to undiscovered human remains. No impacts would occur.

### ***Mitigation Measures***

Refer to **MM TCR-3** in **Section 4.16, Tribal Cultural Resources** of this EIR.

## 4.4.6 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable cultural resource impacts have been identified.

## 4.4.7 CUMULATIVE IMPACTS

For purposes of cumulative impact analysis to cultural resources, the geographic context for cumulative analysis includes the proposed Project, in combination with past, present, and future projects (refer to **Table 4-1, Cumulative Projects List** located in **Section 4.0, Environmental Impact Analysis**). Accordingly, impacts are site-specific and not generally subject to cumulative impacts unless multiple projects impact a common resource, or an affected resource extends off-site, such as a historic townsite or district. With this consideration, the cumulative analyses for historical and archaeological resources considers whether

the Project, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect any common cultural resources.

The Project could result in potential site-specific impacts to as-yet unidentified archaeological resources discovered during grading and trenching activities associated with future project construction. Other projects within the cumulative study area also have the potential to result in damage and/or loss to these resources. The combination of the Project as well as past, present, and reasonably foreseeable projects in the City and San Bernardino County would be required to comply with all applicable State, federal, County and local regulations concerning preservation, salvage, or handling of cultural resources. Similarly, these projects also would be required to implement and conform project-specific to mitigation measures, which would be likely to reduce impacts to less than significant. Although in the process of development, some known or unknown resources may be lost, it is not anticipated that these impacts would be cumulatively considerable. In addition, implementation of **MM CUL-1** and **MM CUL-2** would reduce Project-specific impacts to a less than significant level. Therefore, the Project's contribution to cumulative impacts would be less than significant.

#### 4.4.8 REFERENCES

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## 4.5 ENERGY

### 4.5.1 INTRODUCTION

This section identifies existing conditions in The Gateway at Grand Terrace Specific Plan (Project), in the City of Grand Terrace (City) and evaluates the Project's potential to result in impacts due to wasteful, inefficient, or unnecessary consumption of energy resources or conflict with an energy plan. Mitigation to avoid/reduce impacts is identified, as needed. The Project's future development would be constructed to Title 24 standards, which are designed to reduce energy demand in all new construction.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

The significance of each impact is included at the end of this section. This analysis is based primarily on the following documentation located in **Appendix D**.

- Kimley-Horn & Associates, Inc. (2023). *Energy Assessment*.

### 4.5.2 ENVIRONMENTAL SETTING

Pursuant to Section 15126.2(b), Section 15126.4 (a)(1)(C), and Appendix F of the State CEQA Guidelines, the environmental setting may include "existing energy supplies and energy use patterns in the region and locality." Energy use is analyzed in this document due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.). CEQA Appendix F provides that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (see Public Resources Code §21100(b)(3)). Energy conservation implies that a project's cost effectiveness be reviewed not only in dollars, but also in terms of energy requirements. For many projects, cost effectiveness may be determined more by energy efficiency than by initial dollar costs. This section of the EIR evaluates whether the Project would result in environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation, and whether the Project conflicts with or obstructs a State or Local plan for renewable energy or energy efficiency. Refer to **Appendix D** for the CalEEMod calculations



of the Project's energy demands and the California Air Resources Board (CARB) Emissions Factor<sup>1</sup> (EMFAC) 2021 computer program for typical daily fuel use in San Bernardino County.

## Existing Energy Supplies

### Electricity

Electricity as a utility is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands.

Energy capacity, or electrical power, is generally measured in watts (W) while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is one million watts, while energy use is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is one billion watt-hours.

Electrical services are provided to the area by Southern California Edison (SCE). SCE provides electricity to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area.<sup>2</sup> **Table 4.5-1, Energy Resources Used to Generate Electricity for SCE (2020)** shows the SCE electric power mix in 2020 compared to the statewide 2020 power mix. In 2020, electricity use attributable to the County of San Bernardino (County) was approximately 15,969 GWh from residential and non-residential sectors.<sup>3</sup>

**Table 4.5-1: Energy Resources Used to Generate Electricity for SCE (2020)**

| Energy Resources       | 2020 SCE Power Mix | 2020 CA Power Mix |
|------------------------|--------------------|-------------------|
| Eligible Renewable:    | 30.9%:             | 33.1%:            |
| Biomass and Biowaste   | 0.1%               | 2.5%              |
| Geothermal             | 5.5%               | 4.9%              |
| Eligible Hydroelectric | 0.8%               | 1.4%              |
| Solar                  | 15.1%              | 13.2%             |
| Wind                   | 9.4%               | 11.1%             |
| Coal                   | 0.0%               | 2.7%              |
| Large Hydroelectric    | 3.3%               | 12.2%             |
| Natural Gas            | 15.2%              | 37.1%             |
| Nuclear                | 8.4%               | 9.3%              |

<sup>1</sup> EMFAC is an emission inventory model that CARB developed to assess emissions from on-road motor vehicles including cars, trucks, and buses in California.

<sup>2</sup> SCE. (2020). *By the Numbers: Who We Serve*. Retrieved from SEC Website: <https://www.sce.com/about-us/who-we-are>. (accessed March 18, 2022).

<sup>3</sup> California Energy Commission (CEC). (2020). *Electricity Consumption by County*. Retrieved from CEC Website: <http://ecdms.energy.ca.gov/elecbycounty.aspx>. (accessed March 18, 2022).

| Energy Resources                          | 2020 SCE Power Mix | 2020 CA Power Mix |
|---|--------------------|-------------------|
| Other                                     | 0.3%               | 0.2%              |
| Unspecified Sources of Power <sup>1</sup> | 42.0%              | 5.4%              |
| <b>Total</b>                              | <b>100%</b>        | <b>100%</b>       |

<sup>1</sup> Electricity from transactions that are not traceable to specific generation sources.  
Source: SCE. (2021). *2020 Power Content Label, Southern California Edison*. Retrieved from SCE Website: [https://www.sce.com/sites/default/files/inline-files/SCE\\_2020PowerContentLabel.pdf](https://www.sce.com/sites/default/files/inline-files/SCE_2020PowerContentLabel.pdf). Accessed March 18, 2022

## Natural Gas

The Southern California Gas Company (SoCalGas), the service provider for Project area, services approximately 21 million people in a 20,000-square-mile service territory. SoCalGas has four storage fields; Aliso Canyon, Honor Rancho, La Goleta, and Playa del Rey, as well as a combined storage capacity of approximately 134 billion cubic feet. According to the California Energy Commission (CEC), natural gas demand in the County area was 527 million therms in 2020.<sup>4</sup>

SoCalGas projects that total gas demand in their service area will decline at an annual rate of 1 percent from 2020-2035.<sup>5</sup> The decline in demand is due to modest economic growth, California Public Utilities Commission mandated energy efficiency standards and programs, and SB 350 goals. Other factors that contribute to the downward trend are tighter standards created by revised Title 24 Codes and Standards, renewable electricity goals, a decline in core commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure (AMI).

## Energy Use

Energy use is typically quantified using the British Thermal Unit (BTU). Total energy use in California was 7,802 trillion BTU in 2019, which is the equivalent to 198 million Btu total consumption per capita.<sup>6</sup>

**Table 4.5-2, California Energy Consumption by Sector**, breaks down California's energy consumption by sector.

**Table 4.5-2: Energy Resources Used to Generate Electricity for SCE (2019)**

| End-Use Sector | Consumption               | Share of U.S. |
|----------------|---------------------------|---------------|
| Residential    | 1,456 trillion Btu        | 6.9%          |
| Commercial     | 1,468 trillion Btu        | 8.2%          |
| Industrial     | 1,805 trillion Btu        | 5.5%          |
| Transportation | 3,073 trillion Btu        | 10.8%         |
| <b>Total</b>   | <b>7,802 trillion Btu</b> | -             |

Electricity and natural gas in California are generally used by stationary sources such as residences, commercial sites, and industrial facilities.

## Petroleum Fuel

Petroleum use is generally accounted for by transportation-related energy use. Temporary transportation fuel use such as gasoline and diesel during construction would result from the use of delivery vehicles and

<sup>4</sup> California Energy Commission (CEC). (2020). *Gas Consumption by Southern California Gas*. Retrieved from CEC Website: <http://ecdm.energy.ca.gov/gasbycounty.aspx>. (accessed March 18, 2022).

<sup>5</sup> California Gas and Electric Utilities. 2020. *2020 California Gas Report*. Retrieved from: [https://www.socalgas.com/sites/default/files/2020-10/2020\\_California\\_Gas\\_Report\\_Joint\\_Utility\\_Biennial\\_Comprehensive\\_Filing.pdf](https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf) (accessed March 18, 2022).

<sup>6</sup> US Energy Information Administration (2020). *California Energy Consumption Estimates*. Retrieved from EIA Website: <https://www.eia.gov/state/print.php?sid=CA>. (accessed January 2022).

trucks, construction equipment, and construction employee vehicles. Transportation energy consumption is dependent on the type of vehicles used, number of vehicle trips, vehicle miles traveled, fuel efficiency of vehicles and travel mode. Additionally, most construction equipment during grading would be powered by gas or diesel fuel. In 2021, taxable gasoline sales (including aviation gasoline) in California accounted for 13,060,407,775 gallons of gasoline.<sup>7</sup>

### 4.5.3 REGULATORY SETTING

#### Federal

##### Energy Independence and Security Act of 2007

The Energy Independence and Security Act (EISA; Public Law 110-140) was signed into law by President George W. Bush on December 19, 2007. The Act's goal is to achieve energy security in the United States by increasing renewable fuel production, improving energy efficiency and performance, protecting consumers, improving vehicle fuel economy, and promoting research on GHG capture and storage. Under the EISA, the RFS program (RFS2) was expanded in several keyways:

- Expanded the RFS program to include diesel, in addition to gasoline;
- Increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022;
- Established new categories of renewable fuel and set separate volume requirements for each; and
- Required Environmental Protection Agency (EPA) to apply lifecycle greenhouse gas (GHG) performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

RFS2 lays the foundation for achieving significant reductions of GHG emissions from the use of renewable fuels, for reducing imported petroleum, and encouraging the development and expansion of our nation's renewable fuels sector.

The EISA also includes a variety of new standards for lighting and for residential and commercial appliance equipment. The equipment includes residential refrigerators, freezers, refrigerator-freezers, metal halide lamps, and commercial walk-in coolers and freezers.

##### Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

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<sup>7</sup> California Department of Tax and Fee Administration (CDTFA). (2020). *Net Taxable Gasoline Gallons*. Retrieved from CDTFA Website: <https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm> (accessed January 2022).

## The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

### State

#### Assembly Bill 32 and Senate Bill 32

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006." AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels; the same requirement as under S-3-05) and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Reductions in overall energy consumption have been implemented to reduce emissions.

In September 2016, the Governor signed into legislation SB 32, which builds on AB 32 and requires the state to cut GHG emissions to 40 percent below 1990 levels by 2030. With SB 32, the Legislature also passed AB 197, which provides additional direction for updating the Scoping Plan to meet the 2030 GHG reduction target codified in SB 32. CARB has published a draft update to the Scoping Plan and has received public comments on this draft but has not released the final version.

Additional energy efficiency measures beyond the current regulations are needed to meet these goals as well as the AB 32 greenhouse gas (GHG) reduction goal of reducing statewide GHG emissions to 1990 levels by 2020 and the SB 32 goal of 40 percent below 1990 levels by 2030 (see **Section 4.8, Greenhouse Gas**, for a discussion of AB 32 and SB 32). Part of the effort in meeting California's long-term reduction goals include reducing petroleum use in cars and trucks by 50 percent, increasing from one-third to more than one-half of California's electricity derived from renewable sources, doubling the efficiency savings achieved at existing buildings and making heating fuels cleaner; reducing the release of methane, black carbon, and other short-lived climate pollutants, and managing farm and rangelands, forests, and wetlands so they can store carbon.

#### State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including

assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

### **California Building Energy Efficiency Standards: Title 24, Part 6 (California Energy Code)**

The Code California Energy Code (Title 24, Part 6) was created as part of the California Building Standards Code (Title 24 of the California Code of Regulations) by the California Building Standards Commission in 1978 to establish statewide building energy efficiency standards to reduce California's energy use. In general, Title 24 energy code is designed to reduce wasteful and unnecessary energy consumption in newly constructed and existing buildings. The CEC updates the Title 24 Energy Efficiency Standards every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The Title 24 Energy Efficiency Standards conserve nonrenewable resources, such as natural gas, and ensure renewable resources are extended as far as possible to reduce the need for constructing new power plants.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

The Title 24 Energy Efficiency Standards include provisions applicable to all buildings, residential and nonresidential, which describe requirements for documentation and certificates that the building meets the standards. These provisions include mandatory requirements for efficiency and design of the following types of systems, equipment, and appliances:

- Air Conditioning Systems
- Heat Pumps
- Water Chillers
- Gas- and Oil-Fired Boilers
- Cooling Equipment
- Water Heaters and Equipment
- Pool and Spa Heaters and Equipment
- Gas-Fired Equipment Including Furnaces and Stoves/Ovens
- Windows and Exterior Doors
- Joints and Other Building Structure Openings (Envelope)
- Insulation and Cool Roofs
- Lighting Control Devices

The standards include additional mandatory requirements for space conditioning (cooling and heating), water heating, indoor and outdoor lighting systems, as well as equipment in non-residential, high-rise residential, and hotel or motel buildings. Mandatory requirements for low-rise residential buildings cover indoor and outdoor lighting, fireplaces, space cooling and heating equipment (including ducts and fans), and insulation of the structure, foundation, and water piping. In addition to the mandatory requirements, the standards call for further energy efficiency that can be provided through a choice between performance and prescriptive compliance approaches. Separate sections apply to low-rise residential and to non-residential, high-rise residential, and hotel or motel buildings. In buildings designed for mixed use (e.g., commercial and residential), each section must meet the standards applicable to that type of occupancy.

The performance approach set forth under these standards provides for the calculation of an energy budget for each building and allows flexibility in building systems and features to meet the budget. The energy budget addresses space-conditioning (cooling and heating), lighting, and water heating. Compliance with the budget is determined using a CEC-approved computer software energy model. The alternative prescriptive standards require demonstrating compliance with specific minimum efficiency for components of the building such as building envelope insulation R-values, fenestration (areas, U-factor and solar heat gain coefficients of windows and doors) and heating and cooling, water heating and lighting system design requirements. These requirements vary depending on the building's location in the State's 16 climate zones.

### **California Green Building Standards Code**

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. CALGreen standards require new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt which encourage or require additional measures in the five green building topics. The CEC has approved the 2022 California Green Building Standards Code and it is anticipated to take effect January 1, 2023.

### **Renewable Portfolio Standard: Senate Bill 1078 and 107; Executive Order S-14-08, S-21-09, and SB 2X**

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which requires all retail electricity sellers to serve 33 percent of their load with renewable energy, such as wind and solar, by 2020 and directs all state agencies to implement this target in all regulatory proceedings.

In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the CARB under its AB 32

authority to enact regulations to help the State meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020. In addition, CARB is to design emissions reduction measures, adopt regulations requiring the reporting and verification of greenhouse gas emissions, including accounting for greenhouse gas emissions from all electricity consumed in the state, and develop emissions reduction measures, including limits on emissions of greenhouse gases applied to electricity and natural gas providers serving customers in California.

On April 2011, Governor Brown signed SB 2X, which legislated the prior Executive Order S-14-08 renewable standard which would require California energy providers to buy 33 percent of their energy from clean, renewable energy sources by 2020.

### Appendix F to CEQA Guidelines

PRC §21100(b)(3) and *CEQA Guidelines* §15126.4 requires MNDs and EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary use of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the California State Legislature adopted AB 1575, which created the CEC. The CEC's statutory mission is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct State responses to energy emergencies, and promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code §21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary use of energy caused by a project. In addition, *CEQA Guidelines* §15126.4 was adopted in 1998 which requires that an EIR describe feasible mitigation measures which would minimize the inefficient and unnecessary use of energy. Thereafter, the State Resources Agency created *CEQA Guidelines*, Appendix F.

Pursuant to Appendix F, an EIR must include a "discussion of the potential energy impacts of proposed projects..." However, because lead agencies have not consistently included such analysis in their EIRs, California's Natural Resources Agency amended Appendix F to the *CEQA Guidelines* in 2009 "to ensure that lead agencies comply with the substantive directive in §21100(b)(3)." *CEQA Guidelines*, Appendix F lists environmental impacts and mitigation measures that an EIR may include. What is required is a "discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy." Potential impacts that may be discussed include:

- The Project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the Project including construction, operation, maintenance, or removal. If appropriate, the energy intensiveness of materials may be discussed.
- The effects of the Project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the Project on peak and base period demands for electricity and other forms of energy.
- The degree to which the Project complies with existing energy standards.
- The effects of the Project on energy resources.

- The Project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

State CEQA Guidelines, Appendix F assists EIR preparers in determining whether a Project will result in the inefficient, wasteful, and unnecessary use of energy. The discussion below analyzes the Project's effect on energy resources.

## Local

### City of Grand Terrace General Plan

The following goals and policies of the City's General Plan (Grand Terrace GP) pertaining to energy are applicable to this Project.

#### *Land Use Element*

**Goal 2.5:** Provide for the preservation of natural resources and open space.

**Policy 2.5.3** Energy efficiency shall be encouraged in all future development.

#### *Circulation Element*

**Goal 3.1:** Provide a comprehensive transportation system that provides for the current and long-term efficient movement of people and goods within and through the City.

**Policy 3.1.2** An arterial street system shall be established that provides for the collection of local traffic and provide for the efficient movement of people and goods through the City.

**Goal 3.5:** Provide for efficient alternative methods of travel.

**Policy 3.5.1** Promote measures which reduce reliance on single occupant vehicle usage by enforcement of the Traffic Control Measures (TCM) ordinance which addresses development standards, land use patterns, employer based ride share programs and bicycle/pedestrian facilities.

#### *Open Space and Conservation Element*

**Goal 4.6:** The City shall support and promote the conservation of energy resources.

**Policy 4.6.1** The City shall establish an energy conservation policy and implementation program for all City facilities.

**Policy 4.6.2** The City shall implement a public outreach program to provide the public with information regarding energy conservation practices and programs.

**Policy 4.6.3** The City shall encourage energy and environmentally sustainable design in new land development projects using the standards of Leadership in Energy and Environmental Design (LEED).

**Goal 4.7:** Support air quality planning through land use policies, outreach efforts, and participation in regional air quality planning.



**Policy 4.7.7** The City shall promote energy conservation efforts in new and existing residences and businesses.

### ***Housing Element***

**Goal 8.4:** **Conserve and improve the condition of existing affordable housing stock.**

**Policy 8.4.2** Encourage the use of assistance programs to make residences more energy efficient.

**Policy 8.4.5** Encourage the incorporation of energy conservation features in the design of all new housing developments and the addition of energy conservation devices/practices in existing residential developments.

### ***Sustainable Development Element***

**Goal 9.1:** **Reduce the City's per capita energy usage.**

**Policy 9.1.2** The City shall incorporate energy conservation measures into conditions of approval for new development projects.

**Goal 9.3:** **Support sustainable development through good urban design practices.**

**Policy 9.3.2** Site and building design in new developments should maximize opportunities for efficient energy performance.

**Goal 9.8:** **The City shall lead the development community by example in green building, and energy and resource conservation practices.**

**Policy 9.8.1** The City shall support green development standards for new or rehabilitated public buildings and facilities.

**Policy 9.8.2** The City shall actively reduce greenhouse gas emissions from public facilities throughout the community.

### **City of Grand Terrace Municipal Code**

Chapter 15.17 – Green Buildings Standards. Grand Terrace Municipal Code (Grand Terrace MC) Chapter 15.17 adopts the 2019 Green Building Standards Code as the green building standards for the City. The provisions of this code shall apply to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure. The Green Building Standards Code will be on file for public examination in the office of the Building Official.

### **Laws, Ordinances, and Regulations (LORs)**

LORs are existing requirements and standard conditions that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical LORs include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate. Because LORs are neither Project specific nor a result of development of the Project, they are not considered to be either Project Design Features or Mitigation Measures. The following LORs, as identified in **Section 4.2, Air Quality**, would reduce energy consumption.

**LOR AQ-3** Require diesel-powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations (CCR) §2449.

**LOR AQ-5** The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6). These standards are updated, normally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (§110.10) require buildings to be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

**LOR AQ-6** The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water efficient. Install water-efficient fixtures in accordance with §4.303 (residential) and §5.303 (nonresidential) of the California Green Building Standards Code Part 11.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with §4.408.1 (residential) and §5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with §4.410 (residential) and §5.410 (nonresidential) of the California Green Building Standards Code Part 11.

To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with §4.106.4 (residential electric vehicle charging) of the California Green Building Standards Code Part 11 and nonresidential construction shall comply with §5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

#### **4.5.4 SIGNIFICANCE CRITERIA UNDER CEQA**

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning energy. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- The Project results in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation; or
- The Project conflicts with or obstructs a State or Local plan for renewable energy or energy efficiency.

## Methodology and Assumptions

In determining whether implementation of the Project would result in the inefficient, wasteful, or unnecessary use of fuel or energy, this analysis considers the recommendations of Appendix F of the State CEQA Guidelines as described in **Section 4.5.3** above.

This section analyzes energy use on three sources of energy that are relevant to the Project, including electricity, natural gas, and transportation fuel for vehicle trips associated with new development, as well as the fuel necessary for Project construction. The analysis of Project electricity and natural gas use is based on the California Emissions Estimator Model (CalEEMod), which quantifies energy use for occupancy. The results of CalEEMod are included in **Appendix A** of the **Air Quality Greenhouse Gas Emissions Assessments** of this Draft EIR. Modeling related to Project energy use was based primarily on the default settings in CalEEMod for San Bernardino County. The amount of operational fuel use was estimated using CalEEMod<sup>8</sup> outputs for the Project and the California Air Resources Board (CARB) Emissions Factor<sup>9</sup> (EMFAC) 2021 computer program for typical daily fuel use in San Bernardino County. Construction fuel was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. Energy impacts are analyzed below according to topic. Mitigation measures directly correspond with an identified impact. The previous mentioned LORs applicable to the Project are identified and incorporated into the analysis for Impact 4.5-1 as applicable.

### 4.5.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.5-1:** *Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?*

**Level of Significance:** *Less than Significant*

## Construction

### Energy Requirements

The energy associated with Project construction includes electricity use associated with water utilized for dust control, diesel fuel from on-road hauling trips, vendor trips, and off-road construction diesel equipment, as well as gasoline fuel from on-road worker commute trips. The methodology for each category is discussed below. This analysis relies on the construction equipment list and operational characteristics, as stated in **Section 4.2, Air Quality** and **Section 4.7, Greenhouse Gas Emissions**, as well as the energy calculations in **Appendix D**. Quantifications of construction energy are provided for the Project in **Table 4.5-3, Energy Use During Construction**.

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<sup>8</sup> CalEEMod is a statewide land use emissions model designed to provide a uniform platform to quantify potential air emissions from projects.

<sup>9</sup> EMFAC is an emission inventory model that CARB developed to assess emissions from on-road motor vehicles including cars, trucks, and buses in California.

**Table 4.5-3: Energy Use During Construction**

| Project Source   | Total Construction Energy | San Bernardino County Annual Energy (2023) | Percentage Increase Countywide |
|--|---------------------------|--|--------------------------------|
| <b>Electricity Use</b>   |                           | <b>GWh</b>                                 |                                |
| Water Use <sup>1</sup>   | 0.0264                    | 15,969                                     | 0.0002 %                       |
| <b>Diesel Use</b>  |                           | <b>Gallons</b>                             |                                |
| On-Road Construction Trips <sup>2</sup>  | 42,348                    | 325,042,642                                | 0.0130 %                       |
| Off-Road Construction Equipment <sup>3</sup>   | 172,676                   |  | 0.0531 %                       |
| Construction Diesel Total  | 215,024                   |  | 0.0662 %                       |
| <b>Gasoline</b>  |                           | <b>Gallons</b>                             |                                |
| On-Road Construction Trips   | 63,889                    | 914,089,926                                | 0.0070 %                       |
| <sup>1</sup> Construction water use based on acres disturbed per day per construction sequencing and estimated water use per acre.<br><sup>2</sup> On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod and fleet-average fuel consumption in gallons per mile from EMFAC2021 in Riverside County for construction year 2023. Construction VMT occurs from workers, vendors, and hauling.<br><sup>3</sup> Construction fuel use was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry.<br>Source: Refer to energy calculations in <b>Appendix D</b> . |                           |  |                                |

## Electricity

### ***Water for Construction Dust Control***

Electricity use associated with water use for construction dust control is calculated based on total water use and the energy intensity for supply, distribution, and treatment of water.

The total number of gallons of water used is calculated based on acreage disturbed during grading and site preparation, as well as the daily watering rate per acre disturbed.

- The total acres disturbed are calculated using the methodology described in Chapter 4.2 of Appendix A of the CalEEMod User's Guide.
- The water application rate of 3,020 gallons per acre per day is from the Air and Waste Management Association's Air Pollution Engineering Manual.

The energy intensity value is based on the CalEEMod default energy intensity per gallon of water for San Bernardino County. As summarized in **Table 4.5-3**, the total electricity demand associated with water use for construction dust control would be approximately 0.0264 GWh over the duration of construction.

## Petroleum Fuel

### ***On-Road Diesel Construction Trips***

The diesel fuel associated with on-road construction mobile trips is calculated based on vehicle miles traveled (VMT) from vehicle trips (i.e., worker, vendor, and hauling), the CalEEMod default diesel fleet percentage, and vehicle fuel efficiency in miles per gallon (MPG). VMT for the entire construction period is calculated based on the number of trips multiplied by the trip lengths for each phase shown in CalEEMod. Construction fuel was calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. Total diesel fuel consumption associated with on-road construction trips for the Project would be approximately 42,348 gallons (**Table 4.5-3**). Diesel fuel use would be further reduced through compliance with Title 13 of the California Code of Regulations (CCR) §2449, which requires diesel-powered construction equipment to be turned off when not in use.

### ***Off-Road Diesel Construction Equipment***

Construction diesel fuel associated with the off-road construction equipment is calculated based on CalEEMod emissions outputs and conversion ratios from the Climate Registry. The total diesel fuel associated with off-road construction equipment is approximately 172,676 gallons (**Table 4.5-3**).

### ***On-Road Gasoline Construction Trips***

The gasoline fuel associated with on-road construction mobile trips is calculated based on VMT from vehicle trips (i.e., worker, vendor, and hauling), the CalEEMod default gasoline fleet percentage, and vehicle fuel efficiency in MPG using the same methodology as the construction on-road trip diesel fuel calculation discussed above. The total gasoline fuel associated with on-road construction trips would be approximately 63,889 gallons (**Table 4.5-3**).

### **Compliance with Energy Standards**

The Project would include construction activities that would use energy, primarily in the form of diesel fuel (e.g., mobile construction equipment) and electricity (e.g., power tools). Contractors would be required to comply with State law (Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(3)) and CARB Air Toxic Control Measures that place restrictions on the length of time that diesel-powered equipment and vehicles can idle before powering down (thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling). Lastly, Project construction contractors would be required to comply with applicable CARB regulations regarding retrofitting, repowering, or replacement of older, less-efficient diesel off-road construction equipment. Accordingly, the equipment and vehicles employed in construction of the Project would not result in inefficient wasteful, or unnecessary consumption of fuel.

### **Effects of Project Construction on Local and Regional Energy Supplies**

In 2023, the earliest Project construction year, Californians are anticipated to use approximately 15,252,419,610 gallons of gasoline and approximately 3,702,133,264 gallons of diesel fuel. San Bernardino County annual gasoline fuel use in 2023 is anticipated to be 914,089,926 gallons and diesel fuel use is anticipated to be 325,042,642 gallons. Total Project construction gasoline fuel would represent approximately 0.01 percent of annual gasoline used in the County (year 2023), and total Project construction diesel fuel would represent approximately 0.07 percent of annual diesel used in the County (year 2023). Assessing the Project according to Appendix F, II.C.2 shows that based on the total Project's relatively low construction fuel use proportional to annual State and County use, the Project would not substantially affect existing energy fuel supplies or resources. New capacity or additional sources of construction fuel are not anticipated to be required.

SCE's total energy sales in 2020 were 83,533 GWh of electricity. The Project's construction-related net annual electricity consumption of 0.0264 GWh would represent approximately 0.00003 percent of SCE's sales. Therefore, it is anticipated that SCE's existing and planned electricity capacity and electricity supplies would be sufficient to serve the Project's temporary construction electricity demand.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, current crude oil production

would be sufficient to meet 50 years of worldwide consumption. As such, it is expected that existing and planned transportation fuel supplies would be sufficient to serve the Project's temporary construction demand.

Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary use of energy during construction. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive and that there is a significant cost-savings potential in green building practices. Substantial reduction in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The Project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demands for construction materials. In compliance with the Title 13 of the CCR §2449, diesel-powered construction equipment would be required to be turned off when not in use, resulting in reduction in diesel fuel use during construction. With reduced diesel fuel use, electricity use associated with water use for construction dust control would be also reduced. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the costs of business.

As described above, the Project's fuel consumption and electricity usage from the entire construction period would increase by less than one percent in the County. A less than one percent increase in temporary demand is not anticipated to trigger the need for additional capacity. Project construction would have a nominal effect on the local and regional energy supplies. All construction equipment will comply with air quality and energy/fuel efficiency laws and regulations; thus, the equipment would not be wasteful or inefficient.

## Operational

### Energy Requirements

The energy consumption associated with Project operations would occur from building energy use (electricity and natural gas), water use, and transportation-related fuel use. The methodology for calculating operational Project demands of each energy category is discussed below. This analysis relies on operations and land uses as discussed in **Section 4.2, Air Quality** and **Section 4.7, Greenhouse Gas Emissions**, as well as the calculations which are provided in **Appendix D**. Annual energy use during Project operations compared to Countywide energy use is shown in **Table 4.5-4, Annual Energy Use During Operations**.

**Table 4.5-4: Annual Energy Use During Operations**

| Project Source                   | Annual Operational Energy | San Bernardino County Annual Energy | Percentage Increase Countywide |
|----------------------------------|---------------------------|-------------------------------------|--------------------------------|
| <b>Electricity Use</b>           |                           | <b>GWh</b>                          |                                |
| Area <sup>1</sup>                | 7.41                      |                                     | 0.05 %                         |
| Water <sup>1</sup>               | 1.38                      | 15,969                              | 0.01 %                         |
| Total Electricity                | 8.79                      |                                     | 0.06 %                         |
| <b>Natural Gas Use</b>           |                           | <b>Therms</b>                       |                                |
| Area <sup>1</sup>                | 160,195                   | 527,236,428                         | 0.03 %                         |
| <b>Diesel Use</b>                |                           | <b>Gallons</b>                      |                                |
| Light/Medium Trucks <sup>2</sup> | 152,941                   | 280,932,332                         | 0.05 %                         |
| Heavy Trucks <sup>2</sup>        | 145,611                   | 280,932,332                         | 0.05 %                         |
| Total Diesel                     | 298,552                   | 280,932,332                         | 0.11 %                         |
| <b>Gasoline Use</b>              |                           | <b>Gallons</b>                      |                                |
| Passenger Vehicles <sup>2</sup>  | 2,193,771                 | 861,345,274                         | 0.25 %                         |

<sup>1</sup> The electricity, natural gas, and water usage are based on project-specific estimates and CalEEMod defaults.  
<sup>2</sup> Calculated based on the mobile source fuel use based on vehicle miles traveled (VMT) and fleet-average fuel consumption (in gallons per mile) from EMFAC2021 for operational year 2024.  
 Source: Refer to energy calculations in **Appendix D**.

### Petroleum Fuel

The gasoline and diesel fuel associated with on-road vehicular trips is calculated based on total VMT calculated for the analyses within **Section 4.2, Air Quality**, and **Section 4.7, Greenhouse Gas Emissions**, and average fuel efficiency from the EMFAC model. The EMFAC fuel efficiency data incorporates the Pavley Clean Car Standards and the Advanced Clean Cars Program. As summarized in **Table 4.5-4**, the total gasoline and diesel fuel associated with on-road trips would be approximately 2,193,771 gallons per year and 298,552 gallons per year, respectively.

### Electricity

The electricity use during Project operations is based on CalEEMod defaults. The Project would use approximately 7.41 GWh of electricity per year for area use (**Table 4.5-4**). The electricity associated with operational water use is estimated based on the annual water use, and the energy intensity factor is based on the CalEEMod default energy intensity per gallon of water for San Bernardino County. Project area water use is based on the CalEEMod default rates. The Project would use approximately 112 million gallons of water annually which would require approximately 1.38 GWh per year for conveyance and treatment. In total, the Project would use approximately 8.79 GWh of electricity per year.

### Natural Gas

The methodology used to calculate the natural gas use associated with the Project is based on CalEEMod default rates. The Project would use 160,195 therms of natural gas per year for space heating, water heating, and stoves (**Table 4.5-4**).

### Effects of Project Operations on Local and Regional Energy Supplies

Californians used 277,704 GWh of electricity in 2020, of which San Bernardino County used 15,969 GWh. The Project’s operational electricity use would represent 0.003 percent of electricity used in the state,

and 0.06 percent of the energy use in San Bernardino County. The Project's electricity consumption estimated above includes reductions associated with compliance with the 2022 Title 24 building code and compliance the CalGreen Tier 2 standards; refer to LOR AQ-6, and **MM GHG-1** in **Section 4.7, Greenhouse Gas Emissions**. Project electricity consumption is 8.79 GWh per year or 8,790 MWh per year. Assuming the Project operates 24 hours per day, seven days per week, 365 days per year with an annual electricity consumption of 8,790 MWh/year, the Project would require a capacity of approximately 1.0 MW.<sup>10</sup> The nearest SCE electrical substation to the Project is the Colton Substation which has a remaining capacity of 41.52 MW.<sup>11</sup> Therefore, SCE's existing and planned electricity capacity and electricity supplies would be sufficient to serve the Project's estimated electricity demand. SCE can provide the Project sufficient electricity and would not be required to construct additional facilities.

Regarding natural gas, Californians used 14,352 million therms of natural gas and 527 million therms of natural gas in San Bernardino County in 2020. Therefore, the Project's operational natural gas use would represent 0.001 percent of the natural gas use in the state and 0.03 percent of the natural gas use in the County. Project natural gas consumption is estimated to be 160,195 therms/year or 0.04 million cubic feet of gas per day (MMcf/d). According to the 2020 California Gas Report,<sup>12</sup> in 2024 Southern California will have a surplus of 131 MMcf/d available. Therefore, SoCalGas would have enough natural gas to serve the Project's demand of 0.04 MMcf/d.

In 2024, Californians are anticipated to use approximately 14,317,794 gallons of gasoline and approximately 3,195,776,812 gallons of diesel fuel. Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, current crude oil production would be sufficient to meet 50 years of worldwide consumption. Project operational use of gasoline and diesel would represent a 0.25 percent increase of gasoline use and 0.11 percent increase of diesel use in the County. Fuel demands associated with the Project would not require the construction of additional gas stations or refineries.

### Compliance with Energy Efficiency Measures

As discussed above, California's Energy Efficiency Standards for Residential and Non-Residential Buildings create uniform building codes to reduce California's energy use and provide energy efficiency standards for residential and non-residential buildings. These standards are incorporated within the California Building Code and are expected to substantially reduce the growth in electricity and natural gas use. 2022 Title 24 standards for new residential and nonresidential buildings will focus on encouraging electric heat pump technology and use, promote electric-ready buildings to get owners to use cleaner electric heating, cooking, and vehicle charging, expanding solar photovoltaic systems and battery storage systems to reduce reliance on fossil fuel transportation and power plants; refer to LOR AQ-5.

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<sup>10</sup>  $\frac{8,790 \text{ MWh/yr}}{8,766 \text{ h/yr}} = \text{approx. } 1.0 \text{ MW}$

<sup>11</sup> Southern California Edison (SCE), ND. Southern California Edison Power Site Search Tool. Accessed March 31, 2022. Available at <https://www.arcgis.com/apps/webappviewer/index.html?id=05a84ec9d19f43ac93b451939c330888>.

<sup>12</sup> California Gas and Electric Utilities, [https://www.socalgas.com/sites/default/files/2020-10/2020\\_California\\_Gas\\_Report\\_Joint\\_Utility\\_Biennial\\_Comprehensive\\_Filing.pdf](https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf)



Regarding water energy conservation, the Project would incorporate drought-tolerant landscaping throughout portions of the site. Water-efficient irrigation controls would also be used in landscape areas. Buildings would incorporate water-efficient fixtures and appliances, to comply with Title 24.

It should also be noted that SCE is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase total procurement from eligible renewable energy resources to 33 percent by 2020 and 50 percent by 2030. The CEC estimates that in 2019, 36 percent of the State's retail electricity sales were provided by Renewables Portfolio Standard (RPS)-eligible sources such as solar and wind. That exceeds California's 33 percent requirement of retail sales come from RPS-eligible sources by 2020. California surpassed its 2020 RPS goals for the first time two years ago when an estimated 34 percent of retail electric sales came from RPS-eligible source. In 2018, SB 100 revised the goal of the program to achieve the 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. As of 2021, California In-State Generation for Total Renewables, was 34.8 percent.<sup>13</sup> Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat.

### Energy Consumption Analysis During Operations

As discussed above, California's Energy Efficiency Standards create uniform building codes to reduce California's energy use and provide energy efficiency standards for residential and non-residential buildings. These standards are incorporated within the California Building Code and are expected to substantially reduce the growth in electricity and natural gas use.

Project operations would not substantially affect existing energy or fuel supplies or resources. All Project buildings will comply with energy and fuel efficiency laws and regulations; thus, the Project would not result in a wasteful or inefficient use of energy. In addition, none of the estimated Project energy uses exceed one percent of the corresponding uses within the County.

To further minimize energy usage, the Project would implement **MM AQ-2** and **MM GHG-1** through **MM GHG-3**. **MM AQ-2** requires the implementation of a Transportation Demand Management (TDM) program to reduce single occupant vehicle trips and encourage transit. **MM GHG-1** requires the installation of photovoltaic solar panels to offset energy emissions in residential buildings. **MM GHG-2** requires the Project to meet or exceed the voluntary CALGreen Tier 2 standards to further improve energy efficiency. **MM GHG-3** requires the residential projects to be all electric (i.e., no natural gas). Therefore, potential impacts are considered less than significant.

### Mitigation Measures

No mitigation measures are required.

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<sup>13</sup> California Energy Commission. 2022. 2021 Total System Electric Generation. <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation#:~:text=Renewable%20energy%20generation%20increased%203.5,0.51%20percent%20increase%20from%202020.>

**Impact 4.6-2: *Would the Project conflict with or obstruct a state or Local plan for renewable energy or energy efficiency?***

***Level of Significance: Less than Significant***

The energy conservation plans and policies relevant to the Project include the California Title 24 energy standards and the 2022 California Green Building Code; refer to LOR AQ-5 and LOR AQ-6. Compliance with Title 24 energy standards and the 2022 Green Building Code would be enforced through the City's plan check process. Future development on the Project site would be designed in conformance with these existing energy standards. Additionally, the Project would be designed in accordance with Grand Terrace GP and goals, policies, and Grand Terrace MC regulations pertaining to energy efficiency and design standards. Compliance with goals, policies, and design standards would also be verified through the City's design review process. Furthermore, the Project would be consistent with Southern California Association of Government's (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) also referred as the Connect SoCal and Connect SoCal's GHG reduction goals (refer to **Section 4.7, Greenhouse Gas Emissions**). It is not anticipated that buildout of the Project would conflict with or obstruct a state or local plan for renewable energy or efficiency, and therefore, a less than significant impact would occur.

**Mitigation Measures**

No mitigation measures are required.

#### **4.5.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant unavoidable impacts concerning energy have been identified. All impacts would be less than significant with no mitigation required.

#### **4.5.7 CUMULATIVE IMPACTS**

Potential cumulative impacts to energy would result if the proposed Project, in combination with past, present, and future projects (refer to **Table 4-1, Cumulative Projects List** located in **Section 4.0, Environmental Impact Analysis**), would result in the wasteful or inefficient use of energy. This could result from development that would not incorporate sufficient building energy efficiency features, would not achieve building energy efficiency standards, or would result in the unnecessary use of energy during construction and/or operation.

The cumulative projects within the areas serviced by the energy service providers would be applicable to this analysis. All projects listed in **Table 4-1** are within the service area of SCE and SoCalGas and therefore are applicable to this cumulative analysis.

Construction associated with implementation of the Project would result in the use of energy, but not in an inefficient or wasteful manner. The use of energy would not be substantial in comparison to statewide electricity, natural gas, gasoline, and diesel demand; refer to **Table 4.5-3** and **Table 4.5-4**. As discussed above, and in response to CEQA Appendix F, the Project-related construction electricity consumption would represent approximately 0.00002 percent of SCE generated electricity and would not result in the need for construction of additional energy generation. The electricity used for construction would be less than that required during operation of the Project, would be temporary and would have a minimal

contribution to the Project's overall energy consumption. Construction of the Project would not typically involve the consumption of natural gas. The Project's construction electricity consumption would be negligible relative to SCE's generated electricity and electricity supplies would be sufficient to serve the Project's temporary construction electricity demand. All on-site construction equipment would be required to meet existing regulations detailed in **Section 4.5.3** regarding energy efficiency; thus the Project's construction energy use would not be inefficient or wasteful.

During operations the Project-related net annual electricity consumption would represent approximately 0.009 percent of SCE's sales in 2020. SCE would review the Project's estimated electricity consumption in order to ensure that the estimated power requirement would be part of the total load growth forecast for their service area and accounted for in the planned growth of the power system. The Project's natural gas consumption would account for approximately 0.03 percent of the County's forecasted natural gas consumption and the Project would account for approximately 0.003 percent of forecasted surplus of natural gas in the SoCalGas planning area. It should be noted that the planning projections of SCE and SoCalGas consider planned development for their service areas and are in and of themselves providing for cumulative growth. Although the Project includes a General Plan Amendment (GPA), SCE and SoCalGas have the capacity to serve the energy demands of the Project, as discussed above under Impact 4.5-1. Additionally, the Project was determined to not induce substantial unplanned population growth; refer to **Section 4.12, Population and Housing**.

SCE and SoCalGas have policies, programs, and projects in place to provide continued, adequate energy to their users. Substantial reductions to the cumulative demand for energy can result from an increased reliance on renewable energy systems (as required by the State's Renewable Portfolio Standards) and the construction of energy-efficient buildings. Cumulative projects would be subject to applicable Title 24 and CALGreen requirements similar to the Project, which includes energy efficiency standards to minimize the wasteful and inefficient use of energy.

Furthermore, transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, current crude oil production would be sufficient to meet 50 years of worldwide consumption.<sup>14</sup> As such, it is expected that existing and planned transportation fuel supplies would be sufficient to serve the Project's construction and operational demand. New capacity or supplies of energy resources would not be required. Additionally, the Project would be subject to compliance with all federal, state, and local requirements for energy efficiency. State regulations, including the Low Carbon Fuel Standard, Pavley Clean Car Standards, and Low Emission Vehicle Program, would serve to reduce the transportation fuel demand of cumulative projects. In addition, new 2022 building standards would require more vehicle charging infrastructure, assisting in the transition to electric vehicles and away from fossil fuel consumption.

In consideration of cumulative energy use, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Additionally, as discussed above, the Project would increase overall electricity and natural gas demand but would not require additional facilities other than local connections to, or undergrounding of, existing facilities in the Project vicinity. Additionally,

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<sup>14</sup> BP Global. (2022). *2021 Statistical Review of World Energy*. Retrieved at: <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>.

cumulative growth associated with the related projects is already accounted for in the planning of future supplies to cover projected demand. Therefore, the Project would not contribute to a cumulative impact concerning wasteful or inefficient energy use, and a less than significant cumulative impact would occur.

The Project and new development projects located within the cumulative study area would also be required to comply with all the same applicable federal, state, and local measures aimed at reducing fossil fuel consumption and the conservation of energy; refer to **Table 4-1** in **Section 4.0, Environmental Impact Analysis** of this Draft EIR for a list of cumulative projects. The anticipated Project impacts, in conjunction with cumulative development in the vicinity, would increase urbanization and result in increased energy use. Potential land use impacts are site-specific and require evaluation on a case-by-case basis. As noted in Impact 4.6-2, the Project would not result in significant impacts to state or local plans for renewable energy or energy efficiency. Therefore, the Project and identified cumulative projects are not anticipated to result in a significant cumulative impact. Therefore, potential impacts are considered less than significant.

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## 4.6 GEOLOGY AND SOILS

### 4.6.1 INTRODUCTION

This section of this Draft Environmental Impact Report (EIR) describes the existing regulatory and environmental conditions related to the geologic, soil, and seismic characteristics, and paleontological resources within The Gateway at Grand Terrace Specific Plan (Project) site. This section also identifies potential impacts that could result from implementation of the Project, and as necessary, recommends mitigation measures to reduce the significance of impacts. The issues addressed in this section are risks associated with unearthing paleontological resources, faults, strong seismic ground shaking, seismic-related ground failure such as liquefaction, landslides, substantial erosion or the loss of topsoil, and unstable geological units and/or soils.

The properties within the Project area have evolved over the past several years and various technical studies have been prepared for certain properties, however not all properties have been surveyed due to ownership issues and lack of accessibility. The surveys are referenced herein to describe the findings for certain specific properties and are determined to be adequate at a programmatic level regarding the Project area.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

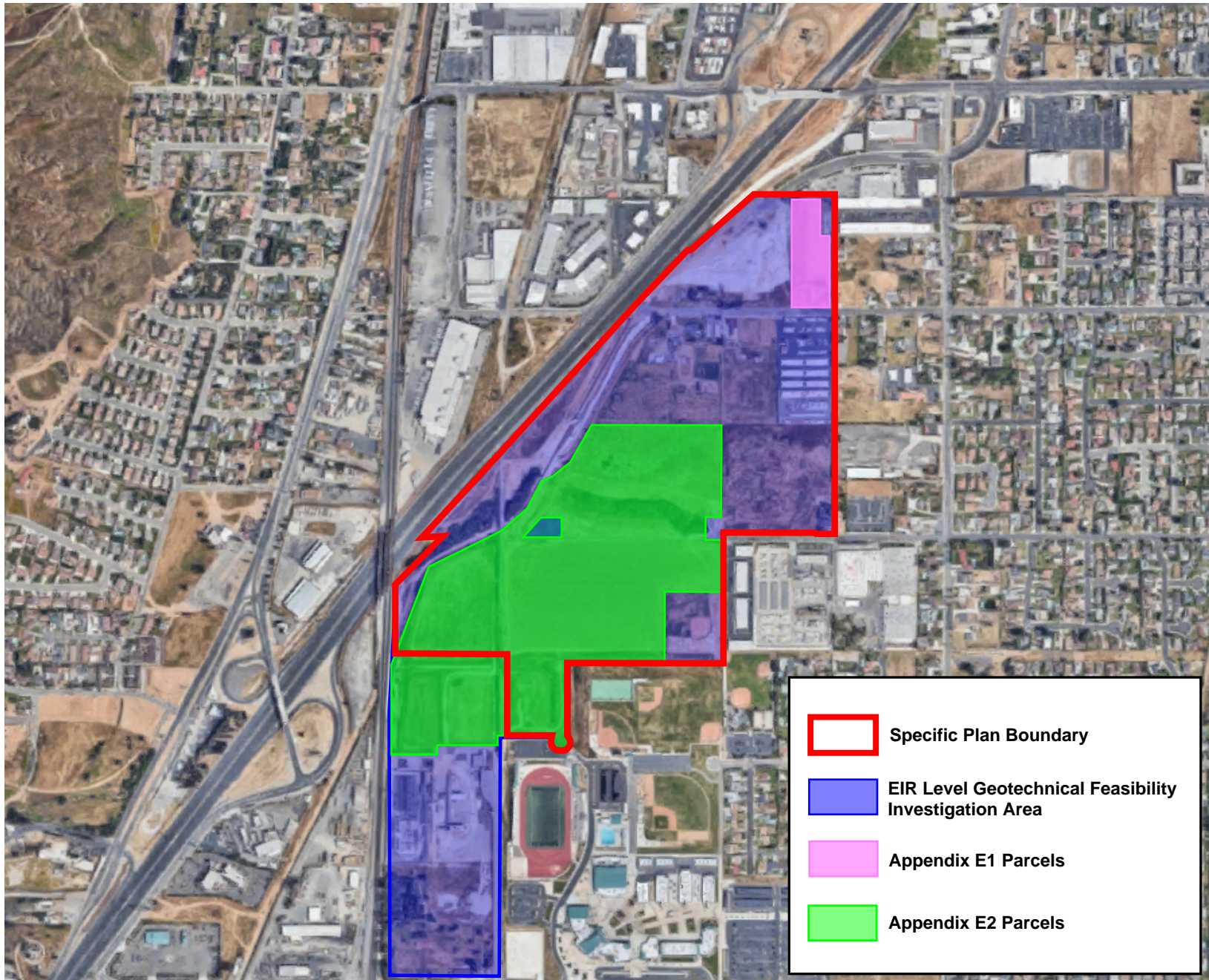
Baseline conditions are largely based on review of the following technical documents, including review of aerial photographs and maps of the Project site and its surroundings and review of relevant public documents:

- *Preliminary Geotechnical Investigation APN's: 1167-161-03 & -04*, (2022) prepared by LOR Geotechnical Group, Inc (**Appendix E1**).
  - Assessor's Parcel Numbers: 1167-161-03 & -04
- *Preliminary Geotechnical Investigation APN's: 1167-151-22, -68, -71 & -74*, (2022) prepared by LOR Geotechnical Group, Inc (**Appendix E2**).
  - Assessor's Parcel Numbers: 1167-151-22, -68, -71 & -74
- *EIR Level Geotechnical Feasibility Investigation Gateway at Grand Terrace Specific Plan and Homecoming Project*, (2018) prepared by LOR Geotechnical Group, Inc (**Appendix E3**).

- *Geotechnical Report Update to the EIR Level Geotechnical Feasibility Investigation Gateway at Grand Terrace Specific Plan and Homecoming Project*, (2022) prepared by LOR Geotechnical Group, Inc (**Appendix E4**).
- *Historical, Archaeological, and Paleontological Resources Reconnaissance*, (2017), prepared by CRM TECH (**Appendix C4**).
- City of Grand Terrace (City) General Plan (Grand Terrace GP).

Additional relevant information presented in this section comes from various planning documents including, but not limited to, the City of Grand Terrace (City) Municipal Code (Grand Terrace MC) and pertinent California Building Standards Codes (CBSC).

An initial Geotechnical Investigation was performed in January and February of 2017 for proposed residential development of approximately 50 acres of property generally located north of Main Street and west of Michigan Avenue in the City of Grand Terrace, California. The Geotechnical Investigations for the Project area represent an updated version of the previous 2017 investigations. The main change from the 2017 investigations to the 2022 investigations is the most recent investigations have involved updates to the Project area description in terms of site conditions and site boundaries, and updates of seismic design criteria following 2022 California Building Code (CBC) guidelines.



**Exhibit 4.6-1:** Geotechnical Investigation Areas  
City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



Not to Scale

**Kimley»Horn**



## 4.6.2 ENVIRONMENTAL SETTING

### Regional Geologic Setting

The Project area is located on the Perris block within the northern Peninsular Ranges geologic province of southern California. The Perris block is considered to be a relatively stable structural block and is bounded by active faults, including the Elsinore fault zone to the southwest, the San Jacinto fault zone to the northeast, and the Cucamonga fault zone to the north. The Perris block is underlain predominantly of crystalline igneous rocks of Cretaceous age and older metasedimentary and metavolcanic rocks. The Perris block has multiple erosional surfaces capped with unconsolidated alluvial sediments stripped from the surrounding highlands and is underlain with older alluvium.<sup>1</sup>

### Local Geologic Setting

The Project is located within the northeastern portion of the City; located between the La Loma Hills to the west and the Box Springs Mountains to the east and southeast. The majority of the Project site is relatively flat, and the slope is slight, with the elevation ranging from approximately 975 feet on the northeastern end of the site to approximately 945 feet on the southwestern corner. The Project site is underlain by surficial topsoil and localized fill soils followed by thick older alluvial materials. Younger alluvial soils were also present within the drainages that traverse the center and northern portions of the Project site. The earth materials encountered by LOR Geotechnical during the 2022 Geotechnical Investigation are generally described as follows:

- **Artificial Fill:** Artificial fill soils encountered at the Project site were mainly present along the northwestern portion of the site where fill has been placed across the two drainages. In addition, fill soils are present in the far southern portion of the property. These soils were created in association with the construction of the adjacent high school and a rip-rap lined drainage channel present in this area. Fill soils are also likely present in the southwest corner where the three aboveground storage tanks were located. Other than minor asphalt and debris, the fill soils appear to consist of locally derived silty sand soils.
- **Topsoil:** Mantling the surface of the vast majority of the Project site are topsoil materials that consist of silty sand. These soils average approximately 1.5 to 2 feet in thickness and are relatively loose. At the time of the site investigation, these soils were moist as a result of recent heavy rains.
- **Younger Alluvium:** Relatively young alluvial soils are present within the two drainage courses that traverse the northern portion of the site from east to west. The younger alluvial materials consist mainly of loose to medium dense silty sand with well graded sand soils at depth. At the location of the exploratory trench, these sediments were found to exceed 15 feet in thickness with the looser, silty sand materials present in the upper 8 to 11 feet and the denser, sandier soils present below these depths.
- **Older Alluvium:** Older alluvium is present at shallow depth across the Project site and underlies the fill soils and younger alluvium. In general, the older alluvium consists of dense silty sand in the near surface and generally becomes sandier with an increase in depth. The dense silty sand and

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<sup>1</sup> LOR Geotechnical Group, Inc. (2022), *Preliminary Geotechnical Investigation APN's: 1167-161-03 & -04*. Refer to **Appendix E1**

the sandy silt layers are typically massive and porous in the near surface. However, the porosity decreases below the first couple of feet and a blocky soil structure is evident in the deeper, denser materials.

## **Faulting and Seismicity**

### **Regional and Local Faulting**

The City of Grand Terrace, including the Project area, is located within a seismically active region and would be subject to strong regional seismic activity. The historical seismicity of the Project site entails numerous small to medium magnitude earthquake events occurring in the region. The primary source of regional seismic activity would occur in the northwest trending San Jacinto and San Andreas fault zones.

### **Ground Shaking**

Strong ground shaking can be expected during moderate to severe earthquakes in this general region and is common in the majority of southern California. Intensity of ground shaking at a given location depends primarily upon earthquake magnitude, site distance from the source, and site response (soil type) characteristics.

### **Ground Subsidence**

The term “ground subsidence” is defined as the sudden shrinking or gradual downward settling and compaction of the soil and other surface material with little or no horizontal movement. Subsidence occurs when a large portion of land sinks, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. Subsidence would depend on the construction methods and the type of equipment used.

### **Expansive Soils**

Expansive soils are characterized as soils with significant amount of clay particles that can shrink or swell resulting in instability for overlying structures. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures or concrete slabs supported on grade. Depending on the extent and location below finish subgrade, expansive soils can have a detrimental effect on structures.

### **Secondary Seismic Hazards**

Secondary seismic hazards generally associated with severe ground shaking during an earthquake include ground rupture, land sliding, rockfall, and liquefaction.

### **Ground Rupture**

Ground rupture is most likely to occur along active faults. As previously mentioned, the Project site is not located within an earthquake fault zone as identified by the Alquist-Priolo Earthquake Fault Zoning Act or County Fault Zone. Therefore, ground rupture is not likely to occur within the Project site.

## Landslides

A landslide is the movement of a mass of rock, debris, or earth down a slope. Seismically induced landslides and slope failures are common occurrences during or soon after large earthquakes. The Project site is relatively flat and slopes from the northeast.

## Rockfalls

The majority of the Project site consists of relatively flat surfaces with gently sloping areas in between. In addition, no loose, un-rooted rocks that could fall or topple and roll were noted to be present during the site investigation. Therefore, potential for rockfalls occurring at the Project site is considered to be nil.

## Liquefaction

Liquefaction is the loss of strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and plasticity characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking. The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below ground surface.

## Paleontological Setting

The Project site is located on surface deposits of older Quaternary alluvium and shallow excavations were determined unlikely to uncover significant fossil vertebrate remains. However, it was determined that deeper excavation may uncover such remains. CRM Tech's Historical, Archeological, and Paleontological Resources Reconnaissance Report (**Appendix C4**) includes a paleontological resources records search to identify known paleontological localities in the vicinity of the Project. The San Bernardino County Museum (SBCM) in Redlands and the Natural History Museum of Los Angeles County (NHMLAC), provided services for this study. These institutions maintain regional paleontological locality inventories and supporting maps and documents. These institutions identified no paleontological localities within the Project site or within a one-mile radius.

### 4.6.3 REGULATORY SETTING

#### Federal

##### Occupational Safety and Health Administration (OSHA) Regulations

Excavation and trenching are among the most hazardous construction activities. OSHA's Excavation and Trenching standard, Title 29 of the Code of Federal Regulations (CFR), Part 1926.650, covers requirements for excavation and trenching operations. OSHA requires that all excavations in which employees could potentially be exposed to cave-ins be protected by sloping or benching the sides of the excavation, supporting the sides of the excavation, or placing a shield between the side of the excavation and the work area.

## Soil and Water Resources Conservation Act of 1977

The purpose of the Soil and Water Resources Conservation Act of 1977 is to protect or restore soil functions on a permanent sustainable basis. Protection and restoration activities include prevention of harmful soil changes, rehabilitation of the soil of contaminated sites and of water contaminated by such sites, and precautions against negative soil impacts. Disruptions of natural soil functions and its function as an archive of natural and cultural history should be avoided, as far as practicable. In addition, the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) requirements, through the National Pollution Discharge Elimination System (NPDES) permitting process, provide guidance for protection of geologic and soil resources.

## Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) established the National Earthquake Hazards Reduction Program (Program) which is coordinated through the Federal Emergency Management Agency (FEMA), the USGS, the National Science Foundation, and the National Institute of Standards and Technology. The purpose of the Program is to establish measures for earthquake hazards reduction and promote the adoption of earthquake hazards reduction measures by federal, state, and local governments; national standards and model code organizations; architects and engineers; building owners; and others with a role in planning and constructing buildings, structures, and lifelines through (1) grants, contracts, cooperative agreements, and technical assistance; (2) development of standards, guidelines, and voluntary consensus codes for earthquake hazards reduction for buildings, structures, and lifelines; and (3) development and maintenance of a repository of information, including technical data, on seismic risk and hazards reduction. The Program is intended to improve the understanding of earthquakes and their effects on communities, buildings, structures, and lifelines through interdisciplinary research that involves engineering, natural sciences, and social, economic, and decisions sciences.

## State

### Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] §§ 2621-2624, Division 2, Chapter 7.5) was passed in 1972 following the destructive February 9, 1971 moment magnitude (Mw) 6.6 San Fernando earthquake to mitigate the hazard of surface faulting to structures intended for human occupancy. The Act's main purpose is to prohibit siting buildings used for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The Act requires the State Geologist to establish regulatory zones, known as "Earthquake Fault Zones," delineating appropriately wide earthquake fault zones to encompass potentially active and recently active traces of faults. Local agencies must regulate most development projects within these zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed human occupancy structures would not be constructed across active faults. An evaluation and written report of a specific site must be prepared by a licensed geologist. If an active fault is found, a

structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically at least 50-foot setbacks are required).<sup>2</sup>

Effective June 1, 1998, the Natural Hazards Disclosure Act requires that sellers of real property and their agents provide prospective buyers with a “Natural Hazard Disclosure Statement” when the property being sold lies within one or more state-mapped hazard areas, including Earthquake Fault Zones.

### **Seismic Hazards Mapping Act of 1990 (SHMA)**

The SHMA of 1990 (California PRC, § 2690 et seq.) directs the California Department of Conservation’s California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards.

The SHMA provides a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure, and other seismic hazards caused by earthquakes. Mapping and other information generated pursuant to the SHMA is to be made available to local governments for planning and development purposes. The state requires (1) local governments to incorporate site-specific geotechnical hazard investigations and associated hazard mitigation as part of the local construction permit approval process, and (2) the agent for a property seller, or the seller if acting without an agent, to disclose to any prospective buyer if the property is located within a seismic hazard zone. The State Geologist is responsible for compiling seismic hazard zone maps. The SHMA specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

### **California Building Code**

CCR Title 24, also known as the California Building Standards Code (CBSC), includes regulations for how buildings are designed and constructed, and are intended to ensure the maximum structural integrity and safety of private and public buildings. The CBSC, which applies to all applications for building permits, consists of 12 parts that contain CBSC administrative regulations for all State agencies that implement or enforce building standards. Local agencies must ensure the development complies with the CBSC standards. Cities and counties can adopt additional standards beyond the CBSC including CBSC Part 2, named the CBC.

### **State Earthquake Protection Law**

The State Earthquake Protection Law (California HSC § 19100 et seq.) requires that structures be designed to resist stresses produced by lateral forces caused by wind and earthquakes. Specific minimum seismic safety and structural design requirements are set forth in Chapter 16 of the CBC. The CBC requires a site-specific geotechnical study to address seismic issues and identifies seismic factors that must be

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<sup>2</sup> California Department of Conservation. (2019). The Alquist-Priolo Earthquake Fault Zoning Act. Retrieved from: <https://www.conservation.ca.gov/cgs/alquist-priolo>. (accessed November 7, 2022).

considered in structural design. Because the Project area is not located within an Alquist–Priolo Earthquake Fault Zone, special provisions would not be required for Project development related to fault rupture.

## Local

### City of Grand Terrace General Plan

#### ***Public Health and Safety Element***

The Grand Terrace GP Public Health and Safety Element identifies specific hazards, their specific locations within the City, and goals and policies designed to minimize the social, economic, and environmental disruption from hazardous events. The following goals and policies are applicable to geologic resources.

**Goal 4.9:** **Comply with state and federal regulations to ensure the protection of historical, archaeological, and paleontological resources.**

**Policy 4.9.1** The City shall take reasonable steps to ensure that cultural resources are located, identified, and evaluated to assure that appropriate action is taken as to the disposition of these resources.

**Goal 5.1:** **Minimize the risk to public health and safety, social and economic welfare of the City resulting from geologic and seismic hazards**

**Policy PHS 5.1.1** All new development shall comply with current seismic design standards

**Policy PHS 5.1.2** All proposed developments shall be evaluated for impacts associated with geologic and seismic hazards.

**Policy PHS 5.1.4** Grading plans for development projects shall include an approved drainage and erosion control plan to minimize the impacts from erosion and sedimentation during grading.

**Goal 5.3:** **Reduce the risk to life and property in areas designated as flood hazard areas.**

**Policy PHS 5.3.4** The City shall require all development projects to comply with the National Pollutant Discharge Elimination System (NPDES) and implement appropriate Best Management Practices.

### City of Grand Terrace Municipal Code

#### ***Title 15 – Building and Construction***

The City of Grand Terrace Municipal Code (Grand Terrace MC) Title 15 contains provisions and regulations of the City’s adopted Uniform Building Code and requires development within the City to comply with the State of California Subdivision Map Act. These State laws require developers to submit grading plans, including soils engineering reports, and, if necessary, engineering geology reports. The reports shall include recommendations concerning cuts, fills, compaction, and foundation to ensure stable development.

#### 4.6.4 SIGNIFICANCE CRITERIA UNDER CEQA

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning geology and soils. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

#### Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning geological and soil resources. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

The baseline conditions and impact analyses are based on the Geotechnical Investigations prepared by LOR Geotechnical; review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" adverse effects on geological and soil resources considers how the potential for development and operation of the future projects would affect the resources.

## 4.6.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.6-1:** *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?*

**Level of Significance: Less than Significant**

### Construction

The Department of Conservation's California Geological Survey's Alquist-Priolo Earthquake Fault Zoning Map was reviewed and was found that the Project site is not within or adjacent to a known earthquake fault. In addition, the County's Geologic Hazards Map for the City determined that the Project site is not located on any known active earthquake faults identified as an Alquist-Priolo Earthquake Fault Zoning Map.<sup>3</sup> Nevertheless, the Project would be subject to regional seismic activity. As noted above in **Section 4.6.2**, the closest active fault is located approximately 1.9 miles northeast of the Project site. Due to the Project's close proximity to the San Jacinto Fault Zone, strong ground motion caused by a seismic event is expected to occur during the lifetime of the development; however, buildout of the Project would be designed according to the latest CBC soil and seismic standards and in conformance with all applicable Grand Terrace MC design standards that aim to minimize or resist structural collapse from strong seismic activity. Furthermore, the Geotechnical Investigations concluded that no active or potentially active faults are known to exist at the Project site. Therefore, construction of future developments within the Project would not cause potentially substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. Impacts are less than significant.

### Operations

As previously mentioned, the Project is not located within an Alquist-Priolo Fault zone and is not within or adjacent to a known earthquake fault. Additionally, operational activities of future development would occur consistent with applicable state, and local regulations and engineering standards and specifications. Therefore, impacts would be less than significant.

### Mitigation Measures

No mitigation measures are required.

**Impact 4.6-2:** *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- ii. Strong seismic ground shaking?*

**Level of Significance: Less than Significant**

<sup>3</sup> County of San Bernardino. 2010. Geologic Hazards Overlay Map FH30C Grand Terrace. Retrieved at: [http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/FH30C\\_20100309.pdf](http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/FH30C_20100309.pdf) (accessed November 7, 2022).



## Construction

As previously mentioned, the Project site is in proximity to the San Jacinto Fault Zone and is expected to experience a strong ground motion seismic event during the lifetime of the development. Large earthquakes could occur on other faults in the Project area but are considered less significant than the San Jacinto fault zone due to lesser anticipated magnitudes and further distances from the Project. Strong levels of seismic ground shaking can cause damage, particularly to older and/or poorly constructed buildings. However, all Project development would consist of new construction in accordance with the latest CBC soils and seismic standards and in conformance with all applicable Grand Terrace MC standards to resist the effects of strong seismic ground shaking. In addition, all relevant documents would be submitted to the City's Engineering and Building Department for approval, as part of the City's discretionary review process. Furthermore, the Project would adhere to Grand Terrace Policies PHS 5.1.1, PHS 5.1.2, and PHS 5.1.4 to ensure that impacts concerning strong seismic ground shaking are further reduced. Compliance with the above policies would confirm the Project would be evaluated for impacts associated with geologic and seismic hazards, comply with current seismic design standards, and include an approved drainage and erosion control plan to minimize impacts from erosion and sedimentation during grading. Therefore, construction of the Project would not cause potentially substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and impacts would be less than significant.

## Operations

The residential, commercial, and public facility uses proposed on the Project site are anticipated to experience strong seismic ground shaking at some point in the future. As discussed above, all buildings would be designed in accordance with all applicable state and local design standards such as Policy PHS 5.1.1 which ensures all new development would comply with current seismic design, and Policy PHS 5.1.2 which ensures all proposed developments would be evaluated for impacts associated with geologic and seismic hazards. Therefore, impacts from strong seismic ground shaking during the Project's operational phase would be less than significant.

### Mitigation Measures

No mitigation measures are required.

**Impact 4.6-3:** *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

*iii. Seismic-related ground failure, including liquefaction?*

**Level of Significance: Less than Significant**

## Construction

The Project would not be susceptible to seismic-related ground failure due to liquefaction. As previously stated in **Section 4.6.2** above, the Project site is not located on or adjacent to any known active earthquake faults identified as an Alquist-Priolo Earthquake Fault Zone. Furthermore, the County's Geologic Hazard

Overlay map for the City was reviewed and the Project site is not within a generalized liquefaction susceptibility area.<sup>4</sup>

Additionally, the potential for liquefaction generally occurs during strong ground shaking within granular, loose sediments where the depth to groundwater is usually less than 50 feet. The Project site is underlain at depth by dense, older alluvium; the upper, loose alluvial soils are anticipated to be replaced with compacted fill; and the depth to groundwater is approximately 100 feet or more. Therefore, the potential for seismic-related ground failure, including liquefaction, is considered to be very low to none, and impacts would be less than significant.

## Operations

It is anticipated that all Project components would be subject to seismic-related ground shaking at some point in the future, however since all Project buildings would be designed in accordance with applicable state and local design standards, persons and structures would not be significantly impacted by potential ground failure, including liquefaction, therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.6-4:** *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

**iv. Landslides?**

**Level of Significance: No Impact**

## Construction and Operations

Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. Areas within the City most susceptible to seismically induced landslides are areas at the base of the Blue Mountain located in the City approximately 1.4 miles to the east. Additionally, the majority of the Project site is relatively flat with gently sloping areas in between. Locally, along the drainage course in the southwestern portion of the property, the slopes approach 2:1 (horizontal to vertical). Considering the Project site's geologic conditions and distance from Blue Mountain, the potential for mass movement failures such as landslides or debris flows is very low. Furthermore, no loose, un-rooted rock that could fall or topple and roll were noted to be present at elevations above the Project site and therefore there would be no potential for rockfalls. In addition, the County's Geologic Hazard Overlay map for the City was reviewed. The Project site is not within a generalized landslide susceptibility area.<sup>5</sup> The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides, and therefore no impact would occur.

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<sup>4</sup> County of San Bernardino. (2010). Geologic Hazards Overlay Map FH30C Grand Terrace. Retrieved at: [http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/FH30C\\_20100309.pdf](http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/FH30C_20100309.pdf) (accessed November 7, 2022).

<sup>5</sup> County of San Bernardino. (2010). Geologic Hazards Overlay Map FH30C Grand Terrace. Retrieved at: [http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/FH30C\\_20100309.pdf](http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/FH30C_20100309.pdf) (accessed November 7, 2022).

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.6-5:** *Would the Project result in substantial soil erosion or the loss of topsoil?*

**Level of Significance: Less than Significant with Mitigation Incorporated**

### **Construction**

Construction activities such as grading, site stripping, excavation, and demolition would potentially result in soil erosion and the loss of topsoil. The 2022 Geotechnical Investigation indicated average removal depths of approximately 3 to 6 feet below existing grades would be required on the majority of development within the subject property. However, deeper removals of approximately 10 to 15 feet would be required within the two drainage courses that traverses the northern portion of the subject property. Grading activities could include newly constructed fill slopes (both cut and fill), comprised of properly compacted engineered fill. The grading proposed by the Project during Phase 1 and 2 are preliminarily estimated to require cut/removal of approximately 293,629 cubic yards (CY) of all the existing artificial fill soils and loose alluvial materials and approximately 280,896 CY of engineered compacted fill would be used to fill the site. Approximately 12,733 CY would also be exported. Although approximately 280,896 CY of engineered compacted fill would be used and approximately 12,733 CY estimated to be exported, the site pads would be graded and adjusted to remain balanced. The Geotechnical Investigation concluded the relative compaction of the younger alluvial soils and the relative compaction anticipated for compacted fill soils for the Project site were estimated to have a compaction shrinkage factor of approximately 10 to 15 percent for the younger alluvium soils. The older alluvium soils are denser, and the removal and replacement of these soils were estimated to also result in a compaction shrinkage factor of approximately 5 to 10 percent.

All footings are estimated to rest upon 24 inches of properly compacted fill material. In areas where the required fill thickness is not met, the footing areas would be further excavated to a depth of at least 24 inches below the proposed footing base grade, with sub excavation extending at least 5 feet beyond the footing lines. If an excess of 5 feet removals are required, the removal areas should extend laterally at a 1:1 ratio, and no structures would be located on areas where the maximum depth of fill to minimum depth of fill is greater than a 3:1 ratio as measured from the bottom of the footing. Additionally, all foundations would have a minimum width of 12 inches and due to the low expansion soils on site, would be established a minimum of 18 inches below the lowest adjacent grade.

Initial site stripping would include the removal of any surficial vegetation and topsoil. Grading and construction activities could also include foundation design improvements, building area slab-on-grade (concrete floor slabs), and retaining walls, that would increase the loss of topsoil to erosion.

Site-specific development plans within the Project would be submitted to the City's Engineering and Building Department for approval, along with a Geotechnical Investigation as part of the City's discretionary review process. Future development would also be required to adhere to the construction design features and Mitigation Measure **(MM) GEO-1**, which requires no clearing and/or grading operations be performed without the presence of a qualified geotechnical engineer and an on-site, pre-

job meeting with the developer, the contractor, and soil engineer prior to all grading related operations. All construction activities would also be subject to Best Management Practices (BMPs) described in a Project-Specific Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) to reduce impacts from runoff associated with soil erosion (refer to **Section 4.9, Hydrology and Water Quality** of this EIR). Therefore, Construction-related impacts related to soil erosion would be less than significant with mitigation incorporated.

## Operations

Buildout of future development projects within the Project area would include primarily impervious surfaces. Pervious surfaces during Project operation would include, but not be limited to, maintained landscaping ballparks, and detention basins to be constructed with operational BMPs set forth in the Project's WQMP to minimize soil erosion or loss of topsoil (refer to **Section 4.9, Hydrology and Water Quality**, of this EIR). The Project also includes utility infrastructure improvements that further support the minimization of soil erosion, such as the inclusion of drainage improvements, including the installation of infiltration facilities and permeable landscape areas (refer to **Section 4.17, Utilities and Service Systems**, of this EIR). These public facilities would be maintained and upgraded as necessary and provided throughout each future developed site as needed. Therefore, operation-related impacts would be less than significant.

### Mitigation Measures

**MM GEO-1**      Construction Monitoring. No clearing and/or grading activities will be performed without the presence of a qualified geotechnical engineer. Construction monitoring, including testing for on-site pavement design, would be performed during and after the site rough grading operations. During and/or near the completion of site grading, additional expansion index testing would be conducted to characterize selected areas and to develop lot-specific recommendations for foundation design as related to the expansion potential of the graded site soils.

During construction, the qualified geotechnical engineer will perform additional observation and testing in correlation of the findings of the City-approved final geotechnical investigations, and if applicable, provide supplemental investigation, with the actual subsurface conditions exposed during construction.

**Impact 4.6-6:**      *Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

**Level of Significance: Less than Significant with Mitigation Incorporated**

## Construction

The majority of the Project site is relatively flat and consist of gently sloping areas. Locally, along the drainage course in the southwestern portion of the property, the slopes approach 2:1 (horizontal to vertical). However, considering the site geologic conditions and the overall gently sloping nature of the property, the potential for mass movement failures such as landslides or debris flows is considered very

low.<sup>6</sup> Refer to Impact 4.6-1 through 4.6-5 above for additional information regarding landslides, lateral spreading, subsidence, liquefaction, and collapse.

Although the Project would be subject to regional seismicity, all development would be designed in accordance with applicable state and local design standards to withstand effects from strong seismic ground-shaking. The Project is not in an area susceptible to liquefaction and the groundwater table is determined to be at a depth of 100 feet or more, and therefore not a concern for future development within the Project Site.

Grading activity would be conducted in accordance with the CBC and applicable design recommendations listed in development -specific Geotechnical Investigations to be approved by the City. Subsequent to grading, future development would be underlain by engineered fill soils. Total settlement of individual foundations will vary depending on the width of the foundation and the actual load supported.

Project site grading would be performed in compliance with the CBC and applicable local ordinances. Any existing undocumented fills would be removed and replaced with engineered compacted fill to strengthen the foundation. Provided that the grading and foundation design recommendations presented in a future development's Geotechnical Investigation are implemented, the settlements are expected to be within the structural tolerances of the proposed buildings.

Cut slopes excavated within the existing alluvial soils may be subject to surficial instability due to the lack of cohesion within these materials. Therefore, fill slopes could be overfilled during construction and then cut back to expose fully compacted soil. Where fills are to be placed against existing slopes steeper than five horizontal to one vertical, the fill could be properly keyed and benched into competent native materials. Therefore, stability fills would be implemented within these areas.

Overall, impacts would be less than significant with implementation of **MM GEO-1** along with applicable design features, and future developments' specific geotechnical design parameters from the applicable CBC and approved Geotechnical Investigation.

## Operations

The Project's operational phase would not result in substantial adverse effects involving strong seismic ground shaking or seismic-related ground failure. All development would be built in compliance with applicable state and local design standards and in accordance with the geologic recommendations set within the development's approved Geotechnical Reports. Therefore, impacts would be less than significant.

### **Mitigation Measures:**

Refer to **MM GEO-1** above.

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<sup>6</sup> LOR Geotechnical Group, Inc. (2022). *Preliminary Geotechnical Investigation APN's: 1167-151-22, -68, -71, & -74*. See **Appendix E1**

**Impact 4.6-7:** *Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

**Level of Significance:** *Less than Significant with Mitigation Incorporated*

## Construction

Soils that expand and contract in volume (“shrink-swell” pattern) are considered to be expansive and may cause damage to aboveground infrastructure as a result of density changes that shift overlying materials. Fine-grain clay sediments are most likely to exhibit shrink-swell patterns in response to changing moisture levels. According to the geotechnical investigation of the site, the majority of the site surficial soils consist of silty sands and sandy silts with a very low to low expansion potential. Although grading activities would likely involve relatively significant mixing and blending of the site materials and a reduction of the overall expansion potential of the fill soils, sandy silt soils of low expansion index would still remain beneath the fill in most areas. Future development within the Project would implement **MM GEO-1**, and design recommendations described in an approved Geotechnical Investigation, and CBC design standards to reduce impacts from expansive soils. Project construction associated with expansive soils would result in a less than significant impact.

## Operations

Future development within the Project would be subject to compliance with requirements set forth in the latest CBC that is current at the time of construction, implementing recommendations provided in a City-approved Geotechnical Investigation, and **MM GEO-1**. Project operations would result in a less than significant impact related to risks to life or property associated with expansive soils.

### **Mitigation Measures:**

See **MM GEO-1** above.

**Impact 4.6-8:** *Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

**Level of Significance:** *Less than Significant*

## Construction and Operations

The Project does not propose the use of septic tanks or an alternative wastewater disposal system. As illustrated in **Exhibit 3-8, Existing Sewer Plan** in **Section 3.0, Project Description** of this EIR, there are various existing sewer pipelines located along Commerce Way, De Berry Street, Van Buren Street, Pico Street, and Taylor Street which connect flows from the existing off-site residences and businesses. As development is proposed on the Project site, sewer improvements would be designed and sized to tie into the existing sewer system which is adequately sized to accommodate the Project’s projected flows. Wastewater collected from the Project would be conveyed through an existing 18-inch diameter sewer pipeline under I-215 to a wastewater treatment plant in the City of Colton. Future development facilitated by the Project would be required to analyze existing sewer capacity and determine if additional sewer

facilities are needed to accommodate future wastewater generation rates. All sewer facility improvements would be constructed in accordance with the City of Grand Terrace and City of Colton requirements. Therefore, a less than significant impact would occur.

**Mitigation Measures:**

No mitigation measures are required.

**Impact 4.6-9:** *Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

***Level of Significance: Less than Significant with Mitigation Incorporated***

### **Construction and Operations**

As previously mentioned, CRM Tech's Historical, Archeological, and Paleontological Resources Reconnaissance Report (**Appendix C4**) included a paleontological resources records search to identify known paleontological localities in the vicinity of the Project. Paleontological records search services were provided by the San Bernardino County Museum (SBCM) and the Natural History Museum of Los Angeles County (NHMLAC). These institutions did not identify any paleontological localities within the planning area or within a one-mile radius. The planning area is located on surface deposits of older Quaternary alluvium, and thus shallow excavations would be unlikely to uncover significant fossil vertebrate remains; however, deeper excavation may encounter the older Quaternary alluvium and fossil remains.

Disturbed and near-surface soils within the planning area have low sensitivity for paleontological resources, but the relatively undisturbed, fine-grained sediments underneath have a higher sensitivity for Pleistocene-age vertebrate fossil remains.<sup>7</sup>

Nevertheless, in the event that unknown paleontological resources are unearthed during ground-disturbance activities, future development within the Project may be required to enlist a qualified paleontologist and implement **MM GEO-2** (Paleontological Construction Monitoring and Compliance Program) to reduce potential impacts on paleontological resources or unique geologic features to less than significant levels. Therefore, with implementation of **MM GEO-2**, construction of the future Project components would not destroy a unique paleontological resource or site or unique geologic feature, thereby reducing impacts to a less than significant level.

Project operations would not involve any activities that impact paleontological resources. Therefore, no impact would occur.

**Mitigation Measures**

**MM GEO-2** All earth moving operations reaching beyond the disturbed surface soils, generally below the depth of two feet, should be monitored for paleontological resources. The monitor should be prepared to quickly salvage fossil remains as they are unearthed to avoid construction delays and should also collect samples of sediments that are

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<sup>7</sup> CRM TECH. (2017). *Historical, Archaeological, and Paleontological Resources Reconnaissance*. Available at **Appendix C2**

likely to contain fossils of small invertebrates and vertebrates. However, the monitor must have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Collected samples of sediments should be processed to recover small invertebrate and vertebrate fossils, and the recovered specimens should be identified and prepared for curation at a repository with permanent retrievable storage.

A report of findings, including an itemized inventory of recovered specimens, should be prepared upon completion of the steps outlined above. Approval of the report by the City of Grand Terrace would signify the completion of the mitigation program.

After Project design has been finalized to determine the precise extent and location of planned ground disturbances, and prior to construction activity, a qualified paleontologist (to be retained by the Applicant) will prepare a paleontological resource monitoring plan (PRMP) for approval by the City.

#### 4.6.6 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable geology and soil impacts have been identified.

#### 4.6.7 CUMULATIVE IMPACTS

Southern California is a seismically active region with a range of geologic and soil conditions. These conditions can vary widely within a limited geographical area due to factors, including differences in landforms and proximity to fault zones, among others. Therefore, while geotechnical impacts may be associated with the cumulative development, by the very nature of the impacts (i.e., landslides and expansive and compressible soils), impacts are typically site-specific and there is little, if any, cumulative relationship between the development of a project and development within a larger cumulative area, such as citywide development.

Impacts associated with seismic events and hazards would be considered significant if the effects of an earthquake on a property could not be mitigated by an engineered solution. The significance criteria do not require elimination of the potential for structural damage from seismic hazards. Instead, the criteria require an evaluation of whether the seismic conditions on a site can be overcome through engineering design solutions that would reduce to less than significant the substantial risk of exposing people or structures to loss, injury, or death. As stated throughout this section, the Project's compliance with applicable state and local design standards and regulations including implementation of **MM GEO-1** and **MM GEO-2** would ensure that impacts related to geology and soils are reduced to less than significant levels. Consequently, the Project's incremental contribution to cumulative geotechnical and seismic impacts would be less than significant. None of the Project characteristics would affect or influence the geotechnical hazards for off-site development and any cumulative development would be required to comply with the same applicable state and local design standards, regulations, goals, and policies. For these reasons, no significant cumulative geotechnical impacts would occur for the Project.



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## 4.7 GREENHOUSE GAS EMISSIONS

The purpose of this analysis is to evaluate potential short- and long-term greenhouse gas (GHG) emissions impacts resulting from implementation of The Gateway at Grand Terrace Specific Plan (Project) in the City of Grand Terrace (City). Information given in this section is based on:

- Kimley-Horn and Associates, Inc. (2023). *Greenhouse Gas Emissions Assessment*.

The GHG emissions assessment and associated calculations are provided in **Appendix F**.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project area. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 Planning Areas that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

### 4.7.1 ENVIRONMENTAL SETTING

#### Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO<sub>2</sub> is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO<sub>2</sub> emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO<sub>2</sub> emissions remains stored in the atmosphere.<sup>1</sup> **Table 4.7-1, Description of Greenhouse Gases** describes the primary GHGs attributed to global climate change, including their physical properties.

**Table 4.7-1: Description of Greenhouse Gases**

| Greenhouse Gas                    | Description   |
|-----------------------------------|---|
| Carbon Dioxide (CO <sub>2</sub> ) | CO <sub>2</sub> is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO <sub>2</sub> emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO <sub>2</sub> is variable because it is readily exchanged in the atmosphere. CO <sub>2</sub> is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs. |
| Nitrous Oxide (N <sub>2</sub> O)  | N <sub>2</sub> O is largely attributable to agricultural practices and soil management. Primary human-related sources of N <sub>2</sub> O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N <sub>2</sub> O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N <sub>2</sub> O is approximately 120 years. The Global Warming Potential of N <sub>2</sub> O is 298.   |
| Methane (CH <sub>4</sub> )        | CH <sub>4</sub> , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH <sub>4</sub> include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH <sub>4</sub> is about 12 years and the Global Warming Potential is 25.  |
| Hydrofluorocarbons (HFCs)         | HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.  |
| Perfluorocarbons (PFCs)           | PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.   |
| Chlorofluorocarbons (CFCs)        | CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.   |

<sup>1</sup> Kimley-Horn and Associates, Inc. (2023). *Greenhouse Gas Emissions Assessment*. Page 6. See **Appendix F**.

| Greenhouse Gas                          | Description   |
|---|---|
| Sulfur Hexafluoride (SF <sub>6</sub> )  | SF <sub>6</sub> is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF <sub>6</sub> is 23,900.  |
| Hydrochlorofluorocarbons (HCFCs)        | HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b. |
| Nitrogen Trifluoride (NF <sub>3</sub> ) | NF <sub>3</sub> was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.  |
| Source: Ibid. Page 7 – Table 1          |   |

## 4.7.2 REGULATORY SETTING

### Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

### Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

### U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) constitute a threat to public health

and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the U.S. EPA's assessment of the scientific evidence that form the basis for the U.S. EPA's regulatory actions.

### **Federal Vehicle Standards**

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the U.S. EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the U.S. EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, U.S. EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the U.S. EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017-2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO<sub>2</sub> in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017-2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the U.S. EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the U.S. EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 miles per gallon [mpg]), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the U.S. EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO<sub>2</sub> emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the U.S. EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by six to 23 percent over the 2010 baselines.

In August 2016, the U.S. EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.

In December 2021, the U.S. EPA finalized federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and are based on an assessment of current and future

technologies. The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050.<sup>2</sup>

## State

### California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO<sub>2</sub> equivalents (CO<sub>2</sub>e) in the world and produced 369 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e) in 2020.<sup>3</sup> The transportation sector is the State's largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, California Global Warming Solutions Act of 2006, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

### Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

### California Air Resource Board Scoping Plan

CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that would be adopted to reduce California's GHG emissions. CARB determined that achieving the 1990 emissions level would require a reduction of GHG emissions of approximately 29 percent below what would otherwise occur in 2020 in the absence of new laws and regulations (referred to as "business-as-usual").<sup>4</sup> The Scoping Plan evaluates opportunities for sector-specific reductions, integrates early actions and additional GHG reduction measures by both CARB and the State's Climate Action Team, identifies additional measures to

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<sup>2</sup> U.S. EPA, *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*, 2021. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed: January 2023.

<sup>3</sup> California Air Resources Board, *Current California GHG Emissions Inventory Data, 2000-2020 GHG inventory (2022 Edition)*, <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed December 2022.

<sup>4</sup> CARB defines business-as-usual (BAU) in its Scoping Plan as emissions levels that would occur if California continued to grow and add new GHG emissions but did not adopt any measures to reduce emissions. Projections for each emission-generating sector were compiled and used to estimate emissions for 2020 based on 2002–2004 emissions intensities. Under CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004.

be pursued as regulations, and outlines the adopted role of a cap-and-trade program.<sup>5</sup> Additional development of these measures and adoption of the appropriate regulations occurred through the end of 2013. Key elements of the Scoping Plan include:

- Expanding and strengthening existing energy efficiency programs, as well as building and appliance standards.
- Achieving a statewide renewables energy mix of 33 percent by 2020.
- Developing a California cap-and-trade program that links with other programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions (adopted in 2011).
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets (several sustainable community strategies [SCS] have been adopted).
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, heavy-duty truck measures, the Low Carbon Fuel Standard (amendments to the Pavley Standard adopted 2009; Advanced Clean Car standard adopted 2012), goods movement measures, and the Low Carbon Fuel Standard (adopted 2009).
- Creating targeted fees, including a public goods charge on water use, fees on gases with high global warming potential, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation.
- The California Sustainable Freight Action Plan was developed in 2016 and provides a vision for California's transition to a more efficient, more economically competitive, and less polluting freight transport system. This transition of California's freight transport system is essential to supporting the State's economic development in coming decades while reducing pollution.
- CARB's Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The Mobile Source Strategy includes increasing zero emission vehicles (ZEV) buses and trucks.

In 2012, CARB released revised estimates of the expected 2020 emissions reductions. The revised analysis relied on emissions projections updated in light of current economic forecasts that accounted for the economic downturn since 2008, reduction measures already approved and put in place relating to future fuel and energy demand, and other factors. This update reduced the projected 2020 emissions from 596 MMTCO<sub>2</sub>e to 545 MMTCO<sub>2</sub>e. The reduction in forecasted 2020 emissions means that the revised business-as-usual reduction necessary to achieve AB 32's goal of reaching 1990 levels by 2020 is now 21.7 percent, down from 29 percent. CARB also provided a lower 2020 inventory forecast that incorporated State-led GHG emissions reduction measures already in place. When this lower forecast is

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<sup>5</sup> The Climate Action Team, led by the secretary of the California Environmental Protection Agency, is a group of State agency secretaries and heads of agencies, boards, and departments. Team members work to coordinate statewide efforts to implement global warming emissions reduction programs and the State's Climate Adaptation Strategy.

considered, the necessary reduction from business-as-usual needed to achieve the goals of AB 32 is approximately 16 percent.

**Scoping Plan Update.** CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes the most recent science related to climate change, including anticipated impacts to California and the levels of GHG emissions reductions necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. By 2016, California had reduced GHG emissions below 1990 levels, achieving AB 32's 2020 goal four years ahead of schedule.

**2017 Scoping Plan.** In 2016, the Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan.<sup>6</sup> The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and support the Clean Power Plan and other Federal actions.

**2022 Scoping Plan.** Adopted December 15, 2022, CARB's 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious

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<sup>6</sup> California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017.



targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects.<sup>7</sup> CARB specifically states that Appendix D does not address other land uses (e.g., industrial).<sup>8</sup> However, CARB plans to explore new approaches for other land use types in the future.<sup>9</sup>

As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development. Therefore, Appendix D only applies to the residential portion of the Project as the Project proposes commercial, residential, public utilities, public park, and open space uses.

### **Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)**

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

### **Senate Bill 375 (The Sustainable Communities and Climate Protection Act of 2008)**

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans (RTP), and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include SCS in their RTPs for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

### **Assembly Bill 1493 (Pavley Regulations and Fuel Efficiency Standards)**

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the U.S. EPA's denial of an implementation waiver. The U.S. EPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO<sub>2</sub>e emissions and 75 percent fewer smog-forming emissions.

### **Senate Bill 1368 (Emission Performance Standards)**

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities.

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<sup>7</sup> California Air Resources Board. (2022). *2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions*, Page 21. Available at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents> (accessed March 2023).

<sup>8</sup> California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions*, Page 4, November 2022.

<sup>9</sup> California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions*, Page 21, November 2022.

SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO<sub>2</sub> per megawatt-hour.

### **Senate Bill 1078, SB 107 and SBX1-2 (Renewable Electricity Standards)**

SB 1078 (2002) required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 (2006) changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard (RPS) target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

### **Senate Bill 350 (Clean Energy and Pollution Reduction Act of 2015)**

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

### **Assembly Bill 398 (Market-Based Compliance Mechanisms)**

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb TACs and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

### **Senate Bill 150 (Regional Transportation Plans)**

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions

experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

### **Senate Bill 100 (California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases)**

Signed into Law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

### **Assembly Bill 1346 (Air Pollution: Small Off-Road Engines)**

Signed into Law in October 2021, AB 1346 requires CARB to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, consistent with federal law, by July 1, 2022. The bill requires CARB to identify and, to the extent feasible, make available funding for commercial rebates or similar incentive funding as part of any updates to existing applicable funding program guidelines to local air pollution control districts and air quality management districts to implement to support the transition to zero-emission small off-road equipment operations.

### **AB 1279 (The California Climate Crisis Act)**

AB 1279 establishes the policy of the State to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO<sup>2</sup> removal solutions and carbon capture, utilization, and storage technologies.

### **SB 1020 (100 Percent Clean Electric Grid)**

Signed on September 16, 2022, SB 1020 provides additional goals for the path to the 2045 goal of 100 percent clean electricity retail sales. It creates a target of 90 percent clean electricity retail sales by 2035 and 95 percent clean electricity retail sales by 2040.

### **SB 905 (Carbon Sequestration Program)**

Signed on September 16, 2022, SB 905 establishes regulatory framework and policies that involve carbon removal, carbon capture, utilization, and sequestration. It also prohibits the injecting of concentrated carbon dioxide fluid into a Class II injection well for the purpose of enhanced oil recovery.

### **AB 1757 (Nature-Based Solutions)**

Signed on September 16, 2022, AB 1757 requires State agencies to develop a range of targets for natural carbon sequestration and nature-based climate solutions that reduce GHG emissions to meet the 2030, 2038, and 2045 goals which would be integrated into a scoping plan addressing natural and working lands

## Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of state agencies.

**Executive Order S-3-05.** Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

**Executive Order S-01-07.** Issued on January 18, 2007, Executive Order S 01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

**Executive Order S-13-08.** Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying, and exploring strategies to adapt to climate change, and specifying a direction for future research.

**Executive Order S-14-08.** Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

**Executive Order S-21-09.** Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

**Executive Order B-30-15.** Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO<sub>2</sub>e. The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive

Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

**Executive Order B-55-18.** Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant state agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires state agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

**Executive Order N-79-20.** Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045, where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division, and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

### California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

**Title 20 Appliance Efficiency Regulations.** The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, §§1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

**Title 24 Building Energy Efficiency Standards.** California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The California Energy Commission (CEC) adopted the 2022 Energy Code on August 11, 2021, which was subsequently approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code

encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

**Title 24 California Green Building Standards Code.** The California Green Building Standards Code (CCR Title 24, Part 11) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The CEC adopted the 2022 CALGreen Code, which went into effect on January 1, 2023. The 2022 CALGreen Code includes voluntary Tier 2 standards, which exceed energy efficiency requirements by 15 percent. CALGreen voluntary Tier 2 standards are met through a variety of energy efficiency measures (e.g., on-site renewable energy, green power, bio-based construction materials, and reduced parking capacity) that exceed the mandatory CALGreen requirements.

## Regional

### South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the South Coast Air Basin, various utilities such as sanitation and power companies throughout the South Coast Air Basin, industry groups, and environmental and professional organizations. The Working Group has proposed a tiered approach to evaluating GHG emissions for development projects where SCAQMD is not the lead agency, wherein projects are evaluated sequentially through a series of "tiers" to determine whether the project is likely to result in a potentially significant impact due to GHG emissions.

With the tiered approach, a project is compared against the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 metric tons of CO<sub>2</sub>e (MTCO<sub>2</sub>e) per year for industrial projects and a 3,000 MTCO<sub>2</sub>e threshold was proposed for non-industrial projects but has not been adopted. The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three decision tree options. Under the Tier 4 first option, SCAQMD initially outlined that a project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. However, the Working Group did not provide a recommendation for this approach. The Working Group folded the Tier 4 second option into the third option. Under the Tier 4 third option, a project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO<sub>2</sub>e per service population per year. Tier 5 would exclude projects that implement off-site mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

### **Tier 3 Screening Thresholds**

When the tiered approach is applied to a proposed project, and the project is found not to comply with Tier 1 or Tier 2, the project's emissions are compared against a screening threshold, as described above, for Tier 3. The screening threshold formally adopted by SCAQMD is an "interim" screening threshold for stationary source industrial projects where the SCAQMD is the lead agency under CEQA. The threshold was termed "interim" because, at the time, SCAQMD anticipated that CARB would be adopting a statewide significance threshold that would inform and provide guidance to SCAQMD in its adoption of a final threshold. However, no statewide threshold was ever adopted, and the interim threshold remains in effect.

For projects for which SCAQMD is not a lead agency, no screening thresholds have been formally adopted. However, the SCAQMD Working Group has recommended a threshold of 10,000 MTCO<sub>2</sub>e/year for industrial projects and 3,000 MTCO<sub>2</sub>e/year for residential and commercial projects. SCAQMD determined that these thresholds would "capture" 90 percent of GHG emissions from these sectors, "capture" meaning that 90 percent of total emissions from all new projects would be subject to some type of CEQA analysis (i.e., found potentially significant).<sup>10</sup>

### **Southern California Association of Governments**

On September 3, 2020, Southern California Association of Governments' (SCAG) Regional Council adopted 2020 – 2045 RTP/SCS or Connect SoCal. The Connect SoCal charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The Connect SoCal is a long-range vision plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

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<sup>10</sup> Kimley-Horn and Associates, Inc. (2023). Greenhouse Gas Emissions Assessment. Page 17

## Local

### City of Grand Terrace General Plan

The Sustainable Development Element of the City of Grand Terrace General Plan (GP) provides policies and goals to reduce emissions and promote the air quality in the City of Grand Terrace. The Sustainable Development Element focuses on the concept of Environmental Sustainability. Environmental sustainability is defined as the ability of the environment to continue to properly function indefinitely. The element establishes goals and policies in the categories of energy, waste reduction, urban design, urban nature, transportation, environmental health, water and city buildings and facilities. The Grand Terrace GP goals and policies applicable to the Project include the following:

- Goal 9.2:**                **Reduce the total quantity of waste generated within the City requiring landfill disposal to meet or exceed the State waste diversion goals.**
- Policy 9.2.2**            Require all new development projects to recycle construction and demolition wastes.
- Goal 9.3:**                **Support sustainable development through good urban design practices.**
- Policy 9.3.1**            Incorporate “green” building practices into the review of all new or renovated development projects.
- Policy 9.3.2**            Site and building design in new developments should maximize opportunities for efficient energy performance.

### Laws, Ordinances, and Regulations

Laws, Ordinances, and Regulations (LOR)s are existing requirements and standard conditions that are based on local, state, or federal regulations or laws that are frequently required independently of CEQA review. Typical LORs and requirements include compliance with the provisions of the Building Code, SCAQMD Rules, etc. The City may impose additional conditions during the approval process, as appropriate.

- LOR GHG-1**            Require diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations §2449.
- LOR GHG-2**            Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the City’s Water Efficient Landscape requirements (Chapter 15.56 of the City’s Municipal Code).
- LOR GHG-3**            The Project shall be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, normally every three years, to incorporate improved energy efficiency technologies and methods. The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. The Title 24 Energy Efficiency Standards (Section 110.10) require buildings to be designed to have 15 percent of the roof area “solar ready” that will structurally accommodate later installation of rooftop solar panels. If future building



operators pursue providing rooftop solar panels, they will submit plans for solar panels prior to occupancy.

**LOR GHG-4**

The Project shall be designed in accordance with the applicable California Green Building Standards (CALGreen) Code (24 CCR, Part 11). The Building Official, or designee shall ensure compliance prior to the issuance of each building permit. These requirements include, but are not limited to:

- Design buildings to be water efficient. Install water-efficient fixtures in accordance with §4.303 (residential) and §5.303 (nonresidential) of the California Green Building Standards Code Part 11.
- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with §4.408.1 (residential) and §5.408.1 (nonresidential) of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with §4.410 (residential) and §5.410 (nonresidential) of the California Green Building Standards Code Part 11.
- To facilitate future installation of electric vehicle supply equipment (EVSE), residential construction shall comply with §4.106.4 (residential electric vehicle charging) of the California Green Building Standards Code Part 11 and nonresidential construction shall comply with §5.106.5.3 (nonresidential electric vehicle charging) of the California Green Building Standards Code Part 11.

### 4.7.3 SIGNIFICANCE CRITERIA UNDER CEQA

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions.<sup>11</sup>

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<sup>11</sup> California Code of Regulations, Section 15064.4

## GHG Thresholds

On December 5, 2008, the SCAQMD Governing Board adopted a 10,000 MTCO<sub>2</sub>e industrial threshold for projects where SCAQMD is the lead agency. The SCAQMD has not announced when staff is expecting to present GHG thresholds for land use projects where the SCAQMD is not the lead agency to the governing board. The City has not adopted project-specific significance thresholds, and instead relies on SCAQMD's recommended Tier 3 screening thresholds to determine the significance of a project's GHG emissions. As discussed under *Tier 3 Screening Thresholds*, the SCAQMD determined the 3,000 MTCO<sub>2</sub>e/year screening threshold for residential and commercial projects would "capture" 90 percent of GHG emissions from all new projects that are subject to some type of CEQA analysis. To provide the most conservative analysis, the City will apply the 3,000 MTCO<sub>2</sub>e/year screening threshold recommended by SCAQMD for residential and commercial projects.

## Methodology and Assumptions

Global climate change is, by definition, a cumulative impact of GHG emissions. Therefore, there is no project-level analysis. The baseline against which to compare potential impacts of the Project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities which almost doubled between 1970 and 2010 from approximately 27 gigatonnes (Gt) of CO<sub>2</sub>/year to nearly 49 GtCO<sub>2</sub>/year.<sup>12</sup> As such, the geographic extent of climate change and GHG emissions cumulative impact discussion is worldwide.

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2020.4.0 (CalEEMod). Details of the modeling assumptions and emission factors are provided in **Appendix F**. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling, and vendor (material delivery) trucks, and worker vehicles. The Project is a Specific Plan, and no development proposals are included at this time. Buildout of the Project would occur in multiple phases over several years and future development would be subject to project-specific City discretionary review and approval. However, construction activities associated with the Project are conservatively estimated to be completed within two phases: Phase 1 and Phase 2. For analysis purposes, Phase 1 was anticipated to commence in July 2023 for a duration of 16 months and Phase 2 was anticipated to commence in January 2025 for a duration of 24 months.

The Project's operational GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. These emissions categories are discussed below.

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<sup>12</sup> Intergovernmental Panel on Climate Change, Climate Change 2014 Mitigation of Climate Change Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2014.

- **Area Sources.** Area source emissions occur from hearths, architectural coatings, landscaping equipment, and consumer products. Additionally, the primary emissions from architectural coatings are volatile organic compounds (VOC), which are relatively insignificant as direct GHG emissions.
- **Energy Consumption.** Energy consumption consists of emissions from project consumption of electricity and natural gas. Primary uses of electricity and natural gas by the Project would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. Energy emissions are calculated based on consumption rates and emissions factors in CalEEMod. No changes were made to the default energy usage consumption rates or emissions factors.
- **Solid Waste.** Solid waste releases GHG emissions in the form of methane when these materials decompose. Solid waste emissions are calculated based on generation rates and emissions factors in CalEEMod.
- **Water and Wastewater.** Project GHG emissions would be generated from energy consumption associated with water and wastewater conveyance and treatment. Water and wastewater emissions are calculated based on the estimated consumption and emissions factors in CalEEMod.
- **Mobile Sources.** Mobile sources are emissions from motor vehicles. The Project's generated traffic was obtained from the Project's *Transportation Impact Analysis Report for The Gateway Specific Plan at Grand Terrace* prepared by Fehr and Peers (**Appendix J1**). Project trip generation from the Trip Generation Analysis is based on the following Institute of Transportation Engineers (ITE) land use categories:
  - ITE Land Use 220: Multifamily Housing (Low-rise) (375 dwelling units, 2,528 total daily vehicle trips).
  - ITE Land Use 210: Single-Family Detached Housing (160 dwelling units, 1,509 total daily vehicle trips).
  - ITE Land Use 215: Single-Family Attached Housing (160 dwelling units, 1,152 total daily vehicle trips).
  - ITE Land Use 820: Shopping Center (232.8 thousand square feet, 8,616 total daily vehicle trips).
  - ITE Land Use 151: Mini-Warehouse (91.9 thousand square feet, 133 total daily vehicle trips).
  - ITE Land Use 932: High-Turnover (Sit-Down) Restaurant (five thousand square feet, 536 total daily vehicle trips).
  - ITE Land Use 934: Fast-Food Restaurant with Drive-Through (six thousand square feet, 2,805 total daily vehicle trips).

The Project would generate a total of 17,279 daily trips. When accounting for internal capture and diverted trips, the Project would generate 14,535 daily trips. Mobile source emissions reflect the Project's net 14,535 daily trips.

Emissions reductions attributable mitigation measures were applied in CalEEMod, are derived from methodologies compiled in the California Air Pollution Control Officers Association (CAPCOA) report

Quantifying GHG Measures. Each measure was assessed to determine its consistency with CAPCOA criteria for the use of the measure. The following mitigation measures were applied in CalEEMod:

- Transportation Demand Management (TDM) Measures: TRT-1 (Implement Trip Reduction Program), TRT-3 (Provide Ride Sharing Program), and TRT-11 (Employee Vanpool/Shuttle). Mitigation Measure (MM) AQ-1 requires a TDM Program.
- A-1 - Electric Landscape Equipment. MM AQ-4 requires electric landscape equipment.
- Energy Efficiency Measures: BE-1 (Exceed Title 24) and BE-4 (Energy Efficient Appliances). MM GHG-2 requires the Project to comply with voluntary CALGreen Tier 2 standards and the mitigation requires a 15 percent improvement. MM GHG-3 requires energy efficient appliances.
- SW-1 (75 Percent Reduction in Solid Waste Disposal). This measure is required by MM GHG-4.

#### 4.7.4 PROJECT IMPACTS AND MITIGATION

**Impact 4.7-1:** *Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

*Level of Significance: Significant and Unavoidable.*

#### Short-Term Construction Greenhouse Gas Emissions

The Project would result in direct emissions of CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub> from construction equipment and the transport of materials and construction workers to and from the Project site. The GHG emissions only occur during temporary construction activities and would cease once construction is complete. The total GHG emissions (in CO<sub>2e</sub>) generated during construction are shown in **Table 4.7-2, Construction-Related Greenhouse Gas Emissions**.

**Table 4.7-2: Construction-Related Greenhouse Gas Emissions**

| Category                            | MTCO <sub>2e</sub> | 30-Year Amortized MTCO <sub>2e</sub> |
|-------------------------------------|--------------------|--------------------------------------|
| Construction Phase 1                | 1,074.91           | 35.83                                |
| Construction Phase 2                | 671.73             | 22.39                                |
| <b>Total Construction Emissions</b> | <b>1,746.64</b>    | <b>58.22</b>                         |

Source: Ibid. Page 22 – Table 2

As shown in **Table 4.7-2**, the Project would result in the generation of approximately 1,746.64 MTCO<sub>2e</sub> over the course of construction. Construction GHG emissions are typically summed and amortized over a 30-year period and then added to the operational emissions.<sup>13</sup> The amortized Project construction emissions would be 58.22 MTCO<sub>2e</sub> per year. Once construction is complete, the generation of these GHG emissions would cease.

#### Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions occur over the life of the Project. GHG emissions would result from direct emissions such as Project generated vehicular traffic, on-site combustion of natural gas, and

<sup>13</sup> The amortization period is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13, August 26, 2009).

operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water to, and wastewater from the Project, the emissions associated with solid waste generated from the Project, and any fugitive refrigerants from air conditioning or refrigerators.

Prior to issuance of a building permit, the City of Grand Terrace would review and verify that future development plans within the Project area demonstrate compliance with the current version of the Building and Energy Efficiency Standards. Future development projects would also be required to adhere to the provisions of CALGreen, which establishes planning and design standards for sustainable site development, and energy efficiency. Construction activities would be required to monitor air quality emissions using applicable regulatory guidance such as the SCAQMD Rules.

GHG emissions associated with the Project are summarized in **Table 4.7-3, Operational Greenhouse Gas Emissions**. As shown in **Table 4.7-3**, the Project's unmitigated emissions would be approximately 20,964 MTCO<sub>2</sub>e annually from both construction and operations. Project-related GHG emissions would exceed the 3,000 MTCO<sub>2</sub>e per year threshold. The majority of the GHG emissions (83 percent of unmitigated emissions and 86 percent of mitigated emissions) are associated with non-construction related mobile sources. Emissions of motor vehicles are controlled by State and Federal standards, and the Project has no control over these standards, as discussed further below.

**Table 4.7-3: Operational Greenhouse Gas Emissions**

| Land Use                   | Emissions Source                                      | MTCO <sub>2</sub> e per Year |              |
|----------------------------|---|------------------------------|--------------|
|                            |   | Unmitigated                  | Mitigated    |
| <b>Phase 1 Residential</b> | Area Source <sup>1</sup>                              | 231.35                       | 6.03         |
|                            | Energy Consumption – Natural Gas <sup>2</sup>         | 790.40                       | 0.00         |
|                            | Energy Consumption – Electricity <sup>3</sup>         | 733.08                       | 728.30       |
|                            | Estimated Solar PV Electricity Generated <sup>4</sup> | --                           | -728.30      |
|                            | Mobile <sup>5</sup>                                   | 6,174.45                     | 6,129.94     |
|                            | Waste <sup>6</sup>                                    | 275.41                       | 68.85        |
|                            | Water and Wastewater                                  | 223.28                       | 186.48       |
|                            | <b>Residential Total</b>                              | <b>8,428</b>                 | <b>6,391</b> |
| <b>Phase 1 Parks</b>       | Area Source <sup>1</sup>                              | 3.32                         | 2.31         |
|                            | Energy Consumption – Natural Gas                      | 0.00                         | 0.00         |
|                            | Energy Consumption – Electricity                      | 0.00                         | 0.00         |
|                            | Mobile  | 0.00                         | 0.00         |
|                            | Waste <sup>6</sup>                                    | 0.22                         | 0.05         |
|                            | Water and Wastewater                                  | 11.73                        | 11.01        |
|                            | <b>Parks Total</b>                                    | <b>15</b>                    | <b>13</b>    |
| <b>Phase 2 Commercial</b>  | Area Source <sup>1</sup>                              | 0.00                         | 0.00         |
|                            | Energy Consumption – Natural Gas <sup>2</sup>         | 198.41                       | 182.63       |
|                            | Energy Consumption – Electricity                      | 632.32                       | 592.95       |

| Land Use             | Emissions Source                              | MTCO <sub>2</sub> e per Year |               |
|----------------------|---|------------------------------|---------------|
|                      |   | Unmitigated                  | Mitigated     |
|                      | Mobile <sup>5</sup>                           | 11,224.96                    | 11,099.17     |
|                      | Waste <sup>6</sup>                            | 231.05                       | 57.76         |
|                      | Water and Wastewater                          | 175.40                       | 143.29        |
|                      | <b>Commercial Total</b>                       | <b>12,462</b>                | <b>12,076</b> |
| <b>Project Total</b> | Area Source <sup>1</sup>                      | 234.68                       | 8.34          |
|                      | Energy Consumption – Natural Gas <sup>2</sup> | 988.81                       | 182.63        |
|                      | Energy Consumption – Electricity <sup>3</sup> | 1,365.40                     | 592.95        |
|                      | Mobile <sup>5</sup>                           | 17,399.40                    | 17,229.11     |
|                      | Waste <sup>6</sup>                            | 506.68                       | 126.67        |
|                      | Water and Wastewater                          | 410.41                       | 340.78        |
|                      | <b>Operations Total</b>                       | <b>20,905</b>                | <b>18,480</b> |
|                      | <b>Phase 1 Construction <sup>7</sup></b>      | <b>35.83</b>                 | <b>35.83</b>  |
|                      | <b>Phase 2 Construction <sup>7</sup></b>      | <b>22.39</b>                 | <b>22.39</b>  |
|                      | <b>PROJECT TOTAL</b>                          | <b>20,964</b>                | <b>18,539</b> |
|                      | <i>Threshold</i>                              | <i>3,000</i>                 | <i>3,000</i>  |
|                      | <b>Exceeds Threshold?</b>                     | <b>Yes</b>                   | <b>Yes</b>    |

1. Mitigation Measure AQ-3 prohibits fireplaces and Mitigation Measure AQ-4 (refer to **Section 4.2**) requires electric landscaping equipment, which would reduce area source emissions.  
 2. Mitigation Measure GHG-2 requires building energy efficiency.  
 3. Mitigation Measure GHG-3 requires energy efficient all electric appliances (i.e., no natural gas) in residential projects.  
 4. Mitigation Measure GHG-1 requires the installation of photovoltaic solar panels on residential buildings to offset energy emissions.  
 5. Mitigation Measure AQ-2 (refer to **Section 4.2**) requires implementation of a TDM program.  
 6. Mitigation Measure GHG-4 requires a minimum of 75 percent solid waste diversion.  
 7. Construction amortized over 30 years based on the South Coast Air Quality Management District GHG CEQA Significance Thresholds Working Group (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

Source: Ibid, Page 22 – Table 2

**MM AQ-2** through **AQ-4** have been identified in **Section 4.2, Air Quality** to reduce operational emissions. **MM AQ-2** requires the implementation of a qualifying Commute Trip Reduction (CTR)/ Transportation Demand Management (TDM) plan to reduce mobile GHG emissions for all uses. **MM AQ-3** prohibits the use of any kind of fireplaces, and **MM AQ-4** requires that the Project’s Codes Covenants and Restrictions (CC&Rs) and/or tenant lease agreements include contractual language that all landscaping equipment used on-site shall be 100 percent electrically powered.

Mitigation Measures provided at the end of this Impact Statement would further reduce GHG emissions. **MM GHG-1** requires the installation of photovoltaic solar panels to offset energy emissions in residential buildings. It should be noted that **MM GHG-1** only applies to residential buildings as specific development for commercial buildings is not proposed at this time. **MM GHG-2** requires the Project to meet or exceed the voluntary CALGreen Tier 2 standards to further improve energy efficiency. **MM GHG-3** requires the residential projects to be all electric (i.e., no natural gas) and **MM GHG 4** requires the Project to divert 75 percent of waste from landfills. Additionally, LORs GHG-1 through GHG-4 are required by local, state, or federal regulations or laws and would also apply to the Project.

As shown in **Table 4.7-3** above, implementation of these MMs would reduce GHG emissions to 18,539 MTCO<sub>2</sub>e per year. As shown in **Table 4.7-3**, the Phase 1 residential portion of the Project and the Parks portion of the Project would be net zero energy. However, mobile emissions would remain at 6,129.04 MTCO<sub>2</sub>e per year for the residential portion and 11,099.17 for the commercial portion, raising the Project's emissions above the threshold of significance. Therefore, the overall Project's emissions would exceed the 3,000 MTCO<sub>2</sub>e threshold by 15,539 MTCO<sub>2</sub>e per year.

Additional mitigation to further reduce these emissions is not feasible at this time. The TDM program required by **MM AQ-2** would reduce GHG emissions resulting from commuter trips, however the number of delivery trips and retail customer trips would not be reduced by a TDM program, and the reduction to the residential and commercial trips would not reduce the impact from mobile sources to below the significance threshold.

Additional mitigation to reduce the Project's mobile emissions is not feasible due to the limited ability of the City of Grand Terrace to address emissions resulting from mobile sources and/or emissions generated by cars and trucks outside of the City's limits. As with all land use projects, the Project's mobile and transportation related GHG emissions are a function of two parameters: emissions control technology and vehicle miles traveled (VMT).

CARB is directly responsible for regulating mobile and transportation source emissions in the State and the federal government controls tailpipe and fuel efficiency requirements. California addresses emissions control technology through a variety of legislation and regulatory schemes, including the state's LCFS (Executive Order S-01-07), a regulatory program designed to encourage the use of cleaner low-carbon transportation fuels in California, encourage the production of those fuels, and therefore, reduce GHG emissions and decrease petroleum dependence in the transportation sector. The regulatory standards are expressed in terms of the "carbon intensity" of gasoline and diesel fuel and their substitutes. Different types of fuels are evaluated to determine their "life-cycle emissions" which include the emissions associated with producing, transporting, and using the fuels. Each fuel is then given a carbon intensity score and compared against a declining carbon intensity benchmark for each year. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets these declining benchmarks for each annual compliance period. In 2018, CARB approved amendments to the LCFS, which strengthened the carbon intensity benchmarks through 2030 to ensure they are in-line with California's 2030 GHG emission reduction target enacted through SB 32. This ensures that the transportation sector is meeting its obligations to achieve California's GHG reduction targets. The state is also implementing legislation and regulations to address the second parameter affecting transportation related GHG emissions by controlling for VMT. Examples of this include SB 375, which links land use and transportation funding and provides one incentive for regions to achieve reductions in VMT, and SB 743, which discourages VMT increases for passenger car trips above a region-specific benchmark. However, the state has determined that VMT regulations are not applicable to heavy trucks, such as those that will be used at future construction activity and commercial development within the Project and generate the majority of the Project's GHG emissions.

As such, the City of Grand Terrace has no regulatory control over emissions control technology and therefore limited ability to control or mitigate emissions associated with mobile source emissions associated with this Project.

The Project's non-mobile residential emissions are adequately mitigated through the imposed regulations and standard conditions, as well as mitigation measures. The Project's proposed mitigation measures and LORs address non-mobile emissions to the extent possible, by designing buildings to provide environmental design features, incorporate energy and water conservation measures, and provide electrical, heating, ventilation, lighting, and power systems that meet CALGreen Standards (**MM GHG-2** requires the Project to meet or exceed CALGreen Tier 2 standards, which exceeds code requirements). Further, the Project would divert 75 percent of solid waste from landfills (**MM GHG-4**) and require landscape equipment to be 100 percent electric (**MM AQ-4**).

Both California and the federal government have proposed ambitious standards to transition cars in California and the United States from gasoline engines to zero-emission vehicles. In August 2022, California approved the Advanced Clean Cars II regulations that codify Executive Order N-79-20 and establishes a timeline for ensuring all new cars and light truck sold in state will be 100% zero emission vehicles by 2035. In addition, the Low-emission Vehicle Regulations were amended to reduce smog-forming emissions from gasoline cars and heavier passenger trucks.<sup>14</sup> In August 2021, President Biden signed an Executive Order<sup>15</sup> that set a goal that 50% of all new passenger cars and light trucks sold in 2030 be zero-emission vehicles and begins rulemakings to achieve that and other reductions in vehicle emissions. In addition, the Inflation Reduction Act (IRA) has financial incentives for consumers to encourage the purchase of zero-emissions vehicles.<sup>16</sup>

As discussed above, CalEEMod takes into account certain mitigations, however it does not take into account the expected increased sales of and transition to zero-emissions vehicles as the Advanced Clean Cars II regulation takes effect in California and the federal regulations and IRA incentives take effect. Instead, CalEEMod only accounts for CARB's Truck and Bus Regulation and updates to CARB's Advanced Clean Cars regulations from 2017.<sup>17,18</sup> As zero-emissions vehicles are adopted, these tailpipe emissions will fall. However, neither the Project nor the City of Grand Terrace have authority to further require reduced tailpipe emissions, nor is there an approved methodology for taking expected reductions tailpipe emissions reductions into account. In addition, the brightline SCAQMD thresholds favor small projects and disfavor larger projects because smaller projects will simply have fewer cars and trips associated with them. However, there is no "per capita" threshold that has been adopted. Therefore, although **MM AQ-2** through **AQ-4** and **MM GHG-1** through **GHG-4** will take effect and the Project's non-mobile emissions will be reduced to less than significant, mobile emissions will remain and thus the Project's impact will remain significant and unavoidable.

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<sup>14</sup> [ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-li](https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-li).

<sup>15</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/08/05/executive-order-on-strengthening-american-leadership-in-clean-cars-and-trucks/>.

<sup>16</sup> <https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/>.

<sup>17</sup> <https://www.federalregister.gov/documents/2019/08/15/2019-17476/official-release-of-emfac2017-motor-vehicle-emission-factor-model-for-use-in-the-state-of-california>.

<sup>18</sup> <https://ww2.arb.ca.gov/sites/default/files/2023-01/emfac2017-volume-iii-technical-documentation.pdf>.



### **Mitigation Measures**

Refer to **MMs AQ-2 through AQ-4** in **Section 4.2, Air Quality**. The following additional mitigation is also required.

**MM GHG-1 Residential Renewable Energy Generation.** Prior to issuance of each residential building's permit for each development phase, residential development within the Project site shall be required to install solar photovoltaic (PV) panels or other source of renewable electricity generation on-site, based on the maximum roof area available for solar (i.e., solar-ready zone). The solar-ready zone shall comply with Section 110.10 of the 2022 California Energy Code and meet with access, pathway, ventilation, and spacing requirements, and exclude skylight area.

Each residential building shall include an electrical system and other infrastructure sufficiently sized to accommodate the PV arrays. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage. The schedule of photovoltaic system locations may be updated as needed.

**MM GHG-2 Building Energy Efficiency.** Prior to the issuance of building permits, future development within the Project shall be designed to achieve Leadership in Energy and Environmental Design (LEED) standards or meet or exceed CALGreen Tier 2 standards in effect at the time in order to exceed 2022 Title 24 energy efficiency standards by a minimum of 15 percent. Alternatively, the Project design shall include on-site renewable energy for future commercial development, for example the incorporation of solar panels into future Project commercial development, such that 15 percent of the on-site energy consumption is offset.

**MM GHG-3 Energy Efficient Appliances.** For residential projects, all major appliances (e.g., dishwashers, refrigerators, clothes washers and dryers, water heaters, and equipment for space heating) provided/ installed shall be electric (i.e., appliances that do not use natural gas, propane, or other fossil fuels) and Energy Star certified or of equivalent energy efficiency where applicable. Prior to the issuance of the certificate of occupancy, the City of Grand Terrace shall verify implementation of this requirement.

**MM GHG-4 Solid Waste Diversion.** Each future development within the Project shall divert a minimum of 75 percent of landfill waste. Prior to issuance of certificate of occupancy, a recyclables collection and load area shall be constructed in compliance with City standards for recyclable collection and loading areas.

**Impact 4.7-2:** *Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

**Level of Significance: Less Than Significant**

## SCAG's Connect SoCal

SCAG's Connect SoCal establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders S-03-05 and B-30-15. Connect SoCal contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. Connect SoCal is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. Connect SoCal is also supported by a combination of transportation and land use strategies that help the region achieve state GHG emissions reduction goals and Federal Clean Air Act (FCAA) requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to Connect SoCal is an appropriate indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the state. The Project's consistency with Connect SoCal goals is analyzed in detail in **Table 4.7-4, Connect SoCal Consistency**.

**Table 4.7-4: Connect SoCal Consistency**

| Connect SoCal Strategies  | Project Consistency  |
|---|--|
| GOAL 1: Encourage regional economic prosperity and global competitiveness.                        | Consistent: The Project would contribute to regional economic prosperity.  |
| GOAL 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.     | Consistent: Although this Project is not a transportation improvement project, the Project's would contribute to the local or regional mobility, accessibility, reliability, and travel safety for people and goods. At the local level, the Project includes a circulation plan that includes roadways, pedestrian, and bicycle facility improvements. More specifically, partial street improvements to Taylor Street, Van Buren Street, and De Berry Street and the extension of Taylor Street to Commerce Way would provide increased connectivity to regional circulation elements including I-215. The Project is located in an area that is planned to enhance the overall efficiency, aesthetics, and regional capacity to distribute goods. and products. |
| GOAL 3: Enhance the preservation, security, and resilience of the regional transportation system. | N/A: This is not a transportation improvement project and is therefore not applicable.   |
| GOAL 4: Increase person and goods movement and travel choices within the transportation system.   | N/A: This is not a transportation improvement project and is therefore not applicable.   |
| GOAL 5: Reduce greenhouse gas emissions and improve air quality.                                  | Consistent: The Project is located within an urban area and is in close proximity to existing transit routes and freeways. The Project includes Project Design Features such as carpool and vanpool parking, and clean fuel and electric vehicle   |

| Connect SoCal Strategies   | Project Consistency   |
|--|---|
|  | <p>(EV) infrastructure that would facilitate reducing GHG emissions from mobile sources. Additionally, the Project would implement <b>MM AQ-2</b> through <b>MM AQ-4</b> which requires Commute Trip Reduction (CTR)/ Transportation Demand Management (TDM) plan to reduce mobile GHG emissions for all uses, prohibits the use of any kind of fireplaces, and requires 100 percent electrically powered landscaping equipment. Further, the Project would implement <b>MM GHG-1</b> through <b>MM GHG-4</b> which requires PV solar panels in residential buildings, CALGreen Tier 2 standards, energy efficient residential appliances, and divert 75 percent of waste from landfills.</p>   |
| <p>GOAL 6: Support healthy and equitable communities</p>   | <p>Consistent: The Project’s circulation plan includes street, pedestrian, and bicycle facility improvements that would allow easy access to the other proposed mixed-uses. The Project would indirectly improve regional air quality by its location being in proximity to regional transportation corridors and in a location that reduces overall distances for product distribution.</p> <p>Furthermore, the Project would implement mitigation measures that include, but are not limited to, <b>MM AQ-2</b> which requires implementation of a TDM program to reduce single occupant vehicle trips and encourage public transit. These measures support reductions in mobile emissions and more equitable transportation options.</p> |
| <p>GOAL 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.</p>  | <p>Consistent: The Project would be an infill development which provides housing in close proximity to designated public transit facilities and routes. Additionally, the Project would provide a pedestrian-friendly environment that includes new Class II on-street bike lanes, sidewalks and streets connecting the commercial area with the residential neighborhoods, parks, and schools.</p>   |
| <p>GOAL 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.</p>  | <p>No Conflict: This is not a transportation improvement project and is therefore not applicable, but it does not conflict with this goal.</p>  |
| <p>GOAL 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.</p>  | <p>Consistent: The Project area is predominantly undeveloped with open space land. The Project would provide diverse housing types and improve surrounding roadways which then would improve the transportation network including public transit, within the City. These roadways provide connectivity the I-215, allowing local traffic to access regional transportation facilities.</p>  |
| <p>GOAL 10: Promote conservation of natural and agricultural lands and restoration of habitats.</p>  | <p>No Conflict: The Project proposes a mix of residential, commercial, and public facilities land uses in an urbanized area and would therefore not interfere with conservation of natural or agricultural lands. The Project site is not considered vital habitat and therefore would not conflict with restoration of habitats.</p>   |
| <p>Source: SCAG. (2020). <i>Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy)</i>. Available at: <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176</a> (accessed March 2023).<br/>                     Kimley-Horn and Associates, Inc. (2023). <i>Greenhouse Gas Emissions Assessment</i>. Page 28 -Table 4. See <b>Appendix F</b>.</p> |   |

The goals stated in Connect SoCal were used to determine consistency with the planning efforts previously stated. As shown in **Table 4.7-4**, the Project would be consistent with the stated goals of Connect SoCal.

Therefore, the Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets and thus does not conflict with this applicable plan.

### **California Air Resource Board Scoping Plan Consistency**

Adopted December 15, 2022, CARB's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission (ZE) transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place. Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include:

- Implementing SB 100 (achieve 100 percent clean electricity by 2045);
- Achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and
- Implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicle (ZEV) buses and trucks.

Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

As indicated above, GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in 2021 approximately 38 percent of the total electricity net generation in California was derived from natural gas combustion. Therefore, energy saving

measures, such as Title 24, reduces GHG emissions from the power generation facilities by reducing load demand.

### Scoping Plan Appendix D, Local Actions

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the State in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects.<sup>19</sup> CARB specifically states that Appendix D does not address other land uses (e.g., commercial).<sup>20</sup> However, CARB plans to explore new approaches for other land use types in the future (e.g., commercial, etc.).<sup>21</sup>

CARB Scoping Plan Appendix D lists potential actions that support the State's climate goals. However, the Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

Appendix D notes that residential and mixed-use residential projects that meet the below three priority areas are "clearly" consistent with the State's goals and projects that have these key project attributes should accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals. Appendix D also notes that lead agencies may determine, with adequate additional supporting evidence, that projects that incorporate some, but not all, of the key project attributes are consistent with the State's climate goals.<sup>22</sup>

- Transportation Electrification. Table 3 in the 2022 Scoping Plan, Appendix D, notes that to be clearly consistent with the State's goals, projects should provide EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the CALGreen code. The Project is consistent with this attribute as **MM GHG-2** requires Project EV charging to meet CALGreen Tier 2 standards.
- VMT Reduction. The Scoping Plan notes that to be consistent with the VMT reduction attribute, projects should be located on sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land; do not result in the loss or conversion of natural and working lands; reduces parking capacity; includes affordable to lower-income units; and consist of transit-supportive densities (minimum of 20 residential dwelling units per acre). The proposed Project is surrounded by existing urban uses, does not result in the loss of natural

<sup>19</sup> California Air Resources Board. (2022) 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 21. Available at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents> (accessed March 2023).

<sup>20</sup> Ibid. Page 4.

<sup>21</sup> Ibid. Page 4.

<sup>22</sup> California Air Resources Board, 2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions, Page 23, November 2022.

and working lands (i.e., it would redevelop underutilized primarily vacant disturbed land), and has a density of 20 dwelling units per acre. Additionally, the Project site is located in close proximity to existing transit routes and freeways. Furthermore, **MM AQ-2** would reduce mobile source emissions through the implementation of a TDM program. Although the Project does not propose affordable housing, the Project would help increase housing in the City as required by the City's Regional Housing Needs Assessment (RHNA) goals; refer to **Section 4.12, Population and Housing**. Further, the Project would implement a variety of parking reduction measures through the Travel Demand Management Measures; refer to **Section 4.15, Transportation**.

- **Building Decarbonization.** Building decarbonization involves maximizing energy efficiency and eliminating use of fossil fuel energy. **MM GHG-1** requires the Project to include renewable solar energy in residential buildings, **MM GHG-2** requires the Project to meet CALGreen Tier 2 energy efficiency standards, **MM AQ-4** requires the use of electric landscape equipment, **MM GHG-3** requires electric Energy Star rated appliances, and **MM AQ-3** also prohibits natural gas use.

The Project would be required to comply with applicable regulatory requirements promulgated through the 2022 Scoping Plan and would not conflict with any applicable actions. The proposed Project would include the Appendix D key residential and mixed-use project attributes as LORs or mitigation (refer to LOR GHG-1 through LOR GHG-4, **MM AQ-2** through **MM AQ-4**, and **MM GHG-1** through **MM GHG-4**). As noted above, these measures include EV charging stations, TDM measures, transit-supportive densities, and building decarbonization, as well as prohibiting wood-burning fireplaces, requiring solar panels, requiring energy conserving appliances, and requiring low-flow toilets and faucets. As such, the Project would be consistent with the 2022 Scoping Plan.

## Conclusion

The proposed Project would be consistent with the SCAG's Connect SoCal and the CARB Scoping Plan, and would be required to comply with existing regulations, including applicable measures from the City's General Plan. The Project would be directly affected by the outcomes of vehicle trips and energy consumption generating less carbon intensive emissions due to statewide compliance with future low carbon fuel standard amendments and increasingly stringent Renewable Portfolio Standards. As such, the Project would not conflict with any other State-level regulations pertaining to GHGs.

As shown in **Table 4.7-3**, approximately 92 percent of the Project Total GHG emissions are from energy and mobile sources which would be further reduced by the 2022 Scoping Plan goals described above (including achieve 100 percent clean electricity by 2045 [SB 100], achieving 100 percent zero emission vehicle sales in 2035 [Advanced Clean Cars II], and implementing the Advanced Clean Fleets regulation [ZEV buses and trucks]). Mobile source emissions would decline in the future due to statewide measures discussed above (including the reduction in fuels' carbon content, CARB's Advanced Clean Car Program, CARB's Mobile Source Strategy, fuel efficiency standards, etc.), as well as cleaner technology and fleet turnover. SCAG's Connect SoCal is also expected to help California reach its GHG reduction goals, with reductions in per capita transportation emissions of 19 percent by 2035.<sup>23</sup> The Project includes a mix of a

<sup>23</sup> California Air Resources Board. (2023). *SB 375 Regional Plan Climate Targets*. Available at: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> (accessed March 2023).

residential, commercial, and public facilities land uses that would potentially reduce the need to travel long distances for some residents and reduce associated GHG emissions.

At this time, it is not possible to quantify the emissions savings from future regulatory measures that have not yet been developed; nevertheless, it can be anticipated that Project operations would benefit from applicable measures enacted to meet State GHG reduction goals. The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan.

As discussed above, **MM AQ-2** would reduce mobile source emissions through the implementation of a TDM program. LOR GHG-1 through LOR GHG-4, as required by the California Building Code, would provide designated parking to promote the use of alternative fuels and clean fleets, water-efficient irrigation systems and devices, recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste, facilitate future installation of electric vehicle supply equipment, and limit idling times. Furthermore, **MM GHG-1** requires the Project to install solar photovoltaic systems, **MM GHG-2** requires the Project to meet or exceed CALGreen Tier 2 standards to further improve energy efficiency; **MM GHG-3** requires the residential projects to utilize energy efficient appliances; and **MM GHG-4** requires the Project to divert 75 percent of waste from landfills.

In conclusion, the Project does not conflict with the applicable plans that are discussed above and therefore, the Project does not have a significant impact.

### **Mitigation Measures**

Refer to **MM AQ-2** through **MM AQ-4** in **Section 4.2, Air Quality** and **MM GHG-1** through **MM GHG-4**, above.

## **4.7.5 SIGNIFICANT UNAVOIDABLE IMPACTS**

Even with implementation of regulatory requirements, standard conditions of approval, and feasible mitigation, the Project would result in significant and unavoidable impacts because it exceeds the 3,000 MTCO<sub>2</sub>e threshold set by the SCAQMD.

## **4.7.6 CUMULATIVE IMPACTS**

### **Cumulative Setting**

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have much longer atmospheric lifetimes of one year to several thousand years that allow them to be dispersed around the globe.

### **Cumulative Impacts**

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG

impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. As discussed above, the Project-related GHG emissions would exceed the 3,000 MTCO<sub>2</sub>e threshold of significance despite implementation of **MMs AQ-2** through **AQ-4** from **Section 4.2** and **MMs GHG-1** through **GHG-4**, and consistency with the Scoping Plan. Therefore, the Project could impede the State's GHG emission reduction targets. As such, the Project would result in a significant cumulative GHG impact.

### **Mitigation Measures**

Refer to **MMs AQ-2** through **AQ-4** in **Section 4.2** and **MMs GHG-1** through **GHG-4**, above.

## **4.7.7 REFERENCES**

California Air Resources Board. (2022). *2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions*, Page 21. Available at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

California Air Resources Board. (2023). *SB 375 Regional Plan Climate Targets*. Available at: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>

Kimley-Horn and Associates, Inc. (2023). *Greenhouse Gas Emissions Assessment*. See **Appendix F**

SCAG. (2020). *Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy)*. Available at: [https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan\\_0.pdf?1606001176](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176).



## 4.8 HAZARDS AND HAZARDOUS MATERIALS

### 4.8.1 INTRODUCTION

This section identifies existing conditions in The Gateway at Grand Terrace Specific Plan (Project) area and evaluates the Project's potential to cause a significant hazard to the public due to the use, handling, or release of hazardous materials; result in a safety hazard or excessive noise for projects within an airport land use plan or within two miles of an airport; interfere with an emergency plan; or expose people/structures to risk of loss, injury, or death involving wildland fires. Mitigation to avoid/reduce impacts is identified, as needed.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

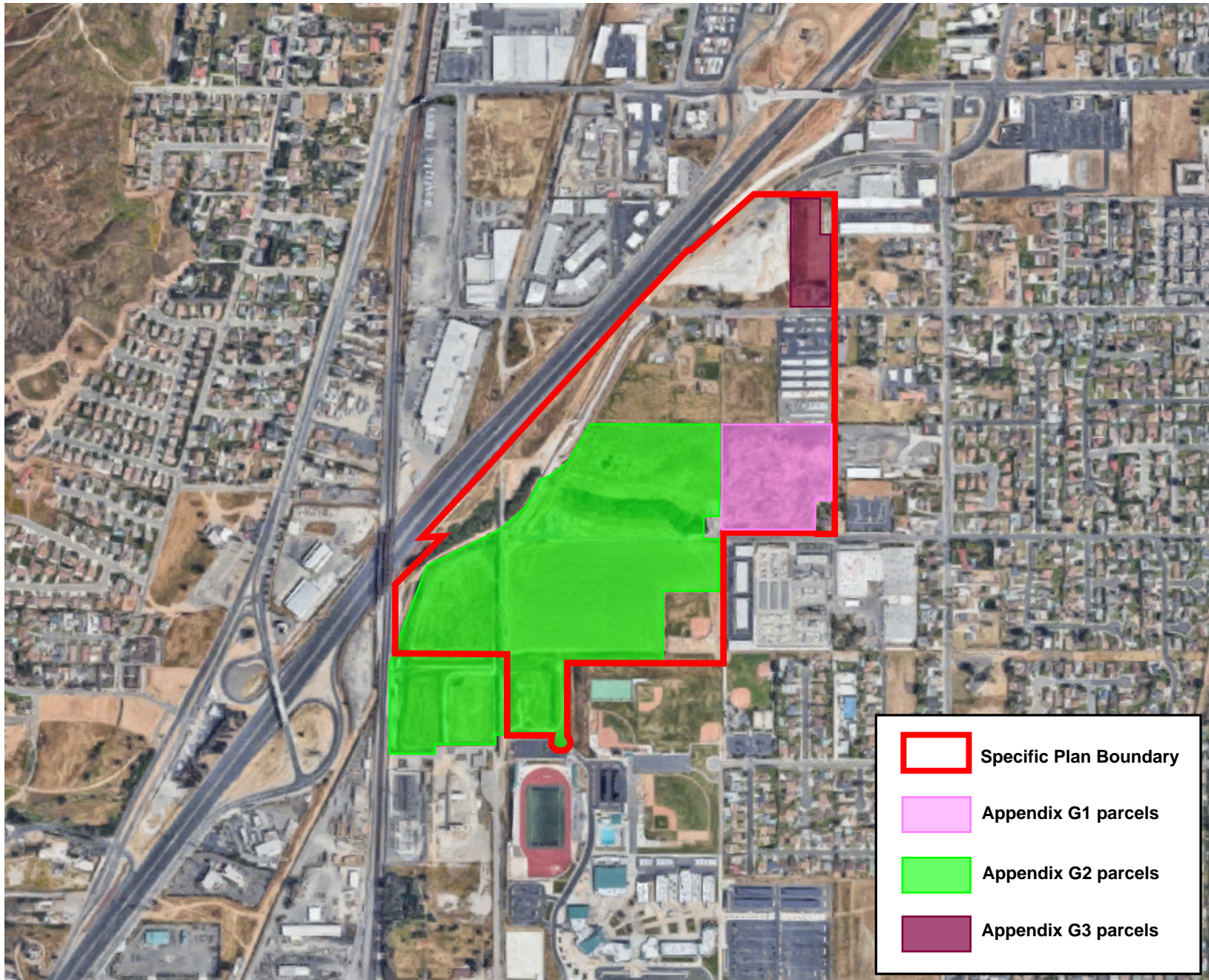
The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

Information in this section is primarily derived from the following documentation:

- Phase I and II Environmental Site Assessment (ESA) for Accessor Parcel Number (APNs): 1167-181-12 and -13, prepared by LOR Geotechnical Group, Inc (ESA Consultant) on December 29, 2020 (**Appendix G1**).
  - APNs: 1167-181-12 and -13 (referred herein as Appendix G1 parcels when describing parcels as a whole)
- Phase I ESA and Limited Site Characterization for APNs: 1167-151-22, -68, -71, and -74, prepared by LOR on February 13, 2017 (**Appendix G2**).
  - APNs: 1167-151-22, -68, -71, and -74 (referred herein as Appendix G2 parcels when describing parcels as a whole)
- Phase I ESA and Limited Site Characterization for APNs: 1167-161-03 and -04, prepared by LOR on February 10, 2017 (**Appendix G3**).
  - APNs: 1167-161-03 and -04 (referred herein as Appendix G3 parcels when describing parcels as a whole)
- Work Plan for Impacted Soil Removal and Management Former Union Pacific Railroad Right-of-way, prepared by Avocet Environmental, Inc. (Avocet) on February 22, 2022 (**Appendix G4**).

Although the Project is a specific plan project that would consist of individual smaller development projects, specific development is not proposed at this time. The technical studies listed above have been

prepared for certain areas as they were added to be included in the Project site boundaries, as depicted in **Exhibit 4.8-1, Environmental Site Assessment Areas**. Not all properties have been surveyed due to ownership issues and lack of accessibility. However, at the programmatic level, the surveys are referenced herein to describe findings for certain specific properties and determined to be adequate at a programmatic level to describe environmental conditions for the overall Project area. Individual development projects would be required to undergo its own independent CEQA analysis, including but not limited to an analysis of impacts related to hazards and hazardous materials.



**Exhibit 4.8-1:** Environmental Site Assessment Areas  
City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



Not to Scale

## 4.8.2 ENVIRONMENTAL SETTING

### Historical Uses of Portions of the Project Site

To obtain a history of previous site usage, the ESA consultant conducted a search in 2020 involving historical and topographic maps, aerial photographs, and assessor's parcel information for the ESA included in **Appendix G1**; the parcels are depicted in **Exhibit 4.8-1**. A representative of the owner of the **Appendix G1** parcels was also interviewed regarding their knowledge of the history of the site and its use, including with respect to environmental concerns. The ESA in **Appendix G1** concluded that the Project site was used mainly for agricultural purposes, including citrus cultivation, on the basis of historic maps dated between 1896-2012, and aerial photographs taken between 1931-2016.

More specifically, the ESA in **Appendix G1** concluded that the parcels evaluated included orange or walnut agricultural groves from at least the early 1900s until the 1950s. Beginning in the 1940s, and periodically to the 1970s, barn or canopy structures were built for various animals, including hogs, horses, and dairy cattle. These barn and canopy structures were removed beginning in the 1980s and all were demolished by 2002. In the 1980s, soil materials were imported to the subject parcels from construction and/or demolition projects, and later used to grade a motorcycle track, including trails and jumps. The Project site remains vacant to the present day, including soil piles associated with the former motorcycle track now disced and/or grown over with natural vegetation.

Properties surrounding these parcels were historically agricultural and residential until the 1960s to 1970s, when commercial and industrial development began. The adjacent property to the east was developed in the 1970s with what appeared to be the beginnings of the trailer repair and sales operation under Swertfeger's Equipment/SEI Trailer Sales & Repair, Inc., which relatively recently became occupied by Richardson's RV Center. The property to the east-southeast is a pump and engineering operation, the original owners (Wilden Pump & Engineering Company) of which began developing the property in the late 1960s, expanding over time. Adjacent to the north of the surveyed parcels and across Van Buren Street to the south are self-storage facilities which began development in the 1970s and 1980s. Commercial development to the south and southeast across Van Buren Street include multi-unit buildings, with operations that have included graphics-related businesses and technologies companies, some of which handled hazardous materials and/or generated hazardous wastes.

The ESA consultants also conducted a search involving historical aerial photographs, assessor's parcel information, City building records, City directory information, and historical maps for other parcels addressed in the report included as **Appendix G2**. A representative of the owner of these parcels completed a questionnaire regarding their knowledge of the history of the site and its use, including with respect to environmental concerns. The ESA included in **Appendix G2** concluded that the subject parcels were used mainly for agricultural purposes and associated farming infrastructure on the basis of the review of historic maps dated between 1896-2012, and aerial photographs taken between 1938-2012.

More specifically, the ESA in **Appendix G2** concluded that the parcels identified in **Appendix G2** historically included residential units, fuel and diesel aboveground tanks, large expansive agricultural fields, and a few other notable human-made features that were present on site between the 1850s and the 1960s. In the 1990s, two present day City of Riverside water well/pump houses were built at two locations on the north

side of Van Buren Street, adjacent to APN 1167-151-22. Additionally, irrigated farmland was present and Veterans Park ball fields were built adjacent to the east/southeast of the central and southeast portions (APN 1167-151-71 and -74), north of Pico Street. Early 2000s photographs showed the fuel oil and diesel above ground tanks had been removed from the southwest corner of the site, and the site appeared to have a large amount of construction items located within the north half of the site (APN 1167-151-68) located west of Taylor Street. Within the area (APN 1167-151-22) north of the Van Buren Street, wide plow marks and widened dirt roads were present.

An ESA was also completed in 2017 on parcels shown in the report in **Appendix G3**. A representative of the owner of the parcels completed a questionnaire regarding their knowledge of the history of the subject parcels and their use, including with respect to environmental concerns. The ESA concluded that the parcels were used mainly for agricultural purposes and associated farming infrastructure on the basis of historic maps dated between 1896-2012, and aerial photographs taken between 1938-2012. A former single-family residence at 21974 De Berry Street, built in 1963, was demolished and removed by 2012. The current single-family residence at 21992 De Berry Street was built in 1942.

## Environmental Site Assessment

The purpose of an ESA is to identify recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), and/or controlled recognized environmental conditions (CRECs) that may be associated with a site. The purpose of the Phase II ESA is to assess hazardous substances that may be associated with the potential impacts to on-site soil and soil vapor from historical on-site and off-site usage, and to determine if further Phase II ESA, remediation and/or mitigation is warranted prior to the planned development. A Phase I ESA was conducted for the **Appendix G1, G2, and G3** parcels. A Phase II ESA was conducted for the **Appendix G1** parcels.

**Appendix G1** concluded that soil piles, including reported import soil materials, and adjacent or adjoining off-site commercial and industrial sites have handled hazardous materials and/or generated hazardous wastes, including petroleum hydrocarbons and solvents.

Based on the findings of the Phase I ESA, the **Appendix G1** parcels did not exhibit any evidence of RECs, HRECs, or CRECs indicative of releases or threatened releases of hazardous substances and no further investigations were recommended. However, record searches conducted for the off-site adjacent properties found that the use of commercial and industrial materials at these properties is a REC as it has the potential for historical handling of hazardous materials and/or generation of hazardous wastes, including petroleum hydrocarbons and solvents which may have impacted the subsurface soil vapor beneath the **Appendix G1** parcels. In addition to the identified REC, two environmental concerns were identified near the parcels associated with **Appendix G1**, one related to historical grove usage, which may have impacted on-site soils with arsenic or organochlorine pesticides and the other related to imported soil materials associated with construction and/or demolition projects, which may have been impacted with contaminants. Based on the results of the Phase II ESA conducted to address the REC and two environmental concerns, there were no significant impacts to the parcels associated with **Appendix G1** on-site soils and soil vapor, including the soil piles that included imported materials. Refer to **Appendix G1** for further information.

**Appendix G2** concluded that no containers with hazardous wastes or hazardous materials were observed on-site. In addition, no soil staining or other evidence of contamination was observed. The CSBFD-HMD's records of the former power generation plant to the south included assessment, remediation, and closure of a 39,000-gallon concrete, in-ground transfer tank. A small release of fuel oil resulted in a relatively minor amount of impacted soil, which was excavated and transported off-site.

Furthermore, the former off-site power plant (Highgrove generating station) to the south, which included three approximate 3.36 million-gallon above ground storage tanks (ASTs) for diesel and fuel oil storage, had numerous environmental site assessments conducted, dating back to the 1980s. The more recent RCRA facility assessment under the Department of Toxic Substances Control (DTSC) resulted in a determination of "No Further Action/Remedy Complete" and DTSC issuance of a CEQA Notice of Exemption (NOE), which indicated there were no releases of hazardous substances that would adversely impact human health and the environment, and the former Highgrove generating station was stated to be acceptable for unrestricted use. Based on the above, there appears to be no significant impact to the **Appendix G2** parcels from the former off-site Highgrove power generation plant and associated on-site tank farm. As concluded in **Appendix G2**, no environmentally impaired properties, listed within these databases, have current or former releases of hazardous substances and/or petroleum products that have migrated to the Project site. Lastly, composite on-site soil testing was performed to assess the potential impacts from OCPs and arsenic.

Based on the results of the Phase I ESA, the **Appendix G2** parcels do not exhibit evidence of RECs indicative of releases or threatened releases of hazardous substances that would prohibit future development and no further tests or investigations were recommended. Refer to **Appendix G2** for further information.

**Appendix G3** determined that based on the age of the on-site residence, lead-based paint (LBP) and asbestos-containing materials (ACM) may be present. In addition, one four-gallon container with approximately one gallon of waste oil and minor leakage was present. Furthermore, composite on-site soil testing was performed to assess the potential impacts from OCPs and arsenic. Also, there are numerous sites listed in environmental regulatory databases within one mile of the **Appendix G3** parcels.

Based on the results of the Phase I ESA, the **Appendix G3** parcels do not exhibit evidence of RECs indicative of releases or threatened releases of hazardous substances that would prohibit future development, and no further tests or investigations were recommended. Refer to **Appendix G3** for more information.

## Airports

The nearest airstrip to the Project site is the San Bernardino International Airport in the City of San Bernardino, located at 1601 E. 3rd Street, #100, San Bernardino, CA 92408, located approximately six miles northeast of the northern Project site boundary.

## Wildland Hazards

According to CAL FIRE’s California Fire Hazard Severity Zone (FHSZ) Viewer, the Project site is not located within a moderate, high, or very high fire FHSZ.<sup>1</sup> The Project site is classified as a non-VHFHSZ and located within a local responsibility area (LRA) which are areas where local governments (i.e., the City of Grand Terrace) have financial responsibility for wildland fire protection. CAL FIRE uses the FHSZ classifications to evaluate potential wildfire hazards. A “hazard” is based on the physical conditions that create a likelihood and expected fire behavior over a 30 to 50-year period without considering mitigation measures such as home hardening, recent wildfire, or fuel reduction efforts. FHSZ maps are assigned a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered such as fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area.<sup>2</sup>

Refer to **Section 4.18, Wildfire**, for more information regarding Project-related wildfire impacts.

## Schools

The closest school to the Project site is Grand Terrace Highschool (21810 Main Street) located adjacently to PA 22. Grand Terrace Elementary School (12066 Vivienda Avenue) is located approximately 0.3-mile northeast of the Project site. Terrace Hills Middle School (22579 De Berry Street) is located approximately 0.6 mile to the east of the Project site.

### 4.8.3 REGULATORY SETTING

Hazardous materials and wastes are identified and defined by federal and state regulations for the purpose of protecting public health and the environment. Hazardous materials contain certain chemical, physical, or infectious properties that cause them to be considered hazardous. Hazardous wastes are defined in the Code of Federal Regulations Title 40, Volume 25, Parts 260–265 and in the California Code of Regulations (CCR), Title 22 Div. 4.5, Chapter 11, Article 1, § 66261. Over the years, the laws and regulations have evolved to deal with different aspects of the handling, treatment, storage, and disposal of hazardous substances.

## Federal

### Federal Toxic Substances Control Act of 1976

The Federal Toxic Substances Control Act of 1976 tasked the EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. The Federal Toxic Substances Control Act addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint.

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<sup>1</sup> CAL FIRE. (2021). *California Fire Hazard Severity Zone Viewer*. Retrieved from: <https://egis.fire.ca.gov/FHSZ/> (accessed April 2023).

<sup>2</sup> CAL FIRE. (2023). *Fire Hazard Severity Zones -What are FHSZ?* Retrieved from: <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/#explorefhsz> (accessed April 2022).

## Resource Conservation and Recovery Act of 1976

The objectives of RCRA are to protect human health and the environment from the potential hazards of waste disposal to conserve energy and natural resources, to reduce the amount of waste generated, and to ensure that wastes are managed in an environmentally sound manner. The RCRA of 1976, which amended the Solid Waste Disposal Act in 1984, addresses solid and hazardous waste management activities. RCRA affirmed and extended the “cradle-to-grave” system of regulating hazardous wastes. The use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act. The Hazardous and Solid Waste Amendments of 1984 also added Subtitle I, which governs USTs.

## Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as “Superfund,” was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants. The National Contingency Plan also established the National Priorities List, which is a list of contaminated sites warranting further investigation by the U.S. EPA. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

## State

Primary state agencies with jurisdiction over public health hazards and hazardous chemical materials management are the DTSC and the RWQCB. Other state agencies involved in hazardous materials management are the Department of Industrial Relations (California OSHA [Cal/OSHA] implementation), Office of Emergency Services (Office of Emergency Services–California Accidental Release Prevention Implementation), California Department of Fish and Wildlife, California Air Resources Board (CARB), California Department of Transportation (Caltrans), State Office of Environmental Health Hazard Assessment (Proposition 65 implementation), and the California Integrated Waste Management Board.

The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol and Caltrans. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. SCAQMD Rules and Regulations pertain to asbestos abatement (including Rule 1403), Construction Safety Orders 1529 (pertaining to asbestos), and 1532.1 (pertaining to lead) from Title 8 of the CCR. Hazardous chemical and biohazardous materials management laws in California include the following statutes:

- Hazardous Materials Management Act – requires that businesses handling or storing certain amounts of hazardous materials prepare a hazardous materials business plan, which includes an



inventory of hazardous materials stored on site (above specified quantities), an emergency response plan, and an employee training program.

- Hazardous Waste Control Act (California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq.) – authorizes the DTSC and local certified unified program agencies to regulate facilities that generate or treat hazardous waste.
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) – requires the governor to publish and update, at least annually, a list of chemicals known to the state to cause cancer, birth defects, or other reproductive harm, and to inform citizens about exposures to such chemicals.
- Hazardous Waste Management Planning and Facility Siting, also known as the Tanner Act (Assembly Bill [AB] 2948, 1986) – requires counties to prepare, for California DTSC approval, hazardous waste management plans, and prescribes specific public participation activities, which must be carried out during the local land use permit process for siting new or expanding off-site commercial treatment, storage, and disposal facilities.
- Hazardous Materials Storage and Emergency Response (AB 2185) – requires the immediate reporting to local fire departments and Offices of Emergency Services of any release or threatened release of a hazardous material, regardless of the amount handled by the business.
- California Medical Waste Management Act (California Health and Safety Code, §§ 117600–118360) – establishes procedures for the proper handling, storage, treatment, and transportation of medical waste.
- Land Disposal Restrictions (CCR, Chapter 18, Title 22) – set up by Congress in 1984 for the U.S. EPA, ensures that toxic constituents present in hazardous waste are properly treated before hazardous waste is land disposed.

State regulations and agencies pertaining to hazardous materials management and worker safety are described in the following subsections.

### **California Environmental Protection Agency**

The boards, departments, and offices that make up the California Environmental Protection Agency (CalEPA) include CARB, the Department of Pesticide Regulation, the Department of Resources Recycling and Recovery, the DTSC, the Office of Environmental Health Hazard Assessment (OHS), and the State Water Resources Control Board (SWRCB). These boards, departments and offices were placed within the CalEPA “umbrella” to create a cabinet-level voice for the protection of human health and the environment (such as clean air, clean water, clean soil, safe pesticides, and waste recycling and reduction) to assure the coordinated deployment of state resources.

### **Department of Toxic Substances Control**

The mission of the DTSC is to protect California’s people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products. As part of its mission, the DTSC maintains its Enforcement and Emergency Response Division (EERD) to administer the technical

implementation of the State Unified Program. The Unified Program is a consolidation of six environmental programs that are implemented at the local level. Those agencies at the local level with responsibility for the program are known as Certified Unified Program Agencies (CUPA). The DTSC also has the responsibility of overseeing and regulating hazardous materials, generators, transporters, and facilities that may use, generate, store, transport, or recycle, hazardous materials.

### **State Water Resources Control Board**

Brownfields are underutilized properties where reuse is hindered by the actual or suspected presence of pollution or contamination. The SWRCB Brownfield Program goals are to:

- Expedite and facilitate site cleanups and closures for brownfield sites to support reuse of those sites;
- Preserve open space and greenfields;
- Protect groundwater and surface water resources, safeguard public health, and promote environmental justice; and
- Streamline site assessment, clean up, monitoring, and closure requirements and procedures within the various SWRCB site cleanup programs.

Site clean-up responsibilities for brownfields primarily reside within four main SWRCB programs: the UST Program; Site Cleanup Program; Department of Defense Program; and the Land Disposal Program. These SWRCB cleanup programs are charged with ensuring sites are remediated to protect California's surface and groundwater and return them to beneficial uses.

### **Government Code Section 65962.5**

Pursuant to Government Code § 65962.5, environmental regulatory database lists were reviewed to identify and locate properties with known hazardous substance contamination within the proposed Project site (California Government Code, § 65960 et seq.). Four state agencies are required to provide lists of facilities that have contributed, harbor, or are responsible for environmental contamination within their jurisdiction. The four state agencies that are required to provide these lists to the Secretary for Environmental Protection include the DTSC, the State Department for Health Services, the SWRCB, and the California Integrated Waste Management Board. The Secretary for Environmental Protection then takes each of the four-respective agency lists and forms one list, referred to as the Hazardous Waste and Substances Site List – Site Cleanup (Cortese List), which is made available to every city and/or county in California.

### **California Health and Safety Code Section 25501**

California law defines a hazardous material as any material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a present or potential hazard to human health and safety or to the environment if released in the workplace or the environment (California Health and Safety Code § 25501).

## California Occupational Safety and Health Administration

Cal/OSHA is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. California OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR 337–340). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

## California Hazardous Waste Control Law

The California Hazardous Waste Control Law (Health and Safety Code, Division 20, Chapter 6.5) is administered by the CalEPA to regulate the management of hazardous wastes. While the Hazardous Waste Control Law is generally more stringent than RCRA, until the U.S. EPA approves the California hazardous waste control program (which is charged with regulating the generation, treatment, storage, and disposal of hazardous waste), both the state and federal laws apply in California. The Hazardous Waste Control Law lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

## California Accidental Release Prevention Program

Similar to the Federal Risk Management Program, the California Accidental Release Prevention Program includes additional state requirements as well as an additional list of regulated substances and thresholds. The regulations of the program are contained in CCR Title 19, Division 2, Chapter 4.5. The intent of California Accidental Release Prevention Program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws.

## California Health and Safety Code

The handling and storage of hazardous materials is regulated by Division 20, Chapter 6.95 of the California Health and Safety Code. Under §§ 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan (HMBP). HMBPs contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the State. Chapter 6.95 of the Health and Safety Code establishes minimum statewide standards for HMBPs.

In addition, in the event that a facility stores a quantity of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare a risk management plan and California Accidental Release Plan. The risk management plan and California Accidental Release Plan provide information on the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts (California Health and Safety Code, Chapter 6.95).

## Local

### City of Grand Terrace General Plan

The following goal and policy from the City of Grand Terrace General Plan (Grand Terrace GP) applies to the Project:

#### ***Public Health and Safety Element***

**Goal 5.6:** Minimize the exposure of residents, business owners, and visitors to the impacts of urban and wildland fires.

**Policy 5.6.3** Encourage the use of fire-resistive construction materials.

### City of Grand Terrace Municipal Code

#### ***Sections 18.36.040 – Prohibited Uses***

City Municipal Code (Grand Terrace MC) § 18.36.040 prohibits development within commercial and restricted manufacturing districts, and industrial districts from storing hazardous and/or flammable materials which includes, but is not limited to, pallet yard, and other wood products, and tire storage.

#### ***Section 13.20.150 – Spill containment***

Grand Terrace MC § 13.20.150 requires that any person(s) storing chemicals or chemical waste outdoors to install spill containment subject to requirements established by the Director of Building & Safety/Public Works and Federal, State and County standards. Persons storing any other materials or equipment that are potential sources of stormwater pollution are also required to install spill containment. No person shall operate a spill containment system that could allow incompatible materials and/or wastes to mix, thereby creating hazardous or toxic substances in the event of failure of one or more containers.

#### ***Section 15.56.080 – Soil Management Report***

Grand Terrace MC § 15.56.080 requires each project applicant to prepare a soil management report/plan in order to reduce runoff and encourage healthy plant growth. Part of the soil management report requires the project applicant to perform tests on soil samples to determine Soil texture; Infiltration rates determined by laboratory test or soil texture infiltration rate table; pH; Total soluble salts; Sodium; Percent organic matter; and recommendations to reduce or eliminate contaminated soils. Each project applicant shall submit documentation verifying implementation of soil analysis report recommendations to the City with certificate of completion.

#### ***Section 15.58.060 – Waste Management Plan***

Grand Terrace MC § 15.58.060 requires that every applicant submit a properly completed "waste management plan" (WMP) to the WMP compliance official, in a form as prescribed by that official, as a portion of the building or demolition permit process.

## City of Grand Terrace Local Hazard Mitigation Plan

The City's Local Hazard Mitigation Plan (LHMP) was last updated in 2017. The LHMP's purpose is to identify potential City hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term damage to people and property from natural and man-made hazards. The plan identifies vulnerabilities, prioritizes mitigation actions, evaluates resources and identifies mitigation shortcomings, provides future mitigation planning, and maintenance guidelines for the existing plan.

### 4.8.4 SIGNIFICANCE CRITERIA UNDER CEQA

State CEQA Guidelines, Appendix G contains the Environmental Checklist Form, which includes questions concerning hazards and hazardous materials. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- Impair implementation of or physically interfere within an adopted emergency response plan or emergency evacuation plan; and
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

## Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria as the basis for determining the level of impacts related to hazards and hazardous materials. The determination that a Project component would or would not result in "substantial" adverse effects on standards related to hazards and hazardous materials considers the available policies and regulations established by regional and state agencies and the amount of deviation from these policies in the Project's components. Where significant impacts remain, feasible mitigation measures are recommended, where warranted, to avoid or lessen the Project's significant adverse impacts.

The baseline conditions and impact analyses are based on the information provided in the ESAs (**Appendices G1 through G3**) conducted for the three areas evaluated within the Project site, which are shown in **Exhibit 4.8-1**. Although the areas shown in **Exhibit 4.8-1** are not inclusive of the entire Project site, they have been determined to represent the entire area on a programmatic level. Site-specific surveys would be required for any future development proposed within the Project site.

### Site Reconnaissance

Site reconnaissance of the; Appendix G1 parcels was conducted on October 13, 2020 as part of the Phase I and II ESA (**Appendix G1**); of the Appendix G2 parcels during subsequent visits between January 16, 2017 through January 18, 2017 as part of the Phase I ESA (**Appendix G2**); and of the Appendix G3 parcels on January 6, 2017 as part of the Phase I ESA (**Appendix G3**). As stated in **Section 4.8.1**, areas outside of the Appendix G1, G2, and G3 parcels were not surveyed due to ownership issues and/or lack of accessibility. ESAs would be conducted as part of future development that would include, but not limited to, site reconnaissance to identify visible environmental concerns. Refer to **Appendices G1, G2, and G3** for further detail.

### Records Search

For records relating to environmental compliance and hazardous materials/waste within the County, the County of San Bernardino Fire Protection District – Hazardous Materials Division (CSBFPD-HMD) generally is the lead agency. The California Regional Water Quality Control Board, Santa Ana Region (CRWQCB-SAR) or CSBFPD-HMD may be the lead agency for soil and groundwater investigations and remediation. These agencies were contacted directly by the ESA consultants for a records review search for the **Appendix G1, G2, and G3** parcels between 2017 and 2020. Federal, state, and local environmental databases obtained by the ESA Consultant were also searched to obtain information regarding landfills, underground storage tanks (UST) sites, above ground storage tank (AST) sites, waste storage sites, toxic chemical sites, contaminated well sites, and other sites containing hazardous materials as part of the ESAs (refer to **Appendices G1, G2, and G3**, respectfully, which provide complete reports of the federal, state, tribal, and proprietary records searched).

## 4.8.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.8-1:** *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

**Level of Significance:** *Less than Significant*

### Construction

Potentially hazardous materials would be utilized during construction phases of the Project. These materials typically consist of gasoline, diesel fuel, lubricants, and other petroleum-based products used for construction-related machinery. The routine transport, handling, or disposal of these hazardous materials would be temporary and adhere to applicable federal and state laws and regulations pertaining to hazardous materials including, but not limited to, those implemented by the U.S EPA, the California DTSC, and Cal/OSHA.

Additionally, all future development would adhere to the general Grand Terrace MC Chapter 8.54 general solid waste regulations in order to reduce the risk to life and property from the use, transportation, storage, treatment, or disposal of hazardous materials and wastes. Furthermore, Grand Terrace MC §13.20.150 would require future development projects within the Project site to comply with spill containment requirements which could include, but not be limited to, the installation of infiltration systems, berms, non-absorbent dikes, and absorbent socks. Grand Terrace MC §15.58.060 would also subject future development projects to diversion requirements which requires that 60 percent of the estimated tonnage of construction and demolition material generated from each covered project shall be diverted from disposal. Prior to construction, each project-specific applicant would be required to submit a waste management plan that accurately depicts that the specific project meets the diversion rate. Compliance with federal, state, and local regulations would ensure that impacts associated with the routine transport, use, or disposal of hazardous materials are less than significant.

## **Operations**

Operations of the Project would not represent a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Any potentially hazardous material handled on the Project site would be limited in both quantity and concentrations, consistent with other similar residential and commercial land uses located in the City.

All future development projects that handle hazardous materials would be required to comply with all applicable regulatory framework concerning hazardous material generation, usage, and transportation to ensure that operational activities would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. For example, as mandated by the OSHA, all hazardous materials stored on the Project site would be accompanied by a Material Safety Data Sheet, which would inform employees and first responders as to the necessary remediation procedures in the case of accidental release. Furthermore, all future development projects that handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid; 500 pounds of a solid; or extremely hazardous substances above the threshold planning quantity; would be required to submit a Hazardous Materials Business Plan (HMBP) in accordance with §§ 25500–25543.3 of the Health and CSBFPD.<sup>3</sup> The purpose of the HMBP is to prevent or minimize harm to public health and the environment from a release or threatened release of a hazardous material. This is accomplished by providing emergency responders with the necessary information to effectively protect the public.

Therefore, compliance with federal, state, and local regulations, related to the transport, use, and disposal of hazardous materials during operations would result in potential impacts being less than significant.

### **Mitigation Measures**

No mitigation is needed.

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<sup>3</sup> County of San Bernardino. (2023). *CSBFPD – HMBP*. Retrieved from: <https://sbcfire.org/hazmatbusinessplan/> (accessed April 2023).

**Impact 4.8-2:** *Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

**Level of Significance:** *Less than Significant with Mitigation Incorporated*

## Construction

Development within the Project site could result in the accidental upset or release of hazardous materials caused by accidental spillage during construction activity including but not limited to the exposure of contaminated soil during grading activities. ESAs (**Appendices G1** through **G3**) conducted for three groups of parcels within the Project site evaluated the potential for hazardous materials.

As discussed in **Section 4.8.2, Environmental Setting**, the ESA included as **Appendix G1** concluded that the evaluated parcels did not exhibit evidence of HRECs and/or CRECs and no further investigations were recommended, with the exception of an identified REC and two environmental concerns. However, the subsequent Phase II ESA, conducted to address the REC and two environmental concerns, found that none of the soil samples analyzed for environmental concerns contained detected concentrations at or above the laboratory reporting limits. As such, the Phase II ESA concluded that there are no significant impacts related to on-site soil and soil vapor from the identified REC and two environmental concerns, including the soil piles that include imported materials. Thus, a less than significant impact would occur.

The ESA included as **Appendix G2** also concluded that the evaluated parcels did not exhibit evidence of RECs, HRECs, and/or CRECs and no further investigations were recommended unless obvious signs of soil contamination, including staining or odor, are found to be present during grading activities. If soil contamination is encountered during ground-disturbance activities within the Project site, construction would halt and all future project-specific applicant/contractors for would prepare a Phase II ESA to evaluate the potential environmental concerns, pursuant to Mitigation Measure (**MM HAZ-1**).

The ESA included in **Appendix G3** concluded that the parcels evaluated did not exhibit evidence of RECs, HRECs, and/or CRECs and no further investigations or tests were recommended. However, it was determined that based on the age of the residence on-site, LBP and ACM may be present. It is also noted that possible subsurface structures, such as old cesspools and/or septic systems should be expected. **MM HAZ-2** requires that any future project inclusive of this parcel be required to conduct ACM and LBP surveys of the existing on-site buildings. Demolition of the on-site buildings has the potential to cause airborne asbestos and LBP concentrations that would exceed federal and state thresholds and may pose an exposure risk for construction workers. **MM HAZ-2** includes measures for the safe dismantling and removal of building components and debris and prevents the accidental release of lead and asbestos, thereby protecting workers and the public from potential exposure to hazardous materials and wastes during demolition. **MM HAZ-3** requires the evaluation of paint waste, should paint be separated from building materials. In the event that cesspools and/or septic systems are encounter, **MM HAZ-4** would also be implemented which would require that future developers provide for the removal and disposal of the septic systems in accordance with applicable laws and regulations.

Future development project located in areas not analyzed in the ESAs included as **Appendices G1** through **G3** would be required to prepare a Phase I ESA to determine if a potential hazard exists (**MM HAZ-5**). If



the Phase I determines that there are hazardous materials, a Phase II ESA would be prepared to address the potential environmental concern(s).

Lastly, roadway improvements of Taylor Street near the Applicant-owned Union Pacific Railroad (UPRR) right-of-way could unearth arsenic-impacted soil. Consequently, Avocet Environmental, Inc. prepared a work plan in accordance with the CSBFPD's Voluntary Cleanup Program, described below.

The work plan, approved by the CSBFPD on February 23, 2022, and attached as **Appendix G4**, includes procedures for characterizing and managing the arsenic-impacted soil and is intended to serve as a Soil Management Plan (SMP). Prior to the widening of Taylor Street, the City would remove the arsenic-impacted soil from beneath the UPRR right-of-way and transport it off-site for disposal. The removal action and transport of the affected soil would be subject to all applicable federal, state, and local regarding handling, transport, and disposal of hazardous materials.

With implementation of **MMs HAZ-1** through **HAZ-5** and compliance with applicable federal, state, and local regulation, impacts would be reduced to a less than significant level.

## **Operations**

Hazardous materials used during operation would include, but limited to standard maintenance (i.e., lawn upkeep, exterior painting and similar activities) and use of commercially available products (e.g., gas, oil, paint). Usage of hazardous materials would be subject to all applicable federal, state, and local regulations to minimize the foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, the use of hazardous materials within the Project site would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accidental release of hazardous materials into the environment. A less than significant impact would occur related to Project operations.

### **Mitigation Measures**

**MM HAZ-1** Applicable to future development projects within the Project site, if signs of soil contamination, including staining or odor are encountered during ground-disturbance activities, construction shall halt, and the project-specific applicant/contractor is required to prepare a Phase II ESA to evaluate the potential environmental concern. If test results are positive for a potential impact, then remediation would be required to clean and detoxify the site, prior to continuing ground-disturbing activities.

**MM HAZ-2** Prior to issuance of a demolition permit of the on-site structures, preparation of a demolition plan for the safe dismantling and removal of building components and debris including a plan for lead and asbestos abatement shall be prepared. The demolition plan shall be submitted to the City's (Building and Safety Department) for review and approval prior to commencement of demolition activities.

Prior to demolition activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and California Division of Occupational Safety and Health (Cal/OSHA) certified building inspector to determine the presence or absence of asbestos-containing materials (ACMs). If ACMs are located, abatement of asbestos shall be completed prior to any activities that would disturb ACMs or create an airborne asbestos hazard.

Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403.

**MM HAZ-3** If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist prior to any activities that would create lead dust or fume hazard. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the Building Official.

**MM HAZ-4** If old cesspools and/or septic systems are encountered during the future development of the Project Site identified in the Phase I ESA included as DEIR Appendix G3 the landowner/developer shall provide for the removal and disposal of septic tank(s) in accordance with applicable federal, state, and local regulations.

**MM HAZ-5** Applicable to future development projects, prior to development of an area not documented in the Phase I ESAs included as DEIR **Appendices G1** through **G3**, project applicants shall be required to conduct a site-specific Phase I ESA to determine if any potential for significant impact exists. If the Phase I ESA identifies new environmental concerns on-site, a Phase II ESA shall be conducted. If the Phase II ESA identifies that remediation is necessary, such remediation shall occur in consultation with the appropriate regulatory agency (e.g., CUPA) prior to any site disturbing activities.

**Impact 4.8-3:** *Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

**Level of Significance: Less than Significant**

## Construction and Operations

The nearest school to the Project site is Grand Terrace High School located adjacent to the south-southeast of PA 22. Consequently, construction and operation of the future development projects could

emit hazardous emissions and/or handle of hazardous materials, substances, or waste within one-quarter mile of an existing school.

As shown in **Exhibit 3-7, Project Planning Areas in Section 3.0, Project Description**, land uses proposed in PAs 4, 5, and 10 through 22 nearest the Grand Terrace High School are medium- and high-density residential, drainage facilities, utilities, and open space. Types of hazardous materials that would be used for these land uses during construction activities could include, but not be limited to, gasoline, diesel fuel, lubricants, and other petroleum-based products used for construction-related machinery. These hazardous materials would be used in limited quantities and would be subject to all applicable federal, state, and local regulations pertaining to the use, handling, or transport of hazardous materials.

During operations, the use of hazardous materials that would be routinely handled on-site would be limited to cleaners, paints, and solvents typical for cleaning and fertilizers and pesticides for landscaping maintenance. These types of hazardous materials are not considered to be significantly hazardous or acutely hazardous. PA 22, which is the closest PA to the Grand Terrace High School, would be developed with a lighted baseball field with a tot-lot/playground. The PA would be owned and maintained by the City. Hazardous materials used during operations (i.e., fertilizers and pesticides) of the proposed park would be handled in compliance with applicable regulations.

Since future development of the PAs 4, 5, 10 through 22 would handle hazardous materials in accordance with applicable federal, state, and local regulations and the type of hazardous materials are not considered to be significantly hazardous or acutely hazardous, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are needed.

**Impact 4.8-4:** *Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

**Level of Significance: Less than Significant**

### **Construction and Operations**

Consistent with ASTM International E1527-13, DTSC's Hazardous Waste and Substances Sites List (Cortese List) and other data bases were searched during preparation of the Phase I ESAs (see **Appendices G-1 through G-3**) and did not identify any parcels within the Project site as being on the Cortese List. In addition, the DTSC's EnviroStor GIS Tool shows that there are four sites within half a mile of the Project site that were listed as contamination sites, but all four sites are classified with a "No Further Action" status which indicates that regulatory agencies have conducted or approved a clean-up or closure of the site and no adverse environmental impact is anticipated. A less than significant impact would occur.

### **Mitigation Measures**

No mitigation measures are needed.

**Impact 4.8-5:** *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

**Level of Significance: No Impact**

## Construction and Operation

The Project site is not within two miles of a public airport or public use airport; therefore, the Project would not result in a safety hazard for the people residing or working in the area. The nearest public airport to the Project site is the San Bernardino International Airport in the City of San Bernardino, located at 1601 E. 3<sup>rd</sup> Street, #100, San Bernardino, CA 92408, approximately six miles northeast of the northern Project site boundary, and would therefore not subject people or workers to excessive noise impacts. No impact would occur in this regard.

### Mitigation Measures

No mitigation measures are needed.

**Impact 4.8-6:** *Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

**Level of Significance: Less Than Significant**

## Construction and Operations

Construction of the Project's residential and nonresidential land uses, including on- and off-site circulation improvements would occur within two phases. When a project-specific construction activity commences, all construction activities would occur within the boundaries of each PA and would not significantly impede access to nearby roadways. The proposed off-site roadway improvements would be constructed in two phases to minimize impediment to the use of De Berry Street, Van Buren Street, and Taylor Street. Pursuant to Grand Terrace MC Article II, Traffic Control Devices, traffic-control devices (i.e., signs, intersection signals, hours of operations, pavement markings) would be used as authorized by the City Engineer to regulate, guide, or warn traffic to ensure that adequate roadway circulation would be provided both on- and off-site. Furthermore, the Grand Terrace GP Public Health and Safety Element does not show any identified evacuation routes near the Project; therefore, construction activities would not impact the City's emergency management program. Although the Project's construction activities may impede traffic flows, these impediments would be temporary in nature and would be minimized with implementation of traffic control devices. Impacts would be less than significant related to interference with an emergency response or evacuation plan.

The City maintains an emergency management program and a Community Emergency Response Team (CERT) to effectively deal with emergency situations. No revisions to the adopted Emergency Operations Plan would be required as a result of construction activities at the Project site and the Project would not impact an identified evacuation route. The nearest fire station is Fire Station 23 (located at 22582 Center City Court), located approximately two miles northeast of the Project site. As further discussed in

**Section 4.13, Public Services**, the Project would not significantly impact fire response times. Furthermore, the proposed roadways would be designed in compliance with applicable federal, state, and local requirements. In addition, all roads would be maintained during construction activities, and buildout of the Project's on-and off-site circulation improvements would provide additional points of access in the surrounding area.

Lastly, any future commercial development projects that may handle hazardous materials in quantities equal to or greater than 55 gallons of a liquid; 500 pounds of a solid; or extremely hazardous substances above the threshold planning quantity; would be required to submit a HMBP that would aid emergency responders with the necessary information to effectively protect the public due to hazards and/or to accidental release of hazardous materials.

In conclusion, construction or operations of the Project would not significantly disrupt or interfere with emergency access or impede access to nearby roadways or interfere with the City's emergency management program. Impacts would be less than significant in this regard and mitigation is not required.

#### **Mitigation Measures**

No mitigation measures are needed.

**Impact 4.8-7:** *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

**Level of Significance: No Impact**

### **Construction and Operations**

The Project area is not located in an State Responsibility Area (SRA) or lands classified as Very High FHSZ. According to CAL FIRE's FHSZ Map Viewer, the Project site is located in a LRA and is classified as a non-Very High FHSZ.<sup>4</sup> Consequently, the Project would not directly, or indirectly expose people or structures significant risk of loss, injury or death involving wildland fires and no impact would occur. Refer to **Section 4.18, Wildfire** for more information.

#### **Mitigation Measures**

No mitigation measures are needed.

### **4.8.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant unavoidable impacts concerning hazards and hazardous materials have been identified.

### **4.8.7 CUMULATIVE IMPACTS**

Impacts associated with hazardous materials are often site-specific and localized. However, the cumulative impacts area (refer to **Table 4-1, Cumulative Projects List** located in **Section 4.0, Environmental Impact Analysis**) for the Project accounts for the off-site environmental hazards, which

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<sup>4</sup> CAL FIRE. (2021). California Fire Hazard Severity Zone Viewer. Retrieved from: <https://egis.fire.ca.gov/FHSZ/> (accessed April 2023).

were documented through the findings of various governmental database searches regarding properties with known or suspected releases of hazardous materials within a search radius of up to one mile from the Project site.

As concluded above, the ESAs did not identify any current HRECs or CRECs. One REC and two environmental concerns were identified. In addition, it is currently unknown if Project PAs not analyzed in the appended ESAs contain any potential environmental concerns. Similarly, hazards associated with cumulative projects could also have potential impacts associated with hazardous materials as the environmental concerns associated with hazardous materials are typically site-specific. Therefore, each cumulative project would be required to address any issues related to hazardous materials or wastes on a project-specific basis. In addition, all cumulative development, as well as future development within the Project site, must comply with all federal, state, and local statutes and regulations applicable to hazardous materials, and implement mitigation, as applicable, to reduce impacts concerning hazards and hazardous materials.

With adherence to applicable federal, state, and local regulations governing hazardous materials and implementation of mitigation measures, the cumulatively potential risks associated with hazardous materials would be less than significant. The incremental effects of the Project related to hazards and hazardous materials would be minimized, and any effects would be site-specific. Therefore, considering the above, the Project's impact concerning hazards and hazardous materials is not considered cumulatively significant with compliance of applicable federal, state, and local requirements, policies, and regulations.

#### 4.8.8 REFERENCES

- CAL FIRE. (2023). *Fire Hazard Severity Zones -What are FHSZ?* Retrieved from: <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/fire-hazard-severity-zones/#explorefhsz>.
- CAL FIRE. (2021). California Fire Hazard Severity Zone Viewer. Retrieved from: <https://egis.fire.ca.gov/FHSZ/>.
- County of San Bernardino. (2023). *CSBFPD – HMBP*. Retrieved from: <https://sbcfire.org/hazmatbusinessplan/>.
- DTSC. (2023). *Envirostor GIS Database*. Available at: <https://www.envirostor.dtsc.ca.gov/public/map/?assembly=42>.
- LOR Geotechnical. (2020). *Phase I and II ESA for Accessor Parcel Number (APNs): 1167-181-12 and -13. (Appendix G1)*.
- LOR Geotechnical. (2017). *Phase I ESA and Limited Site Characterization for APNs: 1167-151-22, -68, -71, and -74. (Appendix G2)*.
- LOR Geotechnical. (2017). *Phase I ESA and Limited Site Characterization for APNs: 1167-161-03 and -04 (Appendix G3)*.
- Avocet Environmental, Inc. (2022). *Work Plan for Impacted Soil Removal and Management Former Union Pacific Railroad Right-of-way. (Appendix G4)*.

## 4.9 HYDROLOGY AND WATER QUALITY

### 4.9.1 INTRODUCTION

The purpose of this section is to describe the hydrologic resources available to The Gateway at Grand Terrace Specific Plan (Project) while assessing the potential impact each future development within the Project site could have on those resources. The pre-development conditions of the water and drainage systems surrounding the Project area were used as a baseline with which to compare potential impacts associated with the Project. Impacts in this section are assessed regarding their effects on water quality, groundwater availability, and other hydrological conditions of the area. The analysis also considers the potential effects that may occur from the presence of flood, tsunami, and seiche zones within the Project vicinity.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

Information provided in this section is based on the following documentation:

- City of Grand Terrace (City) General Plan (Grand Terrace GP).
- City of Grand Terrace Municipal Code (Grand Terrace MC).
- *Hydrology and Hydraulics Report* (Q3 Consulting, November 2022) (**Appendix H1**).
- *Preliminary Water Quality Management Plan (WQMP)* (KWC Engineers, 2022) (**Appendix H2**).
- *Preliminary Geotechnical Investigation APN's: 1167-151-22, -68, -71 & -74*, (2022) prepared by LOR Geotechnical Group, Inc (**Appendix E2**).
- Water Supply Assessment (WSA) prepared on October 10, 2022, by Engineering Resources of Southern California (ERSC) (**Appendix K1**).

### 4.9.2 ENVIRONMENTAL SETTING

#### Existing Hydrology

##### Regional Hydrology and Drainage

The Project site is located within the Santa Ana River Watershed. Within this Watershed, the Santa Ana River is the principal surface flow water body within the region. The Santa Ana River rises in Santa Ana

Canyon in the southern San Bernardino Mountains and runs southwesterly across San Bernardino, Riverside, and Orange Counties. The Santa Ana River then discharges into the Pacific Ocean at the City of Huntington Beach. The total length of the Santa Ana River and its major tributaries is approximately 700 miles.

The Watershed is regulated by the California Regional Water Quality Control Board (RWQCB), Santa Ana Region. The Santa Ana Region is the smallest of the RWQCB regions in the State of California, covering approximately 2,800 square miles of land roughly between Los Angeles and San Diego. Regional boundaries for each RWQCB are generally based on watersheds, while water quality requirements for each RWQCB are based on the unique differences in climate, topography, geology, and hydrology. Although geographically small, the Santa Ana Region's approximately four million residents make it one of the most densely populated regions in the State. The region covers portions of Los Angeles, San Bernardino, Riverside, and Orange counties.

### **Stormwater Drainage**

The Project site is traversed by three major drainage courses that originate at the base of Blue Mountain at De Berry Street, Van Buren Street, and Pico Street. The northern drainage course enters the site at the westerly end of De Berry Street. It then travels in a southwesterly direction and enters the San Bernardino County Flood Control District (SBCFCD) channel that eventually directs flows off-site under I-215. The second drainage course enters the Project site on the north side of Van Buren Street near the easterly edge of Planning Area (PA) 11. These storm water flows travel west and join the SBCFCD channel at the western edge of the Project site. A portion of this drainage course has been identified as a possible wetlands area. The third drainage course enters the Project site along the northern portion of the existing Grand Terrace High School near the southeasterly edge of PA 20. The westerly terminus of Pico Street overflows with storm water during large storm events and the storm water travels through the existing school site towards Taylor Street and ultimately joins the Gage Canal at the western edge of the Project site.

The off-site tributary area consists of a watershed of approximately 32,320 acres including the majority of the City. All flows are directed to the low point within the Project site. Ultimately, drainage from the Project site flows to the Santa Ana River.

### **Groundwater**

The Project site is underlain by the Riverside-Arlington Subbasin of the Santa Ana River Watershed groundwater basin within the Santa Ana Region.<sup>1</sup> The Riverside-Arlington Subbasin is neither critically over-drafted nor of a high Sustainable Groundwater Management Act (SGMA) Basin Priority. According to the Project's Preliminary Geotechnical Investigation for APN's 1167-151-22, -68, -71, and -74, conducted by LOR Geotechnical Group, groundwater was not encountered in any exploratory trenches or borings, nor was any groundwater seepage observed during site reconnaissance. In addition, the Preliminary Geotechnical Investigation indicated that the depth to groundwater at the Project site is

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<sup>1</sup> California Department of Water Resources. (2004). *California's Groundwater Bulletin 118 – Upper Santa Ana Valley Groundwater Basin, Riverside-Arlington Subbasin*. [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/8\\_002\\_03\\_Riverside-ArlingtonSubbasin.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/8_002_03_Riverside-ArlingtonSubbasin.pdf).



approximately 100 to 120 feet below the surface (refer to **Appendix E2**). The borings were drilled to depths ranging from approximately 16.5 to 51.5 feet below the existing ground surface. According to the Preliminary Geotechnical Investigation prepared for the Project, the depth to groundwater at the site is approximately 100 to 120 feet beneath the surface. Recent groundwater data for a well located just southeast of the intersection of Main Street and Taylor Street indicates that the depth to groundwater at that location ranged from 157 to 177 feet during the time period from October 2011 to March of 2016. (refer to **Appendix E2**). According to the Western Municipal Water District and the San Bernardino Valley Water Conservation District Cooperative Well Measuring Program, the depth to groundwater was approximately 160 to 170 feet in nearby wells measured during the fall of 2014. The groundwater flow direction below the site is anticipated to be to the southwest following the regional surface topography.

## Water Quality

The City has identified Riverside Highland Water Company (RHWC) as the public water system that would supply water to the Project site. Water quality can be determined by the number of pollutants in surface runoff and quantity of materials in the environment and its characteristics. In an urban environment, the quantity of certain pollutants in the stormwater system is generally associated with the intensity of the land use. In general groundwater is less vulnerable to seasonal and climatic changes than surface water supplies. Based on current conditions, water quality is not expected to affect RHWC's supply reliability. Water quality issues are constantly evolving, therefore, RHWC will take action to protect and treat supplies when needed through water quality treatment.<sup>2</sup> Furthermore, the Sustainable Groundwater Management Act (SGMA) requires local agencies to form groundwater sustainability agencies (GSAs) for the high and medium priority basins.<sup>3</sup> The Western Municipal Water District elected to serve as the GSA. The Western Municipal Water District developed a Groundwater Sustainability Plan (GSP) for the Upper Santa Ana Valley Riverside-Arlington Subbasin. The Watermaster manages groundwater under the adjudicated portion of the basin. Activities associated with planning, development, and GSP preparation include, developing a data management framework, stakeholder engagement, and developing a planning document that builds upon past studies and data to establish current and historic groundwater conditions and describe potential project and management actions that will help the basin achieve sustainability.<sup>4</sup>

As previously stated, drainage from the Project site eventually flows to the Santa Ana River. The Project site is less than a mile from the Santa Ana River. According to the California 2020-2022 Integrated Report, the closest reach of the Santa Ana River to the Project site, Reach 4, is listed for, or impaired by, Indicator Bacteria.<sup>5</sup> The source of the impairment is unknown. There is not an active Total Maximum Daily Load (TMDL) project for this reach of the Santa Ana River. The TMDL requirement status for Reach 4 is 5A: A

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<sup>2</sup> Water Supply Assessment for The Gateway at Grand Terrace Final Report. October 10, 2022 (**Appendix K1**).

<sup>3</sup> California Department of Water Resources. Sustainable Groundwater Management Act (SGMA). 2023. Retrieved from: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management> (accessed March 2023).

<sup>4</sup> Arlington Basin Groundwater Sustainability Plan. 2022. Retrieved from: <https://ceqanet.opr.ca.gov/2022020049> (accessed March 2023).

<sup>5</sup> SWRCB. 2022. California 2020-2022 Integrated Report final mapping visualization tool. <https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=6cca2a3a1815465599201266373cbb7b> (accessed November 2022).

water segment where standards are not met and a TMDL is required, but not yet completed, for at least one of the pollutants being listed for this segment.<sup>6</sup>

## Flood Hazards

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) shows the Project site being covered by one map panel, 06071C8689H (effective 8/28/2008). No part of the Project site is within a FEMA-mapped special flood hazard area. The entirety of the Project site is classified as Zone X, an area noted as having a minimal flood hazard. In addition, there are no dams, reservoirs, or large water bodies near the Project site. Furthermore, according to the City's Flood Hazards Map, the majority of the City, including the Project site, is not within a 100-year or a 500-year flood plain.<sup>7</sup> The northwestern portion of the City, that lies adjacent to or within the Santa Ana River and its floodplain, is designated as a 100-year and 500-year floodplain. This portion of the river is located 0.65 mile northwest of the Project site.

### 4.9.3 REGULATORY SETTING

#### Federal

##### Federal Clean Water Act

The Project would be subject to federal permit requirements under the federal Clean Water Act (CWA). The primary goals of the CWA are to maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollution discharges; it provides the legal framework for several water quality regulations, including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, antidegradation policy, nonpoint-source discharge programs, and wetlands protection. The United States Environmental Protection Agency (U.S. EPA) has delegated the administrative responsibility for portions of the CWA to State and regional agencies. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with its RWQCBs to preserve, protect, enhance, and restore water quality.

Under the NPDES permit program, the U.S. EPA establishes regulations for discharging stormwater by municipal and industrial facilities and construction activities. Section 402 of the CWA prohibits the discharge of pollutants to "Waters of the United States" from any point source unless the discharge is in compliance with an NPDES Permit.

The Anti-degradation Policy under EPA's Water Quality Standards Regulations (48 Federal Register [FR] 51400, 40 Code of Federal Regulations [CFR] 131.12, November 8, 1983), requires states and tribes to establish a three-tiered anti-degradation program to prevent a decrease in water quality standards.

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<sup>6</sup> SWRCB. 2022. Category 5 2020 California 303(d) List of Water Quality Limited Segments. [https://www.waterboards.ca.gov/water\\_issues/programs/tmdl/2020\\_2022state\\_ir\\_reports\\_revised\\_final/apx-c-catereports/category5\\_report.shtml](https://www.waterboards.ca.gov/water_issues/programs/tmdl/2020_2022state_ir_reports_revised_final/apx-c-catereports/category5_report.shtml) (accessed November 2022).

<sup>7</sup> City of Grand Terrace General Plan Draft EIR. (2010). Flood Hazard Map. Page 147. Retrieved from: [https://p1cdn4static.cividive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/draft\\_eir.pdf](https://p1cdn4static.cividive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/draft_eir.pdf).

- Tier 1—Maintains and protects existing uses and water quality conditions that support such uses. Tier 1 is applicable to all surface waters.
- Tier 2—Maintains and protects “high quality” waters where existing conditions are better than necessary to support “fishable/swimmable” waters. Water quality can be lowered in such waters but not to the point at which it would interfere with existing or designed uses.
- Tier 3—Maintains and protects water quality in outstanding national resource waters. Water quality cannot be lowered in such waters except for certain temporary changes.

Anti-degradation was explicitly incorporated into the federal CWA through 1987 amendments, codified in §303(d)(4)(B), requiring satisfaction of anti-degradation requirements before making certain changes in NPDES permits.

Section 303(d) of the CWA requires the SWRCB to list impaired water bodies that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDL for these waters.

Section 404 of the CWA is administered and enforced by the U.S. Army Corps of Engineers (USACE). Section 404 establishes a program to regulate the discharge of dredged and fill material into Waters of the United States, including wetlands and coastal areas below the mean high tide. USACE administers the day-to-day program, and reviews and considers individual permit decisions and jurisdictional determinations. USACE also develops policy and guidance and enforces Section 404 provisions.

## State

### California Porter-Cologne Water Quality Control Act (Porter-Cologne Act)

The Porter-Cologne Act (California Water Code §13000 et seq) is the principal law governing water quality regulation in California. It established a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act the policy of the State is as follows:

- That the quality of all the Waters of the State shall be protected,
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason, and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of Water in the State from degradation.

The Porter-Cologne Act established nine RWQCB’s (based on hydrogeologic barriers) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews Regional Water Board decisions. In addition, the State Water Board allocates rights to the use of surface water. The RWQCB has primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrology regions. The State Water Board and Regional Water

Boards have numerous nonpoint source pollution (NPS)-related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB and the RWQCBs can make their own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing WDRs and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions.

The Porter-Cologne Act also implements many provisions of the CWA, such as the NPDES permitting program. Section 401 of the CWA gives the State Water Board the authority to review any proposed federally permitted or federally licensed activity that may impact water quality and to certify, condition, or deny the activity if it does not comply with State water quality standards. If the State Water Board imposes a condition on its certification, those conditions must be included in the federal permit or license. Except for dredge and fill activities, injection wells, and solid waste disposal sites, waste discharge requirements may not “specify the design, location, type of construction, or particular manner in which compliance may be had...” (Porter Cologne Act §13360). Thus, waste discharge requirements ordinarily specify the allowable discharge concentration or load or the resulting condition of the receiving water, rather than the manner by which those results are to be achieved. However, the Regional Water Boards may impose discharge prohibitions and other limitations on the volume, characteristics, area, or timing of discharges and can set discharge limits such that the only practical way to comply is to use management practices. Regional Water Boards can also waive waste discharge requirements for a specific discharge or category of discharges on the condition that management measures identified in a water quality management plan approved by the State Water Board or Regional Water Boards are followed.

The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. A number of statewide water quality control plans have been adopted by the State Water Board. In addition, regional water quality control plans (basin plans) have been adopted by each of the Regional Water Boards and are updated as necessary and practical. These plans identify the existing and potential beneficial uses of Waters of the State and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by EPA. When approved they become water quality standards under the CWA.

### **State Water Resources Control Board**

The SWRCB administers water rights, water pollution control, and water quality functions throughout the State, while the RWQCBs conduct planning, permitting, and enforcement activities. The City of Grand Terrace lies within the jurisdiction of the Santa Ana RWQCB (SARWQCB).

The NPDES permit is broken up into two Phases: I and II. Phase I requires medium and large cities, or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. Phase II requires regulated small Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. Concerning the proposed Project, the NPDES permit is divided into two parts: construction and post-construction. The construction permitting is administered by the SWRCB, while the post-construction permitting is administered by the RWQCB. Development projects typically result in the disturbance of soil that requires compliance with the NPDES General Permit, Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction Activities (Order No. 2012-0006-DWQ, NPDES Number CAS000002) (General Construction Permit). This Statewide General Construction Permit regulates discharges from construction sites that disturb one or more acres of soil.

The SWRCB has issued and periodically renews a statewide General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (GCASP) and a statewide General Industrial Activities Stormwater Permit (GIASP) for projects that do not require an individual permit for these activities. The GCASP was adopted in 2009 and further revised in 2012 (Order No. 2012-0006-DWQ). The most recent GIASP (Order No. 2014-0057-DWQ) was adopted in April 2014, amended in November 2018 (by Order No. 2015-0122-DWQ), and requires dischargers to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to reduce or prevent industrial pollutants in stormwater discharges, eliminate unauthorized non-storm discharges, and conduct visual and analytical stormwater discharge monitoring to verify the effectiveness of the SWPPP and submit an annual report.

By law, all stormwater discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre of total land area must comply with the provisions of this NPDES Permit and develop and implement an effective SWPPP. The SWPPP is required to contain a site map(s), which shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the Project site. The SWPPP is required to list Best Management Practices (BMPs) the discharger will use to protect stormwater runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Construction General Permit Section A describes the elements that must be contained in an SWPPP. A project applicant must submit a Notice of Intent (NOI) to the SWRCB to be covered by the NPDES General Permit and prepare the SWPPP before beginning construction. SWPPP implementation starts with the commencement of construction and continues through project completion. Upon project completion, the applicant must submit a Notice of Termination (NOT) to the SWRCB to indicate that construction is completed.

The Municipal Stormwater Permitting Program regulates stormwater discharges from MS4s. Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The MS4 permits require the discharger to develop and implement a Stormwater Management Plan/Program with

the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in CWA §402(p). The management programs specify what BMPs will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

For construction activities that would result in the disturbance of one acre or more, permittees must develop, implement, and enforce a program to reduce pollutant runoff in stormwater. This includes: (1) a program to prevent illicit stormwater discharges; (2) structural and non-structural BMPs to reduce pollutants in runoff from construction sites; and (3) preventing discharges from causing or contributing to violations of water quality standards. Permittees are required to review construction site plans to determine potential water quality impacts and ensure proposed controls are adequate. These include preparation and submission of an Erosion and Sediment Control Plan (ESCP) with elements of an SWPPP, prior to issuance of building or grading permits. The 2012 MS4 permit requires that the ESCP be developed by a Qualified SWPPP Developer. Permittees are required to develop a list of BMPs for a range of construction activities.

## Local

### City of Grand Terrace General Plan

The following goals and policies from the Grand Terrace GP are pertinent to the Project.

#### ***Open Space and Conservation Element***

**Goal 4.3**                    **Public health and safety in the City of Grand Terrace be protected, in part, through open space areas.**

**Policy 4.3.3**                Open space shall be used to protect public health and safety resulting from flood hazard conditions in the City of Grand Terrace.

**Goal 4.8:**                **Achieve regional water quality objectives and protect the beneficial uses of the regions surface and groundwater.**

**Policy 4.8.1**                Evaluate all proposed land use and development plans for their potential to create groundwater contamination hazards from point and non-point sources, and cooperate with other appropriate agencies to assure appropriate mitigation.

**Policy 4.8.2**                Comply with the requirements of the National Pollutant Discharge Elimination System (NPDES).

#### ***Public Health and Safety Element***

**Goal 5.3:**                **Reduce the risk to life and property in areas designated as flood hazard areas.**

**Policy 5.3.4**                The City shall require all development projects to comply with the National Pollutant Discharge Elimination System (NPDES) and implement appropriate Best Management Practices.

### ***Sustainable Development Element***

**Goal 9.7:** Reduce the City's per capita demand for water consumption.

**Policy 9.7.2** The City shall incorporate water conservation into the development review process.

### **City of Grand Terrace Municipal Code**

#### ***Section 18.73.190 – Utility Underground***

City Municipal Code (Grand Terrace MC) §18.73.190 requires that all public utility distribution and transmission lines shall be located underground unless otherwise approved by the site and architectural review board or city council.

#### ***Section 17.52.090 – Underground Utilities***

Grand Terrace MC §17.52.090 requires that all existing and proposed utilities within a subdivision and along peripheral streets be placed underground except those facilities exempted by the public utilities commission regulations. In lieu fees would be paid as approved by the City Council for future undergrounding of utilities throughout the City.

#### ***Chapter 4.80 – Developer Impact Fees***

Pursuant to Grand Terrace MC Chapter 4.80, project applicants are required to pay Development Impacts Fees (DIFs) to pay for all or a portion of the costs of providing public services associated with new development.

## **4.9.4 SIGNIFICANCE CRITERIA UNDER CEQA**

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning hydrology and water quality. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
  - i. Result in substantial erosion or siltation on-or off-site?
  - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
  - iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted run-off?

- iv. Impede or redirect flood flows?
- d) In flood hazard, tsunami, or seiche zones, risk release or pollutants due to project inundation?
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable ground water management plan?

## Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning hydrology and water quality. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

The baseline conditions and impact analyses are based on available information in public databases including local planning documents, Hydrology and Hydraulics Report, Preliminary Water Quality Management Plan, Water Supply Assessment, review of Project maps and drawings; and analysis of aerial and ground-level photographs. The determination that a Project component would or would not result in "substantial" adverse effects related to hydrology and water quality includes consideration of the available policies and regulations established by local and regional agencies and any deviation from these policies in the Project's components.

## 4.9.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.9-1:** *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

**Level of Significance:** *Less than Significant*

### Construction

The Project site currently contains storage commercial uses and six non-conforming residences, and consists of predominately vacant land. The Project's topography has elevations ranging from approximately 975 feet on the northeastern end of the site to approximately 945 feet on the southwestern corner. Grading and earthmoving activities conducted during the proposed Project's construction period may require the use of water for dust mitigation. Water from dust control and other liquids such as fuels, lubricants, and liquid wastes can create runoff that could affect both groundwater and surface water quality.

Prior to construction activities the Project applicant must submit a Notice of Intent (NOI) to the SWRCB to be covered by the NPDES General Permit and prepare a SWPPP before beginning construction. The SWPPP would identify site-specific construction BMPs to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater runoff from the Project site. BMPs are designed to control and prevent discharges of pollutants that can adversely impact the downstream surface water quality. Construction BMPs would include, but not be limited to, the following:



- Minimization of disturbed areas to the portion of the Project site necessary for construction;
- Stabilization of exposed or stockpiled soils and cleared or graded slopes;
- Establishment of permanent re-vegetation or landscaping as early as is feasible;
- Removal of sediment from surface runoff before it leaves the Project site by silt fences or other similar devices around the site perimeter;
- Diversion of upstream runoff around disturbed areas of the Project site;
- Protection of all storm drain inlets on-site or downstream of the Project site to eliminate entry of sediment;
- Prevention of tracking soils and debris off-site through use of a gravel strip or wash facilities, which will be located at all construction exits from the Project site;
- Proper storage, use, and disposal of construction materials, such as solvents, wood, and gypsum; and
- Continual inspection and maintenance of all BMPs through the duration of construction by the City.

For each future development projects, implementation of these BMPs would reduce or eliminate the discharge of pollutants in stormwater runoff from the construction site to the maximum extent practicable. As such, the water quality of nearby surface waters and groundwater would be maintained via compliance with NPDES permit stipulations. Additional compliance with the NPDES permit requires the preparation and implementation of a Stormwater Quality Management Plan (SWQMP) to manage stormwater runoff during construction activity and include site design and source control BMPs to help ensure stormwater runoff and impervious areas are minimized and natural areas are conserved. With implementation of the SWQMP, compliance with the NPDES permit requirements, and implementation of BMPs, construction activities would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Chapter 13.20.260 of the Grand Terrace MC requires all construction projects covered by the NPDES general construction permit as well as construction projects less than one acre to submit SWQMP to the Director of Building & Safety/Public Works.<sup>8</sup> Mandatory compliance with the SWPPP and a development-specific erosion control plan would ensure that future construction activities would not violate any water quality standards or waste discharge requirements. Therefore, water quality impacts associated with construction activities would be less than significant and no mitigation measures would be required.

## Operations

The City requires the preparation and implementation of a SWQMP for all development. The SWQMP shall identify all BMPs that would be incorporated into each individual future development to control stormwater and non-stormwater pollutants during and after construction and shall be revised as necessary during the life of the project. The SWQMP submittal applies to construction projects covered

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<sup>8</sup> City of Grand Terrace Municipal Code. Retrieved from: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeId=TIT13PUSE\\_CH13.20STSY\\_ARTVCORE\\_13.20.260STQUMAPL\\_SW](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeId=TIT13PUSE_CH13.20STSY_ARTVCORE_13.20.260STQUMAPL_SW) (accessed March 2023).

by the NPDES general construction permit and is designed to minimize the release of potential waterborne pollutants, including pollutants of concern for downstream receiving waters, under long-term conditions via BMPs. Implementation of the SWQMP ensures ongoing, long-term protection of the watershed basin.

Typical stormwater-related pollutants of concern for large residential mixed-use developments include the following:

- Pesticides and herbicides and an increase in nutrients from fertilizers uses for the landscaped areas;
- Trash/debris from the park areas;
- Fluids from vehicles (motor oil, transmission fluid, antifreeze, brank fluid, gasoline, etc.) spilled onto paved areas; and
- Organic compounds and animal waste.

The Project proposes to construct a network of drainage lines and a detention basin throughout the Project site to accommodate storm water runoff flows. A Preliminary WQMP was prepared by KWC Engineers in May 2022 (attached in **Appendix H1**). Per the Preliminary WQMP, surface flows would be collected in a series of catch basins, located within the western portion of the site, and gutters before flows are conveyed into Continuous Deflective Separation (CDS) units for pre-treatment before entering a series of dry well basins. The proposed WQMP basins have been designed in accordance with the City of Grand Terrace standards to detain and slowly release storm water to allow particles and associated pollutants to settle out.

Additionally, the Project would be required to comply with the NPDES Municipal Permit. In addition to mandatory implementation of a SWQMP, the NDPEs program also requires commercial land uses to prepare a SWPPP for operational activities and to implement a long-term water quality sampling and monitoring program, unless an exemption has been granted. Under the effective NPDES Permit, the Project Applicant (or the Project's occupant(s)) would be required to prepare a SWPPP for all future operational activities and implement a long-term water quality sampling and monitoring program or receive an exemption. Based on the requirements of the NPDES General Permit, it is assumed that mandatory compliance with all applicable regulations would further reduce potential water quality impacts during long-term Project operation for each future development within the Project site. Therefore, impacts related to the violation of water quality standards during operations would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.9-2:** *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

**Level of Significance: Less than Significant**

### **Construction and Operations**

Future development within the Project site would not directly extract groundwater and no potable groundwater wells are proposed. Under existing conditions, water service for the Project site is provided by RHC. The Project-specific Water Supply Assessment (WSA; included as **Appendix K1**) concluded that RHC has sufficient groundwater to meet existing and future demands. Accordingly, the potential for each future development within the Project site to substantially deplete groundwater supplies through means of groundwater extraction or increasing consumption of potable groundwater is less than significant.

One large regional detention basin with approximately 65 acre-feet of capacity would be constructed west of Taylor Street to provide for regional storm water detention and treatment of the proposed storm drain systems in Van Buren and Pico Streets, as well as opportunities for groundwater recharge. The goal of the basin is to reduce the peak runoff of the Project site as well as reduce the peak runoff of the regional watershed. The proposed basin has a bottom elevation of 925 feet and a top elevation of 945 feet. The basin would include one outlet point at the north end of the proposed basin and would route under the Riverside Canal into an existing native drainage channel owned by Southern California Edison, and ultimately flows into an existing double 6-foot by 6-foot reinforced concrete box (RCB) underneath Interstate 215 (I-215).<sup>9</sup> The proposed detention basin would serve as a regional flood attenuation facility and a source for groundwater replenishment. The development of the proposed detention basin would include obtaining Consent Agreements and right-of-way and drainage easements from Southern California Edison (SCE) for the outlet facility into the native channel.

Inclusion of drainage improvements, including the installation of infiltration facilities and permeable landscape areas, as a component of all future development would create efficient passageways for runoff water to rejoin the water system and would result in a less than significant impact to local groundwater recharge. RHC does not maintain any groundwater recharge basins, nor are there any in the vicinity of the Specific Plan area owned or operated by others for the specific purpose of groundwater recharge. Construction activities would not directly impact groundwater sources.

Preventative Low Impact Design (LID) BMPs are included in the Preliminary WQMP to minimize impervious areas, maximize natural infiltration capacity, preserve existing drainage patterns, and re-vegetate disturbed areas. As aforementioned, the Project site would incorporate a basin system to capture, treat, and infiltrate the storm water runoff. Additionally, the site would be designed – per the WQMP – to optimize the pervious surfaces with additional landscaping and park areas. The proposed drainage patterns would be consistent with existing drainage patterns. In addition to these LID BMPs, each future development within the Project site would comply with all other NPDES permitting to include BMPs that are required as part of a SWPPP. With these considerations, each future development would not

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<sup>9</sup> *Hydrology and Hydraulics Report* (Q3 Consulting, November 2022) (**Appendix H1**).

substantially deplete groundwater supplies and impacts to groundwater supplies would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.9-3:** *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

*Result in substantial erosion or siltation on- or off-site?*

**Level of Significance: Less than Significant**

### **Construction and Operation**

The Riverside Canal runs along the western edge of the Project site. There are no streams or rivers running through the Project site; the nearest river is the Santa Ana River located less than one mile from the Project. Ultimately, drainage from the Project site flows to the Santa Ana River.

Current surface runoff flows through the site along existing drainage pathways – with limited surface and sub-surface conveyance facilities –and into the existing drainage course before flowing off-site to the west. The Project site is currently comprised of pervious surfaces that would be converted largely to impervious surfaces with each future development. Flows associated with each future development would be conveyed to the storm drain system, minimizing erosion and siltation associated with an undeveloped site. Each future development in the Project site would utilize subsurface storm drain systems that convey flows in the underground storm drain network.

A local storm drain system at the intersection of De Berry Street and Commerce Way would capture flows from De Berry Street and connect to the existing SBCFCD storm drain line under Commerce Way, then drain to the basin. Within Van Buren Street, the proposed facilities include a 36-inch reinforced concrete pipe (RCP) from the regional basins to the Michigan Street intersection, with a local storm drain system and catch basins to protect the intersection from flooding and storm water velocity. Additionally, new curbs and driveways at sump conditions east of Michigan Street would be constructed to protect property from storm event flooding. Future development would include a 48-inch storm drain extended east to the intersection of Michigan Street, with a local storm drain system and catch basins to protect property from flooding, along with new raised curbs that would be required at various sections along Pico Street.

Furthermore, all proposed site-specific drainage improvements would be analyzed as future projects are developed, and all site drainage would ultimately discharge to the existing storm drain system located on the low point of the Project site and then under I-215. Furthermore, all proposed improvements would adhere to the requirements of the City and the SBCFCD.

The NPDES, SWPPP, and WQMP created for the Project would also minimize potential impacts from erosion and siltation. Further, an Erosion and Sediment Control Plan would also be implemented to further minimize potential siltation and erosion effects. The erosion control plan is required as part of the

Municipal Stormwater Permitting Program. Implementation of dust control measures along with BMPs included in the NPDES, SWPPP, and WQMP would reduce potential environmental effects. Impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.9-4: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

***Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

***Level of Significance: Less than Significant***

### **Construction**

The Project site is currently vacant and lends a substantial proportion of land to pervious surfaces. The Project proposes a mix of residential, commercial, and public facilities land uses. New development could result in increased rates of surface water runoff associated with new impervious surfaces and could promote increased erosion and sedimentation or other storm water contamination, and exceedance of the capacity of existing storm drain systems.

The Project would include future development of approximately 112 acres. The existing drainage pattern for the Project site and the general area is characterized by sheet conveyance with limited surface and sub-surface conveyance facilities. Under existing conditions, the Project site generally intercepts upstream drainage from property and street runoff from DeBerry, Van Buren, and Pico Streets. Existing flows from DeBerry Street collect at the westerly cul-de-sac terminus, and discharge to an existing SBCFCD trapezoidal channel. Flows from Van Buren Street discharge to an open native channel, which is then routed under the Riverside Canal and into an unimproved SCE-owned native channel, which ultimately conveys to the Caltrans box culverts under I-215. Stormwater from Pico Street is partially intercepted at the cul-de-sac adjacent to Grand Terrace High School and routed through the school parcel to an existing concrete trapezoidal channel that discharges to the Riverside Canal.

A local storm drain system at the intersection of De Berry Street and Commerce Way would capture flows from De Berry Street and connect to the existing SBCFCD storm drain line under Commerce Way, then drain to the basin. Within Van Buren Street, the proposed facilities include a 36-inch reinforced concrete pipe (RCP) from the regional basins to the Michigan Street intersection, with a local storm drain system and catch basins to protect the intersection from flooding and storm water velocity. Additionally, new curbs and driveways at sump conditions east of Michigan Street would be constructed to protect property from storm event flooding. Future development would include a 48-inch storm drain extended east to the intersection of Michigan Street, with a local storm drain system and catch basins to protect property from flooding, along with new raised curbs would also be required at various sections along Pico Street.

All proposed site-specific drainage improvements would be analyzed as future projects are developed, and all site drainage would ultimately discharge to the existing storm drain system located on the low point of the Project site and then under I-215. Furthermore, all proposed improvements would adhere to the requirements of the City and the SBCFCD.<sup>10</sup>

The Riverside Canal runs along the western edge of the Project site and carries flows downstream to an existing 5-foot by 8-foot RCB. Adjacent to the upstream end of the Riverside Canal there is a concrete lined trapezoidal channel that conveys flows to the Highgrove Storm Channel. From the Highgrove Storm Channel, runoff is conveyed under I-215 via the double 6-foot by 6-foot RCB. Refer to **Section 3.0, Project Description, Exhibit 3-9, Existing Sewer Plan, Exhibit 3-10, Conceptual Water Plan, and Exhibit 3-11, Conceptual Storm Drain Plan.**

Flows generated on-site are proposed to be conveyed via a storm drain system and discharged into a proposed basin that would be located within the southwestern portion of the Project site. The detention basin would serve as a regional flood attenuation facility as well as a source for groundwater replenishment. The proposed basin is approximately 65 acre-feet (ac-ft) and has a bottom elevation of 925 feet and a top elevation of 945 feet. A Hydrology and Hydraulics Report was prepared by Q3 Consulting to provide supporting analyses for the proposed stormwater facility to ensure the peak outflow under the Project is less than existing conditions (**Appendix H2**). The Hydrology and Hydraulics Report analyzed potential impacts under a local project on-site scenario and a regional watershed scenario. The local project on-site and regional analyses demonstrated that the proposed development would not have adverse impacts on downstream facilities. The proposed 100-year local on-site flows are mitigated by the proposed basin to below existing 25-year flows. Therefore, the Project would not significantly impact flooding conditions to upstream or downstream properties.

According to the FEMA FIRM, the Project site resides within a Flood Zone Designation X.<sup>11</sup> Zone X is the area between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood. The areas of minimal flood hazard, which are the areas outside a special flood hazard area and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone X. Therefore, based on the analysis performed, it can be concluded that the proposed drainage improvements would adequately convey flows.

## Operations

The Project proposes the development of the Project site consistent with the Specific Plan which would involve residential, commercial, and open space uses. The Project would additionally involve the construction of new public roads which would be constructed with appropriate stormwater conveyance facilities such as curb and gutter. These public roads would add new shallow channelized flow paths for run-off to traverse the Project site toward the western drainage facilities and proposed drainage basin. Curb and gutter would be adequately designed to account for the 100-year, 24-hour storm event without flooding. Additionally, future development within the Project site would be consistent with Grand Terrace

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<sup>10</sup> The Gateway at Grand Terrace Specific Plan.

<sup>11</sup> Federal Emergency Management Agency (2008). *FIRM Flood Insurance Rate Map Panel 06071C8689H*. Available at <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd> (accessed November 2022).

GP Policy 4.3.3 which ensures open space would be utilized to protect public health and safety resulting from potential flood hazard conditions. Open spaces can play an important part in flood risk management by providing space for managed flooding and can protect built up areas. As such, operation impacts as a result of Project implementation would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.9-5:** *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

*Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

**Level of Significance: Less than Significant**

### **Construction and Operations**

As discussed previously, future development of the Project must comply with the requirements of the NPDES General Permit, which helps control water pollution by regulating point and non-point sources that discharge pollutants into receiving waters.

All future development within the Project site would be required to obtain a General Construction Permit. The General Construction Permit requires implementation of a SWPPP, which would include BMPs designed to protect the quality of storm water runoff. Preparation, implementation, and participation with both the NPDES General Permit and the General Construction Permit, including the SWPPP and BMPs, would reduce the potential for storm water flows, and any potential contaminants contained within those flows, to be conveyed off-site during construction of the Project. As a result, short-term construction-related impacts associated with creating or contributing to runoff and additional sources of polluted runoff would be less than significant. Conformance with these requirements would be verified prior to any project approval and included as conditions of approval to any future project. Impacts would, therefore, be less than significant.

As mandated by the RWQCB and through implementation of individual SWQMP, the Project site would include new storm water drainage system facilities that would be engineered, designed, and installed to satisfy all water quality requirements. These measures would include minimizing impervious surfaces as feasible and directing flows to LID areas; integrating appropriately sized LIDs to ensure post-development flows do not exceed pre-development flows; and where feasible, incorporating bio-retention in combination with site planning, and dispersion of runoff to meet LID requirements.

To ensure that the new storm water drainage improvements are planned and designed to satisfy these requirements as well as all other applicable standards and requirements, they would be verified by the City and incorporated as conditions of approval of the Project prior to the issuance of any construction

permit. Compliance with these requirements would ensure impacts are less than significant and mitigation would not be necessary.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.9-6: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

***Impede or redirect flood flows?***

***Level of Significance: Less than Significant***

As previously discussed, the Project site is within FEMA Flood Zone Designation X, as per the FEMA FIRM Map. No. 06071C8689H. The entirety of the Project site is classified as Zone X, an area noted as having a minimal flood hazard. In addition, there are no dams, reservoirs, or large water bodies near the Project site. Furthermore, according to the City's Flood Hazards Map, the City is not within a 100-year or a 500-year flood plain. As previously mentioned, the northern drainage course enters the Project Site at the westerly end of De Berry Street and travels southwesterly before entering the SBCFCD channel that directs flows off-site under I-215. The second drainage course enters the Project site on the north side of Van Buren Street near the easterly edge of PA 11 and storm water flows travel west and join the SBCFCD. The third drainage course enters the Project site along the northern portion of the existing Grand Terrace High School near the southeasterly edge of PA 20 and overflows travel through the existing school site and join the Gage Canal at the western edge of the Project site. Flows generated on-site would be adequately conveyed via a storm drain system, catch basin, and discharged into a proposed basin that would be located within the southwestern portion of the Project site. Therefore, there would be a less than significant impact as the Project would not impede or redirect flood flows.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.9-7: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

***Level of Significance: Less than Significant***

The Pacific Ocean is located approximately 50 miles from the Project site. Due to the distance to the Pacific Ocean and the presence of the Santa Ana Mountains between the Pacific Ocean and the Project site, there is no potential for the site to be impacted by a tsunami. Additionally, surface water flow at the Project site is generally via sheet flow in a southwesterly direction. As previously discussed, the Project site is not within a 100-year or 500-year flood zone and the Project site is not listed by the County of San Bernardino as being in any mapped dam inundation hazard zone.<sup>12</sup> Furthermore, the Project site is not downstream of large bodies of water or tanks which potentially could cause flooding and inundate the Project site.

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<sup>12</sup> California Department of Water Resources (2022). California Dam Breach Inundation Map. Map Web Publish. Available at [https://fmds.water.ca.gov/webgis/?appid=dam\\_prototype\\_v2](https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2). Accessed April 17, 2022.



The risk of seiche damage following a seismic event at the Project site is considered low. Therefore, the Project would result in a less than significant impact and no mitigation is necessary.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.9-8:** *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

**Level of Significance:** *Less than Significant*

## **Construction and Operations**

Each future development within the Project site would be located within the Santa Ana River Basin. Related construction and operational activities would therefore be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan by preparing and adhering to a SWPPP and SWQMP. Future development would be required to show conformance prior to any approval. Furthermore, Project implementation would not conflict with or obstruct the Santa Ana Rivers Basin Water Quality Control Plan and impacts would be less than significant. The Project site lies within the Upper Santa Ana Valley-Arlington Subbasin (Basin Number 8-002.03). The Sustainable Groundwater Management ACT (SGMA) requires local agencies to form groundwater sustainability agencies (GSAs) for the high and medium priority basins.<sup>13</sup> The Western Municipal Water District elected to serve as the GSA. The Western Municipal Water District developed a Groundwater Sustainability Plan (GSP) for the Upper Santa Ana Valley Riverside-Arlington Subbasin

Future development would be required to comply with all applicable aspects of the Groundwater Sustainability Plan for the Upper Santa Ana Valley Riverside-Arlington Subbasin. The Project does not propose a specific development at this time. Construction and operations of the Planning Areas would be project-specific and future development would be subject to project-specific City and RWQCB discretionary review and approval. As such, the Project would not conflict with or obstruct the implementation of a water quality control plan or a sustainable groundwater management plan and impacts would be less than significant, and no mitigation is necessary.

### **Mitigation Measures**

No mitigation measures are required.

## **4.9.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant hydrology and water quality impacts have been identified.

## **4.9.7 CUMULATIVE IMPACTS**

Cumulative impacts to hydrology and water quality could occur as new development, redevelopment, and existing uses are ongoing within the watershed. This includes the Project site, other past, present, and

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<sup>13</sup> California Department of Water Resources. Sustainable Groundwater Management Act (SGMA). 2023. Retrieved from: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>. (accessed March 2023).

future projects. Because parts of the watershed are already developed, growth is anticipated to consist of a mix of redevelopment. New development would result in some increases in impervious surfaces, and thus could generate increased runoff from the affected project sites. Depending on the site of projects, they would be required to prepare and implement SWPPP with BMPs to control erosion and stormwater runoff in accordance with all required water quality permits and the Water Quality Control Plan. This would include conformance with the Santa Ana RWQCB's, and the Santa Ana River Basin Regional Watershed Monitoring Program (RWMP). As needed, projects would implement BMPs, including LID BMPs to minimize runoff, erosion, and storm water pollution. As part of these requirements, projects would be required to implement and maintain source controls, and treatment measures to minimize polluted discharge and prevent increases in runoff flows that could substantially decrease water quality. Conformance with these measures would minimize runoff from those sites and reduce contamination of runoff with pollutants. Therefore, related projects are not expected to cause substantial increases in storm water pollution. With compliance with State and regional mandates, cumulative impacts would be less than significant, and Project impacts would not be cumulatively considerable.

#### 4.9.8 REFERENCES

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## **4.10 LAND USE AND PLANNING**

### **4.10.1 INTRODUCTION**

This section of the Draft Environmental Impact Report (EIR) evaluates The Gateway at Grand Terrace Specific Plan (Project)'s consistency with the applicable land use plans, policies, and regulations from Federal, State, and local agencies as well as other local organizations. The section also evaluates the potential impacts that the Project may have regarding its own land uses, but also the potential impact to nearby land uses and developments.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

Potential land use impacts of the Project analyzed in this section of the Draft EIR include those that could result in land use incompatibilities, division of neighborhoods or communities, or incompatibility with other land use plans. Where applicable, mitigation measures are proposed to ensure the implementation of actions which would minimize or avoid land use impacts that are identified as significant.

### **4.10.2 ENVIRONMENTAL SETTING**

#### **Existing Conditions**

The Project site encompasses approximately 112 gross-acres. The Project's topography has elevations ranging from approximately 975 feet at the northeastern portion of the site to approximately 945 feet at the southwestern corner. The Project site consists predominately of vacant land, storage commercial uses, and six non-conforming residences. A concrete-lined storm channel carries runoff from a storm drain at the western end of De Berry Street, southwest beneath the Gage Canal and into the westward-flowing drainage way that crosses the Project site from the western end of Van Buren Street. This drainageway drains beneath Interstate 215 (I-215) in a concrete-lined channel, continues to the southwest beneath La Cadena Avenue, and flows into a debris basin approximately 0.8 mile off-site.

There is a decommissioned Union Pacific Railroad (UPR) line that traverses the Project site in a north/south direction. This property has been acquired by the City of Grand Terrace (City) and would be used as part of the extension of Commerce Way from its existing terminus point south to the existing Taylor Street, and subsequent widened of the existing Taylor Street portion south to its connection at

Main Street. There are three wells owned by the City of Riverside located at the Project site that will remain but may be modified or relocated.

The existing non-lighted ball field northwest of Veterans Freedom Park is proposed to be relocated northwest of the Grand Terrace High School sports fields and constructed as a new lighted baseball field and a public playground. An existing Southern California Edison (SCE) substation located south of the Project site would remain in addition to the SCE power lines that cross the Project site north of the substation. Riverside Canal Power Company owns the property where a decommissioned power station was located. Two billboard signs adjacent to I-215 would remain. There is a total of six existing single-family residences with associated accessory structures along De Berry Street and Van Buren Street. Five of the six residences are currently occupied. The remaining residence is vacant.

### Land Use Designations and Zoning

The City of Grand Terrace General Plan (Grand Terrace GP) currently designates the Project site as Mixed Use (MU). The MU designation allows for multiple types of land uses which include commercial, business park, residential, open space, and recreational uses. All mixed-use projects are required to submit a Specific Plan or Planned Development to demonstrate compatibility between the proposed uses as well as buffering from adjacent properties. The Gateway at Grand Terrace Specific Plan (SP 00-17) has been prepared pursuant California Government Code Section 65454.

Although the existing MU land use designation would allow for a variety of uses on a single site as proposed by the Specific Plan, a General Plan Amendment (GPA 17-01) is required to accommodate the higher density residential developments. Accordingly, the Project proposes a GPA to amend the existing MU land use designation to a new General Plan land use designation - the Gateway at Grand Terrace Specific Plan (GSP) for the entire Project site.

The City's zoning map currently zones the Project site as Commercial Manufacturing (CM), Restricted Manufacturing (MR), and Industrial (M2). The Project proposes a Zone Change (ZC 17-02) to amend the existing CM, MR, and M2 zoning to a new zoning. With adoption of the Specific Plan, these zones will be changed to the Gateway at Grand Terrace Specific Plan (GSP) Zone to allow for a horizontal mixed-use development of residential, commercial, public facilities, and public park as set forth in the proposed Specific Plan.

A summary of each of these discretionary approvals that are sought by the Project Applicant is provided in **Section 3.0, Project Description**.

The following **Table 4.10-1, Project Site and Surrounding – Existing Land Use Designations and Zoning** describes the current land use designations and zoning for both the Project and surrounding areas. In addition, refer to **Exhibit 3-3, Existing and Proposed General Plan Land Use Designations** and **Exhibit 3-4, Existing and Proposed Zoning**, in **Section 3.0, Project Description** for more details.

**Table 4.10-1: Project Site and Surrounding – Existing Land Use Designations and Zoning**

| Location     | Existing Land Use <sup>1</sup>   | Existing Zoning <sup>2</sup>  | Proposed Land Use                            | Proposed Zoning                              |
|--------------|--|---|--|--|
| Project Site | Mixed Use  | Commercial Manufacturing (CM)<br>Restricted Manufacturing (RM)<br>Industrial (M-2)                                  | Gateway at Grand Terrace Specific Plan (GSP) | Gateway at Grand Terrace Specific Plan (GSP) |
| North        | General Commercial<br>Industrial   | General Commercial (C2)<br>Commercial Manufacturing (CM)  | -  | -  |
| South        | Industrial<br>Public   | Restricted Manufacturing (MR)<br>Industrial (M-2)<br>Public Facilities (PUB)  | -  | -  |
| East         | General Commercial<br>Low Density<br>Residential<br>Industrial<br>Public | Single Family (R1-7.2)<br>Commercial Manufacturing (CM)<br>Restricted Manufacturing (MR)<br>Public Facilities (PUB) | -  | -  |
| West*        | Industrial Park<br>Light Industrial                                      | Industrial Park (I-P)<br>Light Industrial (M-1)   | -  | -  |

\* City of Colton General Plan – Land Use Plan and Zoning Map  
Source: City of Grand Terrace. (2011). *General Plan Land Use Map*. Available at: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/general\\_plan\\_land\\_use\\_map\\_9-1-2017.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/general_plan_land_use_map_9-1-2017.pdf) (accessed November 3, 2022).  
City of Grand Terrace. (2017). *Zoning Map*. Available at: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/zoning\\_map\\_sep\\_2017.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/zoning_map_sep_2017.pdf) (accessed November 3, 2022).

### 4.10.3 REGULATORY SETTING

#### State

##### California Planning and Zoning Law

The legal framework in which California cities and counties exercise local planning and land use functions is set forth in the California Planning and Zoning Law, §§65000 to 66499.58. Under State planning law, each city and county must adopt a comprehensive, long-term general plan. State law gives cities and counties wide latitude in how a jurisdiction may create a general plan, but there are fundamental requirements that must be met. These requirements include the inclusion of seven mandatory elements described in the California Government Code (CGC), including a section on land use. Each of the elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures.

#### Regional

##### Southern California Association of Governments (SCAG)

SCAG is the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles. As the designated MPO, SCAG is

<sup>1</sup> City of Grand Terrace. Amended September 27, 2016. *General Plan Land Use Map*. Available at: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/general\\_plan\\_land\\_use\\_map\\_9-1-2017.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/general_plan_land_use_map_9-1-2017.pdf). (accessed November 11, 2022).

<sup>2</sup> City of Grand Terrace. Amended October 11, 2016. *Zoning Map*. Available at: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/zoning\\_map\\_sep\\_2017.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/zoning_map_sep_2017.pdf). (accessed November 11, 2022).

mandated by the Federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the State level. SCAG is responsible for the maintenance of a continuous, comprehensive, and coordinated planning process. SCAG is also responsible for the development of demographic projections, as well as the development of integrated land use, housing, employment, transportation programs, measures, and strategies for portions of the Air Quality Management Plan.

### **SCAG Connect SoCal**

In September 2020, SCAG adopted the 2020-2045 Regional transportation Plan/Sustainable Communities Strategy or Connect SoCal which is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals towards 2045. Connect SoCal includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and Policy circumstances change. The Connect SoCal is a living, evolving blueprint for the region's future. The City of Grand Terrace is a member jurisdiction of the San Bernardino Council of Governments, and a participating agency in SCAG's Connect SoCal.

## **Local**

### **City of Grand Terrace General Plan**

The Grand Terrace GP serves as the blueprint for future land development and planning within the City limits. The General Plan is the City's vision for the future. This vision is described and implemented through the Grand Terrace GP's goals, objectives, policies, and implementation programs. The information contained within each chapter or element of the Grand Terrace GP collectively shapes the future development and redevelopment of the City. The document is used by decision makers, both public and private, to guide them in decisions regarding land use and development throughout the City. The key objectives of the Grand Terrace GP are:

- Accommodate growth on undeveloped and underdeveloped properties within the City.
- Accommodate future demand to the City's street system and infrastructure system due to growth within the City and from surrounding jurisdictions.
- Promote new commercial development that will capitalize on the City's proximity to major transportation corridors.
- Maintain and continue to develop Grand Terrace's established commercial areas.
- Continue to promote the development of quality housing for all segments of the population, including those households with special needs.
- Ensure that residents are provided with a safe and healthful environment in which to live and work.
- Preserve those amenities that make Grand Terrace an attractive place to live and work.

- Mitigate and eventually eliminate, where economically feasible, natural and man-made hazards to life and public safety within the City of Grand Terrace.
- Conserve energy and other critical natural resources through a comprehensive program for sustainable development practices.
- Provide for balanced growth, which seeks to provide opportunities for a wide range of employment and housing and the maintenance of a healthy diversified economy.<sup>3</sup>

The Project's consistency with applicable goals and policies of the General Plan are presented herein under Impact 4.10-1.

## City of Grand Terrace Municipal Code

### ***Title 17 – Subdivisions***

City of Grand Terrace Municipal Code (Grand Terrace MC) Title 17 is the City's subdivision ordinance and is adopted pursuant to Chapter XI, Section 7 of the California Constitution to supplement and implement the California Subdivision Map Act, CGC §66410 et seq.<sup>4</sup> The purpose of Title 17 is to provide the City with legal authority for the review of the design and improvement of subdivisions and the processing of any proposed subdivision, reconfiguration and/or consolidation of land within the City to the extent authorized by the California Subdivision Map Act.

The provisions of this Title shall apply to any division of real property wholly or partially within the incorporated area of the City, and shall govern the filing, processing, approval, conditional approval or disapproval of tentative tract maps, final maps, tentative parcel maps, and parcel maps and any modifications thereof. Except as otherwise provided in this Title and in the Subdivision Map Act, all subdivisions shall be subject to the same substantive and procedural requirements. Subdivisions and incorporated territory adjacent to the City shall be subject to these provisions to the extent permitted and as provided by CGC §66454.

### ***Title 18 - Zoning***

The purpose of Grand Terrace MC Title 18 is to promote the growth of the City in an orderly manner and to promote and protect the public health, safety, comfort and general welfare. Except as otherwise provided in this Title, the provisions of the Government Code pertaining to zoning and planning (CGC §§65000 et. seq.), shall be applicable to all matters as if set forth in full in this Title. The zoning or districting plan effectuated by this Title is a part of the master plan and consists of the establishment of various districts, including all the territory within the boundaries of the City, within which the use of land and buildings, the space of buildings, and the height and bulk of buildings are regulated.<sup>5</sup>

## 4.10.4 SIGNIFICANCE CRITERIA UNDER CEQA

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<sup>3</sup> City of Grand Terrace General Plan Adopted April 27, 2010 Resolution No. 2010-10, page I-1.

<sup>4</sup> City of Grand Terrace. (2010) *Grand Terrace Municipal Code – Title 17 Subdivisions*. Available at: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeId=TIT17SU\\_CH17.04GEPR](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeId=TIT17SU_CH17.04GEPR). (accessed November 11, 2022).

<sup>5</sup> City of Grand Terrace. (2010) *Grand Terrace Municipal Code – Title 18 Zoning*. Available at: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeId=TIT18ZO\\_CH18.03GEPR](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeId=TIT18ZO_CH18.03GEPR). (accessed November 11, 2022).



State CEQA Guidelines Appendix G contains the Environmental Review Checklist, which includes questions concerning land use and planning. The questions presented in the Environmental Review Checklist have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Physically divide an established community or
- Cause a significant environmental impact due to a conflict with any land use plan, Policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

## Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning land use. In addition, this analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

The baseline conditions and impact analyses are based on field observations conducted by Kimley-Horn in March 2022; review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. The determination that a Project component would or would not result in "substantial" adverse effects on land use and planning standards considers the available policies and regulations established by local and regional agencies and the amount of deviation from these policies in the Project's components. For example, an adverse effect may be significant due to the set standards for allowed developments within each zoning type.

### 4.10.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.10-1:** *Would the Project physically divide an established community?*

**Level of Significance:** *Less than Significant*

#### Construction and Operations

There is a total of six existing residential structures with associated accessory structures on De Berry Street and Van Buren Street. Five residences are currently occupied, and one is vacant. Although there are existing residences on the Project site, the existing residential uses are not part of an established community. In addition, the existing residences are inconsistent with uses allowed within their respective zoning of Commercial Manufacturing (CM) and therefore, are considered non-conforming uses.

The physical division of an established community is typically associated with construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access, such as a local road or bridge, which would impair mobility in an existing community or between a community and an outlying area. Buildout of the Project would create an established community in support of Grand Terrace GP Policy LU 2.1.6 by introducing mixed uses to the City. The Project also proposes roadway improvements that

would provide points of connection for the surrounding residents and workers. Since the Project would not divide an established community and would serve to improve existing conditions consistent with the Grand Terrace GP, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.10-2: Would the Project cause a significant environmental impact due to a conflict with any land use plan, Policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

***Level of Significance: Less than Significant***

The Project's purpose is to guide the development and operation of the 22 PAs that would allow a mix of commercial, residential, public utilities and public park development. The Project does not propose any specific development projects, but future development within the Project site would be subject to review under this SP EIR for consideration of approving discretionary permits and, if necessary, additional subsequent environmental review as part of the City's approval process.

### **City of Grand Terrace General Plan Consistency Analysis**

The City requires that all Mixed-Use projects submit a specific plan or planned development to demonstrate compatibility between the proposed uses as well as buffering from adjacent properties. Consequently, the Project includes a Specific Plan entitlement and Zone Change that would require that future development comply with applicable federal, state, and local laws and local policies and regulations, including the design standards within the Specific Plan document. The Gateway at Grand Terrace Specific Plan document (Specific Plan) would be adopted by resolution by the City and would allow for the development of a mix of commercial, residential, public utilities, and public parks uses within the appropriate defined 22 PAs. The Specific Plan would serve as the comprehensive plan for the future development within the Project site and establishes appropriate new land use and zoning designations as well as development standards and guidelines to ensure that development within the Specific Plan would occur in a manner consistent with the Grand Terrace GP. Furthermore, the Specific Plan would be consistent with the Grand Terrace MC Title 18, Zoning, but provides additional zoning, development standards, and guidelines that have been tailored to the Project. The following **Table 4.10-2, Permitted and Conditionally Permitted Uses**, presents the proposed permitted and conditionally permitted land uses, activities, and facilities within the Project area.

**Table 4.10-2: Permitted and Conditionally Permitted Uses**

|   | Open Space | Park | Commercial | Residential (R 4-20) | Drainage Facilities |
|---|------------|------|------------|----------------------|---------------------|
| <b>Residential Uses</b>   |            |      |            |                      |                     |
| Single-family (including small-lot, detached/attached, cluster, and motor court)                                      | -          | -    | -          | P                    | -                   |
| Multi-family units (including duplexes, condominiums, and apartments)   | -          | -    | -          | P                    | -                   |
| Senior citizen housing  | -          | -    | -          | P                    | -                   |
| <b>Residential Accessory Uses</b>   |            |      |            |                      |                     |
| Home occupation (as permitted per chapter 5.06)   | -          | -    | -          | P                    | -                   |
| Second-Family Unit (as permitted per Chapter 18.63)   | -          | -    | -          | P                    | -                   |
| Leasing offices   | -          | -    | -          | P                    | -                   |
| Residential community recreation facility   | -          | -    | -          | P                    | -                   |
| Other accessory uses directly related to primary Residential use (as approved by the Planning Director)               | -          | -    | -          | P                    | -                   |
| <b>Automotive related services (includes motorcycles, boats, recreational vehicles, trailers and campers)</b>         |            |      |            |                      |                     |
| Retail sales of parts and supplies (No Wholesale)   | -          | -    | P          | -                    | -                   |
| Retail sales of heavy equipment and trucks  | -          | -    | C          | -                    | -                   |
| Rental agency   | -          | -    | C          | -                    | -                   |
| Sales (used vehicle sales, repair and maintenance activities only in conjunction with new dealers)                    | -          | -    | C          | -                    | -                   |
| Sales (New vehicle sales)   | -          | -    | C          | -                    | -                   |
| New tire sales (inside tire storage only)   | -          | -    | C          | -                    | -                   |
| Indoor Storage  | -          | -    | C          | -                    | -                   |
| Showrooms   | -          | -    | C          | -                    | -                   |
| <b>Research &amp; Development</b>   |            |      |            |                      |                     |
| Laboratories, research and development facilities   | -          | -    | P          | -                    | -                   |
| <b>Eating and Drinking Establishments</b>   |            |      |            |                      |                     |
| Bars, cocktail lounges, nightclubs, live entertainment  | -          | -    | C          | -                    | -                   |
| Catering  | -          | -    | P          | -                    | -                   |
| Microbrewery  | -          | -    | C          | -                    | -                   |
| Restaurants - With the incidental serving of beer and wine (without a cocktail lounge, bar, entertainment or dancing) | -          | -    | P          | -                    | -                   |
| With entertainment and/or serving of alcoholic beverages (other than beer and wine)                                   | -          | -    | C          | -                    | -                   |
| Fast food (without a drive-thru)  | -          | -    | P          | -                    | -                   |
| Fast food (with a drive-thru)   | -          | -    | C          | -                    | -                   |
| <b>Medical</b>  |            |      |            |                      |                     |
| Clinics, urgent care  | -          | -    | P          | -                    | -                   |
| Medical laboratories  | -          | -    | P          | -                    | -                   |
| Medical/dental offices  | -          | -    | P          | -                    | -                   |
| Optician and optometric shops   | -          | -    | P          | -                    | -                   |
| <b>Office and Administrative Uses</b>   |            |      |            |                      |                     |
| Banks, financial services and institutions  | -          | -    | P          | -                    | -                   |
| Business and office services  | -          | -    | P          | -                    | -                   |
| (Interior showroom  | -          | -    | P          | -                    | -                   |

|   | Open Space | Park | Commercial | Residential (R 4-20) | Drainage Facilities |
|---|------------|------|------------|----------------------|---------------------|
| Realtors and real estate offices  | -          | -    | P          | -                    | -                   |
| Travel agencies   | -          | -    | P          | -                    | -                   |
| Professional office   | -          | -    | P          | -                    | -                   |
| <b>Recreation/Entertainment</b>   |            |      |            |                      |                     |
| Amusement arcades   | -          | -    | C          | -                    | -                   |
| Auditoriums   | -          | -    | C          | -                    | -                   |
| Bowling centers   | -          | -    | C          | -                    | -                   |
| Indoor fitness and sports facilities (health clubs, gymnasiums, fitness centers) 4,000 square feet or less                                    | -          | -    | C          | -                    | -                   |
| Greater than 4,000 square feet  | -          | -    | C          | -                    | -                   |
| Movie theaters  | -          | -    | C          | -                    | -                   |
| Museums   | -          | -    | P          | -                    | -                   |
| Music, exercise and dance studios   | -          | -    | P          | -                    | -                   |
| <b>Retail-Commercial Uses</b>   |            |      |            |                      |                     |
| Apparel stores (including jewelry stores)   | -          | -    | P          | -                    | -                   |
| General retail (i.e., art, music, collectibles, and video games stores)   | -          | -    | P          | -                    | -                   |
| Building materials, garden equipment and supplies (without outside storage) (including Nurseries & garden supply stores within enclosed area) | -          | -    | P          | -                    | -                   |
| Building materials, garden equipment and supplies (with outside storage)  | -          | -    | C          | -                    | -                   |
| Convenience stores (including Liquor/Alcohol sales)   | -          | -    | C          | -                    | -                   |
| Daycare centers (child or adult) and Nursing and residential care facilities  | -          | -    | C          | -                    | -                   |
| Electronic, appliance, and office stores (including small electronic, appliance, and office repair shops)                                     | -          | -    | P          | -                    | -                   |
| Food and beverage stores (including Farmers Markets and bakeries)   | -          | -    | P          | -                    | -                   |
| Furniture and home furnishing stores (including household goods stores and antique stores)  | -          | -    | P          | -                    | -                   |
| General merchandise stores (including Leather goods and luggage stores)   | -          | -    | P          | -                    | -                   |
| Health and personal care stores and services (including Drug stores and pharmacies)   | -          | -    | P          | -                    | -                   |
| Hardware stores (including locksmith shops)   | -          | -    | P          | -                    | -                   |
| Hobby and craft shops (including costume design, art, music and photography supply stores)  | -          | -    | P          | -                    | -                   |
| Pet shops   | -          | -    | P          | -                    | -                   |
| Publishing, printing, blueprinting, and reproduction services   | -          | -    | P          | -                    | -                   |
| Schools, business, hospitality, & professional (including art, barber, beauty, performing arts, and hotels)                                   | -          | -    | C          | -                    | -                   |
| Showroom (room used to display goods for sale)  | -          | -    | C          | -                    | -                   |
| Smoke shops   | -          | -    | C          | -                    | -                   |
| Sporting goods stores   | -          | -    | P          | -                    | -                   |
| Veterinary (domestic, no boarding) (w/boarding requires CUP)  | -          | -    | P          | -                    | -                   |
| Veterinary w/boarding   | -          | -    | C          | -                    | -                   |

|   | Open Space | Park | Commercial | Residential (R 4-20) | Drainage Facilities |
|---|------------|------|------------|----------------------|---------------------|
| <b>Personal Services</b>  |            |      |            |                      |                     |
| Barbers, hair salons, nail shops  | -          | -    | P          | -                    | -                   |
| Dry cleaners, tailor shops  | -          | -    | P          | -                    | -                   |
| Laundromats, self-service   | -          | -    | C          | -                    | -                   |
| Message centers and PO boxes  | -          | -    | P          | -                    | -                   |
| Photography or portrait studio, by appointment only   | -          | -    | P          | -                    | -                   |
| Public and Quasi Public Facilities (places of worship and non-profit organizations)   | -          | -    | C          | -                    | -                   |
| Government offices and facilities (administration buildings)  | P          | P    | P          | P                    | -                   |
| Police and fire stations  | P          | -    | P          | P                    | -                   |
| Rail Transit Station  | -          | -    | -          | -                    | -                   |
| <b>Utilities</b>  |            |      |            |                      |                     |
| Public Utilities, distribution and support facilities   | P          | P    | P          | P                    | -                   |
| <b>Other Uses</b>   |            |      |            |                      |                     |
| Wireless telecommunications facilities  | C          | -    | -          | -                    | C                   |
| Other uses which are determined by the planning commission to be similar in nature to a use listed in this section;   | -          | -    | C          | -                    | -                   |
| <b>Temporary Uses</b>   |            |      |            |                      |                     |
| Food trucks (recurrent) – 1 year permit maximum   |            |      | C          |                      |                     |
| Mobile food services including food trucks (special event) - Special Event Permit   | -          | -    | SE         | -                    | -                   |
| Temporary uses which are determined by the Director not to have significant long-term impact on the environment. (Uses such as parking lot sales, Christmas tree sales, seasonal sales, rummage sales, and others with review through the land use approval or administrative site and architectural approval process in accordance with Chapter 18.63, Site and Architectural Review.) | P          |      | P          | -                    | -                   |
| Temporary construction offices (as approved by Director)  | P          | P    | P          | P                    | -                   |
| Outdoor displays/uses may take place in front of business on-site, which have been approved with a conditional use permit. Temporary special event permits will be required for display of associated balloons, banners and special event signs.  | C          | -    | C          | -                    | -                   |
| <i>Notes:</i><br>P = Permitted Use<br>C = Conditional Use Permit<br>T = Temporary Use Permit<br>SE= Special Event Permit  |            |      |            |                      |                     |

Although this section focuses on the Project’s compliance with applicable land use plans and policies adopted for the purpose of reducing an environmental effect, other relevant policies and regulations are discussed throughout this Draft EIR. The following **Table 4.10-3, General Plan Consistency Analysis**, describes the Project’s consistency with applicable goals and policies of the Grand Terrace GP. As shown in **Table 4.10-3**, the Project would be consistent with all relevant Grand Terrace GP policies.

**Table 4.10-3: General Plan Consistency Analysis**

| General Plan Policy <sup>[1]</sup>   | Project Consistency  |
|--|--|
| <b>Land Use Element</b>  |  |
| <b>Goal 2.1: Provide for balanced growth which seeks to provide a wide range of employment and housing opportunities and maintenance of a healthy, diversified community.</b>  |  |
| Policy LU 2.1.6 - Mixed use development which can demonstrate superior use of land, more efficient utilization of public facilities, and more effective conservation of natural resources shall be strongly encouraged by the City of Grand Terrace.           | The Project proposes mixed-use land uses in support of the City’s desire for more mixed-use development in the City. Therefore, the Project would comply with this Policy.   |
| Policy LU 2.1.7 – The City shall continually refine population growth forecasts to ensure adequate planning for anticipated increased levels of sewerage, water, and other necessary community services.   | <b>Section 4.17, Utilities and Service Systems</b> discusses the Project’s demand on water and sewer as well as other dry utility hookups. Buildout of the Project would incrementally increase demands on public utilities; however, the increases were determined to be within the anticipated growth patterns and within the capacity of existing and planned resources. Therefore, the Project would comply with this Policy.                |
| <b>Goal 2.2: Preserve and enhance the quality and character of the City’s residential neighborhoods.</b>   |  |
| Policy LU 2.2.2 - All residential developments shall comply with the goals and policies of the Housing Element of the General Plan.  | The Project proposes residential uses that would comply with all applicable goals and policies set in the housing element. Additionally, all residential development would adhere to the development standards and design standards contained in the Grand Terrace MC and Specific Plan document. Refer to consistency with the pertinent goals and policies in the Housing Element below. Therefore, the Project would comply with this Policy. |
| <b>Goal 2.3: Provide a wide range of retail and service commercial opportunities designed to meet the needs of the City’s residents, businesses, and visitors while also providing employment opportunities.</b>   |  |
| Policy LU 2.3.1 - Commercially designated freeway frontage shall be master planned to ensure a comprehensive commercial development pattern that will serve as a scenic entry into the City.   | The Project’s commercial uses would be located near the I-215 freeway off-ramp at Barton Road. Commercial development would be subject to Grand Terrace MC and Specific Plan design standards and guidelines to ensure that all commercial development serves as a scenic entry into the City via Barton Road/Commerce Way. Therefore, the Project would comply with this Policy.  |
| Policy LU 2.3.2 - Maintenance and continued development of Grand Terrace’s established commercial areas, as an encouragement of new commercial development.  | The Project includes the establishment of new commercial development. Therefore, the Project would comply with this Policy.  |
| Policy LU 2.3.3 - Additional freeway service-oriented commercial uses shall be encouraged.   | The Project’s commercial land uses are sited near the I-215 north-south off ramps via Barton Road. Therefore, the Project would comply with this Policy.   |
| Policy LU 2.3.5 - Measures to reduce potential land use incompatibility between commercially designated areas and all other plan areas will be given special consideration. Specific features could include increased setbacks, walls, berms, and landscaping. | Applicable Specific Plan design standards and features would be considered on a project-by-project basis so residential and nonresidential land uses are developed cohesively. All development would be subject to the Specific Plan design standards for residential and nonresidential development and any other applicable Grand Terrace MC development standards. Therefore, the Project would comply with this Policy.                      |
| <b>Goal 2.5: Provide for the preservation of natural resources and open space.</b>   |  |
| Policy LU 2.5.3 - Energy efficiency shall be encouraged in all future development.   | Future development facilitated by this Project would be designed in compliance with applicable federal, state, and local regulatory which includes, but is not limited to, the current California Green Building Standards Codes in regard to energy usage. If necessary, future development would   |

| General Plan Policy <sup>[1]</sup>  | Project Consistency  |
|---|--|
|   | perform subsequent environmental analysis to determine project-specific energy demand impacts. Therefore, the Project would comply with this Policy.   |
| <b>Circulation Element</b>  |  |
| <b>Goal 3.1: Provide a comprehensive transportation system that provides for the current and long-term efficient movement of people and goods within and through the City.</b>                              |  |
| Policy C 3.1.1 - Provide a transportation system which supports planned land uses and improves the quality of life.   | The Project proposes a circulation plan that includes improvements to the local circulation (i.e., roadways, pedestrian walkways, and bicycle facilities). The circulation plan for the Project improves local circulation and provides for new development. Refer to <b>Exhibit 3-12, Conceptual Circulation Plan</b> and <b>Section 4.15, Transportation</b> for further details. Therefore, the Project would comply with this Policy.  |
| Policy C 3.1.2 - An arterial street system shall be established that provides for the collection of local traffic and provide for the efficient movement of people and goods through the City.              | The proposed circulation plan would provide partial improvements to Taylor Street, Van Buren Street, and De Berry Street, that include street extensions, utility easements, installation of bike lanes, sidewalks, and a variety of street cross sections that will serve the various land uses and create a visually appealing and functional roadway system for vehicle and pedestrian uses. This will improve local circulation for traffic and provide efficient movement of people and goods through the City. Additionally, Taylor Street shall be extended towards Commerce Way along the Riverside Canal. Therefore, the Project would comply with this Policy. |
| Policy C 3.1.3 - Commerce Way shall provide for the movement of traffic associated with commercial and business traffic.  | Refer to Policy C 3.1.2 above, <b>Exhibit 3-12</b> , and <b>Exhibit 3-7, Construction Phasing Plan</b> which illustrates the proposed Commerce Way/Taylor Street extension/connection and improvements as part of the Specific Plan. Therefore, the Project would comply with this Policy.   |
| <b>Goal 3.2: Provide for a well-maintained roadway system.</b>  |  |
| Policy C 3.2.2 - The City shall require that street improvements be constructed at the time that development occurs on vacant or underutilized property.  | Circulation improvements are anticipated to occur within two phases and would be considered on a project-by-project basis. Therefore, the Project would comply with this Policy.   |
| <b>Goal 3.3: Provide for a safe circulation system.</b>   |  |
| Policy C 3.3.2 - The City shall require that new developments provide adequate off street parking in order to minimize the need for on street parking.  | Both on-site and off-site parking requirements will be determined on a project-by-project but would be designed in accordance with all applicable state and local regulations, including the design standards within the Specific Plan document. Future development would be required to provide adequate parking as determined by City staff. Therefore, the Project would comply with this Policy.   |
| Policy C 3.3.3 - The City shall ensure that local street improvements are designed with proper attention to community appearance and aesthetics as well as the need to move traffic safely and efficiently. | The Specific Plan standards include private roads and alleys should be visually distinguishable from public streets through the use of a variety of materials and colors. Refer to Policy 3.1.1 above and <b>Section 4.15, Transportation</b> for more information. Therefore, the Project would comply with this Policy.  |
| <b>Goal 3.5: Provide for efficient alternative modes of travel.</b>   |  |
| Policy C 3.5.1 - Promote measures, which reduce reliance on single occupant vehicle usage by enforcement of the Traffic Control Measures (TCM) ordinance, which addresses development standards,            | Travel Demand Management (TDM) measures determined most appropriate for the Specific Plan include providing car-sharing, bike sharing, and ride-sharing programs, developing bicycle connections that will provide access to proposed bicycle facilities, and providing telecommuting or work-at-  |

| General Plan Policy <sup>[1]</sup>  | Project Consistency  |
|---|--|
| land use patterns, employer based rideshare programs and bicycle/pedestrian facilities.   | home programs, where appropriate. Refer to <b>Section 4.15, Transportation</b> that contains a discussion regarding travel demand measures that would serve to further assist in reducing VMT. Therefore, the Project would comply with this Policy.   |
| <b>Open Space and Conservation Element</b>  |  |
| <b>Goal 4.1: That the Open Space needed for outdoor recreation in the City of Grand Terrace be provided and thereby, improve the quality of life for the residents of the City.</b>   |  |
| Policy OPC 4.1.1 – A park standard of five (5) acres per 1,000 population shall be used to determine the total acreage of developed parks and recreation areas for the City.  | The Project would develop open space and recreational uses that would meet park facilities demands of the planned generated population growth, including the development of additional recreational facilities and would comply with Policy 4.1.1. The Project would directly generate population growth and would develop and would develop new recreational, public facilities, and open space development into the planning area. Therefore, the Project would comply with this Policy. |
| Policy OPC 4.1.5 – The City will establish guidelines and standards for the establishment of a linkage system among the City’s parks and open space areas. In residential areas, the feasibility of utilizing sidewalks shall be made. These sidewalks will be part of the “Pedestrian Sidewalk Master Plan” called for in the Circulation Element and “safe routes” to school’s plan. In addition, consideration will be given to the placement of appropriate signage along the sidewalk identifying them as part of a designated trail system.   | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.  |
| Policy OPC 4.1.6 – The City will work with other public agencies and private entities to coordinate its trail planning and development to tie into the regional trails systems, including the California recreational Trail System, connecting neighboring cities and counties. These trails may be used for pedestrian, equestrian, or biking. Such efforts will include a connection with the Santa Ana River Trail as shown in the “Plan of Open Space and Trails for the County of San Bernardino” and with the trail system of the County of Riverside including the proposed regional trail along the Gage Canal in Riverside County. | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.  |
| <b>Goal 4.2: Natural resources in the City of Grand Terrace shall be protected and preserved by utilizing open space designations or related regulations.</b>   |  |
| Policy OPC 4.2.2 – The City shall establish land use regulations to preserve and protect any identified natural resources.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. However, the Project establishes appropriate new land use and zoning designation as well as development standards and guidelines for future development.   |
| Policy OPC 4.2.5 – The City shall act to reasonably conserve and protect significant biological resources.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. However, the Project would adhere to <b>MM BIO-1</b> through <b>BIO-3</b> to avoid impacts to sensitive species and habitats.  |
| <b>Goal 4.3: Public health and safety in the City of Grand Terrace shall be protected, in part, through open space areas.</b>   |  |
| Policy OPC 4.3.3 - Open space shall be used to protect public health and safety resulting from flood hazard conditions in the City of Grand Terrace.  | The Project proposes open space land uses in PA 5 that would be utilized to protect the proposed residential and commercial uses from flooding hazards that could result from the overflow of the Riverside Canal. In addition, development  |



| General Plan Policy <sup>[1]</sup>  | Project Consistency   |
|---|---|
|   | would include best management practices (BMPs) as required by NPDES permitting that would minimize flood hazard impacts. Therefore, the Project would comply with this Policy.  |
| <b>Goal 4.6: The City shall support and promote the conservation of energy resources.</b>   |   |
| Policy OPC 4.6.1 – The City shall establish an energy conservation policy and implementation program for all City facilities.   | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |
| Policy OPC 4.6.2 – The City shall implement a public outreach program to provide the public with information regarding energy conservation practices and programs.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |
| Policy OPC 4.6.3 - The City shall encourage energy and environmentally sustainable design in new land development projects using Leadership in Energy and Environmental Design (LEED) or similar standards.   | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. However, specific development within the Project would be required to adhere to the latest California Building Code and Energy Code to ensure that energy is used efficiently.  |
| <b>Goal 4.7: Support air quality planning through land use policies, outreach efforts, and participation in regional air quality planning.</b>  |   |
| Policy OPC 4.7.1 - The City shall evaluate and implement traffic flow improvements and construction management practices that reduce locally generated vehicle emissions.   | TDM measures determined most appropriate for the Specific Plan include providing car-sharing, bike sharing, and ride-sharing programs, developing bicycle connections that will provide access to proposed bicycle facilities, and providing telecommuting or work-at-home programs, where appropriate. These travel demand measures would serve to further assist in reducing VMT and thereby vehicular emissions. Therefore, the Project would comply with this Policy.                     |
| Policy OPC 4.7.2 – The City shall encourage the use of public transportation through coordination with local and regional transit providers.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. However, the Project’s proposed residential uses would be located in close proximity of OmniTrans OminiGo Route 325, Route 30519, Route 5, and Route sbX,2and Riverside Transit Authority (RTA) Route 14.   |
| Policy OPC 4.7.3 - The City shall encourage land use planning and urban design that reduces vehicle trips through mixed use development, consolidation of commercial uses along arterial highways, and pedestrian connection between residential and commercial uses. | The Project’s proposed circulation plan would improve circulation for the new development by reinforcing a pedestrian-friendly environment. New Class II on-street bike lanes, sidewalks and streets would cohesively connect the mixed-use areas with the residential neighborhoods, parks and schools and provide circulation within the residential communities. In addition, the Project would travel demand measures to lower VMT. Therefore, the Project would comply with this Policy. |
| Policy 4.7.5 – The City shall encourage employers to develop and implement trip reduction plans including alternate work schedules, rideshare programs, telecommuting, and employee education programs.   | TDM measures determined most appropriate for the Specific Plan include providing car-sharing, bike sharing, and ride-sharing programs, developing bicycle connections that will provide access to proposed bicycle facilities, and providing telecommuting or work-at-home programs, where appropriate. These travel demand measures would serve to further assist in reducing VMT Therefore, the Project would comply with this Policy.  |

| General Plan Policy <sup>[1]</sup>   | Project Consistency   |
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| Policy OPC 4.7.6 – The City shall implement policies and procedures designed to reduce emissions generated by construction activities including enforcement of SCAQMD Rule 403.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |
| Policy OPC 4.7.7 - The City shall promote energy conservation efforts in new and existing residences and businesses.   | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. The relevant energy conservation plans and policies to the Project include the California Title 24 energy standards and the 2022 California Green Building Code.  |
| <b><i>Goal 4.8: Achieve regional water quality objectives and protect the beneficial uses of the regions surface and groundwater.</i></b>  |   |
| Policy OPC 4.8.1 - Evaluate all proposed land use and development plans for their potential to create groundwater contamination hazards from point and non-point sources, and cooperate with other appropriate agencies to assure appropriate mitigation | All future development projects within the Project site would be required to implement a SWPPP and WQMP that contains BMPs to minimize groundwater contamination hazards. Therefore, the Project would comply with this Policy.   |
| Policy OPC 4.8.2 - Comply with the requirements of the National Pollutant Discharge Elimination System (NPDES).  | All site-specific development would be subject to the requirements of the NPDES permitting process. Therefore, the Project would comply with this Policy. Therefore, the Project would comply with this Policy.   |
| <b><i>Goal 4.9: Comply with state and federal regulations to ensure the protection of historical, archaeological, and paleontological resources.</i></b>   |   |
| Policy OPC 4.9.1 - The City shall take reasonable steps to ensure that cultural resources are located, identified and evaluated to assure that appropriate action is taken as to the disposition of these resources.                                     | The Project would implement mitigation measures that would minimize impacts to any unknown cultural resources discovered on site. Therefore, the Project would comply with this Policy.   |
| <b>Public Health and Safety Element</b>  |   |
| <b><i>Goal 5.1: Minimize the risk to public health and safety, social and economic welfare of the City resulting from geologic and seismic hazards.</i></b>  |   |
| Policy PHS 5.1.1 - All new development shall comply with current seismic design standards.   | All development projects would be designed in accordance with the latest California Building Codes to ensure that impacts from seismic activity is minimized. Therefore, the Project would comply with this Policy.   |
| Policy PHS 5.1.2 - All proposed developments shall be evaluated for impacts associated with geologic and seismic hazards.  | All development would be subject to applicable Grand Terrace MC design standards, including City approval of final geotechnical reports, and mitigation measures provided in this EIR which includes the presence of a qualified geotechnical engineer during all grading activity. Therefore, the Project would comply with this Policy. |
| Policy PHS 5.1.4 - Grading plans for development projects shall include an approved drainage and erosion control plan to minimize the impacts from erosion and sedimentation during grading.   | All development projects would be subject to this Policy. Therefore, the Project would comply with this Policy.   |
| <b><i>Goal 5.3: Reduce the risk to life and property in areas designated as flood hazard areas.</i></b>  |   |
| Policy PHS 5.3.4 - The City shall require all development projects to comply with the National Pollutant Discharge Elimination System (NPDES) and implement appropriate Best Management Practices.   | All site-specific development would be subject to the requirements of the NPDES permitting process. Therefore, the Project would comply with this Policy.   |
| <b><i>Goal 5.6: Minimize the exposure of residents, business owners, and visitors to the impacts of urban and wildland fires.</i></b>  |   |
| Policy PHS 5.6.2 – Continue the weed abatement program to ensure clearing of dry vegetation areas.   | The Project is located in an LRA and would comply with the City’s Local Hazard Mitigation Plan. Therefore, the Project would comply with this Policy.   |

| General Plan Policy <sup>[1]</sup>   | Project Consistency   |
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| Policy PHS 5.6.3 – Encourage the use of fire-resistive construction materials.   | The Project would comply with the California Building Code which regulates the design, construction, and quality of materials, etc. for development. Therefore, the Project would comply with this Policy.  |
| <b>Noise Element</b>   |   |
| <b>Goal 6.1: Protect the citizens of Grand Terrace and sensitive land uses from annoying and excessive noise generated by non-transportation-oriented uses and activities.</b>   |   |
| Policy N 6.1.2 - Construction noise on adjacent land uses shall be minimized by limiting the permitted hours of activity.  | All future project construction activity would occur within the permitted hours of activity consistent with this Policy. Therefore, the Project would comply with this Policy.  |
| Policy N 6.1.3 – City departments shall observe state and federal occupational safety and health noise standards.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |
| <b>Goal 6.2: Prevent and mitigate the adverse impacts of excessive exposure to residential and commercial land uses.</b>   |   |
| Policy N 6.2.1 - The City shall evaluate potential noise impacts as part of the land use planning process to mitigate or avoid detrimental impacts and enforce the local noise ordinance.  | Project development would be consistent with the Grand Terrace MC Noise development standards to reduce noise impacts near residential land uses and is further discussed in <b>Section 4.11, Noise</b> . Therefore, the Project would comply with this Policy.   |
| Policy N 6.2.3 - New residential developments located in close proximity to existing commercial/industrial operations shall be evaluated for potential noise impacts and interior noise mitigation.  | All proposed mixed use/ commercial development near residential land uses would be designed in accordance with applicable Grand Terrace MC Noise standards. Therefore, the Project would comply with this Policy.   |
| Policy N 6.2.4 - Commercial uses developed as part of any mixed-use project including residential component shall not be noise intensive. Mixed-use structures shall be designed to prevent commercial noise impacts to the project’s residential uses.  | All proposed mixed use/ commercial development near residential land uses would be designed in accordance with applicable Grand Terrace MC Noise standards, as well as mitigation measures included in this EIR to reduce impacts to nearby sensitive receptors. Therefore, the Project would comply with this Policy.  |
| Policy N 6.2.5 - New commercial/industrial operations located in proximity to existing or proposed residential areas shall incorporate noise mitigation into project design.   | All proposed commercial development near the proposed residential land uses would be designed in accordance with applicable Grand Terrace MC Noise standards, as well as mitigation measures included in this EIR to reduce impacts to nearby sensitive receptors. Therefore, the Project would comply with this Policy.  |
| Policy N 6.2.6 - Impacts of construction noise and vibration on adjacent land uses shall be regulated through limiting the permitted hours of activity.  | All future project construction activity would occur within the permitted hours of activity consistent with this Policy. Therefore, the Project would comply with this Policy.  |
| Policy N 6.2.7 - The City shall evaluate potential ground-borne vibration impacts as part of the land use planning process to mitigate or avoid detrimental impacts on adjacent land uses.   | Pursuant to <b>MM NOI-3</b> in this EIR, should construction activities requiring operation of vibratory rollers take place within 26 feet of a structure, a Project-specific vibration impact analysis shall be conducted. Therefore, the Project would comply with this Policy.   |
| <b>Public Services Element</b>   |   |
| <b>Goal 7.1: Coordinate and balance the provision of public services with existing and planned development to eliminate service gaps, maximize the use of existing public facilities and services, provide a high level of quality public services at a reasonable cost, and maintain adequate services to meet the needs of current and future City residents and businesses.</b> |   |
| Policy PS 7.1.1 – All proposed development shall be evaluated to determine whether current public services and facilities can meet with their needs. If determined that current services and facilities are inadequate to meet the needs of new development, appropriate mitigation measures shall be applied to   | Fire protection and police protection would remain efficient in serving the proposed project. The Project is required to adhere to Grand Terrace MC Chapter 4.80 Development Impact Fees, which would require each applicant to pay a development impact fee (determined by the table provided in Chapter 4.80) imposed by the City to pay for all or a portion of costs of providing public services associated with new |

| General Plan Policy <sup>[1]</sup>   | Project Consistency  |
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| the new development to assure an adequate level of service.  | development. Therefore, the Project would comply with this Policy.   |
| Policy PS 7.1.2 – The City shall establish and periodically update a Development Impact Fee program for new development designed to generate adequate fees to provide new public services and facilities necessary to serve the new development.         | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.  |
| <b>Goal 7.5: Provide for adequate law enforcement and police protection services and facilities.</b>   |  |
| Policy PS 7.5.1 – Work with the County Sherriff’s Department to ensure that adequate police personnel, response times, and equipment are available to meet current and future demands of the City’s residents and businesses.                            | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. However, the Project is required to adhere to Grand Terrace MC Chapter 4.80 Development Impact Fees.   |
| <b>Goal 7.6: Provide for adequate fire protection services and facilities.</b>   |  |
| Policy PS 7.6.1 – Work with the San Bernardino County Fire Protection District to ensure that adequate fire protection personnel, response times, and equipment are available to meet current and future demands of the City’s residents and businesses. | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. However, the Project is required to adhere to Grand Terrace MC Chapter 4.80 Development Impact Fees.   |
| Policy PS 7.6.2 – Work with Riverside Highland Water Company to ensure adequate water pressure for fire fighting throughout the City.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects. However, the Project is required to provide fire hydrants at locations approved by the SBCoFD, and Riverside Highland Water Company lines would be extended to loop around the Project site.   |
| <b>Goal 7.7: In cooperation with the Colton Joint Unified School District, provide adequate public education facilities and programs.</b>  |  |
| Policy PS 7.7.2 - Cooperate with the School District in the collection of school impact mitigation fees for all new developments within the City.  | The Project would pay these fees in compliance with the California Government Code Section 65995 and Education Code and Grand Terrace MC Chapter 4.80. Therefore, the Project would comply with this Policy.   |
| <b>Housing Element</b>   |  |
| <b>Goal 8.1: Provide and encourage a supply of housing suitable to the needs and sufficient in number to serve existing and projected residents of Grand Terrace.</b>  |  |
| Policy H 8.1.1 - Promote and encourage development of housing, which varies by type, design, form of ownership and size.   | The proposed residential uses would contain a variety of housing types which include a variety of attached and detached residential including cluster product, duplexes, townhomes, small-lot single family, stacked flats and supportive recreational amenities. Therefore, the Project would comply with this Policy.  |
| Policy H 8.1.2 - Maximize use of remaining vacant land suitable for residential development  | The Project would convert primarily vacant land for residential uses. Therefore, the Project would comply with this Policy.  |
| Policy H 8.1.3 - Promote and encourage infill housing development and more intensive use of underutilized land for residential construction.   | The Project proposes residential development on underutilized land. Therefore, the Project would comply with this Policy.  |
| Policy H 8.1.4 - Encourage the use of innovative land use techniques and construction methods to minimize housing costs without compromising basic health, safety and aesthetic considerations.  | The residential land uses would contain a variety of housing types to create individual neighborhoods, provide architectural interest and housing choices. All residential development would subject to the residential design standards within the Specific Plan and applicable state design standards. Therefore, the Project would comply with this Policy. |

| General Plan Policy <sup>[1]</sup>   | Project Consistency   |
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| <b>Goal 8.2: Promote and encourage housing opportunities, accessible to employment centers and quality community services for all economic segments of the community including designated very low, low, and moderate income households.</b> |   |
| Policy H 8.2.1 – Continue a Policy of expeditious processing of residential development proposals and permits.   | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |
| Policy H 8.2.2 – Encourage a wide range of housing types, prices and ownership forms in new construction.  | See Policy H 8.1.1 and H 8.1.4 above.   |
| Policy H 8.2.3 – Emphasize and promote the role of the private sector in the construction of low-and moderate-income housing.  | The Project would adhere to the California Planning and Zoning Law which would assist in the development of adequate housing to meet the needs of low-and moderate-income households. Therefore, the Project would comply with this Policy.   |
| Policy H 8.2.4 – Support the development of cost saving and energy conserving construction techniques.   | All housing development would be developed in accordance with the latest California Building and Energy Codes. Pursuant to the California Solar Mandate, all housing development would also be developed with solar systems that would help reduce electricity costs. Therefore, the Project would comply with this Policy. |
| Policy H 8.2.8 – Streamline administrative procedures for granting approvals and permits and establish time limits for such approvals to minimize time, costs and uncertainty associated with development.                                   | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |
| Policy H 8.2.9 – Provide zoning, subdivision and construction incentives to minimize the cost of new and rehabilitated units.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects  |
| Policy H 8.1.10 - Promote mixed use development that includes provisions for affordable housing.   | See Policy H 8.2.3 above. The Project would comply with this Policy.  |
| <b>Goal 8.3: Promote and encourage the rehabilitation of deteriorated dwelling units and the conservation of the currently sound housing stock.</b>  |   |
| Policy H 8.3.4 – Upgrade community facilities and municipal services as community needs warrant.   | The Project proposes public facility land uses that includes improvements to existing community facilities and municipal services. Therefore, the Project would comply with this Policy.  |
| Policy H 8.3.11 – Preserve the physical character of existing neighborhoods.   | The Specific Plan contains development standards that would ensure that streetscapes and buildings convey a cohesive, high-quality community identity while minimizing negative impacts to nearby neighborhoods. Therefore, the Project would comply with this Policy.  |
| <b>Goal 8.4: Conserve and improve the condition of existing affordable housing stock.</b>  |   |
| Policy H 8.4.2 – Encourage the use of assistance programs to make residences more energy efficient.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |
| Policy H 8.4.5 – Encourage the incorporation or energy conservation features in the design of all new housing developments and the addition of energy conservation devices/practices in existing residential developments.                   | The Project would adhere to the California Green Building Standards Code of Regulations, Title 24, Part 11. Therefore, the Project would comply with this Policy.   |
| <b>Sustainable Development Element</b>   |   |
| <b>Goal 9.1: Reduce the City's per capita energy usage.</b>  |   |
| Policy SD 9.1.2 – The City shall incorporate energy conservation measures into conditions of approval for new development projects.  | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.   |

| General Plan Policy <sup>[1]</sup>   | Project Consistency  |
|--|--|
| <b>Goal 9.2: Reduce the total quantity of waste generated within the City requiring landfill disposal to meet or exceed the State waste diversion goals.</b>   |  |
| Policy SD 9.2.2 – Require all new development projects to recycle construction and demolition wastes.  | All development projects will be required to recycle or handle construction and demolition wastes, consist with this Policy and in accordance with applicable state regulations regarding the use, handling, storage, and transportation of waste. Therefore, the Project would comply with this Policy. |
| <b>Goal 9.3: Reduce the total quantity of waste generated within the City requiring landfill disposal to meet or exceed the State waste diversion goals.</b>   |  |
| Policy SD 9.3.1 – Incorporate “green” building practices into the review of all new or renovated development projects.   | All future development would be designed in accordance with the latest California Building Code and Energy Code standards, including the Specific Plan’s residential and non-residential development standards. Therefore, the Project would comply with this Policy.                                    |
| Policy SD 9.3.2 – Site and building design in new developments should maximize opportunities for efficient energy performance.   | All future development would be designed in accordance with the latest California Building Code and Energy Code standards, including the Specific Plan’s residential and non-residential development standards. Therefore, the Project would comply with this Policy.                                    |
| <b>Goal 9.7: Reduce the City’s per capita demand for water consumption.</b>  |  |
| Policy SD 9.7.2 The City shall incorporate water conservation into the development review process.   | All development Projects would be required to incorporate water conservation design features and landscaping to minimize water consumption. Therefore, the Project would comply with this Policy.  |
| <b>Goal 9.8: The City shall lead the development community by example in green building, and energy and resource conservation practices.</b>   |  |
| Policy SD 9.8.1 – The City shall support green development standards for new or rehabilitated public buildings and facilities.   | The Project would adhere to the California Green Building Standards Code of Regulations, Title 24, Part 11. Therefore, the Project would comply with this Policy.  |
| Policy SD 9.8.2 – The City shall actively reduce greenhouse gas emissions from public facilities throughout the community.   | <i>Not Applicable.</i> This Policy is intended to be implemented by the City of Grand Terrace and not private projects.  |
| Source: City of Grand Terrace. (2010). <i>Grand Terrace General Plan</i> . Retrieved at: <a href="https://www.grandterrace-ca.gov/departments/planning_development_services/planning">https://www.grandterrace-ca.gov/departments/planning_development_services/planning</a> (accessed March 2022). Tables C.1 through C.8 of Specific Plan. |  |

### City of Grand Terrace Municipal Code – Zoning

The Grand Terrace MC sets the City’s standards, guidelines, and procedures relating to the development and maintenance of all land uses within the City. The regulations implement the goals and policies of the General Plan while being consistent with the Land Use Plan designations. The zoning protects the physical, social, and economic stability of City residents, businesses, and their property. It reduces or eliminates hazards to the public; and enhances the City’s physical, social, and economic advantages through comprehensive land use and resource planning.

The Project is seeking a Zone Change that would modify the existing zoning for a new zoning – The Gateway at Grand Terrace Specific Plan (GSP) to implement a mixed-use development of residential, commercial, and public facilities. Under this SP zoning, the land use plan, policies, development standards, and design guidelines provide the site-specific requirements for future development within the area. The GSP designation allows design flexibility to attain superior quality and excellence in design, sustainability, architecture, and site amenities. Upon approval of the proposed zone change, the future development on the Project site would be compliant with all applicable Grand Terrace MC zoning requirements. Any

amendments to the existing land use plan designations and/or zoning that would be required for Project implementation would be subject to additional analysis for consistency with this EIR when those legislative actions are processed in the foreseeable future.

**SCAG Connect SoCal**

Connect SoCal is a long-term planning document intended to guide the growth of the region that includes the Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. Connect SoCal allows public agencies who implement transportation projects to do so in a coordinated manner and assists the region in achieving California’s greenhouse gas emission reduction goals and federal Clean Air Act requirements. The plan also strives to achieve broader regional objectives, such as the preservation of natural lands, improvement of public health, increased roadway safety, support for the region’s vital goods movement industries, and more efficient use of resources. **Table 4.10-4, Project Compatibility with SCAG Connect SoCal Strategies** below describes the proposed Project’s compatibility with the land use strategies proposed in Connect SoCal. Due to the Project’s consistency with the Connect SoCal Land Use strategies, no significant impact is expected in this regard.

**Table 4.10-4: Project Compatibility with Connect SoCal Strategies**

| Connect SoCal Strategies  | Project Consistency   |
|---|---|
| 1. Encourage regional economic prosperity and global competitiveness                        | The Project is located on a vacant site and development of the site would contribute to regional economic prosperity. The Project would encourage future growth in the City and the County, spur infrastructure improvements in the area, and implement the Specific Plan vision. The Project would allow for the development of urban uses on currently underutilized land. Therefore, the Project would comply with this strategy.  |
| 2. Improve mobility, accessibility, reliability, and travel safety for people and goods     | The Project’s proposed circulation improvements would contribute to the local or regional mobility, accessibility, reliability, and travel safety for people and goods. At the local level, the proposed Project includes a circulation plan that includes roadways, pedestrian, and bicycle facility improvements. More specifically, partial street improvements to Taylor Street, Van Buren Street, and De Berry Street and the extension of Taylor Street to Commerce way would provide increased connectivity to regional circulation elements including I-215. The proposed Project is located in an area that is planned to enhance the overall efficiency, aesthetics, and regional capacity to distribute goods. and products. Therefore, the Project would comply with this strategy. |
| 3. Enhance the preservation, security, and resilience of the regional transportation system | All modes of public and commercial transit throughout the Project area would be required to follow safety standards set by State, regional, and local regulatory documents. For example, sidewalks must follow precautions established in the City’s Development Code. The Project would not remove or alter in a reductive manner access to the local public transportation near the Project site. Therefore, the Project would comply with this strategy.   |
| 4. Increase person and goods movement and travel choices within the transportation system   | The Project would involve transportation improvements in the form of improvements to nearby streets. The Project’s proposed circulation plan would provide partial improvements to Taylor Street, Van Buren Street, and De Berry Street, that include street extensions, utility easements, installation of bike lanes, sidewalks, and a variety of street cross sections that will serve the various land uses and create a visually appealing and functional roadway system for vehicle and pedestrian uses. This will improve local circulation for traffic and provide efficient movement of people and goods through the City. Additionally, Taylor Street shall be extended towards Commerce Way along the Riverside Canal. Therefore, the Project would comply with this strategy.       |
| 5. Reduce greenhouse gas emissions and improve air quality                                  | The Project is located within an urban area and is in close proximity to existing transit routes and freeways. The Project’s circulation would be designed to increase the efficiency of distribution of goods and products and reduce trip lengths, which would  |

| Connect SoCal Strategies  | Project Consistency   |
|---|---|
|   | <p>reduce GHG and air quality emissions. The Project also includes Project Design Features such as carpool and vanpool parking, and clean fuel and EV infrastructures that would facilitate reducing GHG emissions from mobile sources. The Project would implement <b>MM GHG-1</b> through <b>MM GHG-4</b>, <b>MM AQ-2</b> through <b>AQ-5</b> and laws, ordinances, and regulations (LORs) AQ-1 through AQ- 6 to reduce operational emissions to the greatest amount feasible. <b>MM GHG-1</b> requires residential development to install solar photovoltaic (PV) panels or other source of renewable electricity generation. <b>MM GHG-2</b> requires the Project to comply with CALGreen Tier 2 and requires a minimum 15 percent improvement. <b>MM GHG-3</b> requires energy efficient appliances. <b>MM GHG-4</b> requires a 75 percent reduction in solid waste disposal. <b>MM AQ-1</b> requires the Project to use “Super Compliant” low VOC paints during construction. <b>MM AQ-2</b> requires a TDM plan to reduce mobile GHG emissions for all uses. <b>MM AQ-3</b> prohibits the installation of wood-burning and natural gas devices to limit ROG, NO<sub>x</sub>, particulate matter, and visible emissions. <b>MM AQ-4</b> confirms the Project’s Codes Covenants and Restrictions and/or tenant lease agreements include contractual language that all landscaping equipment used on-site shall be 100 percent electrically powered. Lastly, <b>MM AQ-5</b> requires product that have a volatile organic compound rating of 50 grams per liter or less are used for interior and exterior architectural coatings. LOR AQ-1 requires the implementation of Rule 402 and 403 dust control to minimize emissions. LOR AQ-2 requires the low VOC paints. LOR AQ-3 requires diesel powered construction equipment to turn off when not in use per Title 13 of the California Code of Regulations § 2449. LOR AQ-4 requires water-efficient irrigation systems and devices in accordance with Chapter 15.56 of the City’s Municipal Code. LOR AQ-5 requires accordance with Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings. Lastly LOR AQ-6 requires the Project to adhere to the applicable California Green Building Standards. The Project would not exceed construction emission standards with mitigation. However, even with mitigation, operational emissions would remain above the SCAQMD threshold. However, despite the implementation of all feasible mitigation measures and standard conditions, air quality and greenhouse gas emission impacts would remain significant and unavoidable. See <b>Section 4.2, Air Quality</b> and <b>Section 4.7, Greenhouse Gas Emissions</b> for more information. Therefore, the Project would comply with this strategy.</p> |
| <p>6. Support healthy and equitable communities</p>   | <p>The Project’s circulation plan includes street, pedestrian, and bicycle facility improvements that would allow easy access to the other proposed mixed-uses. The Project would indirectly improve regional air quality by its location being in proximity to regional transportation corridors and in a location that reduces overall distances for product distribution.</p> <p>Furthermore, the Project would implement mitigation measures that includes, but is not limited to, <b>MM AQ-2</b> which requires implementation of a TDM program to reduce single occupant vehicle trips and encourage public transit. These measures support reduction in mobile emissions and more equitable transportation options. Therefore, the Project would comply with this strategy.</p>  |
| <p>7. Adapt to a changing climate and support an integrated regional development pattern and transportation network</p> | <p>The Project would construct new roads, infrastructure, and buildings to support uses consistent with the 2020-2045 RTP/SCS and consistent with current building codes, State and Federal requirements including CALGreen Code. This includes electric vehicle (EV) Parking spaces, energy-efficient buildings, and use of construction and grading equipment that complies with current air quality standards, etc. See <b>Section 4.2, Air Quality</b>; <b>Section 4.7, Green House Gas Emissions</b>; and <b>Section 4.15, Transportation</b>. Therefore, the Project would comply with this strategy.</p>   |
| <p>8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel</p>       | <p>The Project’s circulation plan would ensure that the proposed roadway improvements and internal circulation are designed cohesively with the proposed land uses. Therefore, the Project would comply with this strategy.</p>   |
| <p>9. Encourage development of diverse housing types in areas that are supported by multiple transportation options</p> | <p>The Project area is predominantly undeveloped, vacant, and open space land. There are currently two transit stops on Barton Road in close proximity to the Project site. The Project would provide diverse housing types and improve surrounding roadways which then would improve the transportation network, including public transit,</p>   |



| Connect SoCal Strategies   | Project Consistency   |
|--|---|
|  | within the City. These roadways would provide connectivity I-215, allowing local traffic to access regional transportation facilities. Therefore, the Project would comply with this strategy.  |
| 10. Promote conservation of natural and agricultural lands and restoration of habitats   | This Project is located within an urban area and is not located on agricultural lands and no habitat restoration sites are present on the Project site. Therefore, no agricultural or habitat restoration sites will be impacted as a result of this Project. Therefore, the Project would comply with this strategy. |
| Source: SCAG. 2020. <i>Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy)</i> . <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176</a> . |   |

As shown in **Tables 4.10-3** and **4.10-4**, the Project would be consistent with the Grand Terrace GP and MC, and Connect SoCal strategies. Therefore, the Project would not cause a significant environmental impact due to a conflict with any land use plan, Policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and the impact would be less than significant.

**Mitigation Measures**

No mitigation measures are required.

**4.10.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant unavoidable land use and planning impacts have been identified.

**4.10.7 CUMULATIVE IMPACTS**

The geographic scope for cumulative impacts related to land use includes closely related past, present, and reasonably foreseeable future projects located in the surrounding area. Regarding conflicts with any land use plan, policies, or regulations, approval of the Project and implementation of mitigation measures identified throughout this EIR would ensure that any future development within the Project complies applicable goals, policies, and regulations implemented by the state, regional, and local jurisdictions, including the design standards and guides set within the Specific Plan.

Potential land use impacts would be site-specific and would require evaluation on a project-by-project basis. This is true with regard to land use compatibility impacts, which are generally a function of the relationship between the interactive effects of a specific development site and those of its immediate environment. Existing, as well as future cumulative development, within the surrounding area is anticipated to occur in accordance with the Grand Terrace GP and MC and be evaluated as such the same as the Project. In addition, all future development within the Project must conform to the Specific Plan’s development and design standards and may require additional environmental review. Therefore, the Project, in conjunction with these other projects, is not anticipated to introduce incompatible uses and substantially conflict with the operation of surrounding land uses.

Furthermore, the Project would not physically divide an established community because the proposed residential units would offset the loss of existing residential units and would provide utility improvements and a circulation plan that would benefit the City financially and increase circulation/connectivity in the area. Therefore, the proposed Project would not result in a cumulative contribution to impacts associated

with conflicts with land use planning documents or related policies and regulations. These impacts are less than cumulatively considerable and less than significant.

#### 4.10.8 REFERENCES

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## 4.11 NOISE

### 4.11.1 INTRODUCTION

The section identifies existing conditions in The Gateway at Grand Terrace Specific Plan (Project) area and evaluates the Project's potential to generate a substantial temporary or permanent increase in ambient noise; generate ground-borne vibration or noise; or, if located in the vicinity of an airport, expose people to excessive noise levels. Mitigation to avoid/reduce impacts is identified, as needed. The evaluation of the Project, including the potential impacts to noise, is largely based on the following resources:

- Kimley-Horn & Associates. (2023). *Acoustical Assessment*. (Appendix I)

The Project is a specific plan that serves as the regulatory mechanism to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

### 4.11.2 ENVIRONMENTAL SETTING

#### Acoustic Fundamentals

##### Sound and Environmental Noise<sup>1</sup>

Acoustics is the science of sound. Sound is defined as the mechanical energy of a vibrating object transmitted by pressure waves through a medium (e.g., air) to human (or animal) ear. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or hertz (Hz).

Noise is defined as loud, unexpected, or annoying sound. In acoustics, the fundamental model consists of a noise source, a receptor, and the propagation path between the two. The loudness of the noise source, obstructions, or atmospheric factors affecting the propagation path, determine the perceived sound level and noise characteristics at the receptor. Acoustics deal primarily with the propagation and control of sound. A typical noise environment consists of a base of steady background noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These sources can vary from an occasional aircraft or train passing by to

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<sup>1</sup> Kimley-Horn & Associates. (2023). *Acoustical Assessment*. Page 6. See Appendix I.

continuous noise from traffic on a major highway. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a large range of numbers. To avoid this, the decibel (dB) scale was devised. The dB scale uses the hearing threshold of 20 micropascals ( $\mu\text{Pa}$ ) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels correspond closely to human perception of relative loudness.

## Noise Descriptors<sup>2</sup>

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The equivalent noise level ( $L_{\text{eq}}$ ) represents the continuous sound pressure level over the measurement period, while the day-night noise level ( $L_{\text{dn}}$ ) and Community Equivalent Noise Level (CNEL) are measures of energy average during a 24-hour period, with dB weighted sound levels from 7:00 p.m. to 7:00 a.m. Most commonly, environmental sounds are described in terms of  $L_{\text{eq}}$  that has the same acoustical energy as the summation of all the time-varying events. Each noise descriptor used in the Acoustical Assessment is summarized in the following **Table 4.11-1, Definitions of Acoustical Terms**.

**Table 4.11-1: Definitions of Acoustical Terms**

| Term   | Definitions   |
|--|---|
| Decibel (dB)   | A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.  |
| Sound Pressure Level   | Sound pressure is the sound force per unit area, usually expressed in $\mu\text{Pa}$ (or 20 micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in dB as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 $\mu\text{Pa}$ ). Sound pressure level is the quantity that is directly measured by a sound level meter. |
| Frequency (Hz)   | The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.  |
| A-Weighted Sound Level (dBA)   | The sound pressure level in dB as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.  |
| Equivalent Noise Level ( $L_{\text{eq}}$ )   | The average acoustic energy content of noise for a stated period of time. Thus, the $L_{\text{eq}}$ of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.   |
| Maximum Noise Level ( $L_{\text{max}}$ )<br>Minimum Noise Level ( $L_{\text{min}}$ ) | The maximum and minimum dBA during the measurement period.  |
| Exceeded Noise Levels ( $L_{01}$ , $L_{10}$ , $L_{50}$ , $L_{90}$ )                  | The dBA values that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.   |

<sup>2</sup> Ibid. Page 7

| Term                                    | Definitions  |
|---|--|
| Day-Night Noise Level ( $L_{dn}$ )      | A 24-hour average $L_{eq}$ with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity at nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour $L_{eq}$ would result in a measurement of 66.4 dBA $L_{dn}$ .  |
| Community Noise Equivalent Level (CNEL) | A 24-hour average $L_{eq}$ with a 5 dBA weighting during the hours of 7:00 a.m. to 10:00 a.m. and a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour $L_{eq}$ would result in a measurement of 66.7 dBA CNEL. |
| Ambient Noise Level                     | The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.   |
| Intrusive                               | That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.   |

Source: Ibid. Page 7 – Table 2

The A-weighted decibel (dBA) sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source.

### A-Weighted Decibels and Addition of Decibels<sup>3</sup>

The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by dBA values. There is a strong correlation between dBA and the way the human ear perceives sound. For this reason, the dBA has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of dBA, but are expressed as dB, unless otherwise noted.

The dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic dB is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions. Under the dB scale, three sources of equal loudness together would produce an increase of approximately 5 dBA.

<sup>3</sup> Ibid. Page 8

## Sound Propagation and Attenuation<sup>4</sup>

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics.<sup>5</sup> No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The way older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

## Human Response to Noise<sup>6</sup>

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). The following relationships are noted regarding increases in dBA:

- Except in carefully controlled laboratory experiments, a 1-dBA change cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A minimum 5-dBA change is required before any noticeable change in community response would be expected. A 5-dBA increase is typically considered substantial.

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<sup>4</sup> Ibid. Page 8

<sup>5</sup> Ibid. Page 8

<sup>6</sup> Ibid. Page 9

- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

## Effects of Noise on People<sup>7</sup>

### Hearing Loss

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

### Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The  $L_{dn}$  as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. A noise level of about 55 dBA  $L_{dn}$  is the threshold at which a substantial percentage of people begin to report annoyance.<sup>8</sup>

### Ground-borne Vibration<sup>9</sup>

Sources of ground-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions or heavy equipment usage during construction). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

**Table 4.11-2, Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations**, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception

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<sup>7</sup> Ibid. Page 9

<sup>8</sup> Ibid. Page 10

<sup>9</sup> Ibid. Pages 10-11

can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where ground-borne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

**Table 4.11-2: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations**

| Maximum PPV (in/sec) | Vibration Annoyance Potential Criteria | Vibration Damage Potential Threshold Criteria                      | FTA Vibration Damage Criteria                       |
|----------------------|--|--|---|
| 0.008                | --                                     | Extremely fragile historic buildings, ruins, ancient monuments     | --  |
| 0.01                 | Barely Perceptible                     | --   | --  |
| 0.04                 | Distinctly Perceptible                 | --   | --  |
| 0.1                  | Strongly Perceptible                   | Fragile buildings  | --  |
| 0.12                 | --                                     | --   | Buildings extremely susceptible to vibration damage |
| 0.2                  | --                                     | --   | Non-engineered timber and masonry buildings         |
| 0.25                 | --                                     | Historic and some old buildings                                    | --  |
| 0.3                  | --                                     | Older residential structures                                       | Engineered concrete and masonry (no plaster)        |
| 0.4                  | Severe                                 | --   | --  |
| 0.5                  | --                                     | New residential structures, Modern industrial/commercial buildings | Reinforced-concrete, steel or timber (no plaster)   |

PPV = peak particle velocity; in/sec = inches per second; FTA = Federal Transit Administration  
 Source: Ibid. Page 11 – Table 3

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for ground-borne vibration are planes, trains, and construction activities such as earthmoving which requires the use of heavy-duty earth moving equipment.

## Existing Conditions

### Existing Noise Sources

The City is characterized as a predominately urban environment. Much of the City has been developed with residential, commercial, and industrial land uses. Transportation-related noise is the primary noise source in the City. Other noise sources include noise generated from commercial, residential, and recreational activities.

### Mobile Sources

Existing roadway noise levels were calculated in the Acoustical Assessment for the roadway segments in the Project vicinity using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) and existing traffic volumes from the Project traffic analysis (**Appendix J**). The



noise prediction model calculated the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (also referred to as energy rates) used in the FHWA model were modified to reflect average vehicle noise rates identified for California by the California Department of Transportation (Caltrans). The Caltrans data indicates that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along roadway segments in proximity to the Project site are included in **Table 4.11-3, Existing Traffic Noise Levels**.

**Table 4.11-3: Existing Traffic Noise Levels**

| Roadway Segment |  | Land Use    | ADT    | dBA CNEL |
|-----------------|--|-------------|--------|----------|
| Barton Road     | I-215 SB Ramps to NB Ramps                   | Commercial  | 17,426 | 67.3     |
|                 | I-215 NB Ramps to Michigan Street            | School      | 23,963 | 68.8     |
|                 | Michigan Street to Vivienda Avenue           | School      | 22,888 | 68.6     |
|                 | Vivienda Avenue to Mt. Vernon Avenue         | Commercial  | 16,225 | 67.1     |
| Vivienda Ave    | Barton Road to Michigan Street               | Commercial  | 11,801 | 58.4     |
| Michigan Street | Barton Road to De Berry Street               | Residential | 12,051 | 64.8     |
|                 | De Berry Street to Van Buren Street          | Residential | 9,126  | 63.5     |
|                 | Van Buren Street to Pico Street              | Residential | 6,901  | 62.2     |
|                 | Pico Street to Main Street                   | Residential | 5,851  | 61.5     |
|                 | Main Street to Center Street                 | Residential | 3,600  | 59.4     |
| Main Street     | Michigan Street to Grand Terrace HS Driveway | School      | 4,838  | 58.5     |
|                 | Grand Terrace HS Driveway to Titan Way       | School      | 4,825  | 58.5     |
|                 | Titan Way to Taylor Street/Commerce Way      | School      | 5,338  | 58.8     |
|                 | Taylor Street/Commerce Way to Iowa Avenue    | Commercial  | 5,563  | 59.0     |
| De Berry Street | Michigan Street to Mt Vernon Avenue          | School      | 2,963  | 54.9     |

ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.

Source: Ibid. Page 17 – Table 5

As shown in **Table 4.11-3**, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 58.9 dBA CNEL to 69.1 dBA CNEL 100 feet from the centerline. As previously described, CNEL is 24-hour average noise level with a 5 dBA “weighting” during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

### Stationary Sources

The nearest source of stationary noise in the Project vicinity would come from existing single-family residential and commercial properties to the east. Noise sources from residential and commercial uses typically include mechanical equipment such as heating, ventilating, and air conditioning (HVAC); automobile related noise such as cars starting and doors slamming; and landscaping equipment. The noise associated with these sources may represent a single-event noise occurrence or short-term noise.

### Noise Measurements

The Project site is primarily vacant and/or used for storage with interspersed residential uses. As noted in the Acoustical Assessment, Kimley-Horn staff conducted four short-term noise measurements on

March 1, 2022, to quantify existing ambient noise levels in the Project vicinity (refer to **Appendix A** of the Acoustical Assessment for further detail). The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site. The 10-minute measurements were taken between 10:19 a.m. and 11:38 a.m. on a Tuesday. Measurements of  $L_{eq}$  are considered representative of the noise levels throughout the day. The average noise levels and sources of noise measured at each location are listed in **Table 4.11-4, Existing Noise Measurements** and shown on **Exhibit 4.11-1, Noise Measurement Locations**.

**Table 4.11-4: Existing Noise Measurements**

| Site | Location                              | Measurement Period | Duration   | $L_{eq}$<br>(dBA) |
|------|---------------------------------------|--------------------|------------|-------------------|
| ST-1 | 21801 De Berry Street, Grand Terrace  | 10:19 – 10:29 a.m. | 10 Minutes | 67.4              |
| ST-2 | 12215 Michigan Street, Grand Terrace  | 10:38 – 10:48 a.m. | 10 Minutes | 72.1              |
| ST-3 | 22110 Van Buren Street, Grand Terrace | 11:04 – 11:14 a.m. | 10 Minutes | 62.9              |
| ST-4 | 21950 Pico Street, Grand Terrace      | 11:28 – 11:38 a.m. | 10 Minutes | 51.5              |

Source: Ibid. Page 18 – Table 6

## Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive uses typically include residences, hospitals, schools, childcare facilities, and places of assembly. Vibration sensitive receivers are generally similar to noise sensitive receivers but may also include businesses, such as research facilities and laboratories that use vibration-sensitive equipment. The Project site is surrounded by a mix of residential, commercial, and industrial properties to the east, a high school and park to the south, and I-215 to the north and west. Sensitive land uses nearest to the Project are summarized in the following **Table 4.11-5, Sensitive Receptors**.

**Table 4.11-5: Sensitive Receptors**

| Receptor Description      | Distance and Direction from the Project   |
|---------------------------|---|
| Single-family Residences  | Adjacent to the east  |
| Veterans Freedom Park     | Adjacent to the southeast   |
| Single-family Residences  | 240 feet to the southeast   |
| Grand Terrace High School | 90 feet to the south from nearest sensitive use area<br>(i.e., tennis courts and baseball fields) |

Source: Ibid. Page 20 – Table 7

### 4.11.3 REGULATORY SETTING

#### Federal

##### Federal Transit Administration Noise and Vibration Guidance

The Federal Transit Administration (FTA) has published the Transit Noise and Vibration Impact Assessment report to provide guidance on procedures for assessing impacts at different stages of transit project development. The report covers both construction and operational noise impacts and describes a range of measures for controlling excessive noise and vibration. The specified noise criteria are an earlier version of the criteria provided by the Federal Railroad Administration's High-Speed Ground Transportation Noise and Vibration Impact Assessment. In general, the primary concern regarding vibration relates to potential

damage from construction. The guidance document establishes criteria for evaluating the potential for damage for various structural categories from vibration.

## State

### California Government Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable” noise levels for various land use types. Single-family homes are “normally acceptable” in exterior noise environments up to 60 CNEL and “conditionally acceptable” up to 70 CNEL. Multiple-family residential uses are “normally acceptable” up to 65 CNEL and “conditionally acceptable” up to 70 CNEL. Schools, libraries, and churches are “normally acceptable” up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

### Title 24 – Building Code

The State’s noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, hotel rooms, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new multi-family residential buildings and habitable rooms (including hotels), the acceptable interior noise limit for new construction is 45 dBA CNEL.

## Local

### City of Grand Terrace General Plan

Adopted on April 27, 2010, the City of Grand Terrace General Plan (Grand Terrace General Plan) identifies interior and exterior noise standards that are used as guidelines to evaluate noise level impacts, as well as noise/land use compatibility standards.

### Interior and Exterior Noise Standards

The Grand Terrace Noise Element has identified interior and exterior noise standards for various land uses, as depicted in Table 4.11-6, Grand Terrace Interior and Exterior Noise Standards. As shown in Table 4.11-6, sensitive land uses, such as residential uses, have acceptable exterior noise level standards of up to 65 dB and interior noise level standards of up to 45 dB.

**Table 4.11-6: Grand Terrace Interior and Exterior Noise Standards**

| Land Use  | CNEL                  |                       |
|---|-----------------------|-----------------------|
|   | Interior <sup>1</sup> | Exterior <sup>2</sup> |
| Residential – Single Family, Multi-family, Duplex, Mobile Homes   | 45 dB                 | 65 dB                 |
| Transient Lodging, Hotels, Motels, Nursing Homes  | 45 dB                 | 65 dB                 |
| Private Offices, Church Sanctuaries, Libraries, Conference Rooms, Theaters, Auditoriums, Concert Halls, Meeting Halls | 45 dB                 | --                    |
| School  | 45 dB                 | 65 dB                 |
| General Offices, Reception/Clerical Areas   | 50 dB                 | --                    |
| Bank Lobbies, Retail Stores, Restaurants  | 55 dB                 | --                    |
| Manufacturing, Kitchens, Warehouses   | 65 dB                 | --                    |
| Parks, Playgrounds  | --                    | 65 dB                 |
| Golf Courses, Outdoor Spectator Sports, Amusement Parks   | --                    | 65 dB                 |

Notes:  
 1. Standard applies to all habitable interior areas. Standard to be achieved with windows and doors closed. Mechanical ventilation shall be provided as required by the Uniform Building Code.  
 2. Standard applies to all habitable exterior living areas including private yards, private patios and balconies, common recreation.  
 Source: City of Grand Terrace, Grand Terrace General Plan, 2010.

**Noise/Land Use Compatibility Criteria**

The noise criteria identified in the **Table 4.11-7, Grand Terrace Noise/Land Use Compatibility Matrix** below are guidelines to evaluate noise/land use compatibility. The compatibility criteria listed in **Table 4.11-7** provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. Note that Noise/Land Use Compatibility Matrix describes categories of compatibility and not specific noise standards.

**Table 4.11-7: Grand Terrace Noise/Land Use Compatibility Matrix**

| Land Use  | CNEL (dB) |    |    |    |    |    |    |
|---|-----------|----|----|----|----|----|----|
|   | 50        | 55 | 60 | 65 | 70 | 75 | 80 |
| Residential – Single Family, Multi-family, Duplex                   | A         | A  | B  | C  | C  | D  | D  |
| Residential – Mobile Homes  | A         | A  | B  | C  | C  | D  | D  |
| Transient Lodging – Hotels, Motels                                  | A         | A  | B  | B  | C  | C  | D  |
| Schools, Libraries, Churches, Hospitals, Nursing Homes              | A         | A  | B  | C  | C  | D  | D  |
| Auditoriums, Concert Halls, Amphitheaters                           | B         | B  | C  | C  | D  | D  | D  |
| Sports Arenas, Outdoor Spectator Sports, Amusement Parks            | A         | A  | A  | B  | B  | D  | D  |
| Playgrounds, Neighborhood Parks                                     | A         | A  | A  | B  | C  | D  | D  |
| Golf Courses, Riding Stables, Cemeteries                            | A         | A  | A  | A  | B  | C  | C  |
| Office and Professional buildings                                   | A         | A  | A  | B  | B  | C  | D  |
| Retail Commercial, Banks, Restaurants                               | A         | A  | A  | A  | B  | B  | C  |
| Industrial, Manufacturing, Utilities, Service Stations, Warehousing | A         | A  | A  | A  | B  | B  | B  |
| Agriculture   | A         | A  | A  | A  | A  | A  | A  |

Notes:  
**A Normally Acceptable:** Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.  
**B Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air systems or air conditioning will normally suffice.  
**C Normally Unacceptable:** New construction or development should generally be discouraged. If it does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.  
**D Clearly Unacceptable:** New construction or development should generally not be undertaken.  
 Source: Ibid. Page 13 – Table 4

The City's General (Grand Terrace GP) goals and policies that address noise are applicable to the Project:<sup>10</sup>

### **Noise Element**

- Goal 6.1:**           **Protect the citizens of Grand Terrace and sensitive land uses from annoying and excessive noise generated by non-transportation oriented uses and activities.**
- Policy 6.1.2**       Construction noise on adjacent land uses shall be minimized by limiting the permitted hours of activity.
- Policy 6.1.3**       City departments shall observe state and federal occupational safety and health noise standards.
- Goal 6.2:**           **Prevent and mitigate the adverse impacts of excessive exposure to residential and commercial land uses.**
- Policy 6.2.1**       The City shall evaluate potential noise impacts as part of the land use planning process to mitigate or avoid detrimental impacts and enforce the local noise ordinance.
- Policy 6.2.2**       The City shall establish acceptable noise standards for various land uses throughout the City of Grand Terrace through the adoption of ordinances and standards.
- Policy 6.2.3**       New residential developments located in close proximity to existing commercial/industrial operations shall be evaluated for potential noise impacts and interior noise mitigation.
- Policy 6.2.4**       Commercial uses developed as part of any mixed-use project including residential component shall not be noise intensive. Mixed-use structures shall be designed to prevent commercial noise impacts to the project's residential uses.
- Policy 6.2.5**       New commercial/industrial operations located in proximity to existing or proposed residential areas shall incorporate noise mitigation into project design.
- Policy 6.2.6**       Impacts of construction noise on adjacent land uses shall be regulated through limiting the permitted hours of activity.
- Policy 6.2.7**       The City shall evaluate potential ground-borne vibration impacts as part of the land use planning process to mitigate or avoid detrimental impacts on adjacent land uses.

### **Grand Terrace Municipal Code<sup>11</sup>**

#### **Section 8.108.020 – Loud, annoying, excessive and unnecessary noises prohibited.**

- A. It shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any excessive or unreasonable noise that disturbs the peace or quiet of any property within the City or which causes discomfort or annoyance to any reasonable person of normal sensitivities residing in the area.

<sup>10</sup> City of Grand Terrace. (2010). *City of Grand Terrace General Plan*. Retrieved at: [https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning) (accessed March 2022).

<sup>11</sup> City of Grand Terrace. (2021). *City of Grand Terrace Municipal Code*. Retrieved at: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code](https://library.municode.com/ca/grand_terrace/codes/municipal_code) (accessed March 2023).

- B. Irrespective of whether the noise originates within the City or outside the City, the standard that may be considered in determining whether excessive noise exists may include, but not be limited to, the following:
1. Whether the noise can be heard over 100 feet from the property line where the source of the noise is located;
  2. The level of the noise;
  3. Whether the nature of the noise is usual or unusual;
  4. Whether the origin of the noise is natural or unnatural;
  5. The level and intensity of the background noise, if any;
  6. The proximity of the noise to residential sleeping facilities;
  7. The nature and zoning of the area within which the noise emanates;
  8. The density of the inhabitation of the area within which the noise emanates or is heard in;
  9. The time of the day and night the noise occurs;
  10. The duration of the noise, including whether it is of a temporary or short-term nature;
  11. Whether the noise is recurrent, intermittent, or constant;
  12. Whether the noise is produced by a commercial or noncommercial activity; and
  13. Whether the noise produces vibrations that are felt or heard.

***Section 8.108.040 – Special activities.***

The following activities shall be exempted from the Chapter 8.108 – Noise:

- B. Noises produced by mechanical devices, apparatus or equipment used, related to, or connected with emergency machinery, vehicles, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within 30 minutes in any hour of its being activated.
- C. Noises sources associated with or vibration created by construction, repair or remodeling or grading of any real property or during authorized seismic surveys, are exempt from the provisions of Chapter 8.108 – Noise, provided said activities do not take place between the hours of 8:00 p.m., and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday.
- E. Noise sources associated with the maintenance of real property provided the activities take place between the hours of 8:00 a.m. and 8:00 p.m. on any day except Sunday or between the hours of 9:00 a.m. and 8:00 p.m. on Saturday.

***Section 8.108.050 – Prohibited noise.***

The following noises are prohibited and declared to be nuisances:

- F. *Loading or Unloading of Trucks.* No person shall create or cause to be created loud and excessive noise in connection with the loading or unloading of motor trucks and other vehicles, so as to disturb

the peace and quiet of adjacent residential neighborhoods, between the hours of 10:00 p.m. and 7:00 a.m. The loading or unloading in such a manner as to be loud or excessive at a distance of 50 feet from the trucks or vehicles being unloaded shall be prima facie evidence of a violation of this Section.

G. *Operation of Equipment.* The operation or use between the hours of 10:00 p.m. and 7:00 a.m. of any pile driver, steam shovel, pneumatic hammers, derrick, steam or electric hoist, power driven saw, forklifts, milling equipment, other tools or apparatus the use of which is attended by loud and excessive noise, or the movement of tractors, tractor trucks, or large trucks on property adjacent to residences is prohibited. The operation of such equipment between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to be loud or excessive at a distance of 50 feet from the equipment being operated shall be prima facie evidence of a violation of this Section. However, it is not the intent of this Section to prohibit the direct movement of trucks on or off property, at any time; provided, however, that such movement directly on or off the property shall not be within 50 feet of an occupied residence.

H. *Automotive Repair Works.* No person shall do automotive repair, automotive body or fender or other work on metal objects and metal parts between the hours of 10:00 p.m. and 7:00 a.m., in or adjacent to any residential district, so as to cause loud and excessive noise which disturbs the peace and quiet of the residential neighborhood. The doing of such activities as are prohibited in this Subsection in such a manner as to be loud or excessive at a distance of 50 feet from where such prohibited activity is being done shall be prima facie evidence of a violation of this Section.

#### **Section 18.74.060 – Vibration Standards.**

Uses shall be operated in compliance with the following provisions:

1. The generation of vibration of a duration and intensity so as to be excessive, disturbing, or objectionable to persons located off-site, shall not be permitted.
2. Uses shall not generate ground vibration that interferes with the operations of equipment and facilities of adjoining parcels.

#### **4.11.4 SIGNIFICANCE CRITERIA UNDER CEQA**

CEQA Guidelines Appendix G, Environmental Checklist Form, includes questions pertaining to noise. The issues presented in the Environmental Checklist have been utilized as thresholds of significance in this section. Accordingly, the Project would have a significant adverse environmental impact if it would result in:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- b) Generation of excessive groundborne vibration or groundborne noise levels; and

- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

## Methodology

### Construction

Construction noise levels were based on typical noise levels generated by construction equipment published by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA). Construction noise is assessed in dBA  $L_{eq}$ . This unit is appropriate because  $L_{eq}$  can be used to describe noise level from operation of each piece of equipment separately, and levels can be combined to represent the noise level from all equipment operating during a given period.

Construction noise modeling was conducted using the FHWA Roadway Construction Noise Model (RCNM). Reference noise levels are used to estimate operational noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dB per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Noise level estimates do not account for the presence of intervening structures or topography, which may reduce noise levels at receptor locations. Therefore, the noise levels presented herein represent a conservative, reasonable worst-case estimate of actual temporary construction noise. The City does not have established quantitative construction noise standards. As noted above, this analysis conservatively uses the FTA's threshold of 80 dBA (8-hour  $L_{eq}$ ) for residential uses and 90 dBA (8-hour  $L_{eq}$ ) for non-residential uses to evaluate construction noise impacts.

### Operations

The analysis of the without Project and with Project noise environments is based on noise prediction modeling and empirical observations. Reference noise level data are used to estimate the Project operational noise impacts from stationary sources. Noise levels are collected from field noise measurements and other published sources from similar types of activities are used to estimate noise levels expected with the Project's stationary sources. The reference noise levels are used to represent a worst-case noise environment as noise level from stationary sources can vary throughout the day. Operational noise is evaluated based on the standards within the City's noise ordinance and Grand Terrace GP.

An analysis was conducted of the Project's effect on traffic noise conditions at off-site land uses. Without Project traffic noise levels were compared to with Project traffic noise levels. The environmental baseline is the without Project condition. The without Project and with Project traffic noise levels in the Project vicinity were calculated using the FHWA highway noise prediction model (FHWA-RD-77-108). The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures (walls and buildings), barriers, and topography. The noise attenuating effects of changes in elevation, topography, and intervening structures were not included in the model used in the Acoustical Assessment. Therefore, the modeling effort is considered a worst-case representation of the roadway noise. In general, a 3-dBA increase in traffic noise is barely perceptible to people, while a 5-dBA increase is readily noticeable.



## Vibration

Ground-borne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical ground-borne vibration levels associated with construction equipment, obtained from FTA published data for construction equipment. Potential ground-borne vibration impacts related to building/structure damage and interference with sensitive existing operations were evaluated, considering the distance from construction activities to nearby land uses and typically applied criteria.

For a structure built traditionally, without assistance from qualified engineers, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any vibration damage. FTA guidelines show that modern engineered buildings built with reinforced-concrete, steel, or timber can withstand vibration levels up to 0.50 in/sec and not experience vibration damage. The Caltrans 2020 *Transportation and Construction Vibration Guidance Manual* identifies the vibration threshold as 0.2 in/sec for building damage.

## Assumptions

### Construction Noise

The Project is within the City and adjacent to the City of Colton and the County of Riverside. The cities of Grand Terrace and Colton do not establish quantitative construction noise standards; therefore, the Acoustical Assessment conservatively used the FTA's threshold of 80 dBA (8-hour  $L_{eq}$ ) for residential uses and 90 dBA (8-hour  $L_{eq}$ ) for non-residential uses to evaluate construction noise impacts.<sup>12</sup>

### Operational Noise

#### **Non-Transportation Noise**

Non-transportation related noise generators are commonly called "stationary," "fixed," "area," or "point" sources of noise. Mechanical equipment and HVAC equipment are examples of fixed location, non-transportation noise sources.

In general, commercial noise within the City is not considered excessive. However, where residential locations are adjacent to commercial zones, a significant impact may exist if exterior noise levels exceed 65 dBA CNEL (refer to **Table 4.11-6**), which is the exterior noise standard established by the Grand Terrace GP Noise Element for residential receptors.

#### **Mobile Noise**

Traffic noise, including automobiles, trucks, and other motor vehicles is the most pervasive source of noise in the City. Traffic generated noise impacts are evaluated based on the land use compatibility standards within the Grand Terrace GP. A traffic noise level increase is considered substantial if:

- The existing noise levels exceed the objectives presented in **Table 4.11-6** (60 dBA CNEL for residential and noise sensitive areas and 70 dBA CNEL for commercial) and the Project would increase this noise level by 3 dBA CNEL (barely noticeable in an exterior environment) or more; or

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<sup>12</sup> Kimley-Horn & Associates. (2023). *Acoustical Assessment*. Page 21.

- The noise level with the implementation of the Project would remain within the objectives shown in **Table 4.11-6**, but the Project adds 5 dBA CNEL (noticeable to most people) or more to the pre-Project noise levels. General Plan build-out will result in traffic volumes that result in noise level increases of 5 dB or greater along most Circulation Element roadways.

### **Vibration**

The City currently does not have a significance threshold to assess vibration impacts. The Caltrans 2020 Transportation and Construction Vibration Guidance Manual identifies the vibration threshold as 0.2 in/sec for building damage.

## **4.11.5 PROJECT IMPACTS AND MITIGATION**

**Impact 4.11-1:** *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

**Level of Significance:** *Less Than Significant with Mitigation Incorporated*

### **Construction**

As noted in 4.11.1, Introduction, the Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed at this time. All subsequent development projects, including construction and operations, undertaken within the Project's PAs would be subject to project-specific City discretionary review and approval. Construction activities associated with the Project are conservatively estimated herein to be completed within two phases.

Individual projects within the Project area would generate temporary construction noise during that could exceed existing ambient noise levels in the Project area, but construction noise would be short-term in duration and would cease with the completion of individual development projects. Noise impacts associated with construction activity are a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Each phase of construction involves different types of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest several pieces of equipment.

The noise produced at each construction phase is determined by combining the  $L_{eq}$  contributions from the top three loudest pieces of equipment used at a given time, while accounting for the ongoing time-variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on what specific activity is being performed at any given moment.

Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and

diminishes at a rate of at least 6 dBA per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and shielding effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site (site of each development phase) with different loads and power requirements.

The Grand Terrace Municipal Code (Grand Terrace MC) does not establish quantitative exterior construction noise standards; however, Grand Terrace MC Section 8.108.040 states that construction activities are exempt from the noise provisions of Grand Terrace MC Chapter 8.108 – Noise, provided that construction activities do not take place between 8:00 p.m. and 7:00 a.m. on weekdays and Saturday, or anytime on Sunday or national holidays. While the Grand Terrace MC does not establish quantitative construction noise standards, this analysis conservatively uses the FTA’s threshold of 80 dBA (8-hour  $L_{eq}$ ) for residential uses and 90 dBA (8-hour  $L_{eq}$ ) for non-residential uses to evaluate construction noise impacts.<sup>13</sup> Standard construction provides 25 dBA of exterior-to-interior noise attenuation with windows closed and 15 dBA with windows open.<sup>14</sup> Therefore, it can be assumed that exterior noise levels of 80 dBA would equal 55 dBA when measured from the interior with windows closed.

Noise levels from Project-related construction activities were calculated from the top three loudest construction equipment at spatially averaged distances (i.e., from the acoustical center) to the property line of the nearest receptors. Although construction may occur across the Project area, the distance from the center of the Project construction area to various sensitive receptors, best represents the potential average construction-related noise levels.

The nearest off-site sensitive receptors are single-family residences located to the east of the Project site. Additionally, as the proposed residential land uses would be developed in Phase 1, the nearest on-site receptors during Phase 2 construction would be those previously constructed residential uses. Distances were measured from the center of the Project construction site to the property line. The center of the construction site is used because the  $L_{eq}$  metric is an average and equipment would move around the site, a center distance represents the average. As shown in **Table 4.11-8, Construction Noise Levels at Sensitive Receptors**, construction activities would not exceed the 80 dBA  $L_{eq}$  residential threshold for on- and off-site sensitive receptors. Therefore, construction related noise impacts would be less than significant.

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<sup>13</sup> Ibid. Page 25

<sup>14</sup> United States Environmental Protection Agency, *Protective Noise Levels (EPA 550/9-79-100)*, 1979.

**Table 4.11-8: Construction Noise Levels at Sensitive Receptors**

| Construction Phase  | Noise Level (dBA L <sub>eq</sub> )   |  |   |  |   |  |
|---|--------------------------------------|--|---|--|---|--|
|   | Off-Site Receptors                   |  |   |  | On-Site Receptors                                       |  |
|   | Single-Family Residences to the East | Veterans Freedom Park to the Southeast | Single-Family Residences to the Southeast | Grand Terrace High School to the South | On-Site Residences to the South of Phase 2 Construction | On-Site Residences to the East of Phase 2 Construction |
| Demolition  | 61.7                                 | 57.0                                   | 55.6                                      | 52.1                                   | 62.1  | 69.4   |
| Site Preparation  | 60.5                                 | 55.8                                   | 54.4                                      | 50.9                                   | 60.9  | 68.2   |
| Grading   | 61.3                                 | 56.6                                   | 55.3                                      | 51.8                                   | 61.7  | 69.0   |
| Building Construction   | 60.5                                 | 55.8                                   | 54.5                                      | 50.9                                   | 60.9  | 68.2   |
| Architectural Coating   | 50.8                                 | 46.1                                   | 44.7                                      | 41.2                                   | 51.2  | 63.0   |
| Paving  | 55.3                                 | 50.6                                   | 49.3                                      | 45.8                                   | 55.7  | 58.5   |
| Combined Overlapping Phases <sup>1</sup>  | 62.0                                 | 57.3                                   | 56.0                                      | 52.4                                   | 58.9  | 66.2   |
| Exceed 80 dBA Threshold?  | No                                   | No                                     | No  | No                                     | No  | No   |
| 1. Overlapping phases combine building construction, architectural coating, and paving.     |                                      |  |   |  |   |  |
| Source: Kimley-Horn & Associates. (2023). <i>Acoustical Assessment</i> . Page 25 – Table 8. |                                      |  |   |  |   |  |

## Operations

Implementation of the Project would create new sources of noise in the Project vicinity. The major noise sources associated with the Project that would potentially impact existing and future nearby residences include the following:

- Traffic noise;
- Mechanical equipment (i.e., air conditioners, etc.);
- Slow moving delivery/trash trucks on the Project site; and
- Parking areas (i.e., car door slamming, engine start-up, and car pass-by).

### Off-Site Traffic Noise

Implementation of the Project would generate increased traffic volumes along nearby roadway segments. Based on the Traffic Impact Analysis Report, the Project would generate a total of 17,279 daily trips. When accounting for internal capture and diverted trips, the Project would generate 14,535 daily trips. “Opening Year Without Project” and “Opening Year With Project” scenarios are compared in **Table 4.11-9, Off-Site Traffic Noise Levels**. As shown in **Table 4.11-9**, the “Opening Year Without Project” roadway noise levels would range from 55.1 dBA CNEL to 69.7 dBA CNEL and the “Opening Year With Project” scenario would range from 56.2 dBA CNEL to 70.6 dBA CNEL. Project generated traffic would result in a maximum increase of 3.5 dBA; however, because the “Opening Year With Project” noise level at this roadway segment remains below 70 dBA CNEL for commercial uses, an increase of 5 dBA is necessary to result in a significant impact. Existing roadway segments with sensitive uses that exceed 60 dBA CNEL would require an increase of 3 dBA to result in a significant impact. As shown in **Table 4.11-9**, the Project would not result in any significant impacts, in fact noise levels along multiple roadways segments would decrease following construction of the Project.

**Table 4.11-9: Off-Site Traffic Noise Levels**

| Roadway Segment |  | Opening Year Without Project |                       | Opening Year With Project |                       | Change      | Noise Threshold <sup>2</sup> | Significant Impact |
|-----------------|--|------------------------------|-----------------------|---------------------------|-----------------------|-------------|------------------------------|--------------------|
|                 |  | ADT                          | dBA CNEL <sup>1</sup> | ADT                       | dBA CNEL <sup>1</sup> |             |                              |                    |
| Barton Road     | I-215 SB Ramps to NB Ramps                             | 23,938                       | 68.7                  | 27,700                    | 69.3                  | 0.6         | 5                            | No                 |
|                 | I-215 NB Ramps to Michigan Street                      | 29,863                       | 69.7                  | 36,475                    | 70.6                  | 0.9         | 3                            | No                 |
|                 | Michigan Street to Vivienda Avenue                     | 28,726                       | 69.6                  | 35,338                    | 70.5                  | 0.9         | 3                            | No                 |
|                 | Vivienda Avenue to Mt. Vernon Avenue                   | 19,813                       | 67.9                  | 28,313                    | 69.5                  | 1.6         | 5                            | No                 |
| Vivienda Ave    | Barton Road to Michigan Street                         | 14,188                       | 59.2                  | 30,250                    | 62.5                  | 3.3         | 5                            | No                 |
| Michigan Street | Barton Road to De Berry Street                         | 14,463                       | 65.5                  | 9,738                     | 63.8                  | <b>-1.7</b> | 3                            | No                 |
|                 | De Berry Street to Van Buren Street                    | 11,401                       | 64.5                  | 6,688                     | 62.2                  | <b>-2.3</b> | 3                            | No                 |
|                 | Van Buren Street to Pico Street                        | 9,088                        | 63.4                  | 4,451                     | 60.3                  | <b>-3.1</b> | 3                            | No                 |
|                 | Pico Street to Main Street                             | 8,013                        | 62.9                  | 3,400                     | 59.2                  | <b>-3.7</b> | 3                            | No                 |
|                 | Main Street to Center Street*                          | 6,025                        | 61.7                  | 4,988                     | 60.8                  | <b>-0.9</b> | 3                            | No                 |
| Main Street     | Michigan Street to Grand Terrace High School Driveway* | 6,363                        | 59.7                  | 4,313                     | 58.0                  | <b>-1.7</b> | 5                            | No                 |
|                 | Grand Terrace High School Driveway to Titan Way*       | 6,338                        | 59.7                  | 4,276                     | 58.0                  | <b>-1.7</b> | 5                            | No                 |
|                 | Titan Way to Taylor Street/Commerce Way*               | 6,975                        | 60.0                  | 4,913                     | 58.4                  | <b>-1.6</b> | 5                            | No                 |
|                 | Taylor Street/Commerce Way to Iowa Avenue*             | 7,301                        | 60.1                  | 16,163                    | 63.6                  | 3.5         | 5                            | No                 |
| De Berry Street | Michigan Street to Mt. Vernon Avenue                   | 3,088                        | 55.1                  | 4,026                     | 56.2                  | 1.1         | 5                            | No                 |

ADT = average daily traffic; dBA = A-weighted decibels; CNEL = community noise equivalent level; NB = northbound.  
 \* = area contains portions of Unincorporated Riverside County  
**Bold** = Noise levels decrease with Project  
 1. Traffic noise levels are at 100 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.  
 2. Potential impacts occur when the Project change exceeds 3 dBA and the land use compatibility standard is exceeded (i.e., both must occur).  
 Source: Ibid. Page 26 – Table 9.

**On-Site Traffic Noise**

Future residents at the Project site would be exposed to mobile traffic noise along Taylor Street, Commerce Way, De Berry Street, and Van Buren Street. **Table 4.11-10, On-Site Traffic Noise Levels - Local Roadways** identifies traffic noise levels at 50 feet from the roadway centerline.

**Table 4.11-10: On-Site Traffic Noise Levels - Local Roadways**

| Roadway Segment  |                                     | Opening Year With Project |                       | Noise Threshold (dBA CNEL) | Significant Impact |
|------------------|-------------------------------------|---------------------------|-----------------------|----------------------------|--------------------|
|                  |                                     | ADT                       | dBA CNEL <sup>1</sup> |                            |                    |
| Taylor Street    | Main Street to Van Buren Street     | 14,550                    | 63.0                  | 60                         | Yes                |
| Commerce Way     | Van Buren Street to De Berry Street | 18,000                    | 64.2                  | 60                         | Yes                |
|                  | De Berry Street to Michigan Street  | 17,760                    | 64.1                  | 60                         | Yes                |
| De Berry Street  | Commerce Way to Michigan Street     | 3,885                     | 59.6                  | 60                         | No                 |
| Van Buren Street | Commerce Way to Michigan Street     | 4,070                     | 57.5                  | 60                         | No                 |

<sup>1</sup>Traffic noise levels are at 50 feet from the roadway centerline. The actual sound level at any receptor location is dependent upon such factors as the source-to-receptor distance and the presence of intervening structures, barriers, and topography.  
Source: Based on traffic data within the Traffic Impact Analysis Report, prepared by Fehr & Peers, 2022.  
Refer to **Appendix B** for traffic noise modeling assumptions and results.

As shown in **Table 4.11-10**, the “Opening Year With Project” traffic noise levels along adjacent roadways (i.e., Taylor Street, Commerce Way, De Berry Street, and Van Buren Street) would range from 57.5 to 64.2 dBA CNEL. Therefore, future on-site residences facing adjacent roadways would experience traffic noise levels above the City’s 60 dBA Normally Acceptable exterior standard for residential uses. As such, the Project would be required to comply with Mitigation Measure (**MM**) **NOI-1**, which requires a detailed acoustical study demonstrating that all residential units would meet the City’s 60 dBA CNEL exterior noise standard for all patios, balconies, and common outdoor living areas through any necessary noise reduction features (barriers, berms, enclosures, etc.). Further, **MM NOI-1** also requires all residential units to be designed to ensure that interior noise levels in habitable rooms from exterior sources (including vehicles on adjacent roadways) shall not exceed 45 dBA, in compliance with the General Plan Noise Element and Title 24 of the California Code of Regulations. Compliance with **MM NOI-1** would ensure on-site mobile noise impacts would be less than significant.

### Mechanical Equipment

The proposed residential and commercial land uses would use HVAC units. Residential HVAC systems typically result in noise levels that average 52 dBA at 50 feet from the source and commercial HVAC systems typically result in noise levels that average 79 dBA at 3.28 feet from the source.<sup>15,16</sup> Although detailed site plans for future development within the Project site have not yet been developed, HVAC equipment associated with commercial uses would typically be roof mounted. At the time of this analysis, identification of specific mechanical equipment and detailed site plans have not been developed. Assuming HVAC units could be located as close as 10 feet from on-site receptors, HVAC noise levels could be approximately 69.3 dBA which would exceed the City’s exterior noise standard (i.e., 65 dBA CNEL). Further, the nearest off-site sensitive receptor from potential HVAC units on the Project site is located approximately 15 feet to the east. At this distance, HVAC noise levels would be approximately 65.8 dBA, which would exceed the City’s exterior noise standard (i.e., 65 dBA CNEL). Therefore, **MM NOI-2** would be implemented to ensure noise-generating stationary source equipment would not exceed the City’s noise regulations at on-site and off-site receptors.

<sup>15</sup> Elliott H. Berger, Rick Neitzel, and Cynthia A. Kladden, Noise Navigator Sound Level Database with Over 1700 Measurement Values, July 6, 2010.

<sup>16</sup> TRANE, Packaged Rooftop Air Conditioners, [https://www.trane.com/content/dam/Trane/Commercial/global/products-systems/equipment/unitary/rooftop-systems/foundation-15-to-25-tons/RT-PRC078H-EN\\_12032022.pdf](https://www.trane.com/content/dam/Trane/Commercial/global/products-systems/equipment/unitary/rooftop-systems/foundation-15-to-25-tons/RT-PRC078H-EN_12032022.pdf), accessed May 2023.

## Truck Deliveries and Trash/Recycling Collection

The proposed Project would involve occasional deliveries and weekly trash/recycling collection from slow-moving trucks. The predominant noise source during on-site operations would be from on-site truck movements and idling. Typically, slow-moving, heavy-duty delivery trucks accessing loading docks can generate a maximum noise level of approximately 68 dBA at a distance of 30 feet.<sup>17</sup> These activities are expected to occur intermittently throughout the day, as trucks arrive and leave the parking lot areas for deliveries. The closest off-site sensitive receptors (i.e., single-family residences to the east) are located approximately 15 feet to the east of potential truck movement at the Project site. At this distance, noise levels would be approximately 74 dBA. However, an existing masonry wall would separate the nearest sensitive receptors and the Project site, which would result in a noise level reduction of at least 10 dBA.<sup>18</sup> Therefore, noise levels at the nearest off-site sensitive receptor would be approximately 64 dBA which is below the City's exterior noise standard (i.e., 65 dBA CNEL). Therefore, noise levels generated from slow-moving truck activity at the Project site would not exceed the City's exterior noise standard. Thus, impacts resulting from truck activities at off-site sensitive receptors would be less than significant.

As previously discussed, on-site sensitive receptors would be located adjacent to commercial land uses. As specific Project-level information is not available at this time, it is not possible to quantify noise impacts associated with slow-moving truck loading dock activity at specific sensitive receptors. Development projects would be subject to environmental review, and specific mitigation measures would be implemented to reduce noise impacts associated with slow-moving truck loading dock activity. Notwithstanding, slow-moving truck loading dock activity noise levels would be reduced through implementation of **MM NOI-2**. **MM NOI-2** would ensure on-site sensitive receptors are not exposed to noise levels above the City's noise standards. Thus, noise impacts associated with slow-moving trucks would be less than significant with implementation of **MM NOI-2**.

## Parking Lots

Traffic associated with parking lots is not of sufficient volume to exceed community noise standards that are based on a time averaged scale such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, an engine starting-up, and car passing by range from 53 dBA to 61 dBA at 50 feet from the source.<sup>19</sup> The Project proposes commercial uses adjacent to existing residential uses (north and south of De Berry Street) and proposed residential uses (north of Van Buren Street). Although there are no specific development projects proposed at this time, future commercial parking lots would potentially be located adjacent to existing and proposed residential uses. The nearest off-site sensitive receptors are located approximately 15 feet to the east of potential commercial parking areas at the Project site. At this distance, parking area noise levels would range from approximately 63.5 dBA to 71.5 dBA.<sup>20</sup> Further, the nearest on-site sensitive receptors could be located approximately 10 feet from potential commercial parking areas at the Project site. At this distance, parking area noise levels would range from approximately 67.0 dBA to 75.0 dBA. Therefore, parking lot noise levels at the nearest off-site

<sup>17</sup> Loading dock reference noise level measurements conducted by Kimley-Horn on December 18, 2018.

<sup>18</sup> National Cooperative Highway Research Program (NCHRP), *Synthesis of Highway Practice 87, Highway Noise Barriers*, December 1981, [http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp\\_syn\\_87.pdf](http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_syn_87.pdf), accessed December 2022.

<sup>19</sup> Kariel, H. G., *Noise in Rural Recreational Environments*, Canadian Acoustics 19(5), 3-10, 1991.

<sup>20</sup> Based upon the Inverse Square Law ( $dBA_2 = dBA_1 + 20 \log[d_1/d_2]$ ), sound levels decrease by 6 dBA for each doubling of distance from the source.

and on-site sensitive receptors may exceed the City's exterior noise standard (i.e., 65 dBA CNEL). **MM NOI-2** would ensure off-site and on-site sensitive receptors are not exposed to noise levels above the City's noise standards. Thus, noise impacts associated with parking lot activity would be less than significant with implementation of **MM NOI-2**.

### ***Mitigation Measures***

**MM NOI-1**      **On-Site Noise Attenuation.** As part of the Site Development Review Permit process for the proposed residential developments, a detailed acoustical study based on architectural plans shall be prepared by a qualified acoustical consultant and submitted to the City of Grand Terrace Community Development Department to demonstrate that all residential units would meet the City's 60 dBA exterior noise standard for all common outdoor living areas. In addition, the acoustical study shall demonstrate that interior noise levels at all residential units at the Project site would meet the City's 45 dBA threshold. This mitigation measure complies with the applicable sections of the California Building Code (Title 24 of the *California Code of Regulations*). The necessary noise reduction may be achieved by implementing noise control measures at the receiver locations. Where closed windows are required to achieve the interior 45 dBA CNEL limit, Project plans and specifications shall include ventilation as required by the California Building Code. The final grading and building plans shall incorporate the required noise barriers (patio enclosure, wall, berm, or combination wall/berm), and the property owner/developer shall install these barriers and enclosures.

**MM NOI-2**      **Stationary Noise Sources.** Prior to issuance of building permits, a Noise Assessment shall be prepared, for submittal and approval of the City of Grand Terrace City Planner, which demonstrates on-site placement of stationary noise sources at commercial uses would not exceed noise standards established in the City of Grand Terrace General Plan and City of Grand Terrace Municipal Code Chapter 8.108, Noise. The Noise Assessment shall verify that stationary noise sources (e.g., loading dock facilities, mechanical equipment, and parking lots) are adequately shielded and/or located at an adequate distance from on-site and off-site sensitive receptors and residences in order to comply with noise regulations established by the City of Grand Terrace.

***Impact 4.11-2:      Generation of excessive ground-borne vibration or ground-borne noise levels?***

***Level of Significance: Less Than Significant with Mitigation Incorporated***

### **Construction**

Construction activity can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. Construction on the Project site would have the potential to result in varying degrees of temporary ground-borne vibration, depending on the specific construction equipment used and the operations involved.



The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.20 in/sec is considered safe and would not result in any construction vibration damage.

**Table 4.11-11, Typical Construction Equipment Vibration levels**, lists vibration levels at 25 feet for typical construction equipment. Vibration levels at 15 feet, the distance from the Project boundary to the nearest existing structure is also included in **Table 4.11-11**. Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. As indicated in **Table 4.11-11**, based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used during Project construction range from 0.003 to 0.089 in/sec PPV at 25 feet from the source of activity.

**Table 4.11-11: Typical Construction Equipment Vibration Levels**

| Equipment                | Peak Particle Velocity at 26 Feet (in/sec) <sup>1</sup> | Reference Peak Particle Velocity at 25 Feet (in/sec) | Peak Particle Velocity at 15 Feet (in/sec) <sup>1</sup> |
|--------------------------|---|--|---|
| Vibratory Roller         | 0.1980  | 0.210  | 0.4518  |
| Large Bulldozer          | 0.0839  | 0.089  | 0.1915  |
| Caisson Drilling         | 0.0839  | 0.089  | 0.1915  |
| Loaded Trucks            | 0.0717  | 0.076  | 0.1635  |
| Jackhammer               | 0.0330  | 0.035  | 0.0753  |
| Small Bulldozer/Tractors | 0.0028  | 0.003  | 0.0065  |

<sup>1</sup> Calculated using the following formula:  $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$ , where:  $PPV_{equip}$  = the peak particle velocity in in/sec of the equipment adjusted for the distance;  $PPV_{ref}$  = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018; D = the distance from the equipment to the receiver.  
 Note: The project construction activities do not include pile driving.  
 Source: Kimley-Horn & Associates. (2023). *Acoustical Assessment*. Page 31 – Table 12.

The nearest structure to the Project construction site is approximately 15 feet away to the east. As shown in **Table 4.11-11**, vibration velocities from typical heavy construction equipment operations that may be used during Project construction range from 0.0065 to 0.4518 in/sec PPV at 15 feet from the source of activity. All construction equipment would remain below the FTA’s 0.20 in/sec PPV threshold at a distance of 15 feet, with the exception of vibratory rollers. As depicted in **Table 4.11-11**, vibratory roller operations may exceed the FTA’s 0.20 in/sec PPV threshold within 15 and 25 feet of a structure. Therefore, implementation of **MM NOI-3** would be required. Pursuant to **MM NOI-3**, should construction activities requiring operation of vibratory rollers take place within 26 feet of a structure, a Project-specific vibration impact analysis shall be conducted.<sup>21</sup> With implementation of **MM NOI-3**, impacts would be less than significant.

<sup>21</sup> 26 feet is the distance at which the threshold is not exceeded.

## Operations

The operation of the Specific Plan would not include any substantial long-term vibration sources. The Project would include truck movement activity at the Project site for deliveries and trash/recycling collection. These movements would generally be low-speed (i.e., less than 15 miles per hour) and would occur over new, smooth surfaces. For perspective, Caltrans has studied the effects of propagation of vehicle vibration on sensitive land uses and notes that “heavy trucks, and quite frequently buses, generate the highest earthborne vibrations of normal traffic.”<sup>22</sup> Caltrans further notes that the highest traffic-generated vibrations are along freeways and state routes. Their study finds that “vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 0.08 inches per second, with the worst combinations of heavy trucks and poor roadway conditions (while such trucks were moving at freeway speeds). This level coincides with the maximum recommended safe level for ruins and ancient monuments (and historic buildings)”.<sup>23</sup> Since truck movements on the Project site would be at low speed (not at freeway speeds) and would be over smooth surfaces (not under poor roadway conditions), Project-related vibration associated with truck activity would not result in excessive groundborne vibrations; no vehicle-generated vibration impacts would occur. In addition, there are no sources of substantial groundborne vibration associated with operation of the Project, such as rail or subways. Therefore, Project related vibration impacts from the operation of the Project would be less than significant.

### Mitigation Measures

**MM NOI-3**      **Construction Vibration.** Future development projects with construction activities requiring operation of vibratory rollers within 26 feet of a structure shall be required to prepare a project-specific vibration impact analysis to evaluate potential construction vibration impacts associated with the project, and to determine any specific vibration control mechanisms that shall be incorporated into the project’s construction bid documents to reduce such impacts. Contract specifications shall be included in construction documents, which shall be reviewed and approved by the City Engineer prior to issuance of a grading permit.

**Impact 4.11-3:**      *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

***Level of Significance: Less than Significant***

## Construction and Operations

The closest airport to the Project site is the San Bernardino International Airport located approximately 6 miles to the northeast. The Project is not within 2.0 miles of a public airport or within an airport land use plan. Additionally, there are no private airstrips located within the Project vicinity. Therefore, the Project

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<sup>22</sup> California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2020.

<sup>23</sup> California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol (“TeNS”)*, September 2013.

would not expose people working in the Project area to excessive airport- or airstrip-related noise levels and no mitigation is required.

### **Mitigation Measures**

No mitigation measures are required.

## **Other Noise Topics**

### **Interstate 215 (I-215) Traffic**

The California Supreme Court in a December 2015 opinion (*California Building Industry Association v. Bay Area Air Quality Management District*, 62 Cal. 4<sup>th</sup> 369 [No. S 213478]) confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, this section is not required under CEQA and is included for informational purposes only. The evaluation of the noise threshold exceedances in the following discussion is provided to ensure compliance with City and State Building Code noise standards.

On-site traffic noise levels from I-215 were modeled using the FHWA Traffic Noise Model (TNM 2.5) software. TNM is a state-of-the-art computer program used for predicting noise impacts in the vicinity of highways. It uses advances in personal computer hardware and software to improve upon the accuracy and ease of modeling highway noise, including the design of effective, cost-efficient noise barriers. Traffic volumes along I-215 were obtained from the Caltrans Traffic Census Program.<sup>24</sup> Truck ADT and fleet mix data was also obtained from Caltrans Traffic Census. The I-215 freeway and future on-site residential receptors were digitized in TNM 2.5 based on the Project land use plan and available topographical data for the Project area. The model accounted for the differences in elevation between the freeway and each receiver and included noise reductions from existing retaining walls and sound walls along I-215. **Table 4.11-12, On-Site Traffic Noise Levels - I-215** provides the traffic noise modeling results for I-215 at on-site residential receptors.

**Table 4.11-12: On-Site Traffic Noise Levels – I-215**

| Receptor No. | Land Use    | Exterior Noise Levels<br>(dBA CNEL) | Interior Noise Levels<br>(dBA CNEL) <sup>1</sup> |
|--------------|-------------|-------------------------------------|--|
| 1            | Residential | 58.1                                | 33.1   |
| 2            | Residential | 56.5                                | 31.5   |
| 3            | Residential | 56.1                                | 31.1   |
| 4            | Residential | 55.7                                | 30.7   |
| 5            | Residential | 55.0                                | 30.0   |
| 6            | Residential | 54.6                                | 29.6   |
| 7            | Residential | 53.8                                | 28.8   |
| 8            | Residential | 55.6                                | 30.6   |
| 9            | Residential | 55.5                                | 30.5   |
| 10           | Residential | 55.2                                | 30.2   |
| 11           | Residential | 54.7                                | 29.7   |
| 12           | Residential | 54.2                                | 29.2   |
| 13           | Residential | 54.9                                | 29.9   |
| 14           | Residential | 53.7                                | 28.7   |

<sup>24</sup> California Department of Transportation, *Traffic Census Program*, <http://www.dot.ca.gov/trafficops/census/>, accessed December 6, 2022.

| Receptor No.   | Land Use    | Exterior Noise Levels<br>(dBA CNEL) | Interior Noise Levels<br>(dBA CNEL) <sup>1</sup> |
|--|-------------|-------------------------------------|--|
| 15   | Residential | 53.1                                | 28.1   |
| 16   | Residential | 52.4                                | 27.4   |
| <sup>1</sup> Interior noise levels were calculated assuming an exterior-interior sound reduction of 25 dBA from standard construction practices, per the United States Department of Housing and Urban Development, Noise Guidebook, available at: <a href="https://www.hudexchange.info/resource/313/hud-noise-guidebook/">https://www.hudexchange.info/resource/313/hud-noise-guidebook/</a> (2009). |             |                                     |  |
| Source: Kimley-Horn & Associates. (2023). <i>Acoustical Assessment</i> . Page 27 – Table 10.   |             |                                     |  |

As indicated in **Table 4.11-12**, exterior traffic noise levels from I-215 would not exceed the City’s 60 dBA exterior noise standard for patios, balconies, and/or common outdoor living areas at the Project site. In addition, interior noise levels from I-215 traffic would not exceed the City’s and/or Title 24 noise standard of 45 dBA CNEL for residential uses; see **Table 4.11-12**. Therefore, on-site traffic noise levels from I-215 would not exceed the City’s exterior or interior noise level standards for residential uses.

#### 4.11.6 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts concerning noise were identified.

#### 4.11.7 CUMULATIVE IMPACTS

##### Cumulative Construction Noise

The Project’s construction activities would not result in a substantial temporary increase in ambient noise levels. Construction noise would be periodic and temporary noise impacts that would cease upon completion of construction activities. The Project would contribute to other proximate construction project noise impacts if construction activities were conducted concurrently. However, based on the noise analysis above, the Project’s construction-related noise impacts would be less than significant with adherence to the Grand Terrace MC.

Construction activities at other planned and approved projects near the Project site would be required to comply with applicable City regulations related to noise and would take place during daytime hours on the days permitted by the applicable Municipal Code, and projects requiring discretionary City approvals would be required to evaluate construction noise impacts, comply with the City’s standard conditions of approval, and implement mitigation, if necessary, to minimize noise impacts. Construction noise impacts are by nature localized. Based on the fact that noise dissipates as it travels away from its source, noise impacts would be limited to the Project site and vicinity. Therefore, Project construction would not result in a cumulatively considerable contribution to significant cumulative impacts, assuming such a cumulative impact existed, and impacts in this regard are not cumulatively considerable.

##### Cumulative Operational Noise

Cumulative noise impacts describe how much noise levels are projected to increase over existing conditions with the development of the Project and other foreseeable projects. Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to buildout of the proposed Project and other projects in the vicinity. Cumulative increases in traffic noise levels were estimated by comparing the “Existing” and “Horizon Year Without Project” scenarios to the “Horizon Year With Project”

scenario. The traffic analysis considers cumulative traffic from future growth assumed in the transportation model, as well as cumulative projects.

A project’s contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The following criteria is used to evaluate the combined and incremental effects of the cumulative noise increase.

- **Combined Effect.** The cumulative “Horizon Year With Project” noise level would cause a significant cumulative impact if a 3.0 dB increase over “Existing” conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use. Although there may be a significant noise increase due to the proposed Project in combination with other related projects (combined effects), it must also be demonstrated that the Project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed Project.
- **Incremental Effects.** The “Horizon Year With Project” causes a 1.0 dBA increase in noise over the “Opening Year Without Project” noise level.

A significant impact would result only if both the combined and incremental effects criteria have been exceeded and the “Horizon Year With Project” noise levels exceed the acceptable noise levels on the land use compatibility matrix. Noise by definition is a localized phenomenon and reduces as distance from the source increases. Consequently, only the Project and growth due to occur in the general area would contribute to cumulative noise impacts.

**Table 4.11-13, Cumulative Off-Site Traffic Noise Levels** identifies the traffic noise effects along roadway segments in the Project vicinity for “Existing,” “Horizon Year Without Project,” and “Horizon Year with Project,” conditions, including incremental and net cumulative impacts.

**Table 4.11-13: Cumulative Off-Site Traffic Noise Levels**

| Roadway Segment | Existing dBA CNEL                    | Horizon Year Without Project <sup>1</sup> dBA CNEL | Horizon Year With Project <sup>1</sup> dBA CNEL | Combined Effects   | Incremental Effects  | Land Use Threshold dBA CNEL | Cumulatively Significant Impact? |    |
|-----------------|--------------------------------------|--|---|--|--|-----------------------------|----------------------------------|----|
|                 |                                      |  |   | Difference In dBA Between Existing and Horizon Year With Project | Difference In dBA Between Horizon Year Without Project and Horizon Year With Project |                             |                                  |    |
| Barton Road     | I-215 SB Ramps to NB Ramps           | 67.3   | 69.3  | 69.9   | 2.6  | 0.6                         | 75                               | No |
|                 | I-215 NB Ramps to Michigan Street    | 68.8   | 70.3  | 71.1   | 2.3  | 0.8                         | 60                               | No |
|                 | Michigan Street to Vivienda Avenue   | 68.6   | 70.2  | 71.0   | 2.4  | 0.8                         | 60                               | No |
|                 | Vivienda Avenue to Mt. Vernon Avenue | 67.1   | 70.0  | 70.1   | 3.0  | 0.1                         | 75                               | No |

| Roadway Segment  |   | Existing dBA CNEL | Horizon Year Without Project <sup>1</sup> dBA CNEL | Horizon Year With Project <sup>1</sup> dBA CNEL | Combined Effects   | Incremental Effects  | Land Use Threshold dBA CNEL | Cumulatively Significant Impact? |
|------------------|---|-------------------|--|---|--|--|-----------------------------|----------------------------------|
|                  |   |                   |  |   | Difference In dBA Between Existing and Horizon Year With Project | Difference In dBA Between Horizon Year Without Project and Horizon Year With Project |                             |                                  |
| Viviend a Ave    | Barton Road to Michigan Street                | 58.4              | 61.2   | 62.6  | 4.2  | 1.4  | 75                          | No                               |
| Michiga n Street | Barton Road to De Berry Street                | 64.8              | 63.4   | 64.3  | -0.5   | 0.9  | 60                          | No                               |
|                  | De Berry Street to Van Buren Street           | 63.5              | 62.4   | 63.2  | -0.3   | 0.8  | 60                          | No                               |
|                  | Van Buren Street to Pico Street               | 62.2              | 61.4   | 62.0  | -0.2   | 0.6  | 60                          | No                               |
|                  | Pico Street to Main Street                    | 61.5              | 61.1   | 61.7  | 0.2  | 0.6  | 60                          | No                               |
|                  | Main Street to Center Street*                 | 59.4              | 61.5   | 61.9  | 2.5  | 0.4  | 60                          | No                               |
| Main Street      | Michigan Street to Grand Terrace HS Driveway* | 58.5              | 61.2   | 61.5  | 3.0  | 0.3  | 60                          | No                               |
|                  | Grand Terrace HS Driveway to Titan Way*       | 58.5              | 60.9   | 61.2  | 2.7  | 0.3  | 60                          | No                               |
|                  | Titan Way to Taylor Street/Com merce Way*     | 58.8              | 61.3   | 61.6  | 2.8  | 0.3  | 60                          | No                               |
|                  | Taylor Street/Com merce Way to Iowa Avenue*   | 59.0              | 63.9   | 64.4  | 5.4  | 0.5  | 75                          | No                               |
| De Berry Street  | Michigan Street to Mt Vernon Avenue           | 54.9              | 56.4   | 57.2  | 2.3  | 0.8  | 60                          | No                               |

ADT = average daily traffic; dBA = A-weighted decibels; CNEL = community noise equivalent level. \* = area contains portions of Unincorporated Riverside County  
**Bold** = Noise levels decrease with Project

Source: Source: Kimley-Horn & Associates. (2023). *Acoustical Assessment*. Page 34 – Table 13.

**Table 4.11-13** shows the volume of traffic generated by the Project would not meet the criteria for cumulative noise increases. Thus, cumulative operational noise impact from related projects, in conjunction with Project-specific noise impacts would not be cumulatively considerable and impacts would be less than significant.

## Cumulative Stationary Noise

Stationary noise sources of the Project would result in an incremental increase in non-transportation noise sources in the Project vicinity. However, as discussed above, operational noise caused by the Project would be less than significant with implementation of **MM NOI-1** and **MM NOI-2**. Similar to the Project, other planned and approved projects would be required to mitigate for stationary noise impacts at nearby sensitive receptors, if necessary. As stationary noise sources are generally localized, there is a limited potential for other projects to contribute to cumulative noise impacts.

No known past, present, or reasonably foreseeable projects would combine with the operational noise levels generated by the Project to increase noise levels above acceptable standards because each project must comply with applicable City regulations that limit operational noise. Therefore, the Project, together with other projects, would not create a significant cumulative impact, and even if there was such a significant cumulative impact, the Project would not make a cumulatively considerable contribution to significant cumulative operational noises.

Given that noise dissipates as it travels away from its source, operational noise impacts from on-site activities and other stationary sources would be limited to the Project site and vicinity. Thus, cumulative operational noise impacts from related projects, in conjunction with Project specific noise impacts, would not be cumulatively significant.

### 4.11.8 REFERENCES

City of Grand Terrace. (2010). *City of Grand Terrace General Plan*. Retrieved at:

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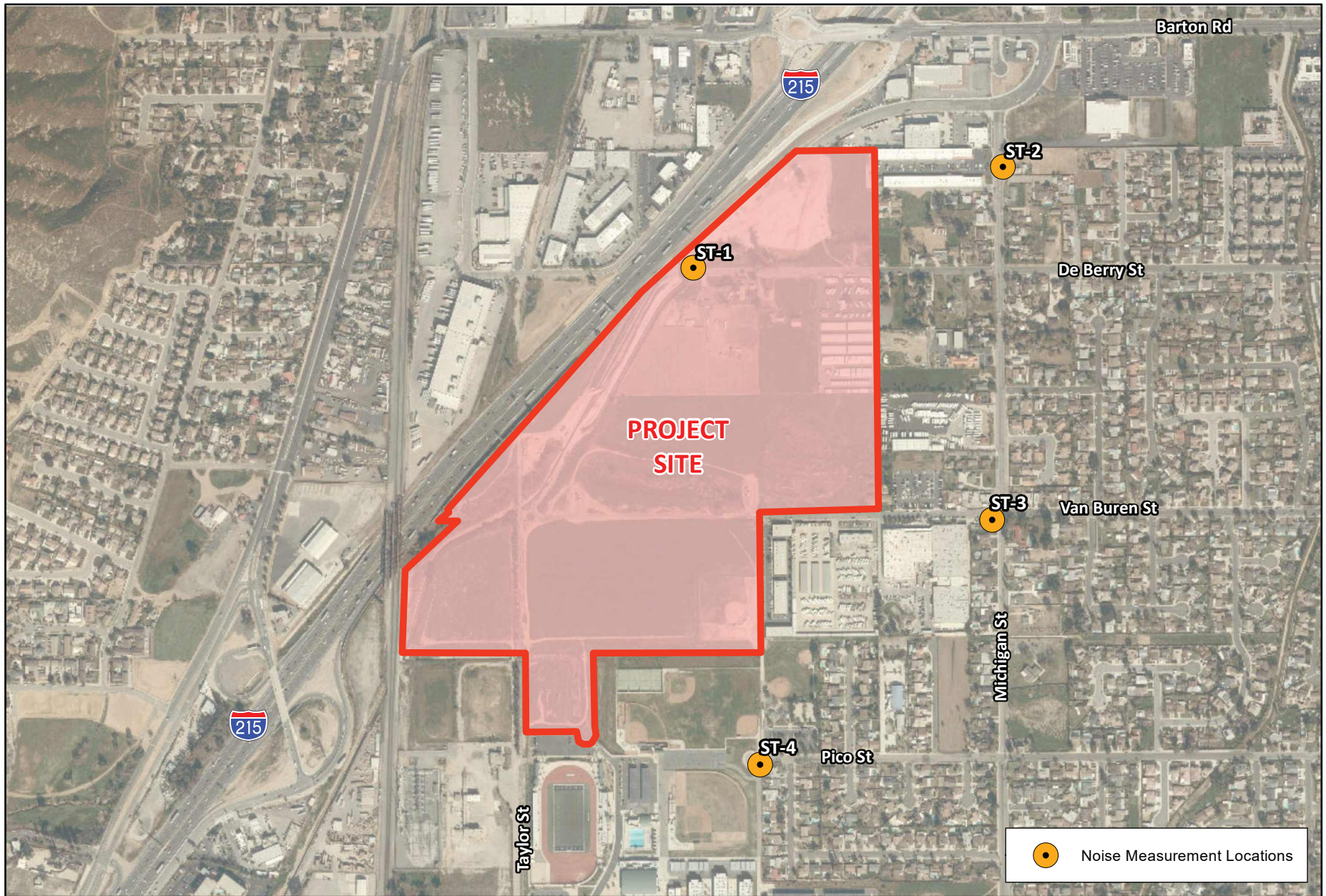
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Source: Kimley-Horn & Associates (2022) Acoustical Assessment

**Exhibit 4.11-1: Noise Measurement Locations**  
 City of Grand Terrace  
*The Gateway at Grand Terrace Specific Plan*



**Kimley»Horn**



## 4.12 POPULATION AND HOUSING

### 4.12.1 INTRODUCTION

The purpose of this section is to analyze The Gateway at Grand Terrace Specific Plan (Project)'s estimated population, housing, and employment effects relative to the County of San Bernardino (County) and City of Grand Terrace (City), and to evaluate whether it would induce substantial unplanned population growth in the area, or displace people or housing. Mitigation measures to avoid/reduce impacts are identified as needed.

Population growth, in and of itself, does not directly constitute a physical impact on the environment. However, population growth may generate secondary, or indirect environmental impacts as defined under CEQA, such as criteria air pollutant emissions (refer to **Section 4.2, Air Quality**), greenhouse gas (GHG) emissions (refer to **Section 4.7, Greenhouse Gas Emissions**), increased demands for public services (refer to **Section 4.13, Public Services**), and infrastructure capacity (refer to **Section 4.17, Utilities and Service Systems**). These indirect population growth-related environmental effects are addressed in the applicable sections of this Program EIR.

The Project is a specific plan that serves as the regulatory mechanism to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

### 4.12.2 ENVIRONMENTAL SETTING

The following regional and local population, housing, and employment conditions provide the context for the environmental analysis.

#### Population

##### County of San Bernardino

**Table 4.12-1, County of San Bernardino Population**, presents population estimates and forecasts for the County based on the California Department of Finance (DOF) and the Southern California Association of Government (SCAG)'s demographic data. As identified in **Table 4.12-1**, the County's estimated 2022 population was 2,187,665 persons and is forecasted to increase to 2,815,000 persons by 2045, which constitutes an approximate 29 percent increase between 2022 and 2045.

**Table 4.12-1: County of San Bernardino Population**

|   | 2010 <sup>a</sup> | 2016 <sup>a</sup> | 2022 <sup>b</sup> | 2045 Forecast <sup>c</sup> |
|---|-------------------|-------------------|-------------------|----------------------------|
| <b>County Total (persons)</b>   | 2,035,210         | 2,122,579         | 2,187,665         | 2,815,000                  |
| a. DOF. (2021). <i>E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark</i> . Retrieved from: <a href="https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2020/">https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2020/</a> (accessed November 29, 2022).<br>b. DOF. (2022). <i>E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022, with 2020 Census Benchmark</i> . Retrieved from: <a href="https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/">https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/</a> (accessed November 29, 2022).<br>c. SCAG. (2020). <i>Connect SoCal 2020 – Demographics and Growth Forecast</i> . <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579</a> . (accessed November 29, 2022). |                   |                   |                   |                            |

### City of Grand Terrace

**Table 4.12-2, City of Grand Terrace Population**, identifies the City’s population estimates and forecasts based on available DOF and SCAG data. As indicated in **Table 4.12-2**, the City’s 2022 population was 13,042 persons. The City’s population is forecasted to increase to approximately 14,500 persons, which constitutes an approximate 11 percent increase between 2022 and 2045. The City’s 2022 population of 13,042 persons represented approximately 0.60 percent of the County’s 2022 population of 2,187,665 persons. The City’s population growth from 2010 to 2022 has a percentage increase of approximately 8 percent between 2010 and 2022.

**Table 4.12-2: City of Grand Terrace Population**

|   | 2010 <sup>a</sup> | 2016 <sup>a</sup> | 2022 <sup>b</sup> | 2045 Forecast <sup>b</sup> |
|---|-------------------|-------------------|-------------------|----------------------------|
| <b>City Total (persons)</b>   | 12,040            | 12,327            | 13,042            | 14,500                     |
| a. DOF. (2021). <i>E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark</i> . Retrieved from: <a href="https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2020/">https://dof.ca.gov/forecasting/demographics/estimates/estimates-e5-2010-2020/</a> (accessed November 29, 2022).<br>b. DOF. (2022). <i>E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2022, with 2020 Census Benchmark</i> . Retrieved from: <a href="https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/">https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/</a> (accessed November 29, 2022).<br>c. SCAG. (2020). <i>Connect SoCal 2020 – Demographics and Growth Forecast</i> . <a href="https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579">https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579</a> . |                   |                   |                   |                            |

### Housing

#### County of San Bernardino

**Table 4.12-3, County of San Bernardino Housing Characteristics**, presents data on the County’s past and present housing supply. As indicated in **Table 4.12-3**, the County’s 2022 housing supply totaled approximately 740,654 units, with an average of 3.19 persons per household. Single-detached dwelling units represented a majority of the County’s housing stock, comprising 525,570 of the 740,654 units or approximately 71 percent of total housing units. The County’s 2022 overall vacancy rate was 8.9 percent (approximately 65,622 unoccupied housing units).

SCAG uses existing census, historical trends and expert-derived demographic and economic assumptions to determine its growth forecasts through Connect SoCal’s horizon planning year of 2045. Based on SCAG’s most recent growth forecast, the County’s households are forecast to increase to 875,000 by 2045, representing an approximately 18 percent increase over the existing 740,654 households.

**Table 4.12-3: County of San Bernardino Housing Characteristics**

| Units                            | 2010 <sup>a</sup> | 2016 <sup>a</sup> | 2022 <sup>a</sup> |
|----------------------------------|-------------------|-------------------|-------------------|
| Single Detached                  | 498,965           | 506,601           | 525,570           |
| Single Attached                  | 24,640            | 24,887            | 25,620            |
| Multi-Family, Two to Four Units  | 45,123            | 45,680            | 47,409            |
| Multi-Family, Five or More Units | 87,405            | 90,843            | 97,958            |
| Mobile Homes                     | 43,504            | 43,770            | 44,097            |
| <b>Total Housing Units</b>       | <b>699,637</b>    | <b>711,781</b>    | <b>740,654</b>    |
| Occupied                         | 611,618           | 629,119           | 675,032           |
| Vacancy Rate                     | 12.6%             | 11.6%             | 8.9%              |
| Persons per Household (average)  | 3.26              | 3.31              | 3.19              |

Source: State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2022, with 2010 Census Benchmark*. Sacramento, California, January 2022. <https://www.dof.ca.gov/forecasting/demographics/estimates/e-5/>. (accessed November, 2022).

### City of Grand Terrace

**Table 4.12-4, City of Grand Terrace Housing**, presents data on the City's past and present housing supply. As noted in **Table 4.12-4**, the City's 2022 housing supply totaled 4,899 units, with an average of 2.75 persons per households. The City's 2022 housing supply represented 0.66 percent of the County's 2022 housing supply. Similar to the County, single detached dwelling units represented a majority of the City's housing supply, comprising approximately 62 percent of total housing units. However, the City's 2022 vacancy rate of 4.1 percent is significantly lower to the County's vacancy rate of 8.9 percent. Furthermore, the City's average household size of 2.75 persons per household is also lower than the County's average of 3.19 persons per household.

Based on SCAG's Growth Forecast, the total number of housing units in the City is anticipated to increase to 5,600 by 2045, representing a significant increase of approximately 14 percent over existing conditions. This increase is nominally lower than projected growth throughout the County.

**Table 4.12-4: City of Grand Terrace Housing Characteristics**

| Units                            | 2010 <sup>a</sup> | 2016 <sup>a</sup> | 2022 <sup>a</sup> |
|----------------------------------|-------------------|-------------------|-------------------|
| Single Detached                  | 2,893             | 2,893             | 3,047             |
| Single Attached                  | 124               | 189               | 165               |
| Multi-Family, Two to Four Units  | 471               | 741               | 487               |
| Multi-Family, Five or More Units | 869               | 869               | 898               |
| Mobile Homes                     | 292               | 292               | 302               |
| <b>Total Housing Units</b>       | <b>78,009</b>     | <b>4,683</b>      | <b>4,899</b>      |
| Occupied                         | 4,403             | 4,437             | 4,696             |
| Vacancy Rate                     | 5.3%              | 5.3%              | 4.1%              |
| Persons per Household (average)  | 2.71              | 2.75              | 2.75              |

Source: State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>. (accessed November 2022).

## Employment

### County of San Bernardino

The State Employment Development Department (EDD) reports the County labor force was 1,020,300 persons in September 2022.<sup>1</sup> Of the County's labor force, 39,000 persons were unemployed representing an unemployment rate of 3.8 percent. According to EDD, jobs in the County totaled 981,400.<sup>2</sup> SCAG forecasts that the County's employment will increase to 972,000 jobs by 2035 and 1,064,000 jobs by 2045.<sup>3</sup> This indicates an approximate 8.4 percent increase in jobs between 2022 and 2045.

### City of Grand Terrace

The State EDD reports that that City's labor force was 6,800 persons in September 2022.<sup>4</sup> Of the City's labor force, 300 persons were unemployed representing an unemployment rate of approximately 3.9 percent. According to EDD, jobs in the City totaled 6,500. Comparatively, the City's existing unemployment rate is 0.1 percent higher than the County's unemployment rate of 3.8 percent. SCAG forecasts that the City's employment will decrease to 6,100 jobs by 2045, representing a 6.2 percent decrease.

### Jobs-Housing Balance

The jobs-housing ratio is a general measure of the total number of jobs and housing units in a defined geographic area, without regard to economic constraints or individual preferences. The balance of jobs and housing in an area—in terms of the total number of jobs and housing units as well as the type of jobs versus the price of housing—has implications for mobility, air quality, and the distribution of tax revenues. The jobs/housing ratio is one indicator of a project's effect on growth and quality of life in the project area. SCAG applies the jobs-housing ratio at the regional and sub regional levels to analyze the fit between jobs, housing, and infrastructure.

Ideally, job-housing balance would be a ratio of 1.0 to 1.25. A higher ratio would indicate more jobs than housing, while a lower ratio would indicate more housing. A job-housing imbalance can indicate potential air quality and traffic problems associated with commuting.

Based on the City's housing demographics data provided in **Table 4.12-2**, the City's job-to-housing ratio in 2022 was also 1.33. This suggests an availability of 1.33 jobs for every housing unit in the City. A jobs-to-housing ratio greater than one implies there is suitable housing available in the area to accommodate the workforce.

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<sup>1</sup> State of California, Employment Development Department. (September 2022). *Monthly Labor Force Data for Cities and Census Designated Places (CDP) (San Bernardino County)*. Retrieved from <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>. (Accessed November, 2022).

<sup>2</sup> State of California, Employment Development Department. (September 2022). *Monthly Labor Force Data for Counties September 2022*. Retrieved from: <https://www.labormarketinfo.edd.ca.gov/data/industry-employment-and-unemployment-rates-for-counties.html>. (accessed December 2022).

<sup>3</sup> Southern California Association of Governments. (2020). *SCAG RTP/SCS: Connect SoCal Plan – Demographics and Growth Forecast*. Retrieved from [https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial\\_demographics-and-growth-forecast.pdf?1606001579](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579). (Accessed November, 2022).

<sup>4</sup> State of California, Employment Development Department. (September 2022). *Labor Force and Unemployment Rate for Cities and Census Designated Places*. Retrieved from <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#CCD>. (Accessed November, 2022).

Based on the County's housing demographics data provided in **Table 4.12-3**, the County's jobs-to-housing ratio in 2022 was 1.33. This means that in 2020, there were 1.33 jobs for every housing unit in the County.

### 4.12.3 REGULATORY SETTING

#### State

##### California Code of Regulations, Title 24

Also known as the California Building Code, Title 24 establishes minimum requirements to safeguard safety to life and property from fire and other hazards attributed to the build environment; to promote safety to firefighters and emergency responders during emergency operations; and public health, safety and general welfare through structural strength, means of egress facilities, stability, access for persons with disabilities, sanitation, adequate lighting, and ventilation and energy conservation.

Additionally, included under Title 24 is the California Green Building Standards Code (Part 11), also known as CALGreen. CALGreen is the nation's first state-mandated green building code. It provides for environmentally responsible and resource-efficient activities, from new building design and sustainable construction to full operational use for the built environment.

Grand Terrace Municipal Code (Grand Terrace MC) Title 15 – Buildings and Construction includes, but is not limited to, Chapter 15.08, Building Code, which adopts the 2019 California Building Code as the City's building code for regulating the construction, occupancy, equipment, use, height, area and maintenance of all buildings and/or structures in the City. In addition, Grand Terrace MC Chapter 15.17, adopted the 2019 Green Building Standards Code as the City's green building code for regulating the planning, design, operation, construction, use and occupancy of every newly constructed building or structure.

##### California Planning and Zoning Law

California planning and zoning law requires each city and county to adopt a general plan for future growth (California Government Code [CGC] § 65300). This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the state level, the Housing and Community Development Department (HCD) estimates the relative share of California's projected population growth in each county based on California Department of Finance (DOF) population projections and historical growth trends. These figures are compiled by HCD in a Regional Housing Needs Assessment (RHNA) for each region of California. The RHNA is a tool used for SCAG and its member local governments in planning for growth. The RHNA quantifies the need for housing within each jurisdiction. Communities then plan, consider, and decide how they will address this need through the process of completing the Housing Elements of their General Plans. The RHNA does not necessarily encourage or promote growth but allows communities to prepare for growth in a way that enhances quality of life and mobility; improves access to jobs, transportation, and housing; and in a way that would not adversely impact the environment.

State law recognizes the vital role that local governments play in the supply and affordability of housing. To that end, the California Government Code requires that the housing element achieve legislative goals to:

- Identify adequate sites to facilitate and encourage the development, maintenance, and improvement of housing for households of all economic levels, including persons with disabilities.
- Remove, as legally feasible and appropriate, governmental constraints to the production, maintenance, and improvement of housing for persons of all incomes, including those with disabilities.
- Assist in the development of adequate housing to meet the needs of low- and moderate-income households.
- Conserve and improve the condition of housing and neighborhoods, including existing affordable housing. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Preserve for lower-income households the publicly assisted multifamily housing developments in each community.

California housing element laws (CGC §§ 65580–65589) require that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community commensurate with local housing needs.

## Regional

### SCAG Regional Housing Needs Assessment

SCAG is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization (MPO) for this region, which encompasses over 38,000 square miles. It serves as a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG develops, refines, and maintains SCAG's regional and small area socioeconomic forecasting/allocation models. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region's MPO, SCAG cooperates with the South Coast Air Quality Management District, the California Department of Transportation, and other agencies in preparing regional planning documents. The socioeconomic estimates and projections are used for federal and state-mandated long-range planning efforts such as the regional transportation plan/sustainable communities' strategy, the air quality management plan, the federal transportation improvement program, and the RHNA.

The RHNA is an assessment process performed periodically as part of housing element and general plan updates at the local level. The RHNA quantifies the need for housing by income group within each jurisdiction during specific planning periods. The RHNA is used in land use planning, to prioritize local resource allocation and to help decide how to address existing and future housing needs. The RHNA also allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.

## SCAG Connect SoCal

In September 2020, SCAG adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy or Connect SoCal which is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals towards 2045. Connect SoCal includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the State of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. The Connect SoCal is a living, evolving blueprint for the region's future. The City is a member jurisdiction of the San Bernardino Council of Governments, and a participating agency in SCAG's Connect SoCal.

## Local

### City of Grand Terrace General Plan

#### *Housing Element*

The Housing Element functions as an integral part of the City's efforts to manage the development of incorporated lands and includes a description of existing housing types, the condition of existing units, an analysis of overcrowding, overpayment, special housing needs, and the demand for affordable housing in the City. The Element also includes a discussion of the progress made over the previous planning period, and projections of needs for the next eight years.

The following goals, objectives, and policies in the City's Housing Element are applicable to the Project:

- Goal 2.1:** Provide for balanced growth which seeks to provide a wide range of employment and housing opportunities and maintenance of a healthy, diversified community.
- Policy 2.1.7** The City shall continually refine population growth forecasts to ensure adequate planning for anticipated increased levels of sewerage, water, and other necessary community services.
- Goal 8.1:** Provide and encourage a supply of housing suitable to the needs and sufficient in number to serve existing and projected residents of Grand Terrace.
- Policy H 8.1.1** Promote and encourage development of housing, which varies by type, design, form of ownership and size.
- Policy H 8.1.2** Maximize use of remaining vacant land suitable for residential development.
- Policy H 8.1.3** Promote and encourage infill housing development and more intensive use of underutilized land for residential construction.
- Policy H 8.1.4** Encourage the use of innovative land use techniques and construction methods to minimize housing costs without compromising basic health, safety and aesthetic considerations.
- Goal 8.2:** Promote and encourage housing opportunities, accessible to employment centers and quality community services for all economic segments of the community including designated very low, low, and moderate income households.

- Policy H 8.2.1** Continue a policy of expeditious processing of residential development proposals and permits.
- Policy H 8.2.2** Encourage a wide range of housing types, prices and ownership forms in new construction.
- Policy H 8.2.3** Emphasize and promote the role of the private sector in the construction of low-and moderate-income housing.
- Policy H 8.2.4** Support the development of cost saving and energy conserving construction techniques.
- Policy H 8.2.8** Streamline administrative procedures for granting approvals and permits and establish time limits for such approvals to minimize time, costs and uncertainty associated with development.
- Policy H 8.2.9** Provide zoning, subdivision and construction incentives to minimize the cost of new and rehabilitated units.
- Policy H 8.2.10** Promote mixed use development that includes provisions for affordable housing.
- Goal 8.3:** **Provide and encourage a supply of housing suitable to the needs and sufficient in number to serve existing and projected residents of Grand Terrace.**
- Policy H 8.3.4** Upgrade community facilities and municipal services as community needs warrant.
- Policy H 8.3.11** Preserve the physical character of existing neighborhoods.

#### 4.12.4 SIGNIFICANCE CRITERIA UNDER CEQA

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning population and housing. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

#### Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning population and housing. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts. The baseline conditions and impact analyses are



based on review of various demographic data available in public records, including local planning documents.

#### 4.12.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.12-1:** *Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

**Level of Significance:** *Less than Significant*

### Employment Growth

#### Construction

Out of the City's labor force, 300 persons out of 6,800 persons, were unemployed, representing an unemployment rate of approximately 3.9 percent. According to EDD, jobs in the City totaled 6,500. SCAG forecasts that the City's employment will decrease to 6,100 jobs by 2045, representing a 6.2 percent decrease. The Project would be developed with a mix of residential, commercial, public utilities and public park land uses, including associated infrastructure within 22 Planning Areas (PA). Construction of the Project would also include off-site roadway improvements and would occur in two phases. Project Construction would generate construction-related employment opportunities. Construction jobs generally do not constitute an inducing action since they are temporary in nature and are anticipated to be filled by persons, locally and regionally. As noted above, the City has a jobs-to-housing ratio greater than one, which implies there is suitable housing available in the area to accommodate the workforce.

Construction of the Project would generate temporary employment opportunities. Construction related jobs would not result in a significant population increase because they are temporary, and since development would occur in two phases, would limit the amount of employment opportunities provided on a site-specific level. Therefore, Project construction would not directly or indirectly induce substantial, unplanned population growth and a less than significant impact would occur.

#### Operations

The Project's proposed commercial land uses would bring permanent jobs in the City. As described in the City's existing employment conditions, the City's employment of 6,500 already surpasses SCAG's forecasted employment of 6,100 by 2045. Although the Project would further generate employment, passing SCAG's forecasted employment for the City, the forecasted increase would be well within the County's forecasted employment of 1,064,000 by 2045. In addition, the Project would contribute to the City's population by approximately 1,911 persons which could help fill the permanent employment opportunities.<sup>5</sup> Furthermore, permanent employment opportunities are expected to be filled by the local area and surrounding region due to the City's unemployment rate of 3.9 and County's unemployment rate of 3.8.

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<sup>5</sup> Determined by multiplying the average person per household (2.75) by the proposed dwelling units (695).

The specific number of Project-generated employees would be determined on a project-per-project basis. Each specific development in the Project area would be subject to project-level discretionary review and approval to determine impacts concerning population growth-inducing impacts. Additionally, buildout of the Project would be subject to compliance with all state, regional, and local requirements for minimizing growth-related impacts. Therefore, the Project's population growth due to employment opportunities would be less than significant.

## Housing Growth

Buildout of the Project could potentially increase the population growth by approximately 1,911 persons with the addition of up to 695 dwelling units.<sup>6</sup> Residential land use, located in Planning Areas 11, 12, 14 through 16, 19, and 20, encompass approximately 43 acres of the Specific Plan. Residential use in this area would account for nearly 39 percent of the total land uses in the Specific Plan and allow up to a maximum of 786 dwelling units. However, when considering the development standards, site constraints, roads, and infrastructure, the potential number of dwelling units to be developed is projected to be approximately 695, which would not exceed the maximum allowable number of 786 dwelling units. Therefore, the total 695 dwelling units is the projected maximum net number of dwelling units set forth in the Specific Plan. A jobs-housing ratio of 1.0 to 1.25 is considered balanced. The City currently has a ratio of 1.33 and is therefore considered to have more jobs than housing, however, the anticipated housing development would help increase housing in the City as required by the City's RHNA goals. The anticipated housing growth would also aid in the achievement of a healthier balanced jobs-housing ratio by 2045. Lastly, the population and housing growth of 1,911 persons and 695 dwelling units would be within the SCAG's forecasted 2045 population and housing growth for the City and County. Therefore, the Project's population growth due to housing would not be substantial, and impacts would be less than significant.

## Transportation Growth

Furthermore, upon implementation of the Project, Commerce Way would be extended from its terminus point southward to Taylor Street and then connecting to Main Street. As part of the Commerce Way extension, the existing Taylor Street portion will also be improved and widened all the way south to its connection at Main Street. Along Commerce Way, the western sidewalk would be eliminated between De Berry Street and Van Buren Street. A sidewalk would exist on the east side of the street. Commerce Way/Taylor Street would be a secondary highway that runs northeast near I-215. Commerce Way/Taylor Street would be the main entry to the Project area, as well as leading into the City. By providing another entry into the City, this would generate an increase in commercial and passenger vehicles, impacting circulation and mobility growth within the City. However, this new roadway would alleviate traffic from Michigan Street and allow commercial vehicles to travel on a new, wider, four-lane road, constructed to accommodate increased vehicular circulation. Lastly, expanded improvements for Commerce Way/Taylor Street would be developed in compliance with Grand Terrace GP Policy 3.1.3, which envisions that Commerce Way would provide movement of traffic from commercial and business

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<sup>6</sup> Ibid.

uses. Therefore, the Project's proposed circulation improvements would cause a less than significant impact to the City's circulation system. Refer to **Section 4.15, Transportation** for further discussion.

## Conclusion

As noted above, the Project would generate approximately 1,911 persons, as well as employment opportunities in the City. All growth is planned in accordance with the SCAG Connect SoCal Plan and would improve the City's job-housing imbalance. The Project's potential employment would be covered by the regional and local labor force, including the Project's future residents due to the development of up to 695 dwelling units. A less than significant impact would occur.

### Mitigation Measures

No mitigation measures are required.

**Impact 4.12-2:** *Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

**Level of Significance: Less than Significant**

## Construction and Operations

The Project site is comprised of predominately vacant land and currently contains six existing residential structures with associated accessory structures on De Berry Street and Van Buren Street. Of these residential structures, five are currently occupied, and one is vacant. Therefore, development of the Project would result in the temporary displacement of residents within the existing residential units until alternative residences are found. Although buildout of the Project would displace both housing and people, the existing residences are currently considered non-conforming since the existing underlying land use and zoning do not permit residential use within the Gateway SP boundary. The Project proposes several entitlements which include, but not limited to, a zone change to convert the existing zoning designations to "Specific Plan" which would allow the development of residential, commercial, and public facilities land uses. As previously stated, residential land use, located in Planning Areas 11, 12, 14 through 16, 19, and 20, encompass approximately 43 acres of the Specific Plan and the total number of dwelling units and will not exceed the allowable maximum of 786 dwelling units within the Specific Plan.

Considering the 2022 total population, average number of residents per unit, and number of housing units within the City, the existing six residences would contain approximately 16.5 persons and account for approximately 0.12 percent of total housing units in the City in 2022.<sup>7</sup> As stated in Impact 4.12-1 above, the Project proposes up to 695 dwelling units and would increase the population City by approximately 1,911 persons. Although the Project would temporarily displace housing, the Project would provide the housing for the units lost. Considering the 2022 vacancy rate of 4.1 percent within the City, there are approximately 203 vacant units that could accommodate the existing residents.<sup>8</sup> To further assist existing residents, the County could provide the existing residents assistance in locating replacement housing through the County's Housing Authority. Therefore, impacts would be less than significant.

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<sup>7</sup> Determined by multiplying the average person per household (2.75) by the existing (6) residences.

<sup>8</sup> Determined by subtracting occupied units from total units.

### **Mitigation Measures**

No mitigation is necessary.

#### **4.12.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant and unavoidable population and housing impacts have been identified.

#### **4.12.7 CUMULATIVE IMPACTS**

Buildout of the Project would provide a planned increase in the City's population, housing, and employment characteristics. Future development within the Project area, consistent with other cumulative projects would be analyzed on a case-by-case basis at a project-level and would undergo CEQA discretionary review and approval versus the Grand Terrace GP goals and policies, Grand Terrace MC regulations and design standards, and other applicable state and regional regulation. This would ensure that project-specific impacts are minimized to the furthest extent possible. As discussed above, the projected population growth due to the Project would not be significantly inducing and would be generally consistent with SCAG's regionally planning goals towards 2045. Therefore, cumulative impacts associated with the buildout of the Project would be less than significant.

#### **4.12.8 REFERENCES**

SCAG. 2020. *SCAG RTP/SCS: Connect SoCal Plan – Demographics and Growth Forecast*. [https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial\\_demographics-and-growth-forecast.pdf?1606001579](https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579).

State of California, Department of Finance. 2022. *E-5 Population Estimates for Cities, Counties, and the State, 2011-2022, with 2010 Census Benchmark*. Sacramento, California, January 2022. <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>.

State of California, Employment Development Department. (September 2022). *Monthly Labor Force Data for Cities and Census Designated Places (CDP) (San Bernardino County)*. Retrieved from <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>.

State of California, Employment Development Department. (September 2022). *Monthly Labor Force Data for Counties September 2022*. Retrieved from: <https://www.labormarketinfo.edd.ca.gov/file/lfmonth/2209pcou.pdf>.

State of California, Employment Development Department. (September 2022). *Labor Force and Unemployment Rate for Cities and Census Designated Places*. Retrieved from <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#CCD>.

## 4.13 PUBLIC SERVICES

### 4.13.1 INTRODUCTION

This section evaluates the potential impacts that The Gateway at Grand Terrace Specific Plan (Project) would have on existing public services, by identifying anticipated demand and evaluating its relationship to existing and planned public services facilities and availability. Per the California Environmental Quality Act (CEQA), the emphasis in this Environmental Impact Report (EIR) is on impacts to public services by the Project that could require the construction or expansion of existing public service facilities resulting in a physical impact on the environment within the City of Grand Terrace. For purposes of this EIR, public services include the following: fire protection, police protection, schools, parks, and library services. In addition, this section describes the environmental and regulatory setting for public services, as it pertains to implementation of the Project.

The environmental setting discussion is based largely on review of documents and information including the City of Grand Terrace General Plan (Grand Terrace GP) and the City of Grand Terrace Municipal Code (Grand Terrace MC).

The Project is a specific plan that serves as the regulatory mechanism to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

### 4.13.2 ENVIRONMENTAL SETTING

#### City of Grand Terrace Public Services

##### Fire Protection

The City contracts with San Bernardino County Fire Protection District (SBCoFD) for fire and rescue services, which provides the following services:<sup>1</sup>

- Multiple Household Hazardous Waste Programs
- Structural Fire Suppression

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<sup>1</sup> City of Grand Terrace. Fire. (2021). Retrieved from: <https://www.grandterrace-ca.gov/departments/fire#:~:text=The%20City%20of%20Grand%20Terrace,for%20fire%20and%20rescue%20services.&text=For%20additiona%20information%2C%20contact%20us,%2FFireHazardAbatement%2FFireHazardAbatementHome.aspx>. (accessed November 2022).

- Wildland Fire Suppression including County hand crews, bulldozers, and helicopter suppression services
- Emergency Medical Services including basic life support
- Technical Rescue Services
- Hazardous Materials Mitigation
- Incident Command and Control including Battalion Chiefs, Division Chiefs, and a County Incident Management Team
- Code Enforcement through the California Building Code and California Fire Code
- Pre-Fire Planning Services
- Public Education Services

The SBCoFD provides fire protection services for the City. Fire Station Number 23, located at 22582 Center City Court, is responsible for providing fire protection to the community and consists of paid and volunteer staffing.<sup>2</sup> Station 23 would serve the site and is approximately two miles northeast of the Project area. This station is staffed by three full-time fire personnel during the fire season (May 1 through November 30) and by two full-time fire personnel during the non-fire season (December 1 through April 30). The full-time personnel are augmented by an on-call company of 20 paid call firefighters who respond to fire and rescue calls and provide response coverage to the station when on-duty personnel are committed to an emergency call.<sup>3</sup>

Equipment stationed at Station 23 includes the following:<sup>4 5</sup>

- Medic Engine 23
- One Type 1 Fire Engine used for structural fires and general response to all calls
- One Type 2 Squad Truck used for augmented response in conjunction with the Rescue Unit
- One Type 3 Rescue Truck used for all types of technical rescue
- One Shoring Trailer used for to carry emergency shoring materials for structural collapse and trench collapse rescues
- There is only one Fire Demand Zone for the City and the average response time is 5 minutes, 23 seconds.

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<sup>2</sup> San Bernardino County Fire & Rescue Station Map. (2020). Retrieved from: <https://www.google.com/maps/d/u/0/viewer?mid=1gXRGFAud9BV92Yhqvv7Y0yrfQ-l&ll=34.06078102424003%2C-117.28561894085699&z=13>. (accessed November 2022).

<sup>3</sup> City of Grand Terrace. Fire. (2021). Retrieved from: <https://www.grandterrace-ca.gov/departments/fire> (accessed November 2022).

<sup>4</sup> City of Grand Terrace General Plan. (2010). Retrieved from: [https://www.grandterrace-ca.gov/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/city\\_of\\_gt\\_general\\_plan.pdf](https://www.grandterrace-ca.gov/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/city_of_gt_general_plan.pdf) (accessed November 2022).

<sup>5</sup> Fire Department. San Bernardino County Fire Department. (2021). Retrieved from: <https://sbcfire.org/> (accessed November 2022).

## Police Protection

The City contracts with the San Bernardino County Sheriff-Coroner Department to provide general patrol services as well as all necessary management and support services. Sheriff's services are operated from the County's main Sheriff's station at 655 East Third Street in the City of San Bernardino, approximately nine miles from the Project site via Interstate 215 ( I-215).<sup>6</sup> The department serves over 2.1 million residents, with eight counties and 14 patrol stations. The department consists of approximately 3,600 employees. The department's dispatch center takes in approximately 1,014,509 calls for service annually, and deputies write approximately 102,271 reports annually.<sup>7</sup>

Average police service response times in 2021, are summarized in **Table 4.13-1, Police Response Times**, below. Response times are based off a priority basis. High-priority report calls are those in which the physical well-being of a person is in jeopardy. Examples would include injury traffic accidents, suicide attempts, domestic disputes, any call involving the use of weapons, including fights and robberies would be considered high priority and are in the priority one category. Also included in priority calls, but to a lesser degree in the second priority category, are calls in which property is jeopardized, i.e., burglaries, thefts, or malicious damage, where the crime is in progress or where the crime has just occurred, and the suspects are still in the area. Priority three calls do not require immediate response but should be dealt with accordingly. All calls of this type must be carefully and accurately evaluated by the call-taker to ensure that no person is in immediate danger. Priority four calls are informational in nature, or the time element dictates that no person or property is in jeopardy. Calls in the priority four category are handled in the order in which they are received.<sup>8</sup>

**Table 4.13-1: Police Response Times for 2021**

| Priority           | Response Time |
|--------------------|---------------|
| Priority Emergency | 03:55         |
| Priority 1         | 06:54         |
| Priority 2         | 09:31         |
| Priority 3         | 11:06         |
| Priority 4         | 11:35         |

Source: Lieutenant Brian Lane with San Bernardino County Sheriff's Department Chief of Police for City of Grand Terrace. (Phone and Email Conversation). December 2022.

The following services are provided by the San Bernardino County Sheriff:

- A 168-hour general law patrol unit. This reflects 1 patrol unit, 24 hours per day, 7 days per week.
- Two 40-hour general law patrol units.
- One 40-hour detective unit.
- One Community Service Officer (CSO). The CSO is provided to coordinate various programs, including citizen patrol, crime prevention, and other community programs. The CSO trains

<sup>6</sup> San Bernardino County Sheriff's Department. Central Station. (2021). Retrieved from: <https://wp.sbcounty.gov/sheriff/patrol-stations/central-station/>. (accessed November 2022).

<sup>7</sup> San Bernardino County Sheriff's Department. (2022). Retrieved from: <https://wp.sbcounty.gov/sheriff/about-us/>. (accessed December 2022).

<sup>8</sup> San Bernardino County Sheriff's Department Manual. (2019). Retrieved from: <http://www.sbcounty.gov/uploads/sheriff/sb978/Department/Department%20Manual%20Master%2012-16-19.pdf> (accessed November 2022).

volunteers, conducts educational safety programs, and interacts with the public and businesses on various community activities.

- Other services provided are processing of background checks, crime analysis, statistical gathering and reporting, periodic bike patrols, emergency enforcement backups, and juvenile and jail facilities. Access to Sheriff's special units is available as needed, and includes helicopter support, SWAT team, Narcotics team, Homicide, Crime Lab, Arson/Bomb Unit, etc.

## Schools

All public schools within the City are owned and operated by the Colton Joint Unified School District (CJUSD).<sup>9</sup> Presently, there are two elementary schools, one middle school, and one high school operated by CJUSD within the City limits. Grand Terrace Elementary is approximately three roadway miles northeast of the Project site; Terrace View Elementary is approximately 0.6 roadway miles northeast; Terrace Hills Middle School is approximately 0.6 roadway miles east; Grand Terrace High School is adjacent to the Project area towards the southern Project boundary line near Planning Areas (PAs) 19, 20, and 22.

**Table 4.13-2, School Enrollment** identifies the last five school years up to the most current enrollment, for each of these schools.

Applicable school fees will be paid at the time of building permit issuance. In the event of overcrowding at any of the local schools, newly registered children may be transferred to other schools throughout the CJUSD until local capacity is available.

**Table 4.13-2: School Enrollment**

| School                   | Enrollment |           |           |           |           |
|--------------------------|------------|-----------|-----------|-----------|-----------|
|                          | 2017-2018  | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Grand Terrace Elementary | 689        | 654       | 659       | 592       | 598       |
| Terrace View Elementary  | 830        | 829       | 795       | 764       | 690       |
| Terrace Hills Middle     | 985        | 994       | 986       | 884       | 872       |
| Grand Terrace High       | 2,114      | 1,955     | 1,823     | 1,792     | 1,826     |

Source.  
CJUSD. Ed-data.org. (2023). Retrieved from: <http://www.ed-data.org/district/San-Bernardino/Colton-Joint-Unified>. (accessed February 2023). Data collected by the California Department of Education (CDE) through the California Longitudinal Pupil Achievement Data System (CALPADS). Aggregate data files are provided by the CDE – Data Reporting Office at <http://www.cde.ca.gov/ds/sd/filesenr.asp>. (accessed November 2022). Counts of students in charter schools and traditional district schools were taken from the FRPM data file at <https://www.cde.ca.gov/ds/ad/filesfp.asp>. (accessed November 2022).

## Parks

The City has seven public parks that include facilities for baseball, soccer, basketball, jogging, playgrounds, picnicking, and casual activities.<sup>10</sup> This includes Blue Mountain Trail, which provides for recreational activity and scenic views. Refer to **Section 4.14, Recreation**, for further discussion on parks and recreation.

## Public Libraries

The Grand Terrace Branch Library is part of the San Bernardino County Library System. It is located in the Grand Terrace Civic Center at 22795 Barton Road in Grand Terrace. The Grand Terrace Branch Library is

<sup>9</sup> CJUSD. District School Map. (2020). Retrieved from: <https://www.colton.k12.ca.us/domain/40> (accessed November 2022).

<sup>10</sup> City of Grand Terrace. (2021). *Parks*. Retrieved from: [https://www.grandterrace-ca.gov/departments/public\\_works/parks\\_recreation/parks](https://www.grandterrace-ca.gov/departments/public_works/parks_recreation/parks) (accessed November 2022).



open seven days a week and provides on-site and internet services to patrons of the San Bernardino County Library System.

### 4.13.3 REGULATORY SETTING

#### Federal

##### Federal Emergency Management Act (FEMA)

In March 2003, FEMA became part of the US Department of Homeland Security. FEMA's continuing mission is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

##### Disaster Mitigation Act of 2000

This Act (42 United States Code [U.S.C.] §5121) was signed into law to amend the Robert T. Stafford Disaster Relief Act of 1988 (42 U.S.C. §5121-5207). Among other things, this legislation reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and is aimed primarily at the control and streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include:

- i) Funding pre-disaster mitigation activities;
- ii) Developing experimental multi-hazard maps to better understand risk;
- iii) Establishing state and local government infrastructure mitigation planning requirements;
- iv) Defining how states can assume more responsibility in managing the hazard mitigation grant program; and
- v) Adjusting ways in which management costs for projects are funded.

The mitigation planning provisions outlined in §322 of this Act establish performance-based standards for mitigation plans and require states to have a public assistance program (Advance Infrastructure Mitigation [AIM]) to develop county government plans. The consequence for counties that fail to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding 10-year period by the same type of event.

##### Americans with Disabilities Act (ADA)

The ADA of 1990 (42 U.S.C. 12181) prohibits discrimination on the basis of disability in public accommodation and State and local government services. Under the ADA, the Architectural and Transportation Barriers Compliance Board issues guidelines to ensure that facilities, public sidewalks, and street crossings are accessible to individuals with disabilities. Public play areas, meeting rooms, park restrooms, and other buildings and park structures must comply with ADA requirements.

## State

### Title 8 California Code of Regulations (CCR) Sections 1270 and 6773

In accordance with CCR, Title 8 §1270 “Fire Prevention” and §6773 “Fire Protection and Fire Equipment,” the California Occupational Safety and Health Administration (Cal-OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

### California Code of Regulations Title 24 (California Building Standards Code)

California Code of Regulations (CCR) Title 24, also known as the California Building Standards Code (CBSC), includes regulations for how buildings are designed and constructed, and are intended to ensure the maximum structural integrity and safety of private and public buildings. The CBSC, which applies to all applications for building permits, consists of 12 parts that contain CBSC administrative regulations for all State agencies that implement or enforce building standards. Local agencies must ensure the development complies with the CBSC standards. Cities and counties can adopt additional standards beyond the CBSC including CBSC Part 2, named the California Building Code (CBC).

### California Building Code

The State provides a minimum standard for building design through the CBC, which is in Part 2 of Title 24 of the CCR. CBC is based on the International Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan checked by local City and County building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all commercial and residential buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

### California Code of Regulations Title 24 Part 9 – California Fire Code

The California Fire Code (CFC) contains regulations consistent with nationally recognized accepted practices for safeguarding, to a reasonable degree, life and property from various hazards, including fire and explosion, among others. The CFC also contains provisions to assist emergency response personnel. The CFC is pre-assembled with the International Fire Code with necessary California amendments. The CFC contains fire safety-related building standards that are referenced in other parts of CCR Title 24. The CFC is updated once every three years; the 2022 CFC took effect on January 1, 2023. The CFC sets forth regulations regarding building standards, fire protection and notification systems, fire protection devices such as fire extinguishers and smoke alarms, high-rise building standards, and fire suppression training. The CFC provides minimum standards to increase the ability of a building or structure to resist the intrusion of flame or burning embers being projected by a vegetation fire and contributes to a systematic reduction in fire losses through the use of performance and prescriptive requirements.

### **California Health and Safety Code**

State fire regulations are set forth in California Health and Safety Code §13000 et seq., and include provisions concerning building standards, fire protection and notification systems, fire protection devices, and fire suppression training, as also set forth in the 2019 California Building Standards Code and related updated codes.

### **Mutual Aid Agreements (MAA)**

The Emergency Management Mutual Aid (EMMA) system is a collaborative effort between city and county emergency managers in the Office of Emergency Services (OES) in the coastal, southern, and inland regions of the state. EMMA provides service in the emergency response and recovery efforts at the Southern Regional Emergency Operations Center, local Emergency Operations Centers, the Disaster Field Office, and community service centers. The purpose of EMMA is to support disaster operations in affected jurisdictions by providing professional emergency management personnel. In accordance with the MAA, local and state emergency managers have responded in support of each other under a variety of plans and procedures.

### **California Governor's Office of Emergency Management Agency (Cal-EMA)**

In 2009, the State of California passed legislation creating the Cal-EMA and authorizing it to prepare a Standardized Emergency Management System (SEMS) program (Title 19 CCR §2400 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

Cal-EMA serves as the lead state agency for emergency management. Cal-EMA coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as these are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the statewide mutual aid system. In California, the SEMS provides the mechanism by which local government requests assistance. Cal-EMA serves as the lead agency for mobilizing the state's resources and obtaining federal resources; it also maintains oversight of the state's mutual aid system.

### **California Penal Code**

All law enforcement agencies within the State of California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and county officers are state peace officers. There are no relevant State regulations pertaining to police protection.

### **California Education Code Section 17620**

California Education Code §17620, et seq. allows school district governing boards to collect impact fees from developers of new commercial and residential construction.

## California State Assembly Bill (AB) 2926

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed AB 2926 in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial building space. Development impact fees were also referenced in the Leroy F. Greene School Facilities Act of 1998, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

## California Department of Education Code Section 17212.5

The California Department of Education Code §17212.5 states that “no school building shall be constructed, reconstructed, or relocated on the trace of a geological fault along which surface rupture can be reasonably expected to occur within the life of the school building.”

## California Government Code Section 65995 and Education Code

California Government Code, §65995 is found in Government Code, Title 7, Chapter 4.9. Government Code §65995 authorizes school districts to collect impact fees from developers of new residential and commercial building space. Senate Bill (SB) 50 amended Government Code §65995 in 1998. Under the provisions of SB 50, schools can collect fees to offset costs associated with increasing school capacity as a result of development.

The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstate the school facility fee cap for legislative actions (e.g., General Plan amendments, Specific Plan adoption, Zoning amendments) as was allowed under the *Mira*,<sup>11</sup> *Hart*,<sup>12</sup> and *Murrieta*<sup>13</sup> court cases. The provisions of Chapter 4.9 are the exclusive means of considering as well as mitigating school impacts caused by new development. Accordingly, these provisions limit the scope of impact review in an EIR, the mitigation that can be imposed, and the findings a lead agency must make in justifying its approval of a project (Government Code §65995-65996). According to Government Code §65996, the provisions of Chapter 4.9, including development fees authorized by SB 50, are deemed to be “full and complete school facilities mitigation....” These provisions remain in place as long as subsequent State bonds are approved and available.

## Local

### City of Grand Terrace General Plan

The following Grand Terrace GP goals and policies are applicable to public services and pertinent to the Project.

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<sup>11</sup> *Mira Development Corp. v. City of San Diego* (1988) 205 Cal. App. 3d 1201 (Mira).

<sup>12</sup> *William S. Hart Union High School Dist. v. Regional Planning Comm.* (1991) 226 Cal. App. 3d 1612 (Hart).

<sup>13</sup> *Murrieta Valley Unified School Dist. v. County of Riverside* (1991) 228 Cal. App. 3d 1212 (Murrieta).

### ***Public Health and Safety Element***

**Goal 5.6:** **Minimize the exposure of residents, business owners, and visitors to the impacts of urban and wildland fires.**

**Policy 5.6.3** Encourage the use of fire-resistive construction materials.

### ***Public Services Element***

**Goal 7.1:** **Coordinate and balance the provision of public services with existing and planned development to eliminate service gaps, maximize the use of existing public facilities and services, provide a high level of quality public services at a reasonable cost, and maintain adequate services to meet the needs of current and future City residents and businesses.**

**Policy 7.1.1** All proposed development shall be evaluated to determine whether current public services and facilities can meet with their needs. If determined that current services and facilities are inadequate to meet the needs of new development, appropriate mitigation measures shall be applied to the new development to assure an adequate level of service

**Policy 7.1.2** The City shall establish and periodically update a Development Impact Fee program for new development designed to generate adequate fees to provide new public services and facilities necessary to serve the new development.

**Goal 7.5:** **Provide for adequate law enforcement and police protection services and facilities.**

**Policy 7.5.1** Work with the County Sheriff's Department to ensure that adequate police personnel, response times, and equipment are available to meet current and future demands of the City's residents and businesses.

**Goal 7.6:** **Provide for adequate fire protection services and facilities.**

**Policy 7.6.1** Work with the San Bernardino County Fire Protection District to ensure that adequate fire protection personnel, response times, and equipment are available to meet current and future demands of the City's residents and businesses.

**Policy 7.6.2** Work with Riverside Highland Water Company to ensure adequate water pressure for fire fighting throughout the City.

**Goal 7.7:** **In cooperation with the Colton Joint Unified School District, provide adequate public educational facilities and programs.**

**Policy 7.7.2** Cooperate with the School District in the collection of school impact mitigation fees for all new developments within the City.

### **City of Grand Terrace Municipal Code**

The Grand Terrace MC establishes Development Impact Fees for Public Use Facilities and Parkland and Open Space Acquisition in Chapter 4.80 Development Impact Fees. Title 15 Building and Construction regulates site and building development in accordance with applicable building and fire codes.<sup>14</sup>

<sup>14</sup> City of Grand Terrace. Municipal Code. (2021). Retrieved from: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeid=TIT15BUCO](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeid=TIT15BUCO). (accessed November 2022).

#### 4.13.4 SIGNIFICANCE CRITERIA UNDER CEQA

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning public services. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - Fire protection
  - Police protection
  - Schools
  - Parks (refer to **Section 4.14, Recreation**)
  - Other public facilities

#### Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning public services. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

The baseline conditions and impact analyses are based on field observations conducted by Kimley-Horn; review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. The determination that a Project component would or would not result in "substantial" adverse effects on public services standards considers the available policies and regulations established by local and regional agencies and the amount of deviation from these policies in the Project's components.

#### 4.13.5 PROJECT IMPACTS AND MITIGATION

***Impact 4.13-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

A significant impact would result if development of the Project site would result in a significant increase in demand for fire protection services, police protection, schools, parks, or other facilities such that new

or physically altered stations, schools, parks, or other facilities or location from which services are provided would be needed. If the construction or operation of such facilities would cause substantial environmental effects due to the expansion or construction of facilities on new sites needed to maintain acceptable service ratios, response times, or other performance objectives, a potentially significant impact could result.

***l) Fire protection?***

***Level of Significance: Less Than Significant***

## **Construction and Operations**

As stated in **Section 4.13.2** above, the City receives fire protection services from the SBCoFD and the primary fire protection services are operated from Station 23. Station 23 has 3 personnel assigned to one Medic Fire Engine. Project Buildout could result in significant increases in emergency response times and performance objectives concerning fire protection services. However, fire service expenses associated with the Project would stem from the SBCoFD funds which receive funds from the City through a 1 percent dedication of City's property tax assessment. Property tax revenues generated from development of the site would also provide funding to offset potential increases in the demand for fire protection during Project buildout. The Project is anticipated to bring \$492,499 in revenue for the SBCoFD. Where possible, infrastructure and physical improvements within the Project boundary may be installed in two overlapping or consecutive phases. Construction of the Project would be phased in a logical sequence, in response to market demands. The Specific Plan incorporates two phases, which would help reduce the pace at which increased fire protection services are needed, since development would not occur concurrently.

Additionally, the Project is required to adhere to Grand Terrace MC Chapter 4.80 Development Impact Fees, which would require each applicant to pay a development impact fee (determined by the table provided in Chapter 4.80) imposed by the City to pay for all or a portion of costs of providing public services (i.e., fire protection services) associated with new development. The Project would be in compliance with the SBCoFD, 2022 CFC, and 2022 CBC, and development standards set forth in the Specific Plan which includes, but is not limited to, fire safety and fire suppression features. In addition, major development areas would be provided with looped on-site mains to assure adequate pressure for fire suppression. Fire hydrants would be installed at locations approved by the SBCoFD and Riverside Highland Water Company lines would be extended to loop around the Project site.

In addition, Project development would be required to comply with the 2022 CFC and 2022 CBC while also undergoing plan reviews and inspections by the SBCoFD – Office of the Fire Marshal (OFM), which is required for any new development.<sup>15</sup> The OFM has a unique position within the Fire Department as the Inspection, Investigation, and Regulatory function of the San Bernardino County Fire Department. While active in emergency preparedness and response to fires and hazardous materials incidents, the OFM also accomplishes the vital purpose of preventing emergencies through the education and enforcement of

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<sup>15</sup> OFM. (2020). Retrieved from: <https://sbcfire.org/planreviews/>. (accessed November 2022).

health and safety laws and regulations. The OFM includes the Hazardous Materials, Community Safety and Household Hazardous Waste Divisions.

Overall, the Project would receive adequate fire protection services and would not result in adverse physical impacts associated with the provision of or need for new or physically altered fire protection facilities, and would not adversely affect service ratios, response times, or other performance objectives. Because no fire protection facilities exist on the Project site, development of the Project would not conflict with existing fire structures or require modification of fire protection facilities. Compliance with applicable local and state regulations would ensure that Project implementation would result in a less than significant impact to fire protection services.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.13-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

#### ***II) Police protection?***

***Level of Significance: Less Than Significant***

## **Construction and Operations**

As discussed in **Section 4.13.2** above, the City contracts with the San Bernardino County Sheriff-Coroner Department to provide general patrol services as well as all necessary management and support services. Sheriff's services are operated from the County's main Sheriff's station at 655 East Third Street in the City of San Bernardino, approximately nine miles from the Project site via I-215. The San Bernardino County Sheriff-Coroner Department is authorized to serve the City of Grand Terrace. In 2021 there were a total of 6,738 dispatched calls and 8,395 proactive calls and the 50,342 calls and the response time of patrol to the Priority One calls was 6:54 minutes. As previously mentioned, the department serves over 2.1 million residents and consists of approximately 3,600 employees. The department's dispatch center takes in approximately 1,014,509 calls for service annually, and deputies write approximately 102,271 reports annually.<sup>16</sup>

Current staffing levels for the San Bernardino County Sheriff's Department meets the existing service demands for police protection within the City. The need for increased police service within the City is determined by increases in service calls, demands on existing personnel, crime levels, and population. The gradual increase in population and development associated with the Project would require continued assessment of the adequacy of law enforcement staffing within the City.

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<sup>16</sup> San Bernardino County Sheriff's Department. (2022). Retrieved from: <https://wp.sbcounty.gov/sheriff/about-us/>. (accessed December 2022).



As discussed in the fire protection analysis above, infrastructure and physical improvements within the Project boundary may be installed in two overlapping or consecutive phases. Construction of the Project would be phased in a logical sequence, in response to market demands. Therefore, the Project would not require the immediate need for police services. The need for additional personnel or equipment was already analyzed in the Grand Terrace GP. Project development would be subject to the San Bernardino County Sheriff-Coroner Department review, which would ensure that development conforms to the San Bernardino County Sheriff-Coroner Department emergency access and site/facility security requirements and recommendations, and thereby reduce demands on law enforcement services.

Additionally, the Project applicant would pay the required Police Facilities Impact fees, property taxes, and other revenues generated by development that would be available to the City to offset any increased costs for law enforcement services with little or no net effect on the City's budget. Furthermore, the San Bernardino County Sheriff-Coroner Department's response to letter requesting information on the Department's ability to serve build-out of the Specific Plan indicated that the Project would be adequately served. Furthermore, prior to commencement of construction activities, Project plans would be reviewed by applicable local agencies to ensure compliance with the City's MC as well as all applicable regulations to ensure adequate site signage, lighting and other crime safety preventative measures are implemented. Construction of the Project would not result in adverse physical impacts associated with the provision of or need for new or physically altered police protection facilities. The Project would not substantially affect service ratios, response times, or other performance objectives such that new facilities are required. The Project also would include design elements such as lighting of streets, walkways, and bikeways; visibility of doors and windows from the street; and fencing of the property. These measures would help reduce demands for law enforcement services and impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.13-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

#### ***III) Schools?***

***Level of Significance: Less Than Significant***

### **Construction and Operations**

The City's public education facilities are provided and maintained by the Colton Joint Unified School District (CJUSD). These schools include Grand Terrace High School, adjacent to the Project site, Grand Terrace Elementary School (12066 Vivienda Avenue) located approximately 3 miles northeast of the Project site, and Terrace Hills Middle School (22579 De Berry Street) located approximately 0.6 mile to the east of the Project site.

The Project would create a direct demand for public school services within the CJUSD, as the subject property would contain residential uses that would generate increased population likely including school-aged children requiring public education. The Project is expected to bring additional residents to the school district; however, with anticipated increases of population per the City’s GP, the CJUSD and the City ensure adequate planning for anticipated increases in population that indirectly impacts school enrollment. **Table 4.13-3, Projected Student Population**, shows the projected student population associated with Project implementation. Upon buildout, future development of the Project would generate an increased student population demand in the City by approximately 456 potential students enrolling in elementary through high school.

**Table 4.13-3: Projected Student Population**

| School Level   | Student/Dwelling Unit <sup>1</sup> | Number of Dwelling Units <sup>2</sup> | Number of Students |
|--|------------------------------------|---------------------------------------|--------------------|
| K-12   | 0.58                               | 695                                   | 456                |
| Notes:   |                                    |                                       |                    |
| 1. Demand factor used for student populations, per <i>Section 4.12, Population and Housing</i> , multiplied by 21.3% persons under 18 years of age within the City. Available at <a href="https://www.census.gov/quickfacts/grandterracecitycalifornia">https://www.census.gov/quickfacts/grandterracecitycalifornia</a> . |                                    |                                       |                    |
| 2. Assumes 786 dwelling units; see Table 3-3: Gateway at Grand Terrace Specific Plan Land Use Summary.   |                                    |                                       |                    |

As school facilities within the City have been overall declining in enrollment (refer to **Table 4.13-2**), school facilities are anticipated to have sufficient capacity for the growth in the Grand Terrace GP and Project area. Additionally, the Project applicant would be required to pay the impact fees levied by the CJUSD, set within the limits of California SB 50 (Greene). This funding program has been found by the Legislature to constitute “full and complete mitigation of the impacts” on the provision of adequate school facilities (Government Code §65995[h]). SB 50 establishes three potential limits for school districts, depending on the availability of new school construction funding from the state and the particular needs of the individual school districts. The school districts, including the CJUSD, within the City qualify for Level 1 fees, in which each district justifies their development fees for each land use and cannot request payment of development fees for school facility construction exceeding the amount of the statutory fees expressed in Education Code §17620. The development fees authorized under the Education Code are \$4.79 per square foot of new residential construction and \$0.78 per square foot of new commercial/industrial development (for K-12 districts).<sup>17</sup> If school districts conduct a school facility needs assessment and qualify for participation in the State Funding Program by the State Allocation Board, among meeting other requirements, they can be eligible for Level 2 and Level 3 Fees. SB 50 also relieves jurisdictions from having the authority to deny approval of a legislative or adjudicative action under CEQA in reference to real estate development based upon the inadequacy of school facilities. Since the Project would pay any applicable fees pursuant to SB 50, a less than significant impact would occur.

Developer fees for commercial development located in the CJUSD is \$0.78 per square foot of covered and enclosed space for new commercial construction and senior housing projects. Developer fees for new residential development or residential additions in excess of 500 square feet are \$4.79 per square foot of assessable space for additions to existing residential construction within the CJUSD.<sup>18</sup>

<sup>17</sup> Colton Joint Unified School District. (2022). Developer Fees. Retrieved from: <https://www.cjUSD.net/Page/5344>. (accessed November 2022)

<sup>18</sup> Colton Joint Unified School District. (2022). Developer School Fees. Retrieved from: <https://www.cjUSD.net/site/handlers/filedownload.ashx?moduleinstanceid=10576&dataid=19880&FileName=Level%20I%20-%20Level%20II%20Fees.pdf>. (accessed November 2022).

Overall, Project implementation would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives. Compliance with applicable local and state regulations would ensure that Project implementation would result in a less than significant impact to school services.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.13-1: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

#### ***IV) Other public facilities?***

***Level of Significance: Less Than Significant***

## **Construction and Operations**

The Project's forecasted population growth would incrementally increase the demand for library services, and specifically at the Grand Terrace Branch Library which is located closest to the Project site at approximately two miles to the northeast. Although the Project would increase the population growth in the area, Grand Terrace GP Policy 7.1.6 ensures that the City will work with the County to evaluate the feasibility for the development of new library facilities within the City, to meet future demands. The County Library system has developed a Strategic Plan that identifies goals and objectives, including financial management and fundraising strategies, to maintain and enhance library facilities to meet future demands. In addition, the Project would pay a development impact fee pursuant to Grand Terrace MC Chapter 4.80 Development Impact Fees, which would require each applicant to pay a development fee determined by the table in Chapter 4.80.

The Project does not propose, and would not create a need for, new or physically altered library facilities to maintain acceptable service ratios and standards. Therefore, the Project would not result in adverse physical impacts associated with such facilities. Given the Project's nature and scope, impacts to libraries would be less than significant, and no mitigation is required.

### **Mitigation Measures**

No mitigation measures are required.

## **4.13.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant and unavoidable public services impacts have been identified.

### 4.13.7 CUMULATIVE IMPACTS

For purposes of the public services impact analysis, cumulative impacts are considered for cumulative development within the City, according to the related projects.

As concluded above, all Project impacts to public services are considered less than significant, following compliance with the established regulatory framework. The proposed Project, combined with cumulative development projects would result in incremental increases in public service demands as the number of people, buildings, roads, and utilities would increase. However, each cumulative project would be required to pay construction and development fees and comply with regulatory requirements that would be used to provide additional or modify existing public service facilities. The Project would not result in a significant cumulative impact concerning public services.

Separate, individual projects are subject to environmental and design review by applicable agencies to ensure that the projects would be compliant with all applicable laws, codes, ordinances, and standards and ensure that the addition of these individual projects would not create undue stress on the public service provided. Additionally, through the payment of development impact fees by individual projects, these public services would have capital and funding available to expand services as needed to meet rising demand with the addition of cumulative projects. Projects would be planned on a schedule to prevent significant cumulative impacts associated with multiple projects being constructed at the same time.

Because of the required plan review, rule and regulation compliance, and payments of development impacts fees as described above, the Project taken in sum with past, present, and reasonably foreseeable projects would not result in a cumulatively considerable impact on public services such as fire protection, police protection, libraries, schools, and parks. Further, anticipated increased demands for public services such as fire protection, police protection, libraries, schools, and parks infrastructure and facilities within the County, were accounted for in the County's Countywide Plan and analyzed in its associated EIR. The Countywide Plan EIR concluded that cumulative impacts related to public services would not be cumulatively considerable upon implementation of applicable Countywide policies.

### 4.13.8 REFERENCES

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## 4.14 RECREATION

### 4.14.1 INTRODUCTION

The purpose of this section is to describe the potential impacts from The Gateway at Grand Terrace Specific Plan (Project) to recreational facilities by identifying anticipated demand created by the Project compared to existing and planned recreational facilities and availability. Per the California Environmental Quality Act (CEQA), the emphasis in this Draft Environmental Impact Report (EIR) is on impacts to recreational facilities by the Project that could require construction or expansion of existing facilities resulting in a physical impact on the environment within the City of Grand Terrace (City), San Bernardino County, California. In addition, this section describes the environmental and regulatory setting for recreation, as it pertains to implementation of the Project.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

### 4.14.2 ENVIRONMENTAL SETTING

#### City of Grand Terrace Parks

The City has seven public parks that include facilities for baseball, soccer, basketball, jogging, playgrounds, picnicking, and casual activities. This includes Blue Mountain Trail, which provides recreational activity and scenic views. The existing City parks are: Grand Terrace Dog Park, Grand Terrace Fitness Park, Gwenn Karger Park, Richard Rollins Community Park, Susan Petta Park, Veterans Freedom Park, and the Blue Mountain Trail.

The nearest parks to the Project area are Veteran Freedom Park, adjacent to the southeast of Planning Area 20, and Richard Rollins Community Park, located approximately 0.8 mile east of Planning Area 9. Veterans Freedom Park offers a variety of recreational amenities to nearby residents. It is located at 21950 Pico Street and is open 7:00 AM to dusk. The Veteran Freedom Park contains two basketball courts, a shelter area, six tables, two barbeque grills, two baseball fields, as well as 24-hour surveillance.<sup>1</sup> One of the two baseball fields is located southeast of the Project and one is located within the Planning Area 20 of Project site. Richard Rollins Community Park is located at 22745 De Berry Street, near the corner of Mt.

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<sup>1</sup> City of Grand Terrace. Parks. (2021). Retrieved from: [https://www.grandterrace-ca.gov/departments/public\\_works/parks\\_recreation/parks](https://www.grandterrace-ca.gov/departments/public_works/parks_recreation/parks) (accessed November 6, 2022).

Vernon Avenue and De Berry Street, behind Terrace Hills Middle School. This park was recently renovated with the addition of new shelters, new play lots and a concession stand for weekend events. In addition to 12 acres of fields, the park amenities include four shelters, two barbecues, cement walking track, a tot lot with swings, and a playground with slides.<sup>2</sup>

### 4.14.3 REGULATORY SETTING

#### State

##### Quimby Act (California Government Code § 66477)

The Quimby Act was established by the California legislature in 1965 to develop new or rehabilitate existing neighborhood or community park or recreation facilities. This legislation was enacted in response to the need to provide parks and recreation facilities for California's growing communities. The Quimby Act gives the legislative body of a city or county the authority, by ordinance, to require the dedication of land or payment of in-lieu fees, or a combination of both, for park and recreational purposes as a condition of approval of a tract map or parcel map. Cities can require land or in-lieu fees for a minimum of three acres per 1,000 residents, with the possibility of increasing the requirement to a maximum of five acres per 1,000 residents if the city already provides more than three acres per 1,000 residents. Assembly Bill (AB) 1191, which was approved by the Governor of California on September 8, 2015, amended the definition of park and recreation purposes to include land and facilities for the activity of "recreational community gardening," which activity consists of the cultivation by persons other than, or in addition to, the owner of the land, of plant material not for sale (AB 1911). The Quimby Act is implemented through City Ordinance and is discussed further below.

##### Landscaping and Lighting Act

The Landscaping and Lighting Act (California Streets and Highways Code §§ 22500 et seq.) enables cities, counties, and special districts to acquire land for parks, recreation, and open space. A local government may also use the assessments to pay for improvements and maintenance to these areas. In addition to local government agencies (i.e., counties and cities), park and recreation facilities may be provided by other public agencies, such as community service districts, park, and recreation districts, etc. If so empowered, such an agency may acquire, develop, and operate recreational facilities for the public.

##### State of California Open Space Standards

State planning law provides a structure for the preservation of open space by requiring every city and county in the state to prepare, adopt, and submit to the Secretary of the Resources Agency a "local open space plan for the comprehensive and long-range preservation and conservation of open-space land within its jurisdiction" (California Government Code § 65560). The following open space categories are identified for preservation:

- Open space for public health and safety, including, but not limited to, areas that require special management or regulation due to hazardous or special conditions.

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<sup>2</sup> Ibid.

- Open space for the preservation of natural resources, including, but not limited to, natural vegetation, fish and wildlife, and water resources.
- Open space for resource management and production, including, but not limited to, agricultural and mineral resources, forests, rangeland, and areas required for the recharge of groundwater basins.
- Open space for outdoor recreation, including, but not limited to, parks, and recreational facilities, areas that serve as links between major recreation and open space reservations (such as trails, easements, and scenic roadways), and areas of outstanding scenic and cultural value.
- Open space for the protection of Native American sites, including, but not limited to, places, features, and objects of historical, cultural, or sacred significance such as Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property (further defined in California Public Resources Code (PRC) §§ 5097.9 and 5097.993)).

## Local

### City of Grand Terrace General Plan

The following City of Grand Terrace General Plan (Grand Terrace GP) goals and policies are applicable to recreation.

#### ***Open Space and Conservation Element***

**Goal 4.1:** That the Open Space needed for outdoor recreation in the City of Grand Terrace be provided and thereby, improve the quality of life for the residents of the City.

**Policy 4.1.1** A park standard of five (5) acres per 1,000 population shall be used to determine the total acreage of developed parks and recreation areas for the City.

**Policy 4.1.5** The City will establish guidelines and standards for the establishment of a linkage system among the City's parks and open space areas. In residential areas, the feasibility of utilizing sidewalks shall be made. These sidewalks will be part of the "Pedestrian Sidewalk Master Plan" called for in the Circulation Element and "safe routes" to school's plan. In addition, consideration will be given to the placement of appropriate signage along the sidewalk identifying them as part of a designated trail system.

**Policy 4.1.6** The City will work with other public agencies and private entities to coordinate its trail planning and development to tie into the regional trails systems, including the California Recreational Trail System, connecting neighboring cities and counties. These trails may be used for pedestrian, equestrian, or biking. Such efforts will include a connection with the Santa Ana River Trail as shown in the "Plan of Open Space and Trails for the County of San Bernardino" and with the trail system of the County of Riverside including the proposed regional trail along the Gage Canal in Riverside County.



## City of Grand Terrace Municipal Code

The City Grand Terrace Municipal Code (Grand Terrace MC) establishes Development Impact Fees for Public Use Facilities and Parkland and Open Space Acquisition in Chapter 4.80 Development Impact Fees.<sup>3</sup>

### 4.14.4 SIGNIFICANCE CRITERIA UNDER CEQA

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning recreation. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

## Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning recreation. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

### 4.14.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.14-1:** *Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

**Level of Significance:** *Less Than Significant*

## Construction and Operations

There are currently seven City Parks located in Grand Terrace including the Grand Terrace Dog Park, Grand Terrace Fitness Park, Gwen Karger Park, Richard Rollins Community Park, Susan Petta Park, Veterans Freedom Park, and the Blue Mountain Trail. The parks nearest the Project site include Veterans Freedom Park, adjacent to the southeast of Planning Area 20, and Richard Rollins Community Park, located approximately 0.8-mile east of Planning Area 9. Each of these parks provide a variety of recreational amenities such as basketball courts, shelter areas, baseball fields, and playground areas. Within the Project, PA 18 will be designated as Open Space and PA 22 along with the pedestrian and bicycle trail that

<sup>3</sup> City of Grand Terrace. (2021). *City of Grand Terrace Municipal Code*. Retrieved from: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeId=TIT4COFESCFITA\\_CH4.80DEIMFE\\_4.80.010FEDE](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeId=TIT4COFESCFITA_CH4.80DEIMFE_4.80.010FEDE). (accessed January 3, 2023).

provides connectivity between PA 22 development and the existing Veterans Freedom Park will be designated as Park.

Project development includes commercial, residential, public utilities, and public park uses. The Project would provide public recreational facilities to meet the needs of the community. The existing non-lighted ball field northwest of Veterans Freedom Park is proposed to be relocated northwest of the Grand Terrace High School sports fields and constructed as a new lighted baseball field in PA 22. In addition to a new lighted baseball field, PA 22 will also include a tot-lot/playground set in a tree-lined and “park-like” setting and a public parking lot.

Although Project buildout of the residential component would create a direct demand for park facilities, the need for parks would be addressed through the Project’s provision of open space and recreational uses such as a 4.97-acre neighborhood park and as well as the pedestrian and bicycle trails that provides connectivity between Planning Area 22 development and the existing Veterans Freedom Park. With the development of the proposed neighborhood park, pedestrian and bicycle trails, it is anticipated that the Project would not significantly increase the use of other nearby off-site neighborhood parks, regional parks, or recreational facilities. Therefore, the Project would not result in substantial physical deterioration of planned or existing recreational facilities and a less than significant impact would occur.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.14-2: Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

***Level of Significance: Less Than Significant***

### **Construction and Operations**

See Impact 4.14-1. In addition to providing on-site park and recreational facilities, the Project would pay applicable park impact fees as established by the City, pursuant to the Quimby Act and local City Regulations (provision of on-site park and recreational facilities may be credited against required Quimby Act fees). According to Chapter 4: Open Space Element of the Grand Terrace GP, the City’s parkland standard of five acres per 1,000 people is the highest allowed under the Quimby Act.<sup>4</sup> Based on the proposed development plans, the Project’s estimated 1,911 residents (assumes an average of 2.75 occupants per residence for this type of community and 695 dwelling units) would equate to a dedication requirement of 9.5 acres. The Project would comply with Quimby Act and City regulations through the dedication of 4.97 acres of parkland within PA 22 and/or payment of in-lieu fees for parks/recreation purposes, as determined by the City. Additionally, the proposed multi-family residential developments

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<sup>4</sup> City of Grand Terrace General Plan. (2010). *Open Space and Conservation Element*. Retrieved from: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/c4\\_open\\_space\\_conserv.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/c4_open_space_conserv.pdf). (accessed November 6, 2022).

would be required to provide amenities for the residents. Therefore, the Project would not have an adverse physical effect on the environment and therefore, impacts will be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

#### **4.14.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant and unavoidable recreational impacts have been identified.

#### **4.14.7 CUMULATIVE IMPACTS**

For purposes of the recreational impact analysis, cumulative impacts are considered for cumulative development within the City, according to the related projects.

As concluded above, all Project impacts to recreation are considered less than significant, following compliance with the established regulatory framework. The proposed Project, combined with cumulative development projects would result in incremental increases in recreational facility demands as the number of people, buildings, and roads would increase. However, each cumulative project would be required to pay construction and development fees and Quimby Act fees, and comply with regulatory requirements that would be used to provide additional, or to modify existing recreation facilities. The Project would not result in a significant cumulative impact concerning recreation.

#### **4.14.8 REFERENCES**

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## 4.15 TRANSPORTATION

### 4.15.1 INTRODUCTION

This section identifies existing transportation-related conditions within the City of Grand Terrace (City) and evaluates The Gateway at Grand Terrace Specific Plan (Project)'s potential to conflict with programs, plans, ordinances or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; conflict or be inconsistent with CEQA Guidelines Section 15064.3; substantially increase hazards due to geometric design features; and result inadequate emergency access. Mitigation to avoid/reduce impacts is identified, as needed.

The affected environment discussion is based largely on the following documentation:

- Fehr & Peers. (2022). Transportation Impact Analysis (TIA) Report for the Gateway Specific Plan at Grand Terrace (**Appendix J1**).
- Fehr & Peers. (2022). The Gateway Specific Plan at Grand Terrace Transportation Metrics Memorandum (**Appendix J2**).
- City of Grand Terrace General Plan (Grand Terrace GP).

The Project is a specific plan that serves as the regulatory mechanism to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

#### Level of Service Analysis Methodology

Level of Service (LOS) is no longer considered a significant environmental effect under CEQA and as such, the following information is provided solely for informational purposes and does not require a significance determination. Per the City of Grand Terrace Traffic Impact Analysis Guidelines, the TIA used methodology from the SBCTA CMP to analyze traffic operations via LOS rankings, consistent with the Grand Terrace GP Circulation Element.

The Highway Capacity Manual 6<sup>th</sup> Edition (HCM6, 2016) was used to perform intersection LOS analysis for the following scenarios:

- Existing (2022) Conditions
- Opening Year (2024) No Project Conditions
- Opening Year (2024) Plus Project Phase 1 Conditions

- Cumulative Year (2040) No Project Conditions
- Cumulative Year (2040) Plus Project Phase 1 Conditions
- Cumulative Year (2040) Plus Project Phase 2 conditions

LOS measures transportation quality of service from the traveler's perspective. Per the HCM6, LOS rankings at intersections use a letter-grade scale ranging from LOS A (optimal conditions) to LOS F (congested or overcrowded conditions) based on average control delay in seconds per vehicle, or how long a vehicle typically waits before proceeding through the intersection. This delay is compared with free-flow conditions, and includes slowing before an intersection, waiting in queues, and stopping at the intersection. Stop-controlled and signalized intersections were analyzed using Synchro 11 software and roundabouts were analyzed using Sidra Version 7 software. For signalized and all-way stop-controlled intersections, LOS rankings are based on the average control delay of all vehicles passing through the intersection. For two-way or side-street stop-controlled intersections, LOS rankings are based on the highest average control delay of all controlled movements.

The TIA (**Appendix J1**) included recommended improvements for study intersections that would operate below applicable LOS policies in given jurisdictions. These recommendations include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements, or a combination of these approaches. The recommended improvements are intended to improve operational conditions consistent with Grand Terrace GP LOS policies. However, the recommended improvements are conceptual in nature and not required to be enforced as additional delay – to an intersection or roadway segment – is no longer considered a significant impact under CEQA. As such, refer to **Appendix J1** for further information.

## 4.15.2 ENVIRONMENTAL SETTING

### Existing Roadway System<sup>1</sup>

#### Regional Access Roads

Regional access to the Project site is provided by the following roads:

**Interstate (I) 215 Freeway:** I-215 passes through the western portion of the City in a general north/south direction. I-215 borders the Project site on its northwesterly side. It is an eight-lane divided freeway near the Project with three general purpose lanes and one high occupancy vehicle (HOV) lane in each direction. South of the Project area, I-215 becomes State Route (SR) 91 where it intersects with SR-60.

**Interstate 10 Freeway:** I-10 is an extensive Interstate Highway that extends from the Pacific Ocean at California State Route 1 (Pacific Coast Highway) in Santa Monica, California, to I-95 in Jacksonville, Florida. In the vicinity of the Project, it provides four-lanes in each direction.

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<sup>1</sup> Fehr & Peers. (2022). *Transportation Impact Analysis Report*. Pages 24-26. See **Appendix J**.

**State Route 60:** SR-60 provides an east-west regional access to the Project site and runs roughly parallel to I-10. In the vicinity of the Project, SR-60 varies between three and four lanes with one HOV lane in each direction.

### Local Access Roads

Local access to the Project site is provided by the following arterial and commuter roadways:

**De Berry Street:** De Berry Street is a two-lane facility that provides an east-west access to the Project site. The City of Grand Terrace General Plan (Grand Terrace GP) classifies De Berry Street as a two-lane Collector Street between the western city limit near I-215 and Observation Street. The posted speed is 35 miles per hour (mph).

**Michigan Street:** Michigan Street is a two-lane facility that provides a north-south access near the Project site. The Grand Terrace GP classifies Michigan Street as a four-lane Secondary Highway between Commerce Way and Van Buren Street and a two-lane Collector Street between Van Buren Street and Main Street. The posted speed is 35 mph.

**Van Buren Street:** Van Buren Street is a two-lane facility that provides an east-west access near the Project site. The Grand Terrace GP classifies Van Buren Street as a two-lane Collector Street between the western City limit near I-215 and Observation Street. The posted speed is 25 mph.

**Pico Street:** Pico Street is a two-lane facility that provides an east-west access near the Project site. The Grand Terrace GP classifies Pico Street as a two-lane Collector Street between Commerce Way and Oriole Avenue. The posted speed is 25 mph.

**Main Street:** Main Street is a two-lane facility that provides an east-west access near the Project site. The street widens on the westbound side into two-lanes near the Grand Terrace High School. The Grand Terrace GP classifies Main Street as a four-lane Secondary Highway between the western city limit near I-215 and Mount Vernon Avenue and a two-lane Collector Street between Mount Vernon Avenue and Oriole Avenue. There is a bike lane on the westbound approach between Michigan Street and Mount Vernon Avenue. The westbound portion of Main Street is within the City of Grand Terrace jurisdiction, and the east-bound portion is in the County of Riverside. The posted speed is 40 mph.

**Barton Road:** Barton Road is a four-lane facility that provides an east-west access near the Project site. The Grand Terrace General Plan classifies Barton Road as a four-lane Major Highway between La Cadena Drive and the east city limits. The posted speed varies between 40 mph and 45 mph.

**Taylor Street:** Taylor Street is a two-lane facility that provides a north-south access near the Project site but currently dead ends north of Grand Terrace High School. The Grand Terrace GP assumes Taylor Street would be an extension of Commerce Way, which classified as a four-lane Secondary Highway. There is no posted speed limit and so a prima facie speed limit of 25 applies.

**Commerce Way:** Commerce Way is a two-lane facility that would provide direct access to the Project site. It currently terminates west of Michigan Street just north of De Berry Street but is planned to connect to

Taylor Street. The Grand Terrace GP classifies Commerce Way as a four-lane Secondary Highway. There is no posted speed limit and so a prima facie speed limit of 25 mph applies.

**La Cadena Drive:** La Cadena Drive is a four-lane facility that provides north-south access near the Project site. The street narrows to a two-lane facility just north of Main Street. The Grand Terrace GP classifies La Cadena Drive as a Divided Major Highway with 120-foot right-of-way from the northern City limits (north of Barton Road) to the southern City limits (Main Street). The City of Riverside GP (Riverside General Plan 2025, 2018) classifies La Cadena Drive south of Main Street as a two-lane collector. The posted speed limit is 45 mph.

**La Crosse Avenue:** La Crosse Avenue is a two-lane facility that provides north-south access near the Project site. La Crosse Avenue connects De Berry Street and Barton Road on the west side of I-215. There is no posted speed limit and so a prima facie speed limit of 25 mph applies.

**Center Street:** Center Street is a four-lane facility that provides east-west access near the Project site. The street narrows to a two-lane facility west of Iowa Avenue and east of Mount Vernon Avenue. The City of Riverside GP classifies Center Street as four-lane arterial from Orange Street in the west to Mount Vernon Avenue in the East. The posted speed limit is 40 mph.

**Mount Vernon Avenue:** Near the Project site, Mount Vernon Avenue is a four-lane facility that provides north-south access near the Project site. The City of Grand Terrace GP classifies Mt Vernon Avenue as a four-lane Secondary Highway between the northern City limits and Main Street. The posted speed is 40 mph.

**Iowa Avenue:** Near the Project, Iowa Avenue is under the cities of Riverside and Colton, and the County of Riverside's jurisdiction. It is a four-lane facility that provides north-south access near the Project site. The City of Riverside GP classifies Iowa Avenue as a four-lane arterial from Center Street to the City of Riverside's northern City limits and a six-lane arteria south of Center Street. The City of Colton's GP classifies the roadway as a four-lane facility from the City of Colton's southern city limits to La Cadena Drive. The posted speed is 45 mph.

## Existing and Planned Bicycle Facilities

According to the City's Active Transportation Plan (ATP), the existing bicycle facility network is comprised of bike lanes (Class II) and shared bike routes (Class III), making up 3.6 miles of existing bikeways. The California Manual on Uniform Traffic Control Devices (CA MUTCD) also permits Class I and Class IV facilities.

The TIA prepared for the Project concluded that although the majority of the existing bicycle facilities in the Project area are Class II facilities, there is an existing Class III bikeway facility located on Barton Road between Commerce Way and Mount Vernon Avenue.<sup>2</sup>

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<sup>2</sup> Ibid. Page 27.

The existing Class II bikeway facilities in the Project area are located on the following roadway segments:

- Intermittently on the north and south side of Barton Road between the western City boundary and Commerce Way
- The north and south side of Barton Road east of Mount Vernon Avenue
- The east and west side of Mount Vernon Avenue between Barton Road and Main Street
- The west and east side of Commerce Way between Barton Road and Michigan Street
- Intermittently on the north side of Main Street between the western City boundary and Mount Vernon Avenue

The Grand Terrace GP and ATP includes planned bicycle facilities on the following roadway segments:

- Michigan Street between Commerce Way and Main Street (Class II)
- The extension of Commerce Way between Michigan Street and Main Street (Class II)
- The Gage Canal between Main Street and the northern boundary of the Project area (Class I)

### **Pedestrian Facilities<sup>3</sup>**

Pedestrian facilities include crosswalks, pedestrian signals, sidewalks, and multi-use trails. At existing signalized intersections, adjacent to the Project, crosswalks and pedestrian push-button actuated signals are provided. Crosswalks are generally provided at existing unsignalized intersections adjacent to the Project, except along Main Street. Main Street primarily consists of side-street stop-controlled intersections and offers limited north-south crossings except near Grand Terrace High School. There are no existing multiuse trails in the area but, the Grand Terrace ATP does state that a Multi-use Path with a Class I bikeway is planned from Main Street, east of Michigan Street, to the north of the Project.

The Grand Terrace ATP concluded that 36 percent of the City consisted of roadways that were missing sidewalks. The only major roadway segment adjacent to the Project that does not provide continuous sidewalk on one or both sides is Michigan Street, south of Commerce Way, to Pico Street. Sidewalk is provided intermittently along the segment on one or both sides of the street. The following roadway segments are adjacent to the Project and do provide continuous sidewalk:

- Barton Road east of Grand Terrace Road
- The existing extent of Commerce Way south of Barton Road
- De Berry Street west of Michigan Street
- Van Buren Street west of Michigan Street
- Michigan Street south of Pico Street
- Center Street
- Main Street east of Taylor Street

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<sup>3</sup> Ibid. Page 29.



## Public Transit Facilities<sup>4</sup>

Public transit service is offered in the City of Grand Terrace by OmniTrans and Riverside Transit Authority (RTA).

OmniTrans operates public transit services throughout the San Bernardino urban area and provides the following route in the vicinity of the Project area, which travels along Barton Road:

**OmniTrans Route 305 (San Bernardino – Waterman – Grand Terrace)** runs weekdays between approximately 5:40 AM and 9:40 PM with headways of exactly 60 minutes. On the weekends, Route 305 starts at 6:55 AM and terminates service at 7:55 PM on Saturdays and 6:50 PM on Sundays. Route 305 continues to operate with 60-minute headways on the weekend. The closest bus stop is located east of Vivienda Avenue/Commerce Way at Barton Road, on the south side of Barton Road.

RTA operates local and regional transit services throughout western Riverside County and provides the following route in the Project area along Center Street:

**RTA Route 14 (Galleria at Tyler – Downtown Riverside – Loma Linda VA Hospital)** runs weekdays between approximately 8:00 AM and 5:40 PM with headways varying between 60 and 70 minutes. On the weekends, Route 14 runs between 8:20 AM and 5:40 PM and operates with headways varying between 55 and 65 minutes. The closest bus stop is located at the northwest corner of Michigan Street at Center Street.

### 4.15.3 REGULATORY SETTING

#### Federal

Federal rules and regulations govern many facets of the City's transportation system, including transportation planning and programming; funding; and design, construction, and operation of facilities. The City complies with all applicable rules and regulations of the Federal Highway Administration, the Urban Mass Transit Administration, the Federal Railroad Administration, the Federal Aviation Administration, and other Federal agencies. In addition, the City coordinates with Federal resource agencies where appropriate in the environmental clearance process for transportation facilities.

#### State

##### Assembly Bill 32 – Global Warming Solutions Act

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006 after considerable study and expert testimony before the legislature. The law instructs the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verifying of statewide greenhouse gas (GHG) emissions. The Act directed CARB to set a GHG emission limit based on 1990 levels to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner (AB 32). In December 2008, CARB adopted a

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<sup>4</sup> Ibid. Pages 29-30.

Scoping Plan to achieve the goals of AB 32. AB 32 was followed by Senate Bill (SB) 32 in 2016, which expanded this goal for statewide GHG emissions to be 40 percent below 1990 levels by 2030 (SB 32).

The scoping plan has a range of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms (e.g., cap-and-trade system), and an AB 32 program implementation regulation to fund the program. CARB recognizes cities as “essential partners” in reducing GHG emissions. As such, CARB has developed a Local Government Toolkit with guidance for GHG reduction strategies, such as improving transit, developing bicycle/pedestrian infrastructure, and increasing city fleet vehicle efficiency, among other strategies.

Adopted December 15, 2022, CARB’s 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high Global Warming Potential (GWP); providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines §15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California’s single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

### **SB 743 – Update to the CEQA Guidelines for Transportation Impacts**

On September 27, 2013, Governor Jerry Brown signed SB 743 into law. A key element of this law is, for CEQA purposes, the potential elimination or deemphasizing of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. According to the legislative intent contained in SB 743, these changes to current practice were necessary to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

As noted, SB 743 requires impacts to transportation network performance to be viewed through a filter that promotes the reduction of GHG emissions, the development of multimodal transportation networks, and the diversification of land uses. Some alternative metrics were identified in the law, including VMT or automobile trip generation rates. SB 743 does not prevent a city or county from continuing to analyze

delay or LOS as part of other plans (i.e., the general plan), studies, or ongoing network monitoring, however automobile delay, as measured by “level of service” or LOS or similar metrics, no longer constitutes a significant adverse environmental effect under CEQA.

In December 2018, the California Natural Resources Agency finalized updates to the State CEQA Guidelines, which included SB 743. Section 15064.3 of the 2019 CEQA Guidelines provides that transportation impacts of projects are, in general, best measured by evaluating a project's VMT. Automobile delay is no longer be considered to be an environmental impact under CEQA. Automobile delay can, however, still be used by agencies to determine local operational impacts. The provisions of this section became mandatory July 1, 2020. Refer to **Section 4.15.4, Significance Criteria Under CEQA**, for more information regarding VMT.

### **Sustainable Communities Strategies: Senate Bill 375 – Land Use Planning**

Senate Bill (SB) 375 provides for a new planning process to coordinate land use planning and regional transportation plans and funding priorities in order to help California meet the greenhouse gas reduction goals established in Assembly Bill (AB) 32. SB 375 requires that regional transportation plans developed by metropolitan planning organizations relevant to a project site (e.g., Southern California Association of Governments (SCAG)) incorporate a “sustainable communities strategy” in their regional transportation plans that will achieve greenhouse gas emission reduction targets set by the California Air Resources Board. SB 375 also includes provisions for streamlined California Environmental Quality Act (CEQA) review for some infill projects, such as Transit-Oriented Developments.

As a metropolitan planning organization, SCAG is responsible for preparing and utilizing a public participation plan that is developed in consultation with all interested parties and provides reasonable opportunities for interested parties to comment on the content of SCAG’s proposed Regional Transportation Plan and the Regional Transportation Improvement Program. SB 375 requires SCAG to adopt a public participation plan for development of the sustainable communities strategy and an alternative planning strategy. Further, as required by SB 375, SCAG will conduct at least two informational meetings in each county within the region for members of the board of supervisors and city councils on the sustainable communities strategy and alternative planning strategy, if any. The purpose of the meetings shall be to present a draft of the sustainable communities strategy to members of the board of supervisors and city council members in that county and to solicit and consider their input and recommendations.

### **Technical Advisory on Evaluating Transportation Impacts in CEQA**

The Governor’s Office of Planning and Research (OPR) released the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) in December 2018. The Technical Advisory aids in the transition from LOS to VMT methodology for transportation impact analysis under CEQA. The advisory contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

## California Department of Transportation

The California Department of Transportation (Caltrans) owns and operates the State highway system (SHS), which includes the freeways and State routes within California. In Grand Terrace, Caltrans maintains I-215, I-10, and SR-60. As discussed above, VMT are now used which, although Caltrans recognizes, will not apply to all projects on the SHS; however, they would apply to this Project. Caltrans also recognizes that VMT is the most appropriate primary measure of transportation impacts for capacity increasing transportation projects on the SHS.

The Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002) provides guidance on the evaluation of traffic impacts to State highway facilities. The document outlines when a traffic impact study is needed and what should be included in the scope of the study. The Guide states the following: “Caltrans endeavors to maintain a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS.” However, as noted above, such analysis is no longer considered a significant adverse environmental effect under CEQA.

## Regional

### Southern California Association of Government (SCAG) – Connect SoCal

As the metropolitan planning organization for the region’s six counties and 191 cities, the Regional Council of SCAG is mandated by law to develop a long-term regional transportation and sustainability plan every four years. On September 3, 2020, SCAG’s Regional Council approved and fully adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) or Connect SoCal. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal identifies 10 goals that fall into four categories: economy, mobility, environment, and healthy/complete communities. Connect SoCal is discussed further in **Section 4.10, Land Use and Planning**, of this EIR.

### San Bernardino County Congestion Management Program

The San Bernardino County Transportation Authority (SBCTA) is San Bernardino’s Congestion Management Agency (CMA). SBCTA prepares, monitors, and periodically updates the County Congestion Management Program (CMP) to meet federal Congestion Management Process requirement and the County’s Measure I Program. The San Bernardino County CMP defines a network of state highways and arterials, LOS standards and related procedures, the process for mitigation of impacts of new development on the transportations system, and technical justification for the approach.

## Traffic Modeling Methodology

VMT was estimated for the Project with the County’s travel demand model, the San Bernardino County Transportation Analysis Model (SBTAM), that forecasts travel patterns on typical weekdays, consistent with City guidance. SBTAM, which is a typical four-step travel demand forecasting model, began as the SCAG regional travel demand forecasting model and underwent a subarea model development to add detail and refinement within San Bernardino County. As identified in the City’s Traffic Impact Analysis

Guidelines (June 2020), SBTAM is the most appropriate travel demand model to measure VMT in San Bernardino County. Refer to **Section 4.15.4** for further information.

## Measure I Strategic Plan

Measure I authorizes a half-cent sales tax in San Bernardino County until March 2040 for use exclusively on transportation improvement and traffic management programs. San Bernardino County voters first approved the measure in 1989 and in 2004 overwhelmingly approved the extension through 2040. Measure I includes language mandating development to pay its fair share for transportation improvements in San Bernardino County. The Measure I Strategic Plan is the official guide for the allocation and administration of the combination of local transportation sales tax, State and Federal transportation revenues, and private fair-share contributions to regional transportation facilities to fund the Measure I 2010–2040 transportation programs. The Strategic Plan identifies funding categories and allocations and planned transportation improvement projects in the County for freeways, major and local arterials, bus and rail transit, and traffic management systems. The City has adopted a development impact fee (DIF) program that is consistent with Measure I requirements.

## Local

### City of Grand Terrace General Plan

#### *Circulation Element*<sup>5</sup>

The following Grand Terrace GP Circulation Element goals and policies are relevant to the Project:

- Goal 3.1:** **Provide a comprehensive transportation system that provides for the current and long-term efficient movement of people and goods within and through the City.**
- Policy 3.1.1** Provide a transportation system which supports planned land uses and improves the quality of life.
- Policy 3.1.2** An arterial street system shall be established that provides for the collection of local traffic and provide for the efficient movement of people and goods through the City.
- Policy 3.1.3** Commerce Way shall provide for the movement of traffic associated with commercial and business traffic.
- Goal 3.2:** **Provide for a well-maintained roadway system.**
- Policy 3.2.2** The City shall require that street improvements be constructed at the time that development occurs on vacant or underutilized property.
- Goal 3.3:** **Provide for a safe circulation system.**
- Policy 3.3.2** The City shall require that new developments provide adequate off-street parking in order to minimize the need for on street parking

<sup>5</sup> City of Grand Terrace. (2010). City of Grand Terrace General Plan. *Circulation Element*. Available at: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/c3\\_circulation.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/c3_circulation.pdf) (accessed November 8, 2022).

**Policy 3.3.3** The City shall ensure that local street improvements are designed with proper attention to community appearance and aesthetics as well as the need to move traffic safely and efficiently.

**Goal 3.5:** **Provide for efficient alternative modes of travel.**

**Policy 3.5.1** Promote measures which reduce reliance on single occupant vehicle usage by enforcement of the Traffic Control Measures (TCM) ordinance which addresses development standards, land use patterns, employer based ride share programs and bicycle/pedestrian facilities.

### City of Grand Terrace Active Transportation Plan

The City adopted the Grand Terrace ATP in 2018 which provides recommendations and an implementation plan to address the long-term development and maintenance of the City's transportation-related systems. The ATP is consistent with the Grand Terrace GP Land Use Element and other pertinent transportation-related local and regional planning documents.

### City of Grand Terrace Municipal Code<sup>6</sup>

#### **Chapter 4.104 Circulation Improvement Fee Program**

Chapter 4.104 of the City's Municipal Code (Grand Terrace MC) requires that new development in the City increases the amount of traffic utilizing the City's street system, thereby requiring the installation of additional traffic signals, arterial street improvements, and operational at specified locations to increase or improve transportation capacity in order to protect the public health, safety and welfare and that such new development should pay its fair share of such improvements.

#### **Chapter 17.16 Tentative Maps**

Grand Terrace MC Chapter 17.16 requires that for every proposed subdivision, the subdivider may, at his or her option, file a preliminary map with the Department, and as many additional copies as may be required, for the purpose of obtaining advice on the conformity of the map with the provisions of this Title and other applicable Codes, and possible improvements in the design of the subdivision. All divisions of land shall conform to those development standards set forth in the Zoning Code for the zoning district in which the property to be divided is located at the time the application for the tentative map is deemed complete. In accordance with Section 17.04.060, all divisions of land shall also conform to the Grand Terrace GP including all maps, goals, objectives, policies and implementation measures, in effect at the time the tentative map is deemed complete.

#### **Section 17.52.010 Design and Improvement Requirements**

Pursuant to Grand Terrace MC Section 17.52.010, all subdivisions and tentative maps thereof, must conform to the Grand Terrace GP, MC, and any applicable specific plans and to all applicable planning,

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<sup>6</sup> City of Grand Terrace. (2021). *City of Grand Terrace Municipal Code*. Available at: [https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodetd=GRAND\\_TERRACE\\_CALIFORNIAMUCO](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodetd=GRAND_TERRACE_CALIFORNIAMUCO) (accessed November 8, 2022).

zoning, design, improvement and environmental requirements. Unless otherwise specified, design requirements and improvement requirements may be modified or waived only by the City Council.

### **Section 17.52.070 Street Design**

All streets shall be designed in conformance with the design standards listed in Grand Terrace MC Section 17.52.070.

## **4.15.4 SIGNIFICANCE CRITERIA UNDER CEQA**

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning transportation. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

## **Methodology and Assumptions**

The Project is evaluated against the aforementioned significance criteria, as the basis for determining the level of impacts related to transportation. This analysis considers existing regulations, laws, and standards that serve to avoid or reduce potential environmental impacts. Where significant impacts remain, feasible mitigation measures are recommended to avoid or lessen the Project's significant adverse impacts.

### **VMT Analysis Methodology**

VMT was estimated using the Origin/Destination (OD) Method to estimate Project-generated VMT and the Boundary Method to estimate the Project's effect on VMT, consistent with the City's thresholds of significance related to VMT. For all methodologies outlined, VMT can be presented as total VMT or as total VMT/Service Population (VMT/SP). Total VMT represents all VMT generated on a typical weekday. Total VMT/SP is an efficiency metric which represents VMT generated on a typical weekday per person who lives and/or works in the region analyzed.

### **Origin/Destination (OD) VMT**

The OD Method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the Project area and tracks those trips to their estimated origins/destinations. The OD Method is completed after the final loops of assignment in the travel demand model (after person trips have been converted to total vehicle trips). Origins are all vehicle trips that start in a specific traffic analysis zone, and destinations are all vehicle trips that end in a specific traffic analysis zone.

The OD Method accounts for trips that begin or end outside of the travel demand model, special generator trips, and truck trips and therefore provides a more complete estimate of all VMT within the Project area. This VMT metric is consistent with VMT estimates that are utilized in the Air Quality, Noise, and Energy sections of an EIR as it is a more complete accounting of VMT, as compared to isolating commute VMT. It should also be noted that, although VMT includes trips to/from the County that originate or are destined to locations outside of the model area, those trip lengths are artificially truncated at the model boundary.

### ***Boundary Method VMT***

The Boundary Method is the sum of all weekday VMT on a roadway network within a designated boundary. Boundary Method VMT estimates VMT by multiplying the number of trips on each roadway segment within the boundary by the length of each segment. This approach consists of all trips, including those trips that do not begin or end in the designated boundary and is another way to summarize VMT. This is the only VMT method that captures the effect of cut-through and/or displaced traffic. The City's TIA guidelines recommend that, for larger projects or projects located near the City limit, a larger boundary should be applied when looking at the project's effect on VMT to ensure that the true project effect is not truncated. The Project is located near the City limits and is large enough to warrant further consideration of the boundary.

An average trip length of 13.5 miles was estimated for the Project traffic analysis zone (TAZ) using the SBTAM model. Using the City's guidance of doubling the average trip length from the Project results in a 27-mile radius boundary. However, a 27-mile radius encompasses the entire San Bernardino Valley and most of Western Riverside County; when considering all land uses within this large of an area, a radius of this size may mask the true effect on VMT associated with other factors not attributable to the Project (such as model convergence criteria and model trip balancing procedures). Therefore, we also reviewed a 10-mile radius from the Project as an additional information point to verify the results from the larger radius test and ensure that model noise was not factoring into the analysis results.

### ***Model Inputs***

The Project's socioeconomic model inputs were estimated in the following ways:

- The average persons per single-family household and multi-family household were estimated from the SBTAM Base Year (2016) model from similar TAZs in San Bernardino (e.g., TAZs that had only single-family household or multi-family households).

Retail and restaurant employees were estimated using an assumption of one employee per 425 square feet.

The following **Table 4.15-1, Project Land Use** presents the land use inputs which were coded into the SBTAM.



**Table 4.15-1: Project Land Use**

| Model Socioeconomic Metric  | Project Input |
|---|---------------|
| <b>Total Population</b>   | <b>2,339</b>  |
| <i>Single Family Population</i>   | <i>1,184</i>  |
| <i>Multiple Family Population</i>   | <i>1,155</i>  |
| <b>Total Households</b>   | <b>695</b>    |
| <i>Single Family Units</i>  | 320           |
| <i>Multi-Family Units</i>   | 375           |
| <b>Total Employment</b>   | <b>640</b>    |
| <i>Retail Employees</i>   | <i>574</i>    |
| <i>Non-Retail Employees</i>   | <i>66</i>     |
| Source: Fehr & Peers. (2022). <i>The Gateway Specific Plan at Grand Terrace Transportation Metrics Memorandum</i> . Pages 4 through 5 – Table 1. See <b>Appendix J2</b> |               |

### Traffic Modeling Methodology

VMT was estimated for the Project with the County’s travel demand model, the San Bernardino County Transportation Analysis Model (SBTAM), that forecasts travel patterns on typical weekdays, consistent with City guidance. SBTAM, which is a typical four-step travel demand forecasting model, began as the SCAG regional travel demand forecasting model and underwent a subarea model development to add detail and refinement within San Bernardino County. As identified in the City’s guidance, SBTAM is the most appropriate travel demand model to measure VMT in San Bernardino County. As recommended in the SBTAM model documentation, model assignment parameters were set to run up-to five loops with a minimum convergence criterion of 0.01.

### 4.15.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.15-1:** *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

**Level of Significance:** *Less Than Significant*

The Project would transform the existing land uses (vacant, storage commercial, and residential) to approximately 112 acres of commercial, residential, public utilities, and public park uses, including associated infrastructure improvements (see **Section 3.0, Project Description**, for more information).

Potential impacts to public transit, pedestrian facilities, and bicycle facilities were evaluated in the TIA (**Appendix J1**) and Transportation Metrics Memorandum (TMM) (**Appendix J2**) to determine if the Project conflicts with adopted policies, plans, or programs, or otherwise decreases the performance or safety of such facilities. Findings are presented below.

#### Impacts to Bicycle Facilities

As noted in **Section 4.15.2** above, the existing bicycle facility network is comprised of bike lanes (Class II) and shared bike routes (Class III), making up 3.6 miles of existing bikeways. The California Manual on Uniform Traffic Control Devices (CA MUTCD) also permits Class I and Class IV facilities. As shown in TIA Figure 4-1, Commerce Way would include a planned Class II Bike Lane. In support of the Grand Terrace ATP, Commerce Way would include a striped median, Class II on-street bike lanes with landscaped parkways and sidewalks. Therefore, the Project would not conflict with the Grand Terrace ATP.

## Impacts to Pedestrian Facilities

Pedestrian facilities include crosswalks, pedestrian signals, sidewalks, and multi-use trails. At existing signalized intersections, adjacent to the Project, crosswalks and pedestrian push-button actuated signals are provided. At existing unsignalized intersections, adjacent to the Project, crosswalks are generally provided, except along Main Street. Main Street consists of mostly side-street stop-controlled intersections and offers limited north-south crossings except near Grand Terrace High School. There are no existing multi-use trails in the area, but as documented in the previous section, the Grand Terrace ATP does state that a Multi-use Path with a Class I bikeway is planned from Main Street, east of Michigan Street, to the north of the Project area.

As noted in **Section 4.15.2** above, the Grand Terrace ATP concludes that 36 percent of the City consists of roadways that do not include sidewalk. The only major roadway segment adjacent to the Project that does not provide continuous sidewalk on one or both sides is Michigan Street south of Commerce Way to Pico Street. Sidewalk is provided intermittently along the segment on one or both sides of the street.

The following roadway segments are adjacent to the Project and currently provide continuous sidewalk:

- Barton Road east of Grand Terrace Road
- The existing extent of Commerce Way south of Barton Road
- De Berry Street west of Michigan Street
- Van Buren Street west of Michigan Street
- Michigan Street South of Pico Street
- Center Street
- Main Street east of Taylor Street

According to the Grand Terrace ATP, the proposed extension of Commerce Way is classified as a Capital Improvement Plan (CIP) project. Commerce Way would be constructed with pedestrian facilities (i.e., sidewalks, bicycle facilities) resulting in a well-connected sidewalk network surrounding the Project. The Project also proposes sidewalks along De Berry Street and Van Buren Street within the Project's limits. Pedestrians would be able to access the Project and other nearby land uses or facilities between Main Street and Barton Road. Lastly, all roadways and pedestrian facilities would be designed according to the development standards listed in the proposed Specific Plan. Therefore, the Project would be compliant with the City's ATP concerning pedestrian facilities.

## Impacts to Public Transit Facilities

The potential impact to transit service or facilities was evaluated based on whether the proposed Project would physically disrupt an existing facility/service or interfere with the implementation of a planned facility/service. In addition, the Project was evaluated to determine if it would create potential conflicts with applicable policies, plans, or programs (as defined in the regulatory setting above) supporting transit such that the conflict could reduce transit trips or increase conflicts with other modes.

The TMM concluded that the Project would not result in any disruption to existing transit facilities. Although new transit trips are anticipated to be generated by the Project, the Project does not propose any changes that would modify transit stop locations or transit headways. Additional transit ridership demand could increase boarding and alighting activity at existing bus stops and transit terminals located near the Project site. However, the Project is consistent with the adopted plans regarding transit infrastructure and is not expected to decrease the performance or safety of these facilities. Therefore, the Project is considered to have a less than significant impact on public transit.

Overall, the Project would adhere to all relevant circulation regulations and applicable policy and planning documents. Adherence with both state and local planning directives would ensure that the Project's impacts to a program, plan, ordinance, or policy pertaining to transit, roadway, bicycle and pedestrian facilities is less than significant.

### ***Mitigation Measures***

No mitigation measures are required.

***Impact 4.15-2: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

***Level of Significance: Less Than Significant***

The City of Grand Terrace prepared its Traffic Impact Analysis Guidelines for land use projects in June 2020 to address changes to CEQA pursuant to SB 743 to include VMT analysis methodology and thresholds. Based on the City of Grand Terrace Traffic Impact Analysis Guidance, a project would result in a significant project-generated VMT impact under either of the following conditions:

1. The baseline project-generated VMT per service population exceeds the County of San Bernardino baseline VMT per service population; or
2. The cumulative project-generated VMT per service population exceeds County of San Bernardino baseline VMT per service population

The Project's effect on VMT would be considered significant if it resulted in the following condition:

1. The cumulative link-level boundary VMT per service population within the City of Grand Terrace increases under the plus Project condition compared to the no Project condition.

### **VMT Assessment**

The OD VMT/SP estimates are shown in the following **Table 4.15-2, Project Generated VMT Estimates** and **Table 4.15-3, VMT Impact Analysis Results and Threshold Comparisons**. The Boundary VMT/SP estimates are also shown in **Table 4.15-3**.

**Table 4.15-2: Project Generated VMT Estimates**

| Year/Scenario              | Area                     | OD VMT      | Service Population | OD VMT/SP |
|----------------------------|--------------------------|-------------|--------------------|-----------|
| 2016 No Project            | County of San Bernardino | 113,178,769 | 2,927,114          | 38.7      |
| 2016 With Project          | Project TAZ              | 102,540     | 2,979              | 34.4      |
| 2022 Baseline No Project   | County of San Bernardino | 118,048,375 | 3,136,178          | 37.6      |
| 2022 Baseline With Project | Project TAZ              | 97,962      | 2,979              | 32.9      |
| 2040 No Project            | County of San Bernardino | 132,657,192 | 3,763,371          | 35.3      |
| 2040 With Project          | Project TAZ              | 84,225      | 2,979              | 28.3      |

Notes:  
1. Service Population is the summation of population and employment within an area.  
2. OD VMT/SP = Origin-Destination Method Vehicle Miles of Travel per Service Population.

Source: Fehr & Peers. (2022). *The Gateway Specific Plan at Grand Terrace Transportation Metrics Memorandum*. Pages 5 through 6 – Table 2. See **Appendix J2**

**Table 4.15-3: VMT Impact Analysis Results and Threshold Comparisons**

| Project Generated VMT                   | OD VMT       | Service Population | OD VMT/SP       |
|---|--------------|--------------------|-----------------|
| Project VMT Estimates (2022)            | 97,962       | 2,979              | 32.9            |
| Project VMT Estimates (2040)            | 84,225       | 2,979              | 28.3            |
| County of San Bernardino (2022)         | 118,048,375  | 3,136,178          | 37.6            |
| <b>Significant Impact Determination</b> |              |                    | <b>No</b>       |
| Project Effect on VMT                   | Boundary VMT | Service Population | Boundary VMT/SP |
| 10-Mile Radius Without Project (2040)   | 30,286,388   | 2,033,868          | 14.89           |
| 10-Mile Radius With Project (2040)      | 30,306,841   | 2,036,847          | 14.88           |
| Net Change                              | 20,453       | 2,979              | -0.01           |
| <b>Significant Impact Determination</b> |              |                    | <b>No</b>       |
| 27-Mile Radius Without Project (2040)   | 115,003,231  | 6,242,514          | 18.423          |
| 27-Mile Radius With Project (2040)      | 115,016,618  | 6,245,493          | 18.416          |
| Net Change                              | 13,387       | 2,979              | -0.007          |
| <b>Significant Impact Determination</b> |              |                    | <b>No</b>       |

Source: Fehr & Peers. (2022). *The Gateway Specific Plan at Grand Terrace Transportation Metrics Memorandum*. Pages 6 – Table 2. See **Appendix J2**

As shown in **Table 4.15-2**, the base year 2016 and future year 2040 data were interpolated to estimate the Baseline 2022 condition. The Year 2022 and Year 2040 analysis show how the VMT generated by the Project compares to current VMT characteristics in the area. As shown in **Table 4.15-3**, the Project is forecast to generate 32.9 VMT/SP in Baseline (2022) conditions and 28.3 VMT/SP in Cumulative (2040) conditions. The relevant threshold is below the County's baseline VMT, which is 37.6 VMT/SP in the 2022 Baseline condition. Therefore, based on the City's adopted significance criteria, the Project VMT/SP is below the applicable threshold for project-generated VMT.

For the Project's effect on VMT, as shown in **Table 4.15-3**, both the 10-mile and 27-mile radius boundaries reflect a modest decrease in VMT/SP as compared to the No Project condition, indicating that the Project would either reduce trips on a per-person basis or would decrease trip lengths in the Project area. Therefore, based on the City's adopted significance criteria, the Project VMT/SP is below the applicable threshold for a projects effect on VMT.

Based on the results previously discussed, the Project's VMT impact would be less than significant, and no mitigation is required.

## Project Phasing VMT Assessment

VMT modeling and estimates were prepared for the full buildout of the Project. Phase 1 would construct 375 Multi-family Residential (MFR) DUs, 160 Detached Single-Family Residential (SFR) DUs, and 160 attached SFR DUs. Note that there is no residential development associated with Phase 2. The San Bernardino County Transportation Authority (SBCTA) Online VMT Screening Tool was utilized to evaluate VMT performance of similar residential developments near the Project. According to the Tool, these areas generated between 23.1 and 24.6 OD VMT/SP. It is anticipated that Phase 1 of the Project would generate VMT at a similar rate.

## Travel Demand Management Measures

While the Project's VMT impact was concluded to be less than significant, the following recommendations for Travel Demand Management (TDM) measures could be implemented to further reduce VMT generated by the Project, as the discretion of the Project Applicant and City of Grand Terrace. The TMM (**Appendix J2**) determined that the TDMs listed below would be the most applicable for the Project:

1. Implement parking restrictions to limit visitors parking in nearby neighborhoods
2. Develop carpool and vanpool programs
3. Promote unbundled parking programs that would allow parking spaces to be sold or rented separately without inclusion into rental cost
4. Encourage shared parking between property owners and renters to increase parking utilization during off-peak parking demand hours
5. Market programs to educate visitors, residents, and employees about alternatives to driving
6. Develop bicycle connections that will provide access to proposed bicycle facilities outlined in the City's Proposed Bikeway Plan, such as the proposed bikeways on Commerce Way, Barton Road and Michigan Street which are within or provide direct access to the Project area
7. Encourage the development of programs that subsidize transit for employees to reduce Project vehicle trips for employees located within an appropriate transit travel distance to the site
8. Incentivize and promote Carshare programs
9. Provide car-sharing, bike sharing, and ride-sharing programs within the Project
10. Improve or increase access to transit in the Project area
11. Improve pedestrian networks in the Project area
12. Provide traffic calming within the Project
13. Provide telecommuting or work-at-home programs, where appropriate
14. Develop a "park once" policy to encourage employees, residents, and visitors to park once and walk to multiple destinations within the Project area

It should be noted that most programs tend to be tenant and employer specific and, at this point, tenants and employers are not yet known. For example, providing a shuttle service to an office use can have

varying reductions in VMT based on the tenant of that office building and that office culture's response to such TDM measures. As such, at the time of entitlement, it is very difficult to fully capture the actual VMT reduction associated with implementation of the TDM program as many tenants in the non-residential uses are not yet known. Although these factors are not yet known and would change the reduction potential associated with the TDM measures, the Project could still implement a subset of measures deemed appropriate by the City for implementation as part of the Project's future project-specific development approval process. Additionally, refer to **MM AQ-2 in Section 4.2, Air Quality**, which provides vehicle trip reduction measures.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.15-3:** *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

#### ***Level of Significance: Less Than Significant***

The Project's proposed circulation plan would improve the local circulation and would provide access for new development within the Project. The proposed circulation improvements are noted under **Section 4.15.3** above and further discussed in the Specific Plan. The proposed circulation improvements would be compatible with existing and proposed land uses. All proposed improvements would be constructed as approved by the City Engineer and City's Fire Department pursuant to Grand Terrace MC Section 17.52.070, Street Design and Chapter 17.16, and as part of the Project's proposed tentative tract map approval. In accordance with Grand Terrace MC Section 17.52.010, "All subdivisions and tentative maps thereof, must conform to the City General Plan, Zoning Code, and any applicable specific plans and to all applicable planning, zoning, design, improvement and environmental requirements."

Upon approval of the Project's Specific Plan and adherence with the Grand Terrace MC design standards, the Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use. Therefore, a less than significant impact would occur, and no mitigation is required.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.15-4:** *Result in inadequate emergency access?*

#### ***Level of Significance: Less Than Significant***

The Project is not anticipated to result in any significant emergency access impacts during construction. Construction staff would include assigned staff that would provide typical safety instructions and flag emergency response vehicles in case of an emergency. All vehicles and construction equipment would not be located in areas that would impede emergency ingress and egress of the Project site or impede emergency vehicles from traversing the Project site. All construction equipment shall be maintained or

left in proper condition in accordance with Cal OSHA safety standards to prevent any hazardous condition that may affect construction staff and emergency responders.

The Project's proposed circulation would be designed in conformance with the applicable Grand Terrace MC design guidelines and regulations, which includes but not limited to use of traffic control devices, and payment of fair share contributions. Furthermore, the Project would be void of gated communities and speed bumps which would provide free and clear access for emergency personnel throughout the Project area. Lastly, as noted in Impact 4.15-3 above, the Project's Specific Plan and future project-specific development plans, would be reviewed by the City Engineer and Fire Department to ensure that adequate emergency access is provided. Therefore, the Project's impact concerning emergency access would be less than significant and no mitigation is required.

#### **Mitigation Measures**

No mitigation measures are required.

### **4.15.6 SIGNIFICANT AND UNAVOIDABLE IMPACTS**

No significant unavoidable impacts associated with transportation were identified.

### **4.15.7 CUMULATIVE IMPACTS**

Implementation of the Project and cumulative development would result in traffic impacts to local roadways. As discussed in the impact thresholds above, the Project is not anticipated to result in significant traffic related impacts resulting from conflicts with transportation plans or policies.

As concluded above, the Project-generated VMT/SP estimated for baseline and future conditions is lower than the adopted significance threshold for the City (the baseline County of San Bernardino OD VMT/SP average). The Project considered applicable state, regional, and local regulatory framework discussed in **Section 4.15.3** and recommended TDMs which would help reduce VMT impacts to a level below the City's threshold of significance. Therefore, the Project would not result in a significant cumulatively considerable impact.

### **4.15.8 REFERENCES**

City of Grand Terrace. (2010). *City of Grand Terrace General Plan*. Retrieved from:

[https://p1cdn4static.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/city\\_of\\_gt\\_general\\_plan.pdf](https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/city_of_gt_general_plan.pdf).

City of Grand Terrace. (2016). *City of Grand Terrace Municipal Code*. Retrieved from:

[https://library.municode.com/ca/grand\\_terrace/codes/municipal\\_code?nodeId=GRAND\\_TERRACE\\_CALIFORNIAMUCO](https://library.municode.com/ca/grand_terrace/codes/municipal_code?nodeId=GRAND_TERRACE_CALIFORNIAMUCO).

Fehr & Peers. (2022). *The Gateway Specific Plan at Grand Terrace Transportation Metrics Memorandum*. See **Appendix J2**.

Fehr & Peers. (2022). *Transportation Impact Analysis Report*. See **Appendix J1**.

## 4.16 TRIBAL CULTURAL RESOURCES

### 4.16.1 INTRODUCTION

This section evaluates the potential for The Gateway at Grand Terrace Specific Plan (Project) to generate impacts on tribal cultural resources in the City of Grand Terrace (City). Tribal cultural resources include landscapes, sacred places, or objects with cultural value to a California Native American Tribe. Other potential impacts to cultural resources (i.e., prehistoric, historic, and disturbance of human remains) are evaluated in **Section 4.4, Cultural Resources**, and impacts to paleontological resources are addressed in **Section 4.6, Geology and Soils**. The analysis contained in this section includes the identification of federal, state, and local regulations which provide guidance on analyzing tribal cultural resources. In cases where significant impacts are found, mitigation measures would be employed to reduce impact significance or remove the impact entirely. The evaluation of the Project site and the potential impact to tribal resources is largely based on the following documentation:

- City of Grand Terrace General Plan (Grand Terrace GP)
- BCR Consulting LLC. (2022). *Updated Cultural Resources Records Search*. (provided in **Appendix C1**)
- CRM Tech. (2017). *Historical, Archaeological, and Paleontological Resources Reconnaissance*. (provided in **Appendix C3**)
- CRM Tech. (2022). *Update and Addendum to Cultural Resources Survey Report The Gateway at Grand Terrace Specific Plan City of Grand Terrace, San Bernardino County, California*. (**Appendix C5**)
- CRM Tech. (2022). *Summary of Cultural Resources Survey Coverage*. (provided in **Appendix C6**)

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval, as well as additional AB 52 compliance for future individual projects.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

### 4.16.2 ENVIRONMENTAL SETTING

#### Cultural Setting

The following information is summarized from the City's GP Draft EIR and **Appendix C3** of this Draft EIR.



## Archaeological Context<sup>1</sup>

The earliest evidence of human occupation in the Inland Empire region was discovered below the surface of an alluvial fan in the northern portion of the Lakeview Mountains, overlooking the San Jacinto Valley, with radiocarbon dates clustering around 9,500 Before the Present (B.P.). Another site found near the shoreline of Lake Elsinore, close to the confluence of Temescal Wash and the San Jacinto River, yielded radiocarbon dates between 8,000 and 9,000 B.P. Additional sites with isolated Archaic dart points, bifaces, and other associated lithic artifacts from the same age range have been found in the nearby Cajon Pass area of the San Bernardino Mountains, typically atop knolls with good viewsheds.

The cultural history of southern California has been summarized into numerous chronologies. Although the beginning and ending dates of the recognized cultural horizons vary among different parts of the region, the general framework of the prehistory of the Inland Empire can be broken into three primary periods:

- **Paleoindian Period (ca. 18,000-9,000 B.P.):** Native peoples of this period created fluted spearhead bases designed to be hafted to wooden shafts. The distinctive method of thinning bifaces and spearhead preforms by removing long, linear flakes leaves diagnostic Paleoindian markers at tool-making sites. Other artifacts associated with the Paleoindian toolkit include choppers, cutting tools, retouched flakes, and perforators. Sites from this period are very sparse across the landscape and most are deeply buried.
- **Archaic Period (ca. 9,000-1,500 B.P.):** Archaic sites are characterized by abundant lithic scatters of considerable size with many biface thinning flakes, bifacial preforms broken during manufacture, and well-made groundstone bowls and basin metates. As a consequence of making dart points, many biface thinning waste flakes were generated at individual production stations, which is a diagnostic feature of Archaic sites.
- **Late Prehistoric Period (ca. 1,500 B.P.-contact):** Sites from this period typically contain small lithic scatters from the manufacture of small arrow points, expedient groundstone tools such as tabular metates and unshaped manos, wooden mortars with stone pestles, acorn or mesquite bean granaries, ceramic vessels, shell beads suggestive of extensive trading networks, and steatite implements such as pipes and arrow shaft straighteners.

## Ethnohistoric Context<sup>2</sup>

According to current ethnohistorical scholarship, what is now the City of Grand Terrace lies in an area where the traditional territories of three Native American groups overlap: the Serrano of the San Bernardino Mountains, the Luiseño of the Perris-Elsinore region, and the Gabrielino of the San Gabriel Valley. Kroeber suggests that the Native Americans in this area were probably Luiseño, Reid states that they were Serrano, and Strong considers them to be Gabrielino. In any case, there also occurred a late influx of Cahuilla during the 19<sup>th</sup> century. All of these groups spoke languages of the Shoshonean group,

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<sup>1</sup> CRM Tech. (2022). Update and Addendum to Cultural Resources Survey Report The Gateway at Grand Terrace Specific Plan City of Grand Terrace, Attachment A pages 6-7. (see **Appendix C3**).

<sup>2</sup> Ibid. Attachment A pages 6.

which in turn is part of the Uto-Aztecan stock, a family of languages that covers most of the southwest United States and reaches southward as far as Mexico City.

Whatever the linguistic affiliation, Native Americans along the Santa Ana River exhibited similar social organization and resource procurement strategies. Villages were based on clan or lineage groups. Their home/base sites are marked by midden deposits, often with bedrock mortar features. During their seasonal rounds to exploit plant resources, small groups often ranged some distances in search of specific plants and animals. Their gathering strategies often left behind signs of special use sites, usually grinding slicks on bedrock boulders, at the locations of the resources.

In terms of subsistence practices, a variety of animal and plant resources were evidently exploited by the tribes. The women focused on gathering, while the men were primarily hunters and fishers. The main plant foods varied according to season and locality. Acorns and piñon nuts were a staple for groups in the mountains while honey mesquite, screw bean mesquite, yucca roots, and cacti fruits were collected from the desert. The main game animals were deer, mountain sheep, antelope, rabbits, birds, and small rodents. Every year desert groups would travel to the foothills to collect resources and trade goods from different ecosystems.

As would be expected, the ecosystem these populations occupied would have implications regarding subsistence-related tools of the material culture. Larger projectile points and associated manufacturing debitage accompanying the hunting of large game are likely to be found in greater quantities at mountain sites, whereas smaller points associated with small game hunting are better represented at sites at lower elevations. Similarly, mortars and pestles are more likely to occur at mountain sites where acorns were processed, while bedrock milling slicks, manos, and metates are more common at lower elevations where they were used to process seeds found in that environment.

## **Existing Tribal Cultural Resources**

### **Native American Consultation**

Assembly Bill (AB) 52 requires that the lead CEQA agency consult with California Native American tribes that have requested consultation for projects that may affect tribal cultural resources. The lead CEQA agency, the City, shall begin consultation with participating Native American tribes prior to the release of a negative declaration, mitigated negative declaration, or EIR. Under AB 52, a project that has potential to cause a substantial adverse change to a tribal cultural resource constitutes a significant effect on the environment unless mitigation reduces such effects to a less than significant level. The City sent notices of the Project to interest California Native American tribes in May 2018 and February 2021. The following tribes were included in the Project notification and opportunity to consult letters pursuant to AB 52: San Manuel Band of Mission Indians (SMBMI); The Morongo Band of Mission Indians; Gabrieleno Band of Mission Indians – Kizh Nation; Agua Caliente Band of Cahuilla Indians; Cahuilla Band of Indians.

Senate Bill (SB) 18 requires local governments to consult with Native American tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to the adoption and amendment of general plans and specific plans. SB 18 outreach letters were sent to interested Native American tribes in May 2018. The

following tribes were included in the Project notification and opportunity to consult letters pursuant to SB 18: Agua Caliente Band of Cahuilla Indians; Augustine Band of Cahuilla Mission Indians; Cabazon Band of Mission Indians; Cahuilla Band of Indians; Gabrieleno Band of Mission Indians - Kizh Nation; Gabrieleno/Tongva San Gabriel Band of Mission Indians; Gabrielino/Tongva Nation; Gabrielino Tongva Indians of California Tribal Council; Gabrielino-Tongva Tribe; Los Coyotes Band of Cahuilla and Cupeno Indians; Morongo Band of Mission Indians; Pala Band of Mission Indians; Pechanga Band of Luiseno Indians; Quechan Tribe of the Fort Yuma Reservation; Ramona Band of Cahuilla; Rincon Band of Luiseno Indians; Rincon Band of Luiseno Indians; San Manuel Band of Mission Indians; Santa Rosa Band of Cahuilla Indians; Serrano Nation of Mission Indians; Soboba Band of Luiseno Indians; Torres-Martinez Desert Cahuilla Indians.

In compliance with Public Resource Code (PRC) §21080.3.1(b), formal notification has been provided to California Native American tribal representatives which may have interest in projects within the geographic area traditionally and culturally affiliated with the tribe. Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects from development on tribal cultural resources as defined in PRC §21074. The Native American Heritage Commission (NAHC) was contacted in 2021, and most recently, June 23, 2022, for a review of the Sacred Land File (SLF) search.

The NAHC's most recent response, dated July 29, 2022, noted that the SLF returned positive results. The NAHC recommended 30 individuals representing 21 Native American tribal groups be contacted to elicit information regarding cultural resource issues related to the Project.

### **4.16.3 REGULATORY SETTING**

#### **Federal**

##### **Archaeological Resources Protection Act**

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on federal lands and Indian lands.

##### **Native American Graves Protection and Repatriation Act of 1990**

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains, associated funerary objects, and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

## State

### Native American Heritage Commission

PRC §5097.91 established the NAHC, the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. PRC §5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

### California Public Records Act

Sections 6254(r) and 6254.10 of the California Public Records Act (California Government Code [CGC] §6250 et seq.) were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to “Native American graves, cemeteries, and sacred places and records of Native American places, features, and objects...maintained by, ..., the Native American Heritage Commission....”. Section 6254.10 specifically exempts from disclosure requests for “records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the [NAHC], another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency.”

### Senate Bill 18

SB 18 (CGC §65352.3) requires local governments to consult with Native American tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. Prior to the amendment or adoption of General or Specific Plans, local governments must notify the appropriate tribal representatives of the opportunity to conduct a consultation with them on matters regarding the preservation and mitigating impacts to sacred places located on land within the local government’s jurisdiction and that such land is affected by the plan adoption or amendment. These consultation and notice requirements apply to the adoption and amendment of general plans and specific plans. The consultation process requires (1) that local governments send the NAHC information on a proposed project and request contact information for local Native American tribes; (2) that local governments then send information on the project to the tribes that the NAHC has identified and notify them of the opportunity to consult; (3) that the tribes have 90 days to respond on whether they want to consult or not, and (4) that consultation begins, if requested, by a tribe and there is no statutory limit on the duration of the consultation. If issues arise and consensus on mitigation cannot be reached, SB 18 allows a finding to be made that the suggested mitigation is infeasible.

### Assembly Bill 52

On July 1, 2015, California AB 52 of 2014 was enacted and expands CEQA by defining a new resource category, “tribal cultural resources.” AB 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.” (PRC §21084.2). It further states that the lead agency shall avoid damaging effects to a tribal cultural resource, when feasible (PRC §21084.3). PRC §21074 (a)(1) and

(2) defines tribal cultural resources as “[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC §5020.1(k), or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC §5024.1. In applying the criteria set forth in subdivision (c) of PRC §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires that lead agencies “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project” if requested (PRC §21080.3.1(b)). Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

## Local

### City of Grand Terrace General Plan

The City of Grand Terrace General Plan (Grand Terrace GP) does not contain goals or policies specifically related to tribal cultural resources, however the following Grand Terrace GP goal and policy below relates to the protection of cultural resources:

#### ***Open Space and Conservation Element***

**Goal 4.9:** Comply with State and federal regulations to ensure the protection of historical, archaeological, and paleontological resources.

**Policy 4.9.1** The City shall take reasonable steps to ensure that cultural resources are located, identified and evaluated to assure that appropriate action is taken as to the disposition of these resources.

### 4.16.4 SIGNIFICANCE CRITERIA UNDER CEQA

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning tribal cultural resources. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

## Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning tribal cultural resources. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

## Native American Outreach and Background Research

In compliance with SB 18 and PRC §21080.3.1(b), formal notification has been provided to California Native American tribal representatives which may have interest in projects within the geographic area traditionally and culturally affiliated with the tribe and to provide notification of a proposed Specific Plan/General Plan Amendment. Native American groups may have knowledge about cultural resources in the area and may have concerns about adverse effects from development on tribal cultural resources as defined in PRC §21074. The NAHC was contacted in May 2018, February 2021, and in June 2022, for a review of the SLF for APNs 1167-151- 10, -11, -12, -13, -21, -22, -23, -26, -28, -40, -41, -64, -65, -66, -68, -71, -74, -75, -76, -77, and -79; 1167-161-02, -03, -04, -05, and -33; 1167-171-11 and -12; 1167-181-01, -12, and -13.

The NAHC first responded on May 24, 2018, noting a SLF search be conducted; an additional response was received on February 22, 2021, noting that the SLF returned positive results. The SLF search did identify previously known Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within the entire Project area. The NAHC suggested 24 individuals representing 17 Native American tribal groups be contacted to elicit information regarding cultural resource issues related to the Project. Outreach letters to the 17 recommended tribal groups were sent in May 2018.

The NAHC was contacted again in February 2021, for an updated review of the SLF search for APNs 1167-151-11, -14, -17, -18, -20, -21, -23, and -75; 1167-181-01, and -12. The SLF search results remained consistent with the 2018 records search. The NAHC was contacted again in June 2022 and the subsequent SLF search results remained consistent with the 2018 and 2021 results. The NAHC responded on July 29, 2022, noting that the SLF returned positive results and suggested that the SMBMI be contacted for further information. Upon receiving the NAHC's reply, CRM TECH contacted the SMBMI, now known as the Yuhaaviatam of San Manuel Nation, in writing on August 2, 2022. On August 23, 2022, the Tribe replied by e-mail that the Project location is not situated near any known Native American cultural resources. In addition to the SMBMI, the NAHC also suggested contacting other local Native American

groups who may have knowledge on potential “tribal cultural resources,” as defined by CEQA, in the Project vicinity and provided a list of 30 individuals associated with 21 tribal organizations.

On June 23, 2022, CRM TECH submitted a written request to the NAHC for information in the SLF pertaining to any known Native American cultural resources in the Project vicinity, specifically for properties identified at APNs 1167-151-11, -14, -17, -18, -20, -21, -23, and -75 and 1167-181-01, -12, and -13. In response, the NAHC stated in a letter dated July 29, 2022, that the SLF search identified unspecified Native American cultural resource(s) in the Project vicinity and recommended that the SMBMI be contacted for further information (see Attachment B of **Appendix C3**). Upon receiving the commission’s reply, CRM TECH contacted the SMBMI, now known as the Yuhaaviatam of San Manuel Nation, in writing on August 2. On August 23, the Tribe replied by e-mail that the project location is not situated near any known Native American cultural resources (see Attachment B of **Appendix C3**).

Should additional responses be received once the final report is submitted, the information will be added to the Update and Addendum to Cultural Resources Survey Report as an addendum and any requested mitigation may be added to the Final EIR or as Conditions of Approval. NAHC and Native American correspondence materials, including communication attempts, are provided in Attachment B of **Appendix C3**.

### ***Formal Consultation – Native American Outreach and Background Research***

The City sent notices of the Project to interest California Native American tribes in May 2018 and February 2021. The following tribes were included in the Project notification and opportunity to consult letters pursuant to AB 52: SMBMI; The Morongo Band of Mission Indians; Gabrieleno Band of Mission Indians – Kizh Nation; Agua Caliente Band of Cahuilla Indians; Cahuilla Band of Indians. SB 18 outreach letters were sent to interested Native American tribes in May 2018. The following tribes were included in the Project notification and opportunity to consult letters pursuant to SB 18: Agua Caliente Band of Cahuilla Indians; Augustine Band of Cahuilla Mission Indians; Cabazon Band of Mission Indians; Cahuilla Band of Indians; Gabrieleno Band of Mission Indians - Kizh Nation; Gabrieleno/Tongva San Gabriel Band of Mission Indians; Gabrielino/Tongva Nation; Gabrielino Tongva Indians of California Tribal Council; Gabrielino-Tongva Tribe; Los Coyotes Band of Cahuilla and Cupeno Indians; Morongo Band of Mission Indians; Pala Band of Mission Indians; Pechanga Band of Luiseno Indians; Quechan Tribe of the Fort Yuma Reservation; Ramona Band of Cahuilla; Rincon Band of Luiseno Indians; Rincon Band of Luiseno Indians; San Manuel Band of Mission Indians; Santa Rosa Band of Cahuilla Indians; Serrano Nation of Mission Indians; Soboba Band of Luiseno Indians; Torres-Martinez Desert Cahuilla Indians.

The results of consultation are discussed below in **Section 4.16.5, Project Impacts and Mitigation**.

The baseline conditions and impact analyses are based on field reconnaissance conducted by CRM TECH; confidential record search data from the South Central Coastal Information Center of the California Historical Resources Information System; review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. The determination that any components of the Project may result in “substantial” adverse

effects on tribal cultural resources considers the existing site's resource value and the severity of the Project implementation on resources that may be considered significant tribal cultural resources.

#### 4.16.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.16-1:** *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*

- i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k) or*
- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code (PRC) §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?*

***Level of Significance: Less Than Significant with Mitigation Incorporated***

As stated above, in compliance with SB 18 and PRC §21080.3.1(b), formal notification has been provided to California Native American tribal representatives which may have interest in projects within the geographic area traditionally and culturally affiliated with the tribe and to provide notification of a proposed Specific Plan/General Plan Amendment. Should additional responses be received once the final report is submitted, the information will be added to the Update and Addendum to Cultural Resources Survey Report as an addendum and any requested mitigation may be added to the Final EIR or as Conditions of Approval. NAHC and Native American correspondence materials, including communication attempts, are provided in Attachment B of **Appendix C3**.

AB 52 and SB 18 Notices were sent by the City to 17 tribal groups in May 2018. Of those 17 tribal groups, the following six responses were received:

- On May 25, 2018, Mrs. Jessica Mauck, Cultural Resource Analyst for the SMBMI, stated that SMBMI does not have concerns with any activity within the Project site, and only asks to be notified of any inadvertent discoveries.
- On May 25, 2018, Mrs. Katie Croft, Cultural Resources Manager for the Agua Caliente Band of Cahuilla Indians (ACBCI), stated that the Project area is not located within the boundaries of the ACBCI Reservation, however it is within the Tribe's Traditional Use Area. At the time of this response, ACBCI defers to the SMBMI. Therefore, no further consultation was conducted.



- On June 5, 2018, Mrs. Victoria Martin, Tribal Secretary for the Augustine Band of Cahuilla Indians, stated that the Project area is not within the Tribe's specific area of historic interest and as such, they do not have any information to provide and defer to a closer tribe to the Project area.
- On June 7, 2018, Mr. Andrew Salas, Chairman of the Gabrieleno Band of Mission Indians – Kizh Nation, stated that the Project lies within their ancestral tribe territory, meaning descending from, a higher degree of kinship than traditional or cultural affiliation. They also stated that the Project is located within a sensitive area and may cause a substantial adverse change in the significance of the Tribes tribal cultural resources. Therefore, to avoid adverse effects to their tribal cultural resources, they request consultation to provide a more complete understanding of the prehistoric use(s) of the Project area and the potential risks for causing a substantial adverse change to the significance of our tribal cultural resources. On March 30, 2022, Kimley-Horn and Associates followed up with the Gabrieleno Band of Mission Indians - Kizh Nation via email for formal consultation to determine whether the Tribe has any comments/concerns on the Project. As of March 30, 2022, the Tribe has not responded for further consultation.
- On June 11, 2018, Mr. Bobby Ray Esparza, Cultural Coordinator for the Cahuilla Band of Indians stated interest in the Project and wished to consult on the proposed Project as it is within the Cahuilla traditional land use area. They request to be notified of all updates and/or changes with the Project moving forward.
- On August 24, 2018, Mrs. Destiny Colocho, Tribal Historic Preservation Officer for the Rincon Band of Luiseno Indians, stated that Project site is not within the Luiseno Aboriginal Territory, but is within the Territory of the Luiseno people and is also within the Rincon's specific area of Historic Interest. However, cultural resources within or near the Project area have not been identified, so the Tribe will not be requesting to receive consulting party status with the lead agency, but they do recommend an archaeological records search be conducted.

On March 30, 2022, the City, contacted the Morongo Band of Mission Indians to determine whether the Tribe has any comments/ concerns on the Project. As of March 30, 2022, the Tribe has not responded for further consultation.

There is a potential for unknown buried archaeological resources that qualify as TCRs to be encountered during Project-related ground-disturbing activities. In the event that a potentially significant archaeological resource is encountered during Project-related ground-disturbing activities, Mitigation Measure (MM) **CUL-2** would apply to minimize potential impacts to archaeological resources. **MM CUL-2** requires that the Project archaeologist consults with local experts and Native American Representatives for the preparation of a treatment plan if significant unknown cultural resources are discovered during construction of the Project. Implementation of **MMs TCR-1** through **TCR-4** would further reduce impacts to any unknown or inadvertently discovered archaeological resources or human remains that are identified as TCRs. All such finds would be required to be treated in accordance with all CEQA requirements and all other applicable laws and regulations. With implementation of these measures, impacts to tribal cultural resources would be less than significant.

**Mitigation Measures**

Refer to **MM CUL-2** in **Section 4.4, Cultural Resources** of this EIR.

**MM TCR-1**      **Discovery of Tribal Cultural Resources.** In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, San Manuel Band of Mission Indians will be contacted if any such find occurs and be provided information and permitted/invited to perform a site visit when the archaeologist makes his/her assessment, so as to provide Tribal input. The archaeologist shall complete an isolate record for the find and submit this document to the applicant and Lead Agency for dissemination to the San Manuel Band of Mission Indians.

**MM TCR-2**      **Treatment and Disposition of TCRs.**

If significant Native American historical resources are discovered and avoidance cannot be ensured, an SOI-qualified archaeologist shall be retained to develop a cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, the drafts of which shall be provided to San Manuel Band of Mission Indians for review and comment.

All in-field investigations, assessments, and/or data recovery enacted pursuant to the finalized Treatment Plan shall be monitored by a San Manuel Band of Mission Indians Tribal Participant(s).

The Lead Agency and/or applicant shall, in good faith, consult with San Manuel Band of Mission Indians on the disposition and treatment of any artifacts or other cultural materials encountered during the project.

After the notification of discovery to the San Manuel Band of Mission Indians and assessments/evaluations have occurred, the following treatment/disposition of the TCRs shall occur:

Preservation-In-Place of the TCRs, if feasible as determined through coordination between the project archeologist, Master Developer or Site Developers, as applicable, and San Manuel Band of Mission Indians, is the preferred method of treatment. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity.

Should Preservation-In-Place not be feasible, the landowner shall accommodate the process for on-site reburial of the discovered items with the San Manuel Band of Mission Indians. This shall include measures and provisions to protect the future reburial area from any future impacts. During the course of construction, all recovered resources shall be temporarily curated in a secure location on site. The

removal of any artifacts from the project site shall require the approval of the San Manuel Band of Mission Indians and all resources subject to such removal must be thoroughly inventoried with a tribal representative from San Manuel Band of Mission Indians to oversee the process. Reburial shall not occur until all cataloguing and basic recordation have been completed.

If Preservation-In-Place and reburial are not feasible, the landowner(s) shall relinquish ownership of all TCRs and a curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 shall be established. The collections and associated records shall be transferred, including title, to said curation facility by the landowner, and accompanied by payment of the fees necessary for permanent curation.

Any historic archaeological material that is not Native American in origin (non-TCRs) shall be curated at a public, non-profit institution with a research interest in the materials within the County of the discovery, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

If discoveries were made during the project, a Monitoring Report shall be submitted to the County by the Archaeologist at the completion of grading, excavation, and ground-disturbing activities on the site. Said report will document monitoring and archaeological efforts conducted by the archaeologist and San Manuel Band of Mission Indians within 60 days of completion of grading. This report shall document the impacts to the known resources on the property, describe how each mitigation measure was fulfilled, document the type of cultural resources recovered, and outline the treatment and disposition of such resources. All reports produced will be submitted to the County of San Bernardino, appropriate Information Center, and San Manuel Band of Mission Indians.

### **MM TCR-3      Procedures for Burials and Funerary Remains.**

In accordance with California Health and Safety Code §7050.5, if human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted within 24 hours of the discovery. The project lead/foreman shall designate an Environmentally Sensitive Area (ESA) physical demarcation/barrier 100 feet around the resource and no further excavation or disturbance of the site shall occur while the County Coroner makes his/her assessment regarding the nature of the remains. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission (NAHC) in Sacramento within 24 hours. In accordance with Public Resources Code §5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant (MLD) from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The designated

Native American representative will then determine, in consultation with the property owner, the disposition of the human remains.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code §5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial in a location mutually agreed upon by the Parties. It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code §6254 (r).

#### **4.16.6 SIGNIFICANT UNAVOIDABLE IMPACTS**

No significant unavoidable tribal cultural resource impacts have been identified.

#### **4.16.7 CUMULATIVE IMPACTS**

For purposes of cumulative impact analysis to cultural and tribal cultural resources, the geographic context for cumulative analysis is regional and considers both direct and indirect impacts over a wide area. However, the discussion is focused on the Project's potential for resulting in site-specific impacts that could contribute to a cumulative loss. Accordingly, impacts are site-specific and not generally subject to cumulative impacts unless multiple projects impact a common resource, or an affected resource extends off-site, such as a historic townsite or district. With this consideration, the cumulative analyses for historical, archaeological, and tribal cultural resources considers whether the Project, in combination with the past, present, and reasonably foreseeable projects, could cumulatively affect any common cultural resources.

As discussed above, the NAHC determined that the SLF search was positive. In addition, future cumulative development projects have the potential to encounter/adversely affect tribal cultural resources. Therefore, it is possible that buried prehistoric artifacts or tribal cultural resources could be present within the area. The proposed Project includes mitigation to ensure proper identification, treatment, and preservation of cultural resources discovered. Potential tribal cultural resource impacts associated with other project development would be site-specific and would undergo individually environmental and design review pursuant to CEQA in order to evaluate potential impacts. The combination of the proposed Project as well as past, present, and reasonably foreseeable projects in the City and Riverside County would be required to comply with all applicable State, federal, and County and local regulations

concerning preservation, salvage, or handling of cultural and tribal cultural resources, including compliance with required mitigation. This also includes project-by-project consultation with the appropriate tribal representatives to discuss mitigation measures that would be included to mitigate impacts to tribal cultural resources. In addition, implementation of the proposed mitigation measures would reduce project-specific impacts to a less than significant level. Therefore, the Project's contribution to cumulative impacts would be less than significant.

#### **4.16.8 REFERENCES**

BCR Consulting LLC. (2022). *Updated Cultural Resources Records Search* (provided in **Appendix C1**).

CRM Tech. (2017). *Historical, Archaeological, and Paleontological Resources Reconnaissance* (provided in **Appendix C3**).

CRM Tech. (2022). *Summary of Cultural Resources Survey Coverage* (provided in **Appendix C6**).

CRM Tech. (2022). *Update and Addendum to Cultural Resources Survey Report The Gateway at Grand Terrace Specific Plan City of Grand Terrace, San Bernardino County, California* (**Appendix C5**).

## 4.17 UTILITIES AND SERVICE SYSTEMS

### 4.17.1 INTRODUCTION

This section describes the existing public utilities and service systems and The Gateway at Grand Terrace Specific Plan (Project)'s consistency with applicable goals and policies; identifies and analyzes environmental impacts; and recommends measures to reduce or avoid adverse impacts anticipated from implementation of the Project, as applicable.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

As such, the information and analysis herein relied on the following documentation:

- City of Grand Terrace (City) General Plan (Grand Terrace GP).
- City of Grand Terrace Municipal Code (Grand Terrace MC).
- *2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan (IRUWMP) – Riverside Highland Water Company (RHWC)* prepared on June 30, 2021, by Water Systems Consulting, Inc.
- *Water Supply Assessment (WSA)* prepared on October 10, 2022, by Engineering Resources of Southern California (ERSC), included as **Appendix K1**.
- *Sewer System Analysis* prepared in May 2022 by KWC Engineers, included as **Appendix K2**.

### 4.17.2 ENVIRONMENTAL SETTING

#### Water

Potable water service for the City is provided by Riverside Highland Water Company (RHWC). RHWC is a private mutual water company owned by its shareholders. The company maintains water main transmission lines, wells, reservoirs, and service laterals throughout the City and is directly responsible for their ongoing maintenance. RHWC currently has 13 wells capable of producing water.<sup>1</sup>

There are four existing City of Riverside Public Utility (RPU) well lines (48-inch) located within Planning Areas (PAs) 1, 5, 6, 10, 18, 21, and 22 that do not serve the City. There are four existing water

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<sup>1</sup> RHWC. (2021). 2020 IRUWMP – Part 2 Chapter 7, RHWC 2020 UWMP. Retrieved from: <https://www.sbvmd.com/home/showpublisheddocument/9246/637614377683630000> (accessed November 6, 2022).

lines, serviced by RHWC, located within or near the Project at Commerce Way (eight-inch), De Berry Street (eight-inch), Van Buren Street (10-inch), and at Main Street (eight-inch).

## Water Supply Assessment

A WSA was prepared for the Project to evaluate the existing and future demands on the water supply needed to be supplied by RHWC. The Project site is primarily vacant and water service is provided to five residences scattered on-site. The WSA was prepared based on the information from the San Bernardino Valley Municipal Water District (SBVMWD)'s 2020 Regional Urban Water Management Plan (RUWMP) and the City's 2010 General Plan land uses to examine existing RHWC demands, projected RHWC water demands, water rights and entitlements, existing supplies, and supplies needed to meet future demands, and water reliability to access whether sufficient water supplies would be available for the Project.

## Water Sources

### Riverside Highland Water Company<sup>2</sup>

As stated above, water service is provided by RHWC. RHWC provides water services to 5,300 domestic potable water customers and serves water to the City, the City of Colton, the Highgrove area of Riverside County, and small portions of the County of San Bernardino (County). RHWC's water supply is comprised entirely of local groundwater and the company does not currently purchase imported water or other supplies. Additionally, RHWC currently has no plans for future use of surface water supplies. However, RHWC participates in regional project planning efforts to capture additional stormwater for purposes of groundwater recharge to increase sustainability of the basins RHWC produces water from.

RHWC extracts potable water from the San Bernardino Basin, including the Bunker Hill Basin and Lytle Basin, and the Riverside Arlington Basin (including the Riverside North Basin and Riverside South Basin). RHWC currently has 13 wells capable of producing water. Two of these wells, RN-21 and RN-22 are dedicated to providing non-potable irrigation water due to high nitrate concentrations. Three wells, FW-2, FW-5, and FW-18 are being used for the groundwater reduction program in the Bunker Hill Basin. These three wells can be converted to domestic water production if required. RHWC recently constructed a new well in the Riverside North Basin, RN-26, which went online in 2021.

According to the WSA, RHWC entered into an agreement with SBVMWD for a maximum flow rate of 1,000 gallons per minute from the Baseline Feeder project. The maximum quantity RHWC can receive in any calendar year is 1,000 acre-feet from this pipeline. Water obtained through this agreement is assessed against RHWC's water right in the San Bernardino Basin.

## Wastewater

Sanitary sewer service is provided by the City of Grand Terrace through various agreements between the cities of Grand Terrace and Colton. The City of Colton leases to the City of Grand Terrace and maintains the sewer lines and treats the wastewater. There are a number of existing gravity sewer lines in the vicinity of the Project. The main sewer line in the area is a 12-inch trunk sewer line in De Berry Street that conveys flow from east to west through the Project and then increases to 18-inch before it crosses I-215. After

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<sup>2</sup> Ibid.

crossing I-215, the sewer line flows north and increases in size before reaching the Colton Water Reclamation Facility. There is also a 10-inch gravity sewer line in Commerce Way that conveys flows south to the 18-inch trunk sewer line. A 10-inch sewer line in Taylor Street conveys flows north to the 18-inch trunk sewer line. There are 8-inch gravity sewer lines in Van Buren Street and Pico Street that convey flows from east to west to the 10-inch line on Taylor Street. See **Exhibit 3-8, Existing Sewer Plan** in **Section 3.0, Project Description**. Sewer improvements would be designed and sized to tie into the existing/backbone infrastructure to serve all future development within the Project site. Based on **Exhibit 3-8**, the existing backbone sewer infrastructure is adequately sized to accommodate these flows. Wastewater collected from the Project site would continue to be conveyed in an existing 18-inch diameter sewer pipeline under I-215 to the wastewater treatment plant in the City of Colton.

The Project site would be served by the City of Colton wastewater treatment plant (Colton WWTP). The City of Colton owns, operates and maintains a wastewater collection, pumping and treatment system. The Colton WWTP also serves the City of Grand Terrace and unincorporated San Bernardino County areas. The Colton WWTP currently collects and treats approximately 7 million gallons per day (MGD) of wastewater from its service area, as well from City of Grand Terrace and some unincorporated San Bernardino County areas.<sup>3</sup> Average daily flows at the Colton WWTP are 5.6 MGD.<sup>4</sup>

A Sewer System Analysis was prepared for the Project site to evaluate the capacity of the existing sewer system, and is included as Draft EIR **Appendix K**. As discussed further below, the analysis concluded that the existing local collector sewers have adequate capacity to serve the Project site developments.

## Stormwater Drainage

The Project site is traversed by three major drainage courses that originate at the base of Blue Mountain at De Berry Street, Van Buren Street, and Pico Street. The northern drainage course enters the site at the westerly end of De Berry Street. It then travels in a southwesterly direction and enters the San Bernardino County Flood Control District (SBCFCD) channel that eventually directs flows off-site under I-215. The second drainage course enters the Project site on the north side of Van Buren Street near the easterly edge of Planning Area 11. These storm water flows travel west and join the SBCFCD channel at the western edge of the Project site. A portion of this drainage course has been identified as a possible wetlands area. The third drainage course enters the Project site along the northern portion of the existing Grand Terrace High School near the southeasterly edge of Planning Area (PA) 20. The westerly terminus of Pico Street overflows with storm water during large storm events and the storm water travels through the existing school site towards Taylor Street and ultimately joins the Gage Canal at the western edge of the Project site.

The off-site tributary area consists of a watershed of approximately 32,320 acres including the majority of the City. All flows are directed to the low point within the Project site. Ultimately, drainage from the Project site flows to the Santa Ana River.

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<sup>3</sup> San Bernardino Valley Regional. 2016. *2015 Urban Water Management Plan*. Retrieved at: <https://www.ci.colton.ca.us/DocumentCenter/View/2941/Urban-Water-Management-Plan?bidId=>. (accessed May 2023).

<sup>4</sup> City of Colton. 2023. *Wastewater Information*. Retrieved at: <https://www.ci.colton.ca.us/653/Wastewater-Information>. (accessed May 2023).



## Solid Waste

The City maintains an agreement with Burrtec Waste Industries, Inc (Burrtec) for the collection and disposal of municipal solid wastes, and organic and recyclable materials generated by residences and businesses within the City. Burrtec provides weekly residential collection services for municipal solid waste, organic and mixed recyclables, and green waste. Collection services to commercial and industrial uses are provided from one to six times per week and include a wide range of waste and recyclable collection services. Additionally, there will be future organic waste options to comply with current State mandates. All municipal solid waste collected in the City is taken to the San Bernardino County landfill system for disposal. The closest landfills to the Project site are the San Timoteo Landfill and the Mid-Valley Landfill.

### San Timoteo Landfill

The San Timoteo Landfill is located east of the Project site at 31 Refuse Road within the City of Redlands. The landfill is owned and operated by the County and is accessible via Barton Road eastbound at San Timoteo Canyon Road and via Redlands Boulevard northbound towards San Timoteo Canyon Road. The landfill encompasses 366 acres, with 114 acres of disposal acreage. The landfill currently has a maximum permitted capacity of 23,685,785 cubic yards for refuse disposal, a remaining capacity of 12,360,396 cubic yards, and a maximum permitted throughput of 2,000 tons per day.<sup>5</sup>

### Mid-Valley Landfill

The Mid-Valley Landfill is located northwest of the Project site at 2390 N. Alder Avenue within the City of Rialto. The landfill is owned and operated by the County and is accessible via I-210 at Alder Avenue. The existing landfill encompasses a total of 498 acres, with 408 acres of disposal acreage. The landfill has a maximum permitted capacity of 101,300,000 cubic yards for refuse disposal, a remaining capacity of 61,219,377 cubic yards, and a maximum permitted throughput of 7,500 tons per day.<sup>6</sup>

## Natural Gas

Natural Gas service for the Project site is provided by Southern California Gas Company (SoCalGas) which maintains a system of mainlines and laterals throughout the City, primarily within public rights-of-way. In an effort to ensure that natural gas is always available to its customers, SoCalGas employs the use of four underground storage tanks: Aliso Canyon Storage Facility, Honor Ranch Storage Facility, La Goleta Storage Facility, and Playa del Rey Storage Facility. These facilities help balance the energy supply and demand.

## Electricity

Electrical power service to the Project is and would continue to be provided by Southern California Edison (SCE) which maintains a system of above and below-ground transmission and distribution lines throughout the City. SCE also maintains a major substation within the City. The Val Vista Substation on Newport Road is a major switching station for SCE's southern California grid.

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<sup>5</sup> CalRecycle. (2019). *SWIS Facility/Site Summary – San Timoteo Landfill (36-AA-0087)*. Retrieved at: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2688> (accessed November 6, 2022).

<sup>6</sup> CalRecycle. (2019). *SWIS Facility/Site Summary – Mid-Valley Sanitary Landfill (36-AA-0055)*. Retrieved at: <https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2662> (accessed November 6, 2022).

## Cable

Cable services for the Project site is currently provided by Time Warner; other cable companies may provide service if permitted by the City in the future. Time Warner maintains a system of above and below-ground lines throughout the City, primarily within public rights-of-way. All new on-site cable lines will be placed underground.

### 4.17.3 REGULATORY SETTING

#### Federal

##### Clean Water Act

Pursuant to § 404 of the Clean Water Act (33 U.S. Code [USC] Section 1251 et seq.; CWA), the U.S. Army Corps of Engineers (USACE) is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 Code of Federal Regulations (CFR) 328.3 (as amended at 80 Federal Register (FR) 37104, June 29, 2015).

The Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board (SWRCB), is required to provide “certification that there is reasonable assurance that an activity that may result in the discharge to waters of the U.S. will not violate water quality standards.” Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under CWA § 402.

##### Safe Drinking Water Act (Federal)

The U.S. Environmental Protection Agency (EPA) administers the Safe Drinking Water Act (SDWA) (42 USC Section 300f et seq.), the primary federal law that regulates the quality of drinking water and establishes standards to protect public health and safety. The Department of Health Services (DHS) implements the SDWA and oversees public water system quality statewide. DHS establishes legal drinking water standards for contaminants that could threaten public health.

#### State

##### Safe Drinking Water Act (State)

California enacted its own Safe Drinking Water Act (SDWA, Health and Safety Code [HSC] §§116350–116405) with the California Department of Public Health Services (DPHS) granted primary enforcement responsibility. Title 22 of the California Code of Regulations (CCR) (Division 4, Chapter 15, “Domestic Water Quality and Monitoring Regulations”) established DPHS authority and provides drinking water quality and monitoring requirements, which are equal to or more stringent than Federal standards.

##### Urban Water Management Planning Act

The California Urban Water Management Planning Act, as amended (California Water Code [CWC] §10610 et seq.), mandates that every urban water supplier that either provides over 3,000 acre-feet of water

annually, or serves more than 3,000 urban connections, to assess the reliability of its water sources over a 20-year planning horizon, and report its progress on 20 percent reduction in per-capita urban water consumption by the year 2020, as required in the Water Conservation Bill of 2009 SBX7-7. The Act is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water through preparation of Urban Water Management Plans (UWMPs). The UWMPs must be prepared every five years and submitted to the California Department of Water Resources (DWR) for review. A UWMP must 1) describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning; 2) quantify past and current water use over five-year increments, and projected water use, identifying the uses among various water use sectors, including single-family residential, multifamily, commercial, industrial, institutional and governmental, landscape, sales to other agencies, seawater intrusion barriers, groundwater recharge, conjunctive use, or any combination thereof, and agricultural; and 3) describe the reliability of the water supply and its vulnerability to seasonal and climatic shortage, and provide data, to the extent practicable, for average, single dry, and multiple dry water years.

### **State Water Resources Control Board**

The State Water Resources Control Board (SWRCB) is the California (State) agency focused on providing and ensuring clean sustainable water for all state residents. This State agency works alongside other federal programs like the Clean Water Act (CWA) to regulate water sources and uses. The SWRCB regulates water consumption for irrigation and drinking, as well as water discharges from construction, municipal uses, stormwater, and other sources.

### **Recycled Water Regulations**

Regulation of recycled water is vested by state law in the SWRCB and the DPHS. DPHS is responsible for the regulations concerning the use of recycled water. Title 17 (California Water Code [CWC] §§ 13500–13556) regulates the protection of the potable water supply through the control of cross-connections with potential contaminants, including recycled water. The established water quality standards and treatment reliability criteria for recycled water are codified in CWC Title 22. The requirements of Title 22, as revised in 1978, 1990 and 2001, establish the quality and/or treatment processes required for a recycled effluent to be used for a non-potable application. In addition to recycled water uses and treatment requirements, Title 22 addresses sampling and analysis requirements at the treatment plant, preparation of an engineering report prior to production or use of recycled water, general treatment design requirements, reliability requirements, and alternative methods of treatment

### **Porter-Cologne Water Quality Act**

The Porter-Cologne Water Quality Act (CWC § 13000 et seq.) is the basic water quality control law for California. Under this act, the SWRCB has primary responsibility for coordination and control of water quality. In California, the U.S. EPA has delegated authority to issue NPDES permits to the SWRCB. The state is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine RWQCBs, carries out the regulation, protection, and administration of water quality in each region. Each RWQCB is required to adopt a WQMP or Basin Plan that recognizes and reflects the regional

differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems.

### **Title 24 Energy Efficiency Standards**

California's Energy Efficiency Standards for Residential and Non-residential Buildings were established in 1978 in response to a mandate to reduce the state's energy consumption. These standards are promulgated under CCR Title 24 Part 6 and are commonly referred to as "Title 24." The Title 24 standards are periodically updated to reflect new or improved energy efficiency technologies and methods. The most recent Title 24 standards were updated effective January 1, 2023, with subsequent revisions and amendments. A new development project is required to incorporate the most recent Title 24 standards in effect at the time the building permit application is submitted.

### **California Senate Bills 610 and 221**

SB 610 and SB 221 amended State law to (1) ensure better coordination between local water supply and land use decisions and (2) confirm that there is an adequate water supply for new development. Both statutes require City and County decision-makers to receive detailed information regarding water availability prior to approval of large development projects. SB 610 requires the preparation of a WSA for certain types of projects subject to the California Environmental Quality Act (CEQA). Projects that would be required to prepare a WSA include, but are not limited to, residential developments of more than 500 dwelling units and shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor area.

### **2015 Update of the State Model Water Efficient Landscape Ordinance (per Governor's Executive Order B-29-15)**

To improve water savings in the landscaping sector, the California DWR, updated the Model Ordinance in 2015 (in accordance with Executive Order B-29-15). The Model Ordinance promotes efficient landscapes in new developments and retrofitted landscapes. The Executive Order calls for revising the Model Ordinance to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater usage, and on-site stormwater capture, and by limiting the portion of landscapes that can be covered in turf. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. This applies to residential, commercial, industrial, and institutional projects that require a permit, plan check, or design review.

Local agencies had until December 1, 2015, to adopt the Ordinance or adopt their own ordinance, which must meet or exceed effectiveness. The City adopted Ordinance No. 247 or Grand Terrace MC Chapter 15.56, Water Efficient Landscape in 2010 establishes provisions for water management practices and water waste prevention for existing landscapes and promotes water efficiency.

### **Assembly Bill 1668 and Senate Bill 606**

AB 1668 and SB 606 build on Governor Brown's ongoing efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought

planning. SB 606 and AB 1668 establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022.

The two bills strengthen the state's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, commercial, industrial, and institutional (CII) irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning.
- Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

### **Mandatory Commercial Recycling – AB 341**

AB 341, approved in October 2011, is intended to reduce greenhouse gas (GHG) emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in the state. The Mandatory Commercial Recycling measure is designed to achieve a reduction in GHG emissions of 5 million metric tons of carbon dioxide (CO<sub>2</sub>) equivalents. To achieve the measure's objective, an additional 2 to 3 million tons of materials annually will need to be recycled from the commercial sector by the year 2020 and beyond. This law requires California commercial businesses and public entities, that generate four or more cubic yards of commercial solid waste per week or is a multi-family residential dwelling with five or more units, to arrange for recycling services.

Each local jurisdiction is required to inform businesses about the recycling requirement and to keep track of the level of recycling within the business community. In addition, each jurisdiction is required to report to CalRecycle, the state agency that oversees recycling and solid waste, on progress in the business community.<sup>7</sup>

## **Local**

### **City of Grand Terrace General Plan**

The following Grand Terrace GP goals and policies are relevant to the Project:

#### ***Open Space and Conservation Element***

**Goal 4.8:**                   **Achieve regional water quality objectives and protect the beneficial uses of the regions surface and groundwater.**

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<sup>7</sup> CLI. 2011. *Assembly Bill No. 341*. [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201120120AB341](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201120120AB341) (accessed January 2023).

**Policy 4.8.1** Evaluate all proposed land use and development plans for their potential to create groundwater contamination hazards from point and non-point sources, and cooperate with other appropriate agencies to assure appropriate mitigation.

**Policy 4.8.2** Comply with the requirements of the National Pollutant Discharge Elimination System (NPDES).

### ***Public Services Element***

**Goal 7.1:** **Coordinate and balance the provision of public services with existing and planned development to eliminate service gaps, maximize the use of existing public facilities and services, provide a high level of quality public services at a reasonable cost, and maintain adequate services to meet the needs of current and future City residents and businesses.**

**Policy 7.1.1** All proposed development shall be evaluated to determine whether current public services and facilities can meet with their needs. If determined that current services and facilities are inadequate to meet the needs of new development, appropriate mitigation measures shall be applied to the new development to assure an adequate level of service.

### ***Sustainable Development Element***

**Goal 9.2:** **Reduce the total quantity of waste generated within the City requiring landfill disposal to meet or exceed the State waste diversion goals.**

**Policy 9.2.2** Require all new development projects to recycle construction and demolition wastes.

**Goal 9.7:** **Reduce the City's per capita demand for water consumption.**

**Policy 9.7.2** The City shall incorporate water conservation into the development review process.

### **City of Grand Terrace Municipal Code**

#### ***Section 18.73.190 – Utility Underground***

City Municipal Code (Grand Terrace MC) § 18.73.190 requires that all public utility distribution and transmission lines shall be located underground unless otherwise approved by the site and architectural review board or city council.

#### ***Section 17.52.080 – Utilities***

Grand Terrace MC § 17.52.080 requires that each unit or lot within the subdivision shall be served by gas, electric, telephone, and cable television facilities.

#### ***Section 17.52.090 – Underground Utilities***

Grand Terrace MC § 17.52.090 requires that all existing and proposed utilities within a subdivision and along peripheral streets be placed underground except those facilities exempted by the public utilities commission regulations. In lieu fees would be paid as approved by the City Council for future undergrounding of utilities throughout the City.

### **Chapter 4.80 – Developer Impact Fees**

Pursuant to Grand Terrace MC Chapter 4.80, project applicants are required to pay Development Impacts Fees (DIFs) to pay for all or a portion of the costs of providing public services associated with new development.

### **Chapter 8.68 – Litter Control**

Grand Terrace MC Chapter 8.68 sets provisions and requirements concerning solid waste containerization and removal for residential and commercial uses.

### **Chapter 15.58 - Recycling and Diversion of Construction and Demolition (C&D) Waste**

Grand Terrace MC Chapter 15.58 includes, but not limited, to provisions requiring every applicant to submit a waste management plan (WMP) prior to issuance of any building or demolition permit.

## **4.17.4 SIGNIFICANCE CRITERIA UNDER CEQA**

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning utilities and service systems. The questions presented in the Environmental Checklist have been utilized as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

### **Methodology and Assumptions**

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning utilities and service systems. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

The baseline conditions and impact analyses are based on technical assessments provided by ERSC (see **Appendix K1**) and KWC Engineers (see **Appendix K2**); review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. The determination that the Project would or would not result in substantial adverse effects on utilities or service systems is based on the capacity of those systems and their ability to efficiently accommodate the Project's development into their infrastructure, as well as the Project's compliance with all relevant regulations and policies.

#### 4.17.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.17-1:** *Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

**Level of Significance: Less Than Significant**

##### Water Facilities

As part of the Project, and as analyzed in this document, the Project site relies on both existing and new water lines which are proposed along the eastern border of the Riverside Canal; PAs 14, 11, and 15; and south from PA 21 to the Taylor Street/Main Street intersection. **Exhibit 3-10, Conceptual Water Plan** shows the existing and proposed water facilities.

All water line improvements would be developed and analyzed as future projects are developed and entitled within the Project area. A hydraulic analysis of any future water facilities would be conducted, and improvements would be constructed in accordance with Grand Terrace GP and MC, and RHWC design standards. Future development would also be provided with fire suppression systems. Major development areas would be provided with looped on-site mains to assure adequate pressure for fire suppression. Fire hydrants would also be installed at locations approved by the San Bernardino County Fire Protection District (SBCFPD). RHWC lines would be extended to loop around the Project site. This would act to ensure water systems are properly designed, implemented, operated, and maintained; thereby furthering efficiency and adequacy of facilities while reducing facilities life cycle costs.

##### Water Use

The WSA (**Appendix K1**) estimated the future water demands for the Project to be 305,029.40 gallons per day with an annual demand of 342 Acre Feet per Year (AFY). The peaking factors adopted by RHWC are 2.25:1 for maximum day: average day and 4.50:1 for peak hour of maximum day: average day.

The IRUWMP estimated RHWC's total water demands will increase from 4,246 AF in 2020 to 5,131 AF in 2045, which totals to an increase of 885 AF. The 342 AFY of water from the Project constitutes approximately 39 percent of this anticipated increase in water demand. Thus, Project's demand does not exceed IRUWMP's projected demand; however, the Project's demand consumes a significant portion of the IRUWMP's projected demand.



RHWC's future water extraction is projected to be 5,131 AF for Year 2045 and future water supply is projected to be 5,900 by Year 2045, concluding a surplus water supply of 769 AF. The IRUWMP has verified that RHWC has sufficient water supplies available during average, single dry, and multiple dry water years within a 25-year projection that will meet the projected demand associated with the Project, in addition to existing and planned future uses (see Impact 4.17-2 below for more information).

Furthermore, the Project would demonstrate consistency with the Grand Terrace MC Chapter 15.56 Water Efficient Landscape which requires that landscape design, installation, maintenance, and management to be water efficient; and that the use of water is limited to the amount reasonably required for the beneficial use to be served. This would apply to the Project's residential and non-residential uses.

Water demand from the Project would not result in or require the relocation or construction of new or expanded water facilities which could cause significant environmental effects beyond the scope and scale of those already evaluated. These impacts would be less than significant.

### Wastewater

As development is proposed within the Project site, sewer improvements may be required to be designed and sized to tie into the existing/backbone infrastructure. The Sewer System Analysis (**Appendix K2**) estimated the sewage flows and evaluated the recommended sewer system improvements would be required for the Project. The criteria utilized in the preliminary sewer are in accordance with the July 2016 City of Colton Sewer Master Plan.

The 2016 Master Plan assumed a per capita sewer generation rate of 75 gallons per day (gpd)/person and uses 4.2 people per single family home per data in the 2010 Urban Water Management Plan, resulting in a residential sewer generation factor of 315 gpd/unit. Multi-family residential units typically have less residents per unit and a lower sewer generation factor. Census data for 2016 to 2020 indicates that the average number of people per household in the City of Colton is 3.27. Using this factor and the per capita sewer generation factor of 75 gpd/person resulted in a residential sewer generation factor of 245 gpd/unit. The Sewer System Analysis utilized a residential sewer generation factor of 250 gpd/unit to estimate flows from the high-density residential units on the Project. To convert average dry weather daily flows to peak wet weather flows, a factor of 2.7 was utilized.

The Sewer System Analysis concluded that the projected average sewer flow for the Project was 274,455 gpd. Using the peaking factor of 2.7, the projected peak wet weather flow for the Project is 741,029 gpd (0.74 mgd).

The Project would receive sewer service by constructing on-site sewer lines and connecting to the existing sewer lines that are adjacent to the development areas. As stated above, the regional sewer system has been analyzed in the 2016 Master Planned and determined to have capacity for existing and proposed flows in this area as no upgrades to the system are proposed in the Project area. Nevertheless, the impact of Project flows on existing local collector sewers would need to be evaluated on a project-by-project basis to confirm that local collector sewers have adequate available capacity to serve the Project. Furthermore, the wastewater collection systems and proposed connections to the municipal wastewater collection system would be designed and installed in conformance with the Grand Terrace GP policies and

MC's stipulated wastewater system design, construction, and operational requirements. This would ensure wastewater collection facilities are properly designed, implemented, operated, and maintained; thereby furthering efficiency and adequacy of facilities while reducing facilities lifecycle costs. In addition, project specific applicants would pay fees pursuant Grand Terrace MC Chapter 4.80 that would cover the City's cost to fund plan review, coordination, and inspection of proposed wastewater collection system improvements. Impacts associated with wastewater would be less than significant.

### ***Gravity Sewers***

The Sewer System Analysis concluded that all existing gravity sewers have been designed to convey peak wet weather flow and were designed to maintain a minimum velocity of two feet per second at design capacity to prevent the deposition of solids. To minimize excessive wear and tear of the pipe, new pipes would be designed to not exceed a maximum velocity of 8 feet per second. All new Project gravity sewers would be installed with a minimum of 7 feet of cover.

### ***Force Mains***

All existing force mains were designed to maintain a minimum velocity of three feet per second at the minimum design pumping capacity to prevent the deposition of solids. To minimize excessive wear and tear of the pipe, all new Project force main pipes would be designed to convey peak wet weather flow and not exceed a maximum velocity of 8 feet per second velocity.

### ***Lift Stations***

All new Project lift stations would be sized to accommodate the influent peak wet weather flows. A minimum of two pumps of equal size would be provided to provide adequate standby capacity if one pump is out of service. Pumps should be able to pass 3-inch minimum solids. The wet well would be sized to limit the number of pump cycles to no more than six per hour. Lift stations would be equipped with submersible pumps in a wet well, a separate meter/valve vault, above ground pump controls housed in an enclosure, telemetry (dialer system at a minimum), and a backup diesel generator.

## **Stormwater and Drainage**

The following drainage improvements would be constructed in phases throughout the Project site:

### ***Phase 1:***

One large regional detention basin with approximately 65-acre-feet of capacity would be constructed west of Taylor Street to provide regional storm water detention and treatment of the proposed storm drain systems in Van Buren and Pico Streets, as well as opportunities for groundwater recharge. The proposed groundwater recharge basins would intercept this flow, allowing for future development within the Project site to contribute to groundwater recharge. Further, inclusion of drainage improvements, including the installation of infiltration facilities and permeable landscape areas, as a component of all future development would create efficient passageways for runoff water to rejoin the water system and would result in a less than significant impact to local groundwater recharge. RHWC does not maintain any groundwater recharge basins, nor are there any in the vicinity of the Specific Plan area owned or operated by others for the specific purpose of groundwater recharge. The basin would be hydraulically connected,

and two outfalls with one providing outlet to the San Bernardino County Flood Control District (SBCFCD) drainage area and another providing a secondary outlet to the Gage Canal.

At De Berry Street, a local storm drain system at the intersection of De Berry Street and Commerce Way would capture flows from De Berry and connect to the existing SBCFCD storm drain line under Commerce Way, draining to the basin.

Within Van Buren Street, the proposed facilities include a 36-inch reinforced concrete pipe (RCP) from the regional basins to the Michigan Street intersection, with a local storm drain system and catch basins to protect the intersection from flooding and storm water velocity. Additional work would include installation of new curbs and driveways at sump conditions east of Michigan Street to protect property from flooding during major storms. The Project-related installation of the storm drain in Van Buren Street would de-water the existing natural drainage area.

### ***Phase 2:***

In Pico Street, the proposed facilities include a 54-inch RCP from the regional basins along the northerly edge of Grand Terrace High School and stubbed to the westerly cul-de-sac in Pico Street. In the future, a 48-inch storm drain would be extended east to the intersection of Michigan Street, with a local storm drain system and catch basins to protect the intersection from flooding and storm water velocity and to alleviate additional flooding. Along with the future 48-inch storm drain extension, new raised curbs would also be required at various sections along Pico Street to prevent flooding.

All new Project-related site-specific drainage improvements would be developed and analyzed as future projects are developed and entitled. All site drainage would ultimately discharge at the existing low point of the Project site and then under I-215. All proposed improvements would be constructed to the requirements of the City and the SBCFCD.

## **Electric Power**

SCE provides electricity service to the residences on the Project site and would also provide electrical service for the Project. The Project would connect to the existing SCE lines which would enable services to the site. Although some new utility infrastructure may be required on the site, described in **Section 4.5, Energy**, extension of services is not anticipated to require the construction of any new off-site electric power facilities in order to serve the Project site. As discussed further in **Section 4.5, Energy**, electricity demands for the Project were modeled using the California Emissions Estimator Model (CalEEMod) and are estimated to be 8.79 Gigawatt Hours (GWh) of electricity per year. The Project's operational electricity use would represent 0.003 percent of electricity used in the State, and 0.06 percent of the energy use in San Bernardino County. The Project's electricity consumption estimated above includes reductions associated with compliance with the 2022 Title 24 building code and compliance the CalGreen Tier 2 standards. Project electricity consumption is 8.79 GWh per year or 8,790 megawatt-hours (MWh) per year. Assuming the Project operates 24 hours per day, seven days per week, 365 days per year with an annual electricity consumption of 8,790 MWh/year, the Project would require a capacity of approximately

1.0 MW.<sup>8</sup> The nearest SCE electrical substation to the Project is the Colton Substation which has a remaining capacity of 41.52 MW.<sup>9</sup> Therefore, SCE's existing and planned electricity capacity and electricity supplies would be sufficient to serve the Project's estimated electricity demand. SCE can provide the Project sufficient electricity and would not be required to construct additional facilities. Therefore, buildout of the Project would not require the construction or unanticipated relocation of electric power facilities resulting in unanticipated environmental effects. Impacts would be less than significant, and mitigation is not required.

## Natural Gas

SoCalGas currently provides basic residential and business gas services within the City as well as existing service to the residences on the Project site. Similar to electricity demands discussed above, it is anticipated that the Project's estimated natural gas demand of approximately 160,195 therms of natural gas per year for space heating, water heating, and stoves, would generate a significant increase in City annual demand (see **Table 4.5-4**, of **Section 4.5, Energy**). Californians used 14,352 million therms of natural gas in the state and 527 million therms of natural gas in San Bernardino County in 2020. Therefore, the Project's operational natural gas use would represent 0.001 percent of the natural gas use in the state and 0.03 percent of the natural gas use in the County. Project natural gas consumption is estimated to be 160,195 therms/year or 0.04 million cubic feet of gas per day (MMcf/d). According to the *2020 California Gas Report*,<sup>10</sup> in 2024 Southern California will have a surplus of 131 MMcf/d available. Therefore, SoCalGas will have enough natural gas to serve the Project's demand of 0.04 MMcf/d.

In 2024, Californians are anticipated to use approximately 14,317,794 gallons of gasoline and approximately 3,195,776,812 gallons of diesel fuel. Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, current crude oil production would be sufficient to meet 50 years of worldwide consumption. Project operational use of gasoline and diesel would represent a 0.25 percent increase of gasoline use and 0.11 percent increase of diesel use in the County. Fuel demands associated with the Project would not require the construction of additional gas stations or refineries.

Therefore, the installation of natural gas infrastructure would not create an increased impact on the environment.

## Telecommunication

Provision of telecommunication services to serve the Project site may involve the extension of services for existing providers and/or the petition for additional providers not currently present in the City or serving the Project site. Existing telecommunication lines would be located within adjacent rights-of-way and within existing areas of disturbance such as those adjacent to existing roadways. Any new facilities required for the Project would be constructed within the development area, and would be placed

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<sup>8</sup>  $\frac{8,790 \text{ MWh/yr}}{8,766 \text{ h/yr}} = \text{approx. } 1.0 \text{ MW}$

<sup>9</sup> Southern California Edison (SCE), ND. Southern California Edison Power Site Search Tool. Accessed March 31, 2022. Available at <https://www.arcgis.com/apps/webappviewer/index.html?id=05a84ec9d19f43ac93b451939c330888>.

<sup>10</sup> California Gas and Electric Utilities, [https://www.socalgas.com/sites/default/files/2020-10/2020\\_California\\_Gas\\_Report\\_Joint\\_Utility\\_Biennial\\_Comprehensive\\_Filing.pdf](https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf)

underground as per the Grand Terrace MC, Title 13. The construction of substantial new telecommunication infrastructure would not be required. Therefore, impacts are anticipated to be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.17-2:** *Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

**Level of Significance: Less Than Significant**

## **Construction and Operations**

Development of the Project would increase water supply demands from RHC. The 2020 IRUWMP identifies water supply demand and delivery systems to serve the City, which includes the Project site, towards horizon year 2045. Through year 2045, RHC is anticipated to have adequate water supply to meet current demand, including the increased demand of the Project and water needed for other anticipated demands. RHC's adequate supply fluctuates with the availability of local groundwater and implementation of RHC's Water Shortage Contingency Plan demand management measures.

### **Normal Year**

In general, groundwater is less vulnerable to seasonal and climatic changes than surface water supplies. Although water use may decrease in the later years of a multiple year drought due to implementation of conservation measures and drought messaging, the 2020 IRUWMP's water service reliability utilized a 10 percent increase throughout the projected five-year drought period to be conservative.

According to the 2020 IRUWMP, RHC demonstrated that water supplies will meet the water demands in normal, single-dry, and multiple dry years. RHC has the ability to extract 4,435 AFY of water in the San Bernardino Basin with a five-year average representing their water right.<sup>11</sup> Additionally, RHC is able to pump more water to meet demands in dry years from the Riverside North and Riverside South Basins. RHC is also currently participating in efforts to replenish the basins with imported and local water through regional recharge programs.

A summary from the 2020 IRUWMP of the normal year water supplies projected to be available to RHC are shown in **Table 4.17-1, RHC Projected Normal Year Supply and Demand**. The percent of average supply increases in drought years because RHC's groundwater production will increase to meet an assumed increase in demands.

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<sup>11</sup> SBVMWD. (2021). 2020 IRUWMP – Part 2 – Local Agency Information. *RHC 2020 UWMP*. Page 7-19. Retrieved from: <https://www.sbvmd.com/home/showpublisheddocument/9246/637614377683630000>. (accessed November 2022).

**Table 4.17-1: RWHC Projected Normal Year Supply and Demand**

|                   | 2025       | 2030       | 2035       | 2040       | 2045       |
|-------------------|------------|------------|------------|------------|------------|
| Supply Total      | 5,226      | 5,449      | 5,672      | 5,786      | 5,900      |
| Demand Total      | 4,545      | 4,738      | 4,932      | 5,031      | 5,131      |
| <b>Difference</b> | <b>681</b> | <b>711</b> | <b>740</b> | <b>755</b> | <b>769</b> |

Source: Water Systems Consulting, Inc. (2021). 2020 Upper Santa Ana River Watershed IRUWMP – RWHC. Page 7-17, Table 7-12. Retrieved from: <https://www.sbvmd.com/home/showpublisheddocument/9246/637614377683630000> (accessed November 2022).

As shown in **Table 4.17-1**, RWHC is anticipated to have sufficient supply during any normal year occurring between 2025 and 2045.

### Single-Dry Year

The RWHC's projected supply and demand during a single dry year is shown in **Table 4.17-2, Single Dry Year Supply and Demand Comparison**. According to the 2020 IRUWMP, RWHC's demands in single dry years are assumed to increase by 10 percent above normal year demands. The local groundwater basins RWHC produces water from have storage for use in dry years so RWHC can produce the volume of water needed to meet 100 percent of demands in single dry years.

**Table 4.17-2: Single Dry Year Supply and Demand Comparison**

|                   | 2025       | 2030       | 2035       | 2040       | 2045       |
|-------------------|------------|------------|------------|------------|------------|
| Supply Total      | 5,749      | 5,994      | 6,239      | 6,365      | 6,490      |
| Demand Total      | 4,999      | 5,212      | 5,425      | 5,534      | 5,644      |
| <b>Difference</b> | <b>750</b> | <b>782</b> | <b>814</b> | <b>830</b> | <b>847</b> |

Source: Water Systems Consulting, Inc. (2021). 2020 Upper Santa Ana River Watershed IRUWMP – RWHC. Page 7-20, Table 7-13. Retrieved from: <https://www.sbvmd.com/home/showpublisheddocument/9246/637614377683630000> (accessed November 2022).

As shown in **Table 4.17-2**, RWHC is anticipated to have adequate supply during any single dry year occurring between 2025 and 2045.

### Multiple Dry Years

The RWHC's projected supply and demand during five consecutive dry years is shown in **Table 4.17-3, Multiple Dry Years Supply and Demand Comparison**. According to the 2020 IRUWMP, RWHC's demands in multiple dry years are assumed to increase by 10 percent above normal year demands each year. The local groundwater basins RWHC produces water from have existing storage capacity for use in dry years so RWHC can produce the volume of water needed to meet 100 percent of demands in multiple dry years. RWHC's supplies are 100 percent reliable during multiple dry years.

**Table 4.17-3: Multiple Dry Years Supply and Demand Comparison**

|             |                   | 2025       | 2030       | 2035       | 2040       | 2045       |
|-------------|-------------------|------------|------------|------------|------------|------------|
| First Year  | Supply Total      | 5,749      | 5,994      | 6,239      | 6,365      | 6,490      |
|             | Demand Total      | 4,999      | 5,212      | 5,425      | 5,534      | 5,644      |
|             | <b>Difference</b> | <b>750</b> | <b>782</b> | <b>814</b> | <b>830</b> | <b>847</b> |
| Second Year | Supply Total      | 5,749      | 5,994      | 6,239      | 6,365      | 6,490      |
|             | Demand Total      | 4,999      | 5,212      | 5,425      | 5,534      | 5,644      |
|             | <b>Difference</b> | <b>750</b> | <b>782</b> | <b>814</b> | <b>830</b> | <b>847</b> |

|             |                   | 2025       | 2030       | 2035       | 2040       | 2045       |
|-------------|-------------------|------------|------------|------------|------------|------------|
| Third Year  | Supply Total      | 5,749      | 5,994      | 6,239      | 6,365      | 6,490      |
|             | Demand Total      | 4,999      | 5,212      | 5,425      | 5,534      | 5,644      |
|             | <b>Difference</b> | <b>750</b> | <b>782</b> | <b>814</b> | <b>830</b> | <b>847</b> |
| Fourth Year | Supply Total      | 5,749      | 5,994      | 6,239      | 6,365      | 6,490      |
|             | Demand Total      | 4,999      | 5,212      | 5,425      | 5,534      | 5,644      |
|             | <b>Difference</b> | <b>750</b> | <b>782</b> | <b>814</b> | <b>830</b> | <b>847</b> |
| Fifth Year  | Supply Total      | 5,749      | 5,994      | 6,239      | 6,365      | 6,490      |
|             | Demand Total      | 4,999      | 5,212      | 5,425      | 5,534      | 5,644      |
|             | <b>Difference</b> | <b>750</b> | <b>782</b> | <b>814</b> | <b>830</b> | <b>847</b> |

Source: Water Systems Consulting, Inc. (2021). 2020 Upper Santa Ana River Watershed IRUWMP – RHWC. Page 7-21, Table 7-15. Retrieved from: <https://www.sbvmd.com/home/showpublisheddocument/9246/637614377683630000> (accessed November 2022).

As shown in **Table 4.17-3**, RHWC is anticipated to have adequate supply during multiple dry years occurring between 2025 and 2045.

The WSA projected water demand of the Project at 2,000 gal/acre/day which would result in an annual demand of 273 AF of potable water. This was based on the anticipated population growth in the service area and the expected change in per-capita consumption. RHWC’s extraction in 2015 was 2,964 AF and future water extraction is 5,900 AF on a normal year and 6,490 AF on a dry-year. Therefore, RHWC has a reliable water supply to supply water to the proposed Project and entire service area. The IRUWMP has verified that RHWC has sufficient water supplies available during average, single dry, and multiple dry water years within a 25-year projection that will meet the projected demand associated with the proposed Project, in addition to existing and planned future uses. Nevertheless, future development under the Project would be required to adhere to the following conditions to ensure the reliability of water supplies towards year 2045:

- Property owners will install water efficient devices and landscaping according to the requirements of RHWC’s water use efficiency ordinance(s), if any, at the time of construction of a project to reduce the impact of this Project of RHWC water supply.
- Prior to any construction activities, Project applicants are required to meet with RHWC staff to develop a plan of service for water supply. A plan of service for water supply includes potable water requirements and recycled water requirements when available to serve the a project.
- In the future it may be possible to serve the Project site with recycled water. RHWC policy recognizes recycled water as a preferred source of water supply for all non-potable water demands, including, without limitation, irrigation of recreation areas, green belts, open space, common areas, commercial landscaping and supply for aesthetic impoundment or other water features. Most landscaped areas in the Project area would be designed to use recycled water to the greatest extent possible. According to RHWC’s requirements, the Project may be conditioned to construct a recycled water system physically separated from the potable water system. The Project may also be conditioned to construct off-site recycled water facilities. However, RHWC has not adopted a recycled water policy at this time but plans to in the future. RHWC will decide on requirements for recycled water use and facilities during the design phases of the Project.
- Based on present information RHWC has determined that it will be able to provide adequate water supplies to meet the potable water demand for the Project’s proposed uses in addition to existing and future uses within their service area. Water service will be guaranteed by the

satisfaction of all rules and regulations of RHC. RHC reserves the right to revisit this WSA in the event of a potential increase in Project water demand.

Therefore, pursuant to SB 221 §66473.7 and SB 610 §10910, RHC would have sufficient water supplies to meet the demands of the Project in addition to the existing and other projected demands during normal, single dry, and multiple dry years over the next 20 years. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.17-3:** *Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

**Level of Significance: Less Than Significant**

## **Construction and Operations**

Buildout of the Project would generate approximately 27,455 gallons per day or 0.023 MGD, as determined by the Sewer System Analysis (**Appendix K2**). As stated above, the Project site would be served by the Colton WWTP which has a current treatment capacity of 7 MGD, and the plant treats an average of 5.6 MGD. Thus, Colton WWTP has a remaining wastewater treatment capacity of 1.4 MGD. The Project's generated wastewater would represent less than two percent of the Colton WWTP remaining treatment capacity. Therefore, wastewater generated by the Project would be adequately treated at the Colton WWTP. The additional wastewater (quantity and type) that would be generated by the Project and treated by the Colton WWTP would not impede the treatment plant's ability to continue to meet its wastewater treatment requirements.

Additionally, there are a number of existing gravity sewer lines in the vicinity of the Project leased to the City and owned and operated by the City of Colton. The main sewer line in the area is a 12-inch trunk sewer line in De Berry Street that conveys flow from east to west through the Project and then increases to 18-inch before it crosses I-215. After crossing I-215, the sewer line flows north and increases in size before reaching the Colton Water Reclamation Facility. There is also a 10-inch gravity sewer line in Commerce Way that conveys flows south to the 18-inch trunk sewer line. A 10-inch sewer line in Taylor Street conveys flows north to the 18-inch trunk sewer line. There are eight-inch gravity sewer lines in Van Buren Street and Pico Street that convey flows from east to west to the 10-inch line on Taylor Street. The Project site contains existing wastewater facilities within and adjacent to the Project site. The Project's wastewater utility improvements would be designed and sized to tie into the existing/backbone wastewater infrastructure. Wastewater collected from the Project's short-term construction and long-term operation activities would continue to be conveyed in an existing 18-inch diameter sewer pipeline under I-215 to the treatment plant owned and operated by the City of Colton.

According to the Sewer System Analysis (**Appendix K2**), the Project's projected average sewage flows would be, at minimum, 27,455 gallons of sewage per day. The Sewer System Analysis concluded that the



existing and local collector sewers have adequate capacity to serve the Project. In addition, all wastewater utility improvements and proposed connections to the existing wastewater system would be constructed and installed in conformance with the Grand Terrace MC and the City of Colton requirements. This would ensure that wastewater collection facilities are properly designed, implemented, operated, and maintained; thereby furthering efficiency and adequacy of facilities while reducing facilities lifecycle costs. As applicable, each project applicant would also pay a DIF pursuant to the fees listed in the Grand Terrace MC Chapter 4.80 and additional capital costs to extend the existing sewer lines, as well as applicable sewer connection and service fees, which act to fund future improvement plans, operations, and maintenance of existing wastewater collection facilities. Therefore, buildout of the Project would have little or no net effect on the operation of wastewater collection facilities or wastewater treatment capacity. Impacts would be less than significant, and mitigation is not required.

### ***Mitigation Measures***

No mitigation measures are required.

**Impact 4.17-4:** *Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

***Level of Significance: Less Than Significant***

### **Construction and Operations**

The City contracts with Burrtec for the collection and disposal of solid waste and recyclable materials. All municipal waste collected in the City is taken to the San Bernardino County Landfill system for disposal. As noted in **Section 4.17.2**, the nearest landfills to the Project site are the San Timoteo and Mid-Valley Landfills.

The Project site land uses allow for and encourage a mix of commercial, residential, and public park uses at the gateway to the City. Consequently, buildout of the Project could significantly increase the amount of waste generation in the area. The CalRecycle website<sup>12</sup> was used for waste generation factors. CalRecycle estimates a waste generation rate of 5 lbs./1,000 sf/day for commercial uses and 12 lbs/person/day for residential uses. Based on the listed generation rates, the Project's commercial and residential land uses would generate the following daily amounts of solid waste:

- $(455,059.5 \text{ commercial sq ft}/1,000 \text{ sq ft}) \times (5 \text{ lbs/day}) = \text{approximately } 2,275 \text{ lbs. commercial waste per day.}$
- $(\text{Proposed } 786 \text{ du} \times 2.74 \text{ [2021 City's persons per household]}) = \text{approximately } 2,154 \text{ persons.}^{13}$ 
  - $(2,154 \text{ persons}/1 \text{ persons}) \times (12 \text{ lbs/day}) = \text{approximately } 25,844 \text{ lbs. residential waste per day.}$

<sup>12</sup> Commercial Sector Generation Rates. (2019). Retrieved from: <https://www2.calrecycle.ca.gov/wastecharacterization/general/rates>. (accessed November 2022).

<sup>13</sup> State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. <https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/>.

As shown above, the Project's commercial and residential land uses would generate an approximate total of 28,119 pounds of waste per day or 14 tons per day (tpd). The San Timoteo Landfill and Mid-Valley Landfill have maximum permitted throughout of 2,000 tons per day and 7,500 tons per day, respectively. The Project's projected solid waste generation would constitute 0.7 percent of the San Timoteo Landfill throughput of waste (tons) per day and 0.19 percent of Mid-Valley Landfill's throughput of waste (tons) per day. Therefore, the Project would not generate solid waste in excess of the capacity of local infrastructure and would not impair the attainment of solid waste reduction goals.

Regardless, all future project-specific development within the Project site would utilize City-approved solid waste generation rates pursuant to Grand Terrace MC Chapter 15.58.060 to determine the amount of solid waste that would be generated during both short-term construction and long-term operations of each project-specific development. In addition, each development would be required to initiate service for solid waste collection and pay any fees associated with solid waste removal. Furthermore, each future development project would be required to comply with ongoing waste management programs and requirements implemented by the City.

Buildout of the Project would also comply with all applicable State requirements related to solid waste, including AB 341 and 1826, by implementing a recycling program to separate recyclable, and recyclable organic materials, from non-recyclable solid waste and coordinating with the respective waste hauler(s) for disposal at a proper facility. These requirements are designed to move California to its statewide goal of a 75 percent recycling rate, including a reduction in the level of organic waste disposal by 50 percent from its current levels.

Although Project-specific solid waste generation is unknown, adherence with applicable state and local provisions and regulations would ensure that buildout of the Project would not generate significant solid waste. Therefore, impacts would be less than significant.

#### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.17-5:** *Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

***Level of Significance: Less Than Significant***

#### **Construction and Operations**

Refer to **Impact 4.17-4**, above. Project buildout would comply with all federal, state, and local statutes and regulations related to solid waste. The Project does not propose any activities that would conflict with the applicable programmatic requirements. Therefore, impacts would be less than significant.

#### **Mitigation Measures**

No mitigation measures are required.

#### 4.17.6 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable impacts concerning utilities and service systems have been identified.

#### 4.17.7 CUMULATIVE IMPACTS

All cumulative development within the City is evaluated when determining the cumulative impacts to utilities and service systems as future projects would naturally increase water demand, wastewater generation, and solid waste generation in the area. Consequently, all future projects would be required to undergo City discretionary review pursuant to CEQA Guidelines to determine the significance of impacts concerning water supplies, sewer capacity, wastewater treatment capacity, landfill capacity and related infrastructure. The IRUWMP accounts for the growth in the City and surrounding region and determined that adequate water supplies would be provided through 2045. Similarly, the Project would be served by existing and planned wastewater and stormwater facilities. Furthermore, it was determined that the San Timoteo and Mid-Valley Landfills would have sufficient remaining capacity of 12,360,396 cubic yards and 61,219,377 cubic yards, respectively. Therefore, while buildout of the Project would incrementally increase demands on public utilities, the increases are within the anticipated growth patterns and within the capacity of existing and planned resources. The Project would not combine with other cumulative projects to result in significant impacts to utilities and service systems. The Project's contribution is not considered cumulatively considerable.

#### 4.17.8 REFERENCES

CalRecycle. (2022). *Frequently Asked Questions*. Available at:

<https://calrecycle.ca.gov/recycle/commercial/organics/faq/>

CalRecycle. (2018). *Per Capita Disposal Rate*. Retrieved from

<https://www.calrecycle.ca.gov/LGCentral/GoalMeasure/DisposalRate/MostRecent/>

CalRecycle. (2019). *SWIS Facility/Site Summary – Mid-Valley Sanitary Landfill (36-AA-0055)*. Retrieved at:

<https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2662>

CalRecycle. (2019). *SWIS Facility/Site Summary – San Timoteo Landfill (36-AA-0087)*. Retrieved at:

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[https://www.ci.colton.ca.us/DocumentCenter/View/2941/Urban-Water-Management-Plan?bidId=.](https://www.ci.colton.ca.us/DocumentCenter/View/2941/Urban-Water-Management-Plan?bidId=)

## 4.18 WILDFIRE

### 4.18.1 INTRODUCTION

This section evaluates potential wildfire hazard impacts that may result from the implementation of The Gateway at Grand Terrace Specific Plan (Project) by identifying existing wildfire hazard conditions on the Project site and surrounding area; considering applicable federal, state, regional, and local goals and policies; identifying and analyzing environmental impacts; and recommending measures to minimize or avoid potential adverse impacts resultant of Project implementation.

Information presented in this wildfire hazards impact analysis is derived largely from CAL FIRE, the City of Grand Terrace (City) General Plan (Grand Terrace GP), the Grand Terrace Municipal Code (Grand Terrace MC), and the City's Local Hazard Mitigation Plan (LHMP).<sup>1</sup>

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project's Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

### 4.18.2 ENVIRONMENTAL SETTING

According to the National Park Service (NPS), a wildfire, or wildland fire, is described as a non-structure fire that occurs in vegetation such as trees, grasses, and shrubs. A prescribed fire is ignited by fire managers after careful planning, under a set of conditions that must be met prior to ignition and is carried out for specific purposes and remains closely monitored. A wildfire cannot be a prescribed fire.<sup>2</sup> The severity of potential wildfires is influenced by four factors: vegetation, climate, slope, and how the fire was started.

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards in the state through its Fire and Resources Assessment Program (FRAP). These maps place areas of the state into different fire hazard severity zones (FHSZ) based on a hazard scoring system using subjective criteria for fuels, fire history, terrain influences, housing density, and occurrence of severe fire weather where urban conflagration could result in catastrophic losses. Lands where CAL FIRE is responsible for wildland fire protection are classified as State Responsibility Areas (SRA), and are generally

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<sup>1</sup> City of Grand Terrace. (2017). *Local Hazard Mitigation Plan*. Retrieved from: [https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning/local\\_hazard\\_mitigation\\_plan](https://www.grandterrace-ca.gov/departments/planning_development_services/planning/local_hazard_mitigation_plan) (accessed November 6, 2022).

<sup>2</sup> National Park Service. (2018). *Types of Wildland Fire*. Retrieved from: <https://www.nps.gov/subjects/fire/types-of-wildland-fire.htm> (accessed November 6, 2022).

located in unincorporated areas of the County. CAL FIRE designates areas as Very High Fire Hazard Severity Zones (FHSZ), High FHSZ, and Moderate FHSZ. Additionally, local fire protection agencies, such as the San Bernardino County Fire Protection District (SBCoFD), are responsible for wildfire protection in lands within the City, or lands classified as Local Responsibility Areas (LRA). CAL FIRE uses the same modeling data that is used to map State Responsibility Areas (SRAs) to Map LRAs and works with local jurisdictions for validation of the mapping. The model accounts for topography, especially the steepness of the slopes (fires burn faster as they burn up-slope), weather (temperature, humidity, and wind), and fuel (material that feeds a fire such as dead trees, brush, grasses, etc.). The areas with the highest likelihood to burn are located along the eastern border of the City in the Blue Mountain region.<sup>3</sup> According to CAL FIRE's FHSZ Map Viewer, the Project site is located in a LRA and is not within a VHFHSZ.<sup>4</sup> The City contracts with SBCoFD for fire and rescue services. The SBCoFD provides fire protection services for the City from Fire Station Number 23, located at 22582 Center City Court in the City of Grand Terrace.

The majority of the City is urbanized and is primarily comprised of single-family residential neighborhoods with commercial, industrial, and public facility land uses. Wildfires pose the greatest risk in the open space and undeveloped portions of the City. The highest potential for wildland fires to occur in the City is at the steep hillsides of Blue Mountain located at the eastern portion of the City. There is also potential for wildfires to occur in the native areas along the Santa Ana River.<sup>5</sup>

### 4.18.3 REGULATORY SETTING

#### Federal

##### Federal Emergency Management Act (FEMA)

In March 2003, FEMA became part of the U.S. Department of Homeland Security. FEMA's continuing mission is to lead the effort to prepare the nation for all hazards and effectively manage federal response and recovery efforts following any national incident. FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration.

##### Disaster Mitigation Act of 2000

This Act (42 United States Code [U.S.C.] §5121) was signed into law to amend the Robert T. Stafford Disaster Relief Act of 1988 (42 U.S.C. §5121-5207). Among other things, this legislation reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and is aimed primarily at the control and streamlining of the administration of federal disaster relief and programs to promote mitigation activities. Some of the major provisions of this Act include:

- i) Funding pre-disaster mitigation activities;
- ii) Developing experimental multi-hazard maps to better understand risk;

<sup>3</sup> City of Grand Terrace – Hazard Mitigation Plan Update. Retrieved from: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/Local%20Hazard%20Mitigation%202017\\_Including%20Appendix%20\\_Complete%20Document.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/Local%20Hazard%20Mitigation%202017_Including%20Appendix%20_Complete%20Document.pdf). (accessed February, 2023).

<sup>5</sup> City of Grand Terrace. (2010). *Grand Terrace Draft Environmental Impact Report*. Page 129. Retrieved from: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/draft\\_eir.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/draft_eir.pdf) (accessed November 6, 2022).

- iii) Establishing state and local government infrastructure mitigation planning requirements;
- iv) Defining how states can assume more responsibility in managing the hazard mitigation grant program; and
- v) Adjusting ways in which management costs for projects are funded.

The mitigation planning provisions outlined in §322 of this Act establish performance-based standards for mitigation plans and require states to have a public assistance program (Advance Infrastructure Mitigation [AIM]) to develop county government plans. The consequence for counties that fail to develop an infrastructure mitigation plan is the chance of a reduced federal share of damage assistance from 75 percent to 25 percent if the damaged facility has been damaged on more than one occasion in the preceding 10-year period by the same type of event.

## State

### California Department of Forestry and Fire Protection

CAL FIRE protects the people of California from fires, responds to emergencies, and protects and enhances forest, range, and watershed values providing social, economic, and environmental benefits to rural and urban citizens. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. The Office of the State Fire Marshal supports CAL FIRE's mission by focusing on fire prevention. It provides support through a wide variety of fire safety responsibilities including by regulating buildings in which people live, congregate, or are confined; by controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death, and destruction by fire; by providing statewide direction for fire prevention in wildland areas; by regulating hazardous liquid pipelines; by reviewing regulations and building standards; and by providing training and education in fire protection methods and responsibilities.

### State of California Fire Regulations

Fire regulations for California are established in §§13000 et seq. of the California Health and Services Code and include regulations for structural standards (similar to those identified in the California Building Code); fire protection and public notification systems; fire protection devices such as extinguishers and smoke alarms; standards for high-rise structures and childcare facilities; and fire suppression training. The State Fire Marshal is responsible for enforcement of these established regulations and building standards for all state-owned buildings, state-occupied buildings, and state institutions within California.

### California Fire Plan

The Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection. By placing the emphasis on what needs to be done long before a fire starts, the Fire Plan looks to reduce firefighting costs and property losses, increase firefighter safety, and to contribute to ecosystem health. The current plan was finalized in early 2010 and updated as of 2018.

### **California Public Resources Code (PRC) Sections 4290 and 4291**

These regulations, which implement minimum fire safety standards related to defensible space, apply to the perimeters and access to all commercial, industrial, and residential building construction with an SRA (approved after January 1, 1991), and within lands classified and designated as Very High FHSZ (after July 1, 2021). The person(s) who control, lease, maintain, operate, or own said building in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable materials is required to preserve a defensible space of 100 feet from the perimeter of the building. The regulations shall include the following:

1. Road standards for fire equipment access.
2. Standards for signs identifying streets, roads, and buildings.
3. Minimum private water supply reserves for emergency fire use.
4. Fuel breaks and greenbelts.

These regulations do not supersede local regulations which equal or exceed minimum regulations adopted by the state.

### **California Code of Regulations, Title 24 – California Building Standards Code**

Title 24 of the California Code of Regulations (CCR) generally referred as the California Building Standards Code (CBSC) consists of 12 parts that contain administrative regulations for the California Building Standards Commission and for all state agencies that implement or enforce building standards. Local agencies must ensure the development complies with the guidelines contained in the CBSC. Cities and counties can adopt additional building standards beyond the CBSC including the CBSC Part 2, named the California Building Code (CBC) which is based upon the 2018 International Building Code, and Part 11, named the California Green Building Standards Code, also called the CalGreen Code.

#### ***CCR Title 24, Part 9 – California Fire Code***

The California Fire Code contains regulations relating to construction and maintenance of buildings, the use of premises, and the management of wildland urban interface (WUI) areas, among other issues. The California Fire Code is updated every three years by the California Building Standards Commission and was last updated on July 1, 2022 (effective date of January 1, 2023). The Fire Code sets forth regulations regarding building standards, fire protection and notification systems, fire protection devices such as fire extinguishers and smoke alarms, high-rise building standards, and fire suppression training. It contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code also include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. Development under the Project would be subject to applicable regulations of the California Fire Code. Projects that are developed after the effective date would be required to adhere to the 2022 California Fire Code design standards.

## **CCR Title 24, Part 2 – California Building Code**

The California Building Code contains general building design and construction requirements relating to fire and life safety, structural safety, and access compliance. CBC provisions provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures and certain equipment. The California Building Code is updated every three years and was updated on July 1, 2022) (effective date of January 1, 2023). Projects that are developed after the effective date would be required to adhere to the 2022 California Building Code’s design standards.

## **Title 8 California Code of Regulations (CCR) Sections 1270 and 6773**

In accordance with CCR, Title 8 § 1270 “Fire Prevention” and § 6773 “Fire Protection and Fire Equipment,” the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

## **California Health and Safety Code**

State fire regulations are set forth in California Health and Safety Code (HSC) §§ 13000 et seq., and include provisions concerning building standards, fire protection and notification systems, fire protection devices, and fire suppression training, as also set forth in the 2019 CBSC and related updated codes.

## **Emergency Mutual Aid Agreements (EMAA)**

The EMMA system is a collaborative effort between city and county emergency managers in the Office of Emergency Services (OES) in the coastal, southern, and inland regions of the state. EMMA provides service in the emergency response and recovery efforts at the Southern Regional Emergency Operations Center, local Emergency Operations Centers, the Disaster Field Office, and community service centers. The purpose of EMMA is to support disaster operations in affected jurisdictions by providing professional emergency management personnel. In accordance with the EMMA, local and state emergency managers have responded in support of each other under a variety of plans and procedures.

## **California Governor’s Office of Emergency Management Agency (Cal-EMA)**

In 2009, the State of California passed legislation creating the Cal-EMA and authorizing it to prepare a Standardized Emergency Management System (SEMS) program (Title 19 CCR § 2400 *et seq.*), which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

Cal-EMA serves as the lead state agency for emergency management in the state. Cal-EMA coordinates the state response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as these are exhausted, obtain more from neighboring cities and special districts, the county in which



they are located, and other counties throughout the state through the statewide mutual aid system. In California, the SEMS provides the mechanism by which local government requests assistance. Cal-EMA serves as the lead agency for mobilizing the state's resources and obtaining federal resources; it also maintains oversight of the state's mutual aid system.

## Local

### City of Grand Terrace General Plan

The following Grand Terrace GP goals and policies pertaining to wildfire which are applicable to the Project are listed below.

#### ***Public Health and Safety Element***

**Goal 5.6:** Minimize the exposure of residents, business owners, and visitors to the impacts of urban and wildland fires.

**Policy 5.6.2** Continue the weed abatement program to ensure clearing of dry vegetation areas.

**Policy 5.6.3** Encourage the use of fire-resistive construction materials.

### City of Grand Terrace Local Hazard Mitigation Plan

The City's Local Hazard Mitigation Plan (LHMP) was last updated in 2017. The LHMP's purpose is to identify potential City hazards, review and assess past disaster occurrences, estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term damage to people and property from natural and man-made hazards. The plan identifies vulnerabilities, prioritizes mitigation actions, evaluates resources and identifies mitigation shortcomings, provides future mitigation planning, and maintenance guidelines for the existing plan.

#### **4.18.4 SIGNIFICANCE CRITERIA UNDER CEQA**

State CEQA Guidelines Appendix G contains the Environmental Checklist Form, which includes questions concerning wildfire. The questions presented in the Environmental Checklist Form have been utilized as significance criteria in this section. If the Project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan;
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire;
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

## Methodology and Assumptions

The Project is evaluated against the aforementioned significance criteria/thresholds, as the basis for determining the impact's level of significance concerning wildfire hazards. This analysis considers the existing regulatory framework (i.e., laws, ordinances, regulations, and standards) that avoid or reduce the potentially significant environmental impact. Where significant impacts remain despite compliance with the regulatory framework, feasible mitigation measures are recommended, to avoid or reduce the Project's potentially significant environmental impacts.

The baseline conditions and impact analyses are based on field observations conducted by Kimley-Horn in March 2022; review of Project maps and drawings; analysis of aerial and ground-level photographs; and review of various data available in public records, including local planning documents. The determination that a Project component would or would not result in "substantial" adverse effects on wildfire hazards standards considers the available policies and regulations established by local and regional agencies and the amount of deviation from these policies in the Project's components.

### 4.18.5 PROJECT IMPACTS AND MITIGATION

**Impact 4.18-1:** *If located in or near SRA or lands classified as Very High FHSZ, would the Project:*

*a) Substantially impair an adopted emergency response plan or emergency evacuation plan?*

**Level of Significance: Less Than Significant**

The Project area is not located in an SRA or lands classified as Very High FHSZ. According to CAL FIRE's FHSZ Map Viewer, the Project site is located in a LRA and is not within a Very High FHSZ. The City maintains an emergency operations center and participates in the Statewide Master Mutual Aid Agreement and contains Mutual Aid Agreements with the County and surrounding cities. The City also maintains a Community Emergency Response Team (CERT) program which provides the community practical emergency response training. As previously mentioned, the City contracts with SBCoFD for fire and rescue services. The SBCoFD provides fire protection services for the City from Fire Station Number 23, located at 22582 Center City Court in the City of Grand Terrace. Additionally, the City also receives emergency response service on a federal level by FEMA.

San Bernardino County's General Plan or Countywide Plan identified evacuation routes near the Project that would serve as emergency evacuation routes: Interstate 10 (I-10), I-215, and I-15. Major local evacuation routes near the Project site include Barton Road, La Cadena Avenue, and Mount Vernon Avenue. The County's Sheriff Department, California Highway Patrol, and other cooperating law enforcement agencies have primary responsibility for evacuations. These agencies work closely with responding fire department personnel who assess fire behavior and spread, which ultimately influence evacuation decisions.

The Project would be developed near regional and local evacuation routes and would be developed in conformance with applicable federal state, and local regulations and design standards. The Project also includes roadway/circulation improvements that would improve the local circulation system and result in

better local evacuation response and services for the City. Therefore, the Project would not impair and adopted emergency response plan or emergency evacuation plan and impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.18-2: If located in or near SRA or lands classified as Very High FHSZ, would the Project:***

***b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

***Level of Significance: Less Than Significant***

The Project area is not located in an SRA or lands classified as Very High FHSZ. The Project site is located in an LRA. CAL FIRE maps LRAs and works with local jurisdictions for validation of the mapping, accounting for topography, especially the steepness of the slopes (fires burn faster as they burn up-slope), weather (temperature, humidity, and wind), and fuel (material that feeds a fire such as dead trees, brush, grasses, etc.).<sup>6</sup>

Topography influences the risk of a fire's spread rate. Steep terrain results in faster fire spread upslope and terrain that forms a funneling effect on the landscape can result in especially intense fire behavior. Conversely, flat terrain tends to have less effect on fire spread, resulting in fires that are driven by vegetation and/or wind. The Project's topography consists of a slight slope with elevations ranging from approximately 975 feet on the northeastern end of the site to approximately 945 feet on the southwestern corner. The Project site is relatively flat, and therefore steep slopes would not exacerbate wildfire risks to Project occupants.

Wind patterns across the south coastal region are characterized by westerly and southwesterly on-shore winds during the day, and easterly or northeasterly breezes at night. Wind speeds are greater during the summer months and range from 4 to 7 miles per hour (mph) during the day and 2 to 6 mph at night within the Project area. Santa Ana winds come from the north and flow through the Cajon Pass and then follow the Santa Ana River to the south. Maximum wind speeds during Santa Ana conditions are undefined, however 60 mph winds are not uncommon in the Project vicinity.<sup>7</sup> High speed winds during Santa Ana conditions could put Project occupants at a higher risk to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, however the City has a LHMP that includes various hazard mitigation such as the San Bernardino County Fire Hazard Abatement (FHA) Program that reduces the risk of fires within communities through the reduction/removal of flammable materials on properties. The FHA conducts surveys to identify fire hazards throughout the year and mails notices to abate the hazards to

<sup>6</sup> City of Grand Terrace – Hazard Mitigation Plan Update. Retrieved from: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/Local%20Hazard%20Mitigation%202017\\_Including%20Appendix%20\\_Complete%20Document.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/Local%20Hazard%20Mitigation%202017_Including%20Appendix%20_Complete%20Document.pdf). (accessed February 2023).

<sup>7</sup> City of Grand Terrace General Plan. (2010). Draft Environmental Impact Report. Retrieved from: [https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server\\_12337255/File/Departments/Planning%20&%20Development/Planning/draft\\_eir.pdf](https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_12337255/File/Departments/Planning%20&%20Development/Planning/draft_eir.pdf). (accessed November 2022).

the property owners. The Property owners are given 30 days to abate the violations before receiving citations, penalties, and/or fees for abatement by the County. As previously mentioned, the areas with the highest likelihood to burn within the City are located in the Blue Mountain region because this area consists of steeper slopes and more vegetation fuel for wildfires. Blue Mountain is located approximately 1.5 miles east of the Project area. The FHA would lower fire risks to the Blue Mountain Region as well as the Project site. Furthermore, the land between Blue Mountain and the Project site is currently developed with lesser amounts of vegetation that would provide fuel for a wildfire.

Wildfires can cause temporary large increases in outdoor airborne particle, and substantial increases in gaseous air pollutants such as carbon monoxide, nitrogen dioxide, formaldehyde, and acetaldehyde which can cause health effects from wildfire smoke exposure. When outdoor air particle concentrations increase, indoor air concentrations of particles also increase. Because U.S. occupants are indoors approximately 90% of the time and may be indoors even more when outdoor air is affected by wildfires, increases in exposures to particles from wildfires attributable to climate change primarily occur indoors. Spending more time indoors, keeping windows and doors closed, and operating indoor particle filtration systems are options to reduce the health effects from wildfire pollutants. Particle filtration systems are installed in forced-air heating and cooling systems and have continuously running fans when there is pollution from wildfires.<sup>8</sup> The California Code of Regulations (CCR) Title 24 Part 6 requires new development to use Minimum Efficiency Reporting Value (MERV) 13 air filtration on space conditioning systems and ventilation systems that provide outside air to the occupiable space of a dwelling. A MERV 13 air filtration system has an average particle size removal efficiency of approximately 75 percent for 0.3 to 1.0  $\mu\text{g}/\text{m}^3$  (DPM) and 90 percent for 1.0 to 10  $\mu\text{g}/\text{m}^3$  (PM10 and PM2.5) based on American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 52.2. The Project's MERV 13 air filtration systems would reduce the highest expected annual average diesel PM10 emission concentrations conservatively by 75 percent to 0.0112  $\mu\text{g}/\text{m}^3$  during opening year (refer to **Appendix A, Air Quality Assessment**).

The Project would receive fire protection services by the San Bernardino County Fire Station 23 and would pay development impact fees pursuant to the Grand Terrace MC to help improve fire protection services in the City (refer to **Section 4.13, Public Services**). Furthermore, CAL FIRE works closely with the building industry when implementing building codes and defensible space requirements to ensure development matches the fire hazards for the development area. Future development within the Project site would be constructed in compliance with the Fire Code and California Building Code and would not expose Project occupants to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire by exacerbating wildfire risks.

In summary, wildfires may occur in wildland areas that surround the Project site; however, would not be significantly increased in frequency, duration, or size with future development within the Project site. Additionally, the Project site is surrounded largely by existing development and flat terrain. Lands classified as Very High FHSZs are over a mile away from the Project site and the slopes ascend away from the areas planned for development. Furthermore, the FHA would reduce the amount of flammable

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<sup>8</sup> Berkeley Lab. 2023. Indoor Air Quality Scientific Findings Resources Bank. Retrieved from: <https://iaqscience.lbl.gov/wildfires> (accessed February, 2023).

materials within the Project site, limiting fuel for wildfires to spread and future development would convert the Project site from readily ignitable fuels to ignition resistant landscapes and structures. As previously stated, the MERV 13 air filtration systems have an average particle size removal efficiency of approximately 75 percent for 0.3 to 1.0 µg/m<sup>3</sup> (DPM) and 90 percent for 1.0 to 10 µg/m<sup>3</sup> (PM10 and PM2.5) and future development within the Project site would adhere to the Fire Code and California building code to reduce exposure to pollutant concentrations. Therefore, impacts would be less than significant.

### **Mitigation Measures**

No mitigation measures are required.

***Impact 4.18-3: If located in or near SRA or lands classified as Very High FHSZ, would the Project:***

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

***Level of Significance: Less Than Significant***

The Project area is not located in an SRA or lands classified as Very High FHSZ, and the Project site is located in an LRA. The Project contains various infrastructure improvements, under the guidance of the Project, which would be installed in two phases. The Project includes construction of infrastructure improvements including on- and off-site sewer, water, storm drainage, dry utilities, and roadway and traffic signal facilities (refer to **Section 4.15, Transportation** and **Section 4.17, Utilities and Service Systems**). Commerce Way would be extended south from the existing terminus point to Taylor Street, and also be improved and widened all the way south to its connection at Main Street. Additionally, all areas proposed for development would be provided with fire suppression systems, major development areas would be provided with looped on-site mains to ensure adequate pressure for fire suppression, fire hydrants would be installed at locations approved by the San Bernardino County Fire Department, and Riverside Highland Water Company (RHWC) lines would be extended to loop around the entirety of the Project area.

Multi-family residential developments within the Project would include fire systems, and fire riser rooms would be located within the building envelope, unless fully integrated into the building architecture. All fire risers and fire-related plumbing would be installed in a fire riser cabinet or meter cabinet.

All proposed improvements would be constructed to meet the requirements of the City of Grand Terrace and the San Bernardino Flood Control District (SBCFCD) and would comply with all Grand Terrace GP policies and Specific Plan and Grand Terrace MC design standards and provisions. Therefore, the installation and maintenance of associated infrastructure would result in less than significant impacts regarding temporary or ongoing impacts to the environment and no mitigation measures are required.

### **Mitigation Measures**

No mitigation measures are required.

**Impact 4.18-4:** *If located in or near SRA or lands classified as Very High FHSZ, would the Project:*

*d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

**Level of Significance: Less Than Significant**

The Project area is not located in or near an SRA or lands classified as Very High FHSZ and is located in an LRA. The Project's topography is relatively flat and consists of elevations ranging from approximately 975 feet on the northeastern end of the site to approximately 945 feet on the southwestern corner. Parcels surrounding the Project Site are relatively flat as well.

According to the Geotechnical Investigation for the Project, the slopes approach 2:1 (horizontal to vertical) along the drainage course in the southwestern portion of the property, and the potential for mass movement failures such as landslides or debris flows is considered very low. Additionally, the majority of the Project site along the northwestern margin (PAs 4, 5, 10, 23, 17 and 21) are currently occupied by flood control improvements and no significant changes are proposed for these areas.<sup>9</sup> Furthermore, future development within the Project site would be designed in compliance with applicable codes and regulations, including the California Building Standard Codes.

Project flooding and drainage is discussed in **Section 4.9, Hydrology and Water Quality** and **Section 4.17, Utilities and Service Systems**; runoff, flooding, and drainage impacts are less than significant with compliance with the Specific Plan, Grand Terrace MC, and implementation of utility improvements.

Although the Project is located downslope from surrounding peaks that are classified as Very High FHSZ, lands surrounding the Project site are relatively flat and developed, limiting any materials or loose sediments as a result of post-fire downslope flooding or landslides. Interstate 215 (I-215) and additional existing development is located east of the Project site, and more existing development is located west of the Project site between the Project and peaks classified as a Very High FHSZ.

Therefore, due to the relatively flat topography of the site, along with the location and nature of the existing development surrounding the Project site, people and/or structures would not be exposed to significant risks, including post-fire downslope flooding or landslides. Additionally, the Project is a Specific Plan that could consist of individual smaller development projects; however, a specific development is not proposed at this time. Construction and operations of the Planning Areas would be project-specific and future development would be subject to project-specific City discretionary review and approval. Furthermore, compliance with applicable state and local regulations would ensure that impacts are less than significant, and no mitigation measures are required.

### **Mitigation Measures**

No mitigation measures are required.

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<sup>9</sup> Preliminary Geotechnical Investigation.

#### 4.18.6 SIGNIFICANT UNAVOIDABLE IMPACTS

No significant unavoidable wildfire impacts have been identified.

#### 4.18.7 CUMULATIVE IMPACTS

Projects have the potential to be cumulatively considerable, when evaluated in the context of other past, present, or reasonably foreseeable projects that make a cumulative contribution to impacts. Similar to the Project, cumulative development within the vicinity of the Project site would be located in areas not classified as Very High Fire Hazard Severity Zones. Nevertheless, all cumulative projects would be subject to the California Building Standard Codes, include the California Building Code and California Fire Code. Additionally, all cumulative projects would be required to comply with all local regulations and meet the minimum fire safety standards required by the City. Implementation of these plans and policies, in conjunction with compliance with the Fire Code and City standards, would ensure cumulative impacts with respect to wildfire hazards are less than significant. As concluded above, the Project's impact concerning to wildfire hazards would not be cumulatively considerable.

#### 4.18.8 REFERENCES

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## 5.0 OTHER CEQA CONSIDERATIONS

This section of the Draft Environmental Impact Report (EIR) provides a discussion of additional California Environmental Quality Act (CEQA) impact considerations, including Significant Irreversible Environmental Changes, Growth-Inducing Impacts, and any Mandatory Findings of Significance.

### 5.1 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2 (b) requires EIR to discuss the significant environmental effects of a proposed project that cannot be avoided if the proposed project is implemented, including those which can be mitigated, but not reduced to a less-than-significant level. These impacts are referred to as “significant and unavoidable impacts” of the project. More information on these impacts and applicable mitigation measures is found in **Section 4.2, Air Quality** and **Section 4.7, Greenhouse Gas Emissions**.

### 5.2 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

The CEQA Guidelines §15126.2(d), requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Generally, the section states that a project would result in significant irreversible environmental changes if the following occurs:

- The project would involve a large commitment of nonrenewable resources in a way that would make their nonuse or removal unlikely;
- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project involved the wasteful use of energy).

**The project would involve a large commitment of nonrenewable resources in a way that would make their nonuse or removal unlikely.**

Nonrenewable resources associated with the development of the Project would include fossil fuels which would serve as energy sources during both construction and operation activity. Fossil fuels would serve as energy sources during both construction and operations of project-specific development. Fossil fuels would act as transportation energy sources for construction vehicles and heavy equipment during the construction period and by vehicles and equipment used during operations. Although buildout of the Project would endeavor to utilize fossil fuels efficiently, their use would be vital for construction and operations activities, making their nonuse unlikely.

Energy-efficient equipment used in operations such fuel-efficient trucks and electric/hybrid cars would be utilized according to their availability and/or in order to comply with energy regulations and policies for the Project as a whole as it pertains to the Project’s proposed mixed uses. The California Solar Mandate is expected to be updated in 2023 in accordance with the 2022 California Building Standards Energy Code, which may require the proposed commercial businesses to have both solar panels and battery storages.



Although no site-specific development is proposed as part of the Project, future development projects would undergo subsequent CEQA review to determine that the use of energy resources such as fossil fuels is used efficiently in accordance with applicable federal, state, and local regulations.

The Project would also require the permanent commitment of land on which the Project would be developed for mixed-use development. Land is a finite resource that once developed, it removes the likely ability for that land to be used for other purposes. However, the development proposed by the Project would provide planned growth and economic benefits to the City and development of the Project would not eliminate the possibility of redevelopment in the future.

Overall, the Project shall utilize nonrenewable resources in a way that would not make their nonuse or removal unlikely.

**The primary and secondary impacts would generally commit future generations to similar uses.**

The Project's development is anticipated to produce significant and unavoidable impacts based on analyses conducted in **Section 4.2, Air Quality** and **Section 4.7, Greenhouse Gas Emissions**. The primary and secondary impacts would affect the surrounding environment but would not necessarily commit future generations to similar uses. Although grading activities would occur at the Project site, grading activities would be limited to project-specific development. Additionally, the Project would implement mitigation measures, air pollutant and greenhouse gas emission reduction strategies and design standards, and standard conditions to reduce impacts from air quality and greenhouse gas emissions to the extent feasible. Furthermore, all future projects within the Project site would be subject to additional environmental review and approval processes to identify impacts and reduction efforts as applicable at the time of development.

The mixed-use nature of the Project is unlikely to lead to primary and secondary impacts that would relegate future generations and developments to similar uses. Therefore, the Project would not influence future development in that land area other than that identified in the Specific Plan and the land use designations would be unchanged.

**The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project.**

The Project would be developed with commercial, residential, utilities, and public park land uses that would not release significant amounts of hazardous materials into the environment. The Project would utilize/handle hazardous materials typical of construction and operational activities. The routine transport, handling, or disposal of these hazardous materials would be temporary and adhere to applicable federal and state laws and regulations pertaining to hazardous materials including, but not limited to, those implemented by the U.S EPA, the California DTSC, and Cal/OSHA. Additionally, all future development would adhere to Grand Terrace MC §§13.20.150, 18.36.040, and 15.58.060 which would help reduce the risk to life and property from the use, transportation, storage, treatment, or disposal of hazardous materials and wastes. Projects within the Specific Plan area will be required to submit a waste management plan, as applicable, as part of the City's demolition permitting requirements, implement

BMPs pursuant to NDPES permitting, and prohibits the storage of certain hazardous materials that may accidentally seep into the environment.

**The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).**

The Project would comply with any applicable federal, state, and local regulation and laws regarding the use of resources during both construction and operations. As established in **Section 4.17, Utilities and Service Systems**, buildout of the Project would not significantly impact water, electricity, solid waste, and telecommunications resources. Riverside Highland Water Company (RHWC), the water supplier for the City and Project, would have adequate water supply to serve the Project's total demand. As concluded in **Section 4.5, Energy**, the Projects use of energy resources would be utilized in an efficient, justifiable manner. Energy resources and consumption is discussed in greater detail in **Section 4.5, Energy**.

### 5.3 GROWTH INDUCING IMPACTS

State CEQA Guidelines §15126.2(e) requires that EIRs include a discussion of ways in which a project could induce growth. The State CEQA Guidelines identify a project as "growth-inducing" if it fosters economic or population growth or if it encourages the construction of additional housing either directly or indirectly in the surrounding environment. New employees from commercial or industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. A project would therefore have a growth inducing impact if it would:

- Directly or indirectly foster economic or population growth, or the construction of additional housing;
- Remove obstacles to population growth;
- Require the construction of new or expanded facilities that could cause significant environmental effects; or
- Encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

A project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors. Under CEQA, the potential for growth inducement is not considered necessarily detrimental nor necessarily beneficial, and neither is it automatically considered to be of little significance to the environment. This issue is presented herein to provide additional information on ways in which the Project could contribute to significant changes in the environment, beyond the direct consequences of implementing the Project examined in the preceding sections of this Draft EIR. Potential growth-inducing effects are examined through analysis of the following questions:

## **Would the project directly or indirectly foster economic or population growth, or the construction of additional housing?**

### **Population Growth due to Employment**

As concluded in **Section 4.12, Population and Housing**, buildout of the Project would directly and indirectly foster economic and population growth within the City. Although the Project does not directly propose any development, future development facilitated by the Project would stimulate permanent population growth from employment opportunities from short-term construction activities, permanent jobs from the proposed commercial development, and the development of future residential dwelling units. The City and County are considered jobs-rich, which indicates that the City is in need of more housing to fill those positions.

The Project includes the construction of additional housing that would add approximately 1,911 persons to the City that could fill both temporary and permanent employment positions. Additionally, positions are expected to also be filled from the surrounding regional labor force due to the County's moderate unemployment rate of 3.8 percent. Furthermore, the Project would generate employment beyond SCAG's forecasted employment for the City towards year 2045, but the forecasted increase would be well within the County's forecasted employment of 1,064,000 by 2045. This indicates that employment opportunities would be adequate to be filled by both the local and regional labor forces and would not require additional housing construction beyond the housing proposed by the Project. Therefore, the Project would foster both economic and population growth, but not in manner that is considered significantly growth-inducing.

### **Population Growth due to Housing**

Buildout of the Project's proposed residential uses would naturally increase the population growth in the City. However, the City and County are considered "housing-poor" and therefore, the Project would help improve the City's job-housing ratio. Development of the Project's proposed residential dwelling units would also support the City's pursuit for more housing as required by the City's Regional Housing Needs Assessment goal. Lastly the population growth due to the Project's proposed dwelling units would be well within the SCAG's forecasted 2045 population and housing growth for the City and County. Therefore, the population growth due to the proposed housing is not considered significantly growth-inducing.

## **Would the project remove obstacles to population growth?**

The Project site currently consists of predominately vacant parcels, six existing single-family residential homes, storage units, and drainage features. Although the buildout of the Project would displace the existing persons, the Project would not remove obstacles to population growth since the Project would potentially develop approximately 695 dwelling units. The projected population growth would also be well within the population growth in the area as indicated by local and regional planning documents.

## **Would the project require the construction of new or expanded facilities that could cause significant environmental effects?**

The Project would include infrastructure improvements and connections to existing facilities to allow for the future development's demands of resources such as natural gas, electricity, and water. The

environmental impacts associated with the facility improvements associated with the Project have been analyzed in **Section 4.1, Aesthetics** through **Section 4.18, Wildfire** of this EIR. Mitigation measures were proposed as applicable that, when implemented, would reduce potential impacts resulting from the Project's need for construction of new and expanded facilities to less than significant levels, with the exception of impacts associated with air quality and greenhouse gas emissions, which would remain significant and unavoidable.

**Encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.**

Refer to **Section 4.1, Aesthetics** through **Section 4.18, Wildfire** of this EIR. No significant cumulative impacts were determined during the analysis of the Project, with the exception of cumulative impacts concerning air quality and greenhouse gases. Operational emissions associated with the Project would result in a cumulatively considerable contribution to significant cumulative air quality impacts. Emissions of motor vehicles are controlled by State and national standards and the Project has no control over these standards, however it can mitigate mobile emissions by attempting to reduce vehicles trips. Standard Conditions and implementation of **MMs AQ-2** through **AQ-5** would reduce emissions by reducing vehicles trips, prohibition of fireplaces, electric landscape equipment, and implementation of low VOC paint. No additional feasible mitigation measures beyond **MMs AQ-2** through **AQ-5** have been identified to further reduce emissions, and impacts would remain significant.

Supplemental analysis may be conducted as development occurs on the Project site to determine if impacts concerning air quality and greenhouse gases could be reduced.

## **5.4 MANDATORY FINDINGS OF SIGNIFICANCE**

CEQA Guidelines §15065(a)(1)-(4) requires preparation of an EIR when certain specified impacts may result from construction or implementation of a project. The EIR concludes a finding of significance if the project:

Has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.

A finding of significance is determined if a project "has the potential to substantially degrade the quality of the environment." In practice, this is the same standard as a significant effect on the environment, which is defined in CEQA Guidelines §15382 as "a substantial or potentially adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

This EIR has been prepared for the Project, which fully addresses all of the Mandatory Findings of Significance. This EIR, in its entirety, addresses and discloses all known potential environmental effects

associated with the development of the Project including direct, indirect, and cumulative impacts in the following environmental resource categories:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

A summary of all potential environmental impacts, level of significance and mitigation measures is provided in **Section 1.0, Executive Summary**.

Special status plant and wildlife species and the Project's potential effect on those species are fully discussed in **Section 4.3, Biological Resources** of this EIR. The Section found that the Project site contained the Northern California black walnut species, that could be result of introgression with the Southern California black walnut special-status species. However, it was concluded that the Project does not support pure individuals of the Southern California black walnut. Accordingly, the Project is not considered to impact the Southern California black walnut and therefore, would not impact a special-status plant species. The Section also determined that the low potential for several special-status wildlife species to occur within the Project site. Due to relatively low habitat value based on the majority of developed and disturbed lands, predominance of non-native vegetation, and adjacency to the developed areas, impacts to those species were considered to be less than significant, with the exception of the burrowing owl species. Mitigation was proposed in the section to reduce the risk to the burrowing owl species.

**Section 4.4, Cultural Resources** and **Section 4.16, Tribal Cultural Resources** of the EIR analyzed the potential historical and archeological resource impacts that could occur due to the future development of the Project. The Section proposed mitigation to reduce impacts to both historical and archeological resources that could be discovered on-site during ground-disturbance activities during the construction period. The mitigation presented in the section reduced the potential impacts to less than significant levels.

#### **Has impacts that are individually limited, but cumulatively considerable.**

CEQA Guidelines §15065(a)(3) defines "cumulatively considerable" to mean that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." This EIR provides a cumulative impact analysis for all thresholds that directly or indirectly result in a less than significant impact, a potentially significant impact unless mitigated, or a significant and unavoidable impact.

Cumulative impacts are addressed for each of the environmental topics listed above and are provided in **Sections 4.1** through **4.18** of this EIR.

**Will cause substantial adverse effects on human beings, either directly or indirectly.**

As required by CEQA Guidelines §15065(a)(4), “A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur: the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.” Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This standard relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could directly or indirectly affect human beings would be possible in all of the CEQA issue areas previously listed, those that could directly affect human beings include aesthetics, air quality and greenhouse gases, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, land use and planning, public services and utilities, transportation, water resources, wildfire hazards, and climate change, all of which are addressed in the appropriate sections of this EIR; refer to **Table of Contents** for specific section numbers.

The Project has the potential to create impacts that could cause adverse effects on human beings. The majority of these effects are created during the construction phase of the Project and would be temporary in nature and would mostly occur over the relatively short-term construction phase. Direct impacts to humans during the construction phase as well as effects associated with operation of the Project site would be less than significant or would be mitigated to less than significant levels with the exception of air quality and greenhouse gas emissions. Mitigation measures created for the potential impacts of the Project are detailed in **Sections 4.1** through **4.18** of this EIR. Most operational impacts foreseen for the Project would be mitigated to a level of less than significant, with the exception of air quality and greenhouse gases despite the implementation of mitigation measures, standard conditions, and project design features. Refer to **Section 5.1** above and **Sections 4.2, Air Quality** and **Section 4.7, Greenhouse Gas Emissions** of this EIR for further discussion.

## 6.0 ALTERNATIVES

### 6.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that Environmental Impact Reports (EIR) “describe a range of reasonable alternatives to the project or to the location of the Project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the Project and evaluate the comparative merits of the alternatives” (State CEQA Guidelines §15126.6). CEQA Guidelines require that the EIR include sufficient information about each Alternative to allow meaningful evaluation, analysis, and comparison with the project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the Alternative must be discussed, but these effects may be discussed in less detail than the significant effects of the project as proposed (California Code of Regulations [CCR] §15126.6[d]). The EIR is not required to consider every conceivable Alternative to a project but is guided by a rule of reason. An EIR is not required to consider alternatives which are infeasible. Section 15126.6[d]) states that the EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. Key provisions of the State CEQA Guidelines on alternatives (§15126.6(a) through (f)) are summarized below to explain the foundation and legal requirements for the Alternative’s analysis in the Draft EIR.

- “The discussion of alternatives shall focus on alternatives to the Project or its location which are capable of avoiding or substantially lessening any significant effects of the Project, even if these alternatives would impede to some degree the attainment of the Project objectives or would be more costly” (§15126.6(b)).
- “The specific alternative of ‘no project’ shall also be evaluated along with its impact” (§15126.6(e)(1)). “The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation was published, at the time the environmental analysis is commenced, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives” (§15126.6(e)(2)).
- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that require an EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the Project” (§15126.6(f)).
- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (§15126.6(f)(1)).

- For alternative locations, “only locations that would avoid or substantially lessen any of the significant effects of the Project need be considered for inclusion in the EIR” (§15126.6(f)(2)(A)).
- “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative” (§15126.6(f)(3)).

## 6.2 RANGE OF ALTERNATIVES

The City of Grand Terrace (City), as the lead agency, is responsible for selecting this range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. This Chapter describes three Alternatives to The Gateway at Grand Terrace Specific Plan (Project). These alternatives include the No Project Alternative (existing zoning and general plan alternative), Reduced Retail Development by 20 Percent Alternative, and the No Commercial Alternative. The three alternatives are discussed below in more detail.

Alternatives were developed based on the following: information provided by the Project Applicant and the City; and input received from comments on the NOP. Among the factors that may be taken into account when addressing the feasibility of alternatives – as described in §15126.6(f)(1) of the CEQA Guidelines – are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, regulatory limitations, and jurisdictional boundaries.

As discussed above, one of the main purposes of the range of alternatives is to discuss different projects that are capable of avoiding or substantially lessening significant effects, especially effects that are found to be significant and unavoidable. In the case of the Project, significant and unavoidable impacts were identified for air quality and greenhouse gas emissions (GHG). With regard to air quality, reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>) operational emissions exceeded the thresholds of the SCAQMD. Additionally, GHG emissions would exceed the City’s 3,000 MTCO<sub>2</sub>e per year, regardless of the mitigation incorporated. For this reason, the alternatives analyzed were selected to evaluate the potential to further reduce impacts on air quality, GHG emissions, and mobile emissions, as those constitute the majority of pollutants and GHG emissions.

Lastly, an EIR need not consider an alternative whose effects could not be reasonably identified, whose implementation is remote or speculative, and that would not achieve the basic project objectives. The alternatives that were selected for additional consideration were chosen in accordance with the above listed CEQA Guidelines, represent a reasonable range of alternatives, are feasible, and will encourage discussion in a manner to foster meaningful public participation and informed decision making.

### Project Objectives

Section 15124(b) of the CEQA Guidelines indicates that an EIR should include “a statement of objectives sought by the proposed Project.” The proposed Specific Plan was prepared to guide and encourage the development and revitalization of under-utilized land in the southwest corner portion of the City. The Specific Plan focuses on the distinctive characteristics of properties within their surrounding context by customizing the planning process and land use regulations specifically in this area, in a manner consistent



with the General Plan. The Specific Plan was prepared to achieve the following Project objectives, which are also described in **Section 3.0** of this Draft EIR:

1. Authorize the redevelopment of a blighted and under-utilized property;
2. Organize a mix of land uses which will provide a variety of housing and businesses, spurring new jobs and services;
3. Implement development standards and design guidelines establishing a vibrant community;
4. Provide diversity of high-quality architecture and landscape with appropriate open space areas;
5. Provide for the distribution, location and extent and intensity of major components of public and private roads, sewage, water, drainage, dry utilities, and other essential facilities within the Project area and/or needed to support the proposed land uses;
6. Establishes compatibility standards and guidelines to minimize negative impacts on adjacent properties;
7. Include operational and maintenance plans for financing improvements;
8. Provide the extension of Commerce Way from its current terminus point southward to Taylor Street and then Main Street; and
9. Provide public recreational facilities to meet the needs of the community by incorporating a public park with a new baseball field and playground.

## Significant and Unavoidable Environmental Impacts of the Project

**Sections 4.1** through **4.18** of this Draft EIR addresses the environmental impacts associated with implementation of the Project. The analyses contained in these sections identified the following significant and unavoidable environmental impacts resulting from the Project:

### Air Quality

- **CAAQS, NAAQS, and AQMP Consistency (Impact 4.2-1).** The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. Although the Project would not exceed construction emissions standards, the Project's operational emissions would continue to exceed the SCAQMD's operational standard for ROG and NO<sub>x</sub> despite the implementation of all feasible mitigation measures and standard conditions. Thus, the Project is not consistent with Consistency Criterion No. 1.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts. The Project would result in a change of land use designations not reflected in the AQMP. Therefore, the Project is conservatively assumed to generate emissions not reflected within the current 2022 AQMP regional emissions inventory for the SCAB and is considered to be inconsistent with the AQMP. Thus, the Project is not consistent with the second criterion.

Project implementation would result in air pollutant emissions (ROG and NO<sub>x</sub>) that exceed SCAQMD's operational emission thresholds. Although mitigation would reduce emissions by the greatest feasible amount, Project emission levels would remain significant and would contribute to the nonattainment designations in the SCAB. Therefore, the Project would be inconsistent with the AQMP, resulting in a significant and unavoidable impact despite the implementation of mitigation.

- **Project-Related Operational Emissions (Impact 4.2-2).** Despite implementation of Mitigation Measure (MM) AQ-2 through MM AQ-5 and compliance with laws, ordinances, and regulations (LOR)s AQ-1 through AQ-6, the Project's operational emissions would remain above SCAQMD thresholds for ROG and NO<sub>x</sub> resulting in a significant and unavoidable impact.
- **Cumulative Long-Term Emissions.** As stated above, operational activities would create a significant and unavoidable impact due to exceedances of SCAQMD thresholds for NO<sub>x</sub> and ROG. Implementation of MM AQ-2 through MM AQ-5 and compliance with LOR AQ-1 through AQ-6 would reduce impacts; however, a significant and unavoidable impact would remain.

### Greenhouse Gas Emissions

- **Project-Related GHG Emissions (Impact 4.7-1).** Despite implementation of MM GHG-1 through MM GHG-3, MMs AQ-2 through AQ-4, and compliance with LORs GHG-1 through GHG-4, the Project's GHG emissions would remain above SCAQMD thresholds, resulting in a significant and unavoidable impact.
- **Cumulative GHG Emissions.** Despite implementation of MM GHG-1 through MM GHG-4, MM AQ-2 through MM AQ-4, and compliance with LORs GHG-1 through GHG-4, Project emissions could impede statewide 2030 and 2050 GHG emission reduction targets. As such, the Project would result in a significant cumulative GHG impact. Therefore, the Project's contribution of GHG emissions would be cumulatively considerable.

## 6.3 PROJECT ALTERNATIVES

### Criteria for Selecting Alternatives

As previously mentioned, the discussion of alternatives shall focus on alternatives to a project or its location that are capable of avoiding or substantially lessening significant impacts of a project, even if the alternatives would impede to some degree the attainment of the project objectives or would be more costly, per §15126.6 (b) of the State CEQA Guidelines. This alternatives analysis, therefore, focuses on project alternatives that could avoid or substantially lessen environmental impacts of the proposed Project related to the environmental categories listed in Appendix G of the State CEQA Guidelines.

Comments received during the NOP process included issues related to noise generation, increased truck traffic – especially on local roadways; air quality impacts from vehicular traffic; increased noise at night; access to recreation; and extended hours of construction and operation. While all of these considerations are addressed throughout this EIR in the respective chapters, they also were considered to develop the reasonable range of alternatives. As discussed above, alternatives were selected based on alternative

designs that could reduce the Project's significant impacts on air quality and GHG emissions. The alternatives listed below represent a reasonable range of alternatives that at least partially fulfill the objectives the City is seeking and/or alleviate some of the potential impacts that would occur upon implementation of the Project as proposed.

## Alternatives to the Project

The following Project alternatives discussion consists of three project alternatives, each of which is described briefly below.

- No Project Alternative
- Reduced Retail Development by 20 Percent Alternative
- No Commercial Alternative

## Existing Conditions

The Project site consists of elevations ranging from approximately 975 feet on the northeastern end of the site to approximately 945 feet on the southwestern corner. The Project area is relatively flat and generally slopes from the northeast to southwest with the low point at the end of De Berry Street. The Project site consists predominately vacant land, storage commercial uses, and six non-conforming residences. A concrete-lined storm channel carries runoff from a storm drain at the western end of De Berry Street, southwest beneath the Gage Canal and into the westward-flowing drainage way that crosses the Project area from the western end of Van Buren Street. This drainageway drains beneath I-215 in a concrete-lined channel, continues to the southwest beneath La Cadena Drive and flows into a debris basin approximately 0.8 mile off-site.

There is a decommissioned Union Pacific Railroad (UPR) line that traverses the Project site in a north/south direction that has been acquired by the City and would be used as part of the extension of Commerce Way from its existing terminus point south to the existing Taylor Street, and subsequent widening of the existing Taylor Street portion all the way south to its connection at Main Street. There are three wells owned by the City of Riverside located in the Project site that would remain but may be modified or relocated.

The existing non-lighted ball field northwest of Veterans Freedom Park is proposed to be relocated northwest of the Grand Terrace High School sports fields and constructed as a new lighted baseball field and a public playground. An existing Southern California Edison (SCE) substation located south of the Project site would remain in addition to the SCE power lines that cross the Project site north of the substation. Riverside Canal Power Company owns the property where a decommissioned power station was located. Two billboard signs adjacent to I-215 would remain. There is a total of six existing single-family residences with associated accessory structures along De Berry Street and Van Buren Street. Five out of the six residences are currently occupied. The remaining building is vacant.

### 6.3.1 Alternative 1: No Project Alternative

Section 15126.6(e) of the State CEQA Guidelines requires analysis of the No Project Alternative or “Alternative 1”. In accordance with the State CEQA Guidelines, the No Project Alternative for a development project on an identifiable property consists of the circumstance under which the Project does not proceed as provided by §15126.6(e)(3)(B) of the State CEQA Guidelines. Section 15126.6(e)(3)(B) provides that, “In certain instances, the no project alternative means ‘no build’ wherein the existing environmental setting is maintained.” Under this alternative, the Project would not be developed, and no new development would occur, however, the existing conditions as mentioned above would remain in operation.

Under Alternative 1, the adoption of the Specific Plan would not occur, and no new development nor infrastructure improvements would occur. However, the existing conditions and uses would remain in operation under Alternative 1. Accordingly, Alternative 1 provides a comparison between the environmental impacts of the Project as compared to the current environmental conditions, resulting from not approving or denying the Project. Alternative 1 would not develop the 695 dwelling units, 455,0495 square feet (SF) of general commercial uses, and associated on-site and off-site infrastructure improvements that would otherwise occur as part of the Project.

#### Comparison of Project Impacts

An evaluation of the potential environmental impacts of Alternative 1, as compared to those of the proposed Project, is provided below.

#### ***Aesthetics***

Under Alternative 1, no new development would occur, and the existing predominately vacant land would remain. Consequently, construction and operational impacts on scenic vistas and scenic resources would not occur. Therefore, no impacts related to aesthetics would occur under Alternative 1. Accordingly, Alternative 1 would be environmentally superior compared to the Project.

#### ***Air Quality***

Under Alternative 1, no potentially significant construction or operational emissions would occur. Additionally, by maintaining existing uses throughout the Project area, an increase in traffic-related air emissions would not occur. Therefore, overall air quality impacts would be reduced, and the significant and unavoidable operation-related ROG and NO<sub>x</sub> emissions would be avoided and remain below SCAQMD’s threshold. Thus, Alternative 1 would be consistent with Consistency Criterion No. 1 and No. 2. Therefore, no impacts related to air quality would occur by Alternative 1. Accordingly, Alternative 1 would be environmentally superior compared to the Project.

#### ***Biological Resources***

Under Alternative 1, no ground disturbance activities would occur and thus, potential impacts to sensitive wildlife species, migratory species and nesting birds, and wetlands and riparian areas that are present on the Project site would not occur. Therefore, Alternative 1 would avoid all on and off-site disturbances and

impacts to biological resources. Accordingly, Alternative 1 would be environmentally superior compared to the Project.

### ***Cultural Resources***

Under Alternative 1, no ground disturbance activities would occur and thus, potential impacts concerning cultural and tribal cultural resources, including human remains, would not occur. Therefore, Alternative 1 would reduce impacts to historical and archaeological resources and is environmentally superior compared to the Project.

### ***Energy***

Under Alternative 1, no new development would occur, and the existing predominately vacant land would remain. Consequently, no grading or construction would occur under this alternative and there would be no potential impacts to energy resources from wasteful, inefficient energy consumption. Therefore, this alternative would reduce impacts to energy resources compared to the Project.

Alternative 1 would be environmentally superior to the Project regarding energy impacts, as no increase in energy consumption would occur from the site continuing in its existing condition.

### ***Geology and Soils***

No new construction activities, including but not limited to demolition and ground disturbing activities, would occur under Alternative 1. Therefore, there would be no potential for persons or building structures to experience seismic ground shaking, liquefaction, lateral spreading, subsidence, or collapse within the Project site. Additionally, this alternative would not result in impacts to paleontological resources. Overall, the geologic hazard impacts from this alternative would be less than significant, in comparison to the Project. Therefore, Alternative 1 would be environmentally superior to the Project.

### ***Greenhouse Gas Emissions***

Under Alternative 1, no construction or operational GHG emissions would occur. More specifically, this alternative would avoid the unmitigated 20,964 MTCO<sub>2</sub>e per year of GHG emissions that would occur with the Project. Therefore, this Alternative would not exceed the City's 3,000 MTCO<sub>2</sub>e threshold.

Alternative 1 would be environmentally superior to the Project regarding GHG emissions since an increase in GHG emissions would not occur.

### ***Hazards and Hazardous Materials***

Because no development would occur under Alternative 1, no impacts related to hazards or hazardous materials would occur. Although this alternative would avoid the Project's potential effects related to hazards and hazardous materials, the cleanup of contaminated soils that exist on the property and near the Union Pacific Railroad would not occur as a result of the property's redevelopment. Remediation of on-site contamination is a benefit of the Project that would not be realized under this alternative. Therefore, hazard impacts would be greater compared to the proposed Project.

Alternative 1 would be environmentally inferior to the Project regarding hazards and hazardous materials since no soil remediation would occur, and contaminated soils would remain on the property.

### ***Hydrology and Water Quality***

Existing water quality conditions, groundwater supplies, drainage patterns, and runoff water amounts would remain “as is” under this alternative because no new development would occur. Accordingly, this alternative would not introduce new sources of water pollutants from either the construction or operation phases of development to the Project site. Additionally, this alternative would not include utility improvements required by the Project. However, this alternative would not include installation of new low-impact development (LID), source control, site design, and treatment control best management practices (BMPs) to minimize runoff and water pollution, which would occur under the Project. Runoff would not be filtered and would continue to contain sediment and other potential pollutants associated with the existing and surrounding uses. The beneficial water quality improvements proposed by the Project would not occur and impacts would be greater compared to the Project.

Alternative 1 would be environmentally inferior to the Project regarding hydrology and water quality since no beneficial stormwater and drainage improvements would occur.

### ***Land Use and Planning***

Under Alternative 1 the City’s zoning designations for the Project site would remain unchanged and would allow for the development of different land uses. The City’s Zoning Code Map shows that the existing zoning designation for the Project site is Commercial Manufacturing (CM), Restricted Manufacturing (MR) and Industrial (M2). Although different land uses, neither Alternative 1 or the Project would physically divide an established neighborhood associated with construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access. Therefore, the Alternative 1 would result in an environmentally equivalent impact compared to the Project.

### ***Noise***

Alternative 1 would not result in construction and operational activities that generate noise and vibration impacts. Therefore, there would be no mobile-source and stationary noise volumes from construction and operational activity under this alternative. Thus, Alternative 1 would result in lesser noise impacts compared to the Project.

Alternative 1 would be environmentally superior to the Project regarding noise and vibration. The short-term construction-related or long-term operational vehicular noise level and vibration increases associated with the Project would not occur.

### ***Population and Housing***

The Project proposes the development of 695 dwelling units, which were determined to be within the growth projections for the area and impacts to population and housing were determined to be less than significant. Under Alternative 1, the development of these 695 dwelling units would not occur. Although Alternative 1 would result in a less than significant impact concerning population growth, this alternative

would not contribute to the growth planned for the City and would necessitate the City to develop housing elsewhere.

Therefore, the Alternative 1 would be environmentally inferior to the Project regarding population and housing.

### ***Public Services***

Alternative 1 would not increase the demand for public facilities, compared to the Project. However, no development impact fees would be collected under the Alternative 1. Thus, Alternative 1 would not stimulate the growth of public services within the City. Therefore, the Alternative 1 would be environmentally equivalent to the Project.

### ***Recreation***

The Project proposes both public and private on-site park and recreational facilities. In addition, the proposed residential uses – of 695 dwelling units – would incrementally increase demand on existing City parks and facilities. However, the Project would pay applicable park impact fees pursuant to the Quimby Act and local City regulations (provision of on-site park and recreational facilities may be credited against required Quimby Act fees). The Project's impacts related to recreation were determined to be less than significant due to these provisions.

Therefore, the Alternative 1 would be environmentally equivalent to the Project regarding recreation.

### ***Transportation***

Under Alternative 1, the existing daily trips would remain at current conditions and vehicle miles traveled (VMT). The Project would not result in any significant and unavoidable traffic impacts associated with transportation and traffic. Additionally, the Project proposes pedestrian facilities that would improve pedestrian access and provide better connections between Main Street and Barton Road along Commerce Way compared to pre-Project conditions.

The Project-generated VMT is estimated to be lower than the adopted significance threshold for the City. According to the Traffic Impact Analysis (TIA), the Project would either reduce trips on a per-person basis or would decrease trip lengths within the study area compared to the Alternative 1.

Therefore, the Alternative 1 would be environmentally inferior to the Project regarding transportation and traffic.

### ***Tribal Cultural Resources***

Alternative 1 would avoid disturbances on the Project site and eliminate impacts to unearthed tribal cultural resources. Thus, there would be no potential for impacting tribal cultural resources since no ground disturbing activities would occur. Therefore, impacts under this alternative would be reduced compared to the Project.

Alternative 1 would be environmentally superior to the Project regarding tribal cultural resources.

### ***Utilities and Service Systems***

Alternative 1 would result in reduced impacts to utilities and service systems since the necessity for utilities and service systems would be lower. Alternative 1 would retain the Project site's existing site conditions and no need for additional utilities and service systems would occur. Therefore, Alternative 1's impacts to utilities and service systems would be considered less than that of the Project.

However, Alternative 1 would also result in no new beneficial utilities and service systems. There would be no storm drain improvements and no construction of a regional detention basin. Therefore, there would not be a new storm drain system or drainage improvements to capture flows from De Berry, Van Buren, and Pico Streets.

Alternative 1 would be environmentally equivalent to the Project regarding utilities and service systems since beneficial utility improvements would not occur. Since no development would occur on-site, there would be no environmental impacts and Alternative 1 would be environmentally superior in this regard. However, because no development would occur, there would also be no beneficial utilities and service systems to be constructed and Alternative 1 would be environmentally inferior in this regard. As such, overall, Alternative 1 would be environmentally equivalent to the Project.

### ***Wildfire***

Alternative 1 would result in a similar potential for wildfire impacts on the Project site since the Project site is not located within a Very High Fire Hazard Severity Zone or within a State Responsibility Area. Therefore, the Alternative 1 would result in a less than significant impact and would be environmentally equivalent in comparison to the Project. Alternative 1 would be environmentally equivalent to the Project regarding wildfire.

### **Alternative 1 Summary**

This Alternative would reduce some of the Project's environmental impacts, although other environmental impacts would be greater and the majority of impacts would be similar, as illustrated in **Table 6-1, Comparison of Project Alternatives Environmental Impacts with the Project**. This Alternative also fails to meet most of the Project's basic objectives, as the Project site would remain in its existing condition. The Project site would not provide housing or employment opportunities and would not provide economic stimulation or roadway improvements in the City. Therefore, this Alternative is considered and rejected because it does not meet the Project objectives.

### **6.3.2 Alternative 2: Reduced Retail Development by 20 Percent Alternative**

The Reduced Retail Development by 20 Percent Alternative or "Alternative 2" assumes the development of commercial uses, but at a smaller retail square footage (20 percent less) than what is proposed for the Project. The Project proposes a projected maximum net development of approximately 335,700 SF of general commercial uses, which include 232,800 SF of retail space, 11,000 SF of restaurant space, and 91,900 SF of self-storage space. Alternative 2 would reduce the Project's proposed retail space from 232,800 SF to 186,240 SF (or 5.34 to 4.07 acres). This would result in a 20 percent reduction of projected workforce, and customer base, resulting in a trip generation reduction of 20 percent from 8,616 daily trips



to approximately 6,893 daily trips. Residential units are assumed to be the same. Although the overall project area would be built out in a similar manner as the Project, Alternative 2 would have a smaller development footprint.

Thus, Alternative 2 would minimize impacts related to the scale of the Project. However, the Project's other proposed components would remain consistent under Alternative 2.

### Comparison of Project Impacts

An evaluation of the potential environmental impacts with the development of Alternative 2, as compared to those of the Project, is provided below.

#### ***Aesthetics***

The same general aesthetic impacts would occur under Alternative 2 when compared to the Project. Although the building footprint of commercial development would be reduced, the general mass and scale of the other Project components would remain the same. Therefore, aesthetic impacts associated Alternative 2 would be similar when compared to the Project and Alternative 2 would be environmentally equivalent to the Project regarding aesthetic impacts.

#### ***Air Quality***

As concluded in **Section 4.2, Air Quality**, the Project would conflict with an applicable air quality plan and result in a cumulatively considerable net increase of criteria pollutants due to operational emissions. Despite implementation of **MM AQ-2** through **MM AQ-5** and compliance with LORs AQ-1 through AQ-6, impacts would remain significant and unavoidable.

Alternative 2 would also assume commercial development, but the retail development would be reduced to 186,240 square feet. The Project would exceed SCAQMD thresholds for ROG and NO<sub>x</sub> emissions, the majority of which would originate from mobile sources. While Alternative 2 would generally reduce Project operational emissions by reducing retail development by 20 percent, the overall project area would be built out in a similar manner (both residential and commercial uses) as the Project. Given Alternative 2's smaller commercial development footprint, construction and operation emissions under this Alternative would be similar but slightly reduced when compared to the Project. The overall built out daily trips for Alternatives 2 would decrease to 15,556, compared to the Project's total daily trips of 17,279. Therefore, Alternative 2 would result in a decrease of operational emissions from mobile sources. The daily trips for retail use, generated from Alternative 2 would be approximately 6,893 or 1,723 less than the Project. However, the vehicular traffic is not anticipated to be significantly reduced under Alternative 2 since the overall development footprint would not be greatly reduced and the daily trips would remain high. Consequently, Alternative 2 would still result in a significant and unavoidable impact to the environment. However, because the alternative would result in a reduction of operational emissions, Alternative 2 is environmentally superior to the Project.

### ***Biological Resources***

Similar to the Project, Alternative 2 would result in similar impacts to biological resources since the potentially affected special-status species, sensitive vegetation communities, nesting birds, jurisdictional waters, and riparian areas would not be avoided. As with the Project, **MMs BIO-1** through **BIO-3** would be required to reduce biological resource impacts to a level of less than significant. As such, similar impacts would occur with implementation of Alternative 2.

Alternative 2 would be an environmentally equivalent alternative compared to the Project regarding biological resources, as the same habitat, wildlife species, jurisdictional waters, and riparian areas would be impacted by construction activities under Alternative 2.

### ***Cultural Resources***

Alternative 2 and the Project would result in similar impacts to cultural and tribal cultural resources, including human remains. Despite reduced retail uses, Alternative 2 has a similar potential to discover unknown human remains during ground disturbance activities. As with the proposed Project, implementation of **MMs CUL-1** and **CUL-2** would be required to reduce cultural resources impacts to a level of less than significant. As such, similar impacts would occur with implementation of Alternative 2.

Alternative 2 would be an environmentally equivalent alternative compared to the Project regarding cultural resources, as a similar footprint would be modified or impacted.

### ***Energy***

Alternative 2 and the Project would require energy during both the construction and operational phases of the Project. However, Alternative 2 would require less energy resources during construction and operation activities due to the 20 percent reduction in retail building footprint, compared to the Project. However, under Alternative 2, the overall project area would be built out in a similar manner as the Project. Given Alternative 2's smaller development footprint, Alternative 2 would consume less energy compared to the Project. Accordingly, Alternative 2 would be environmentally superior to the Project regarding energy impacts, as a decrease in energy consumption would occur compared to the Project.

### ***Geology and Soils***

Alternative 2 and the Project would result in similar geology and soils impacts. Alternative 2 and the Project would be subject to regional seismicity and would be required to adhere to all applicable state and local design standards to withstand seismicity impacts. Both Alternative 2 and the Project would involve construction activities including, but not limited to, demolition and grading activities that would potentially result in soil erosion and the loss of topsoil. Similar to the Project, Alternative 2 would be required to implement **MM GEO-1** and construction design features to reduce impacts associated with grading operations and unstable or expansive soils. Furthermore, all construction activities would also be subject to Best Management Practices (BMPs) set in a Project-Specific Stormwater Pollution Prevention Plan (SWPPP) and water quality management plan (WQMP) to reduce impacts from runoff associated with soil erosion. Lastly, Alternative 2 would also implement **MM GEO-2** to reduce impacts to unknown

paleontological resources to a level of less than significant. Therefore, similar impacts would occur under implementation of Alternative 2.

Alternative 2 would be environmentally equivalent to the Project regarding geological, soils, and paleontological resources. The exposure of people to seismic, geologic, and soil hazards under this Alternative would be equivalent to the Project.

### ***Greenhouse Gas Emissions***

The Project's significant and unavoidable GHG impacts were associated with the exceedance of emissions thresholds in the operational phase of the Project regarding the generation of GHG emissions, would conflict with an applicable plan, policy or regulations, and would generate cumulative GHG emissions. Although mitigation is proposed to minimize the potential emissions impacts associated with Project implementation, emissions under Alternative 2 are still anticipated to exceed the City's 3,000 MTCO<sub>2</sub>e maximum threshold.

Under Alternative 2, the overall project area would be built out in the same manner as the Project; however, the retail development would be reduced by 20%, resulting in a corresponding reduction in workforce, customers, and total trips. Alternative 2 would likely reduce emissions impacts through a reduction in energy use within a smaller building footprint. However, even with a reduction in energy use emissions, the mobile source emissions associated with vehicular travel would not be substantially reduced. Therefore, Alternative 2 would likely remain in excess of the City's GHG emissions thresholds. Associated impacts would be expected to remain significant and unavoidable.

Although impacts under Alternative 2 would still be significant and unavoidable, Alternative 2 would be environmentally superior due to a decrease in GHG emissions and due to its potential to reduce energy and transportation impacts compared to the Project.

### ***Hazards and Hazardous Materials***

Under Alternative 2, the overall project area would be built out in the same manner as the Project; however, the retail development would be reduced by 20%, resulting in a corresponding reduction in workforce, customers, and total trips. Given Alternative 2's smaller development footprint, Alternative 2's impacts related to hazards and hazardous materials would be similar but reduced compared to the Project. Furthermore, Alternative 2 would be subject to the same applicable federal and state regulations and provisions pertaining to hazardous materials and implement **MMs HAZ-1** through **HAZ-5**. Additionally, all development projects within the Project site would be required to submit a waste management plan, implement BMPs pursuant to NDPEs permitting, and prohibit the storage of certain hazardous materials that may accidentally seep into the environment. The anticipated impacts from hazards and hazardous materials, resulting from implementation of the Project would be less than significant. As such, with reduced development footprint, Alternative 2 would also result in less than significant impacts to hazards and hazardous materials, similar to the Project.

Alternative 2 would be environmentally equivalent to the Project regarding hazards and hazardous materials.

### ***Hydrology and Water Quality***

Alternative 2 and the Project would both have a less than significant impact on hydrology and water quality due to implementation and compliance of Best Management Practices, preventative low impact design, and drainage improvements that minimize runoff, erosion, and storm water pollution. The proposed beneficial water quality improvements would still occur under Alternative 2. Although the Project would result in less than significant impacts related to hydrology and water quality, Alternative 2 proposes a reduced retail development footprint and would therefore reduce impervious surfaces because commercial and retail uses have high percentages of impervious cover than residential development. This would result in reduced impacts to hydrology and water quality compared to the Project.

Alternative 2 would be slightly environmentally superior to the Project regarding hydrology and water quality, since impervious surfaces would decrease when compared to the Project.

### ***Land Use and Planning***

The Project requires adoption of the Specific Plan and Development Agreement and approval of the proposed Zone Change and Tentative Tract Map. Alternative 2 would require the same entitlements. As such, Alternative 2 would be environmentally equivalent to the Project regarding land use and planning, since land uses would be added, and land use entitlements would be required.

### ***Noise***

Both Alternative 2 and the Project would generate noise and vibration during both the construction and operations phases of the Project. Due to the reduced retail footprint, Alternative 2 would decrease the amount of noise generated from traffic compared to the Project and potentially result in reduced long-term operational traffic related noise.

Alternative 2 would be environmentally equivalent to the Project regarding noise and vibration, because while the short-term construction-related and long-term operational vehicular noise level and vibration increases associated with Alternative 2, while reduced, would remain similar to the Project.

### ***Population and Housing***

Both Alternative 2 and the Project proposes the development of 695 dwelling units and, therefore, would generate the same population and housing growth. However, the 20 percent reduction of retail development would reduce the employment growth anticipated to result from the proposed Project. As of 2022, the City's jobs-housing ratio is 1.33 which suggests there is not a suitable number of housing units available in the area to accommodate the workforce. Consequently, the reduction of employment growth would push the City into a more balanced jobs-to-housing ratio.

Although Alternative 2 and the Project would cause less than significant impacts, Alternative 2 would be considered environmentally superior to the Project concerning population and housing because it better aligns with a preferred jobs-to-housing ratio.

### ***Public Services***

The need for public services is anticipated to be greater under the proposed Project than under Alternative 2, because Alternative 2 reduces retail development by 20 percent compared to the Project. Both Alternative 2 and the Project would require additional public service needs compared to the existing conditions on the site. However, there would be a considerable reduction in development fees as well.

Therefore, Alternative 2 would be environmentally equivalent when compared to the Project.

### ***Recreation***

The Project proposes both public and private on-site park and recreational facilities that would be consistent under Alternative 2. Alternative 2 and the proposed Project would have the same recreational impacts since the residential development capacity would remain the same. Additionally, both Alternative 2 and the Project would pay applicable park impact fees pursuant to the Quimby Act and local City regulations (provision of on-site park and recreational facilities may be credited against required Quimby Act fees).

Therefore, Alternative 2 would be environmentally equivalent to the Project regarding recreation.

### ***Transportation***

The Project would have a less than significant impact on transportation, specifically as it relates to program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, the Project would not have an impact or conflict with CEQA Guidelines §15064.3. Per these guidelines, the Project-generated VMT is estimated to be lower than the adopted significance threshold for the City. Alternative 2 would further reduce the overall Project retail footprint by 20 percent, which would further reduce VMT due to the reduction of on-site employees and consumers. Lastly, because the overall alternative area would be built out in a similar manner as the Project, the construction and availability of other roadways and bicycle/pedestrian facilities would be equivalent to the Project.

Therefore, Alternative 2 would be slightly environmentally superior to the proposed Project regarding transportation and traffic, and specifically impacts associated with VMT.

### ***Tribal Cultural Resources***

The Project would cause a less than significant impact to tribal cultural resources with the implementation of **MMs CUL-1** and **CUL-2**. Despite reduced retail uses, Alternative 2 has the same potential to impact unknown tribal cultural resources and would be required to implement **MMs CUL-1** and **CUL-2**. In addition, the alternative would be subject to the same applicable federal, state, and local regulations pertaining to tribal cultural resources as the Project. Since this Alternative does not propose a significant reduction in building footprint, it would result in similar impacts to tribal cultural resources as the Project.

Alternative 2 would be environmentally equivalent to the Project regarding tribal cultural resources. There would be a less than significant impact to tribal cultural resources with implementation of **MM CUL-1** and **MM CUL-2**.

### ***Utilities and Service Systems***

Alternative 2 would reduce the demand of public utility services, and impacts concerning water demand, and wastewater and solid waste generation, compared to the Project, although the Project has a less than significant impact with regard to utilities and service systems. A 20 percent reduction in retail uses, compared to the Project, is anticipated to result in a corresponding decrease in utility demand and construction of utilities. Reduced retail development during operations would use less water, natural gas, and electricity and would generate less wastewater and solid waste production. Therefore, Alternative 2 would be environmentally superior, although it would not avoid impacts or substantially lessen utility and service system impacts compared to the Project.

### ***Wildfire***

Alternative 2 and the Project would result in the same less than significant impacts regarding wildfire since the Project is not located within or near a State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones. Therefore, Alternative 2 would result in a less than significant impact and would be environmentally equivalent to the Project regarding wildfire.

### **Alternative 2 Summary**

This Alternative would reduce some of the Project's environmental impacts due to the 20% reduction in commercial retail development. However, the majority of impacts would remain similar, as illustrated in **Table 6-1**. Alternative 2 would likely lead to reduced impacts in air quality, energy, greenhouse gas emissions, hydrology and water quality, population and housing, transportation, and utilities and service systems, but would not result in the avoidance or substantial lessening of any of these impacts. Additionally, this Alternative would fulfill most Project objectives, as Alternative 2 is generally consistent with the Project's proposed land uses. Therefore, this Alternative is under consideration.

### **6.3.3 Alternative 3: no commercial alternative**

The No Commercial Alternative or "Alternative 3" assumes that the Project Applicant would not develop any commercial development and would limit the Project's commercial component as a zone change only. Development under Alternative 3 would only consist of the development of 695 dwelling units, and would forgo the 335,700 SF of combined retail, restaurant, and self-storage spaces that are proposed by the Project. Parcels that would be rezoned for commercial use would remain undeveloped or would be developed by a separate project applicant in the foreseeable future. Additionally, The Specific Plan would not include entitlements for commercial development and any future commercial development (by others) would be subject to the Specific Plan's applicable design standards and provisions. All other Project components would stay the same.

### **Comparison of Project Impacts**

By eliminating commercial uses proposed by the Project, Alternative 3 would significantly reduce impacts related to the scale of the Project. Therefore, many environmental impact areas could see significant improvements regarding potential impact significance. Overall, the Project was able to achieve a less than significant impact with mitigation incorporated in all environmental impact areas except air quality and

GHG. Alternative 3 would still have significant and unavoidable impacts concerning air quality and GHG. An evaluation of the impacts associated with the development of Alternative 3 are described below.

### ***Aesthetics***

The commercial uses proposed by the Project would be eliminated under this alternative. Alternative 3 proposes the development of 695 dwelling units and would leave the remaining land vacant for the foreseeable future until it is developed by others. The same general aesthetics would apply to Alternative 3 when compared to the Project. Although no commercial development by the applicant would occur, future development (by others) within the rezoned commercial land uses are required to adhere to the Specific Plan's commercial guidelines. In addition, although Alternative 3 would eliminate commercial development, the Project area lacks officially designated scenic vistas and the Project site is not considered a visually sensitive area.

Accordingly, Alternative 3 would be environmentally equivalent to the Project regarding aesthetics impacts, and result in less than significant impacts similar to the Project.

### ***Air Quality***

As noted above, the Project would conflict with applicable air quality plans and result in a cumulatively considerable net increase of criteria pollutants due to operational emissions. Specifically, the Project would be inconsistent with AQMP Criterion No. 1 and No. 2 due to the significant and unavoidable impact in the criteria pollutants  $\text{NO}_x$  and ROG despite implementation of **MMs AQ-2** through **AQ-5** and compliance with LORs AQ-1 through AQ-6.

As noted above, most of the ROG emissions are from area and mobile sources and the majority of  $\text{NO}_x$  and CO emissions are from mobile sources. The overall built out daily trips for Alternatives 3 would be 5,189 daily trips, compared to the Project's total daily trips of 17,279. Therefore, Alternative 3 would result in an associated decrease in operational emissions from mobile sources. The daily trips generated from Alternative 3 would be approximately 12,090 less than the Project. Accordingly, Alternative 3 is expected to significantly reduce emissions since operational mobile emissions from the commercial component would not occur.

Although Alternative 3 would cause a significant and unavoidable impact to air quality, Alternative 3 is still considered to be environmentally superior to the Project because of the significant decrease in operational emissions and therefore less air quality impacts.

### ***Biological Resources***

Both the Project and Alternative 3 would potentially result in similar impacts to biological resources since the potentially affected special-status species, sensitive vegetation communities, riparian areas, and jurisdictional waters were identified outside the Project's commercial planning areas. Additionally, the Project and Alternative 3 would implement **MM BIO-1** through **MM BIO-3** to reduce impacts to biological resources to less than significant levels.

Alternative 3 is an environmentally equivalent alternative compared to the Project regarding biological resources, as the habitat, wildlife species, riparian areas, and jurisdictional waters would not be modified nor impacted by changes in commercial development, with the exception of the burrowing owl that could occur within the proposed commercial land use area.

### ***Cultural Resources***

Alternative 3 and the Project would result in similar cultural resources impacts. Although Alternative 3 avoids potential impacts to cultural resources caused by the Project's commercial uses, Alternative 3 proposes residential uses that would potentially impact cultural resources. Similar to the Project, Alternative 3 would be required to implement **MMs CUL-1** and **CUL-2** to reduce impacts to existing historical resources and unknown archeological resources. Furthermore, Alternative 3 and the Project have the potential to reveal unknown human remains during construction activities.

Although Alternative 3 and the Project both require implementation of **MMs CUL-1** and **CUL-2** to minimize impacts regarding cultural resources and both have a less than significant impact, Alternative 3 would be considered an environmentally superior alternative to the Project due to a reduced development footprint.

### ***Energy***

Both Alternative 3 and the Project would require energy during both the construction and operations phases of the Project, but energy usage during construction and operational activities would be significantly reduced under Alternative 3. Under Alternative 3, electricity, natural gas, and transportation fuel for vehicle trips from the commercial development would be eliminated. This is due to the reduction of development by the Applicant and reduction of daily trips. Therefore, although Alternative 3 and the Project would both have less than significant impacts, Alternative 3 would be environmentally superior to the Project regarding energy impacts because the energy usage would be significantly reduced.

### ***Geology and Soils***

Both Alternative 3 and the Project would involve construction activities including, but not limited to, ground disturbing grading activities that would potentially result in soil erosion and the loss of topsoil. Similar to the Project, Alternative 2 would be required to implement **MM GEO-1** and construction design features to reduce impacts associated with grading operations and unstable or expansive soils. Furthermore, all construction activities would also be subject to Best Management Practices (BMPs) set in a Project-Specific Stormwater Pollution Prevention Plan (SWPPP) and water quality management plan (WQMP) to reduce impacts from runoff associated with soil erosion. Lastly, Alternative 3 would also implement **MM GEO-2** to reduce impacts to unknown paleontological resources to a level of less than significant. The Project would have a smaller development footprint under Alternative 3, thereby reducing the amount of ground disturbing grading activities that would potentially result in soil erosion and the loss of topsoil. This would reduce the risk of exposing people to geological hazards, making Alternative 3 the environmentally superior option.



### ***Greenhouse Gas Emissions***

The Project's significant and unavoidable GHG impacts were associated with the exceedance of emissions thresholds and cumulative GHG emissions. Although proposed mitigation would minimize the potential emissions impacts associated with Project implementation, emissions are still anticipated to exceed the City's 3,000 MTCO<sub>2</sub>e maximum threshold.

Alternative 3 is anticipated to result in reduced GHG mobile emissions during construction and operations due to the elimination of the workforce and significant reduction in total daily trips, associated with the commercial development. Although Alternative 3 would continue to result in a significant unavoidable impact, Alternative 3 is still environmentally superior to the Project regarding GHG emissions because of the significant reduction in GHG emissions.

### ***Hazards and Hazardous Materials***

The Project would have a less than significant impact on hazards and hazardous materials. The Project requires the implementation of **MMs HAZ-1** through **HAZ-5** to reduce impacts associated with listed hazardous materials sites. Similar to the Project, Alternative 3 would not avoid impacts resulting from roadway improvements of Taylor Street to Commerce Way, that would potentially unearth hazardous soils. Regardless, Alternative 3 would be subject to the same applicable federal and state regulations and provisions pertaining to hazardous materials. Additionally, all development projects under Alternative 3 would be required to submit a waste management plan, implement BMPs pursuant to NDPES permitting, and prohibit the storage of certain hazardous materials that may accidentally seep into the environment.

Nevertheless, Alternative 3 would reduce the amount of significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials associated with the construction and operations of commercial development, when compared to the Project. Therefore, Alternative 3 would be environmentally superior to the Project regarding hazards and hazardous materials.

### ***Hydrology and Water Quality***

Compared to the Project, Alternative 3 would disturb a smaller footprint and result in less impervious surfaces than the proposed Project. Alternative 3 and the Project would both have a less than significant impact on hydrology and water quality due to implementation of BMPs, preventative low impact design, and drainage improvements that minimize runoff, erosion, and storm water pollution. These proposed beneficial water quality improvements would still occur under Alternative 3, despite the reduced land uses and footprint. Although the Project would result in less than significant impacts related to hydrology and water quality, Alternative 3 proposes a reduced development footprint and reduced impervious surfaces, and therefore would reduce impacts to hydrology and water quality compared to the proposed Project.

Therefore, Alternative 3 would be environmentally superior to the Project regarding hydrology and water quality.

### ***Land Use and Planning***

The Project requires adoption of the Specific Plan and Development Agreement as well as approval of the proposed Zone Change, General Plan Amendment, and Tentative Tract Map. Alternative 3 would require the same entitlements. As such, Alternative 3 would be environmentally equivalent to the Project regarding land use and planning, since land uses would be added, and land use entitlements would be required.

### ***Noise***

Both Alternative 3 and the Project would generate noise and vibration during both the construction and operational phases of the Project. Alternative 3 would result in a shorter construction time frame since no commercial development would be constructed, as it would be with the proposed Project. Consequently, a reduced short-term construction noise impact would occur. Additionally, Alternative 3 would decrease the amount of traffic compared to the Project and result in reduced long-term operational traffic related noise. Because the proposed Project would have a greater short-term construction noise impact and long-term operational noise impact, Alternative 3 noise impacts would be reduced, although the Project's impacts would also be less than significant.

Therefore, Alternative 3 would be environmentally superior to the Project regarding noise and vibration.

### ***Population and Housing***

Since Alternative 3 assumes that no commercial development would occur, long-term employment or economic growth would not occur compared to the Project. However, economic growth does not constitute an environmental impact under CEQA. Similar to the Project, Alternative 3 would induce planned population growth in the City, and not displace substantial numbers of existing people or housing. Therefore, Alternative 3 would be environmentally equivalent, when compared to the Project's impacts concerning population and housing.

### ***Public Services***

Both Alternative 3 and the Project would require additional public service needs compared to the existing conditions on the site. However, Alternative 3 would result in less demand of public services since no commercial development would occur. Accordingly, it is anticipated that the payment of development impact fees from the applicant would be lower.

Therefore, Alternative 3 would be environmentally superior when compared to the Project regarding public services.

### ***Recreation***

Both Alternative 3 and the Project propose the development of 695 dwelling units. Therefore, Alternative 3 and the Project would have the same recreational impacts since the residential development capacity would remain the same. Also, both Alternative 3 and the Project would pay applicable park impact fees pursuant to the Quimby Act and local City regulations (provision of on-site park and recreational facilities may be credited against required Quimby Act fees).

Alternative 3 would be an environmentally equivalent alternative compared to the Project regarding recreation.

### ***Transportation***

The Project would have a less than significant impact on transportation specifically as it relates to a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, the Project would not have an impact or conflict with CEQA Guidelines §15064.3. Per these guidelines, the Project-generated VMT is estimated to be lower than the adopted significance threshold for the City. Under Alternative 3, Project-generated VMT would be significantly lower due to the reduction of trips from the Project's proposed commercial component. Although Alternative 3 would result in the same less than significant impact, when compared with the Project, Alternative 3 would be environmentally superior to the Project regarding transportation and traffic, and specifically impacts associated with VMT.

### ***Tribal Cultural Resources***

The Project would cause a less than significant impact to tribal cultural resources with the implementation of **MMs CUL-1** and **CUL-2**. Similarly, Alternative 3 has the same potential to impact unknown tribal cultural resources and would be required to implement **MMs CUL-1** and **CUL-2**, and would be subject to the same applicable federal, state, and local regulations pertaining to tribal cultural resources. Although the Project would result in less than significant impacts to tribal cultural resources, Alternative 3 proposes a reduced overall development footprint that would be less impactful to tribal cultural resources.

Although Alternative 3 would have an impact on tribal cultural resources, Alternative 3 would be environmentally superior due to the elimination of commercial development and reduced development footprint.

### ***Utilities and Service Systems***

Alternative 3 would significantly reduce demand of public utility services, and impacts concerning wastewater and solid waste generation, compared to the Project. Temporary increases in utility demand and construction of utilities would still occur during construction, but these increases would be lower than with the proposed Project. Although the Project would result in less than significant impacts related to utilities and service systems, Alternative 3 proposes a reduced overall development footprint and, therefore, would reduce impacts to utilities and service systems compared to the Project.

Therefore, Alternative 3 would be environmentally superior, compared to the Project, regarding impacts to utilities and service systems.

### ***Wildfire***

Alternative 3 and the Project would result in the same less than significant impacts since the Project is not located in or near a State Responsibility Areas or lands classified as Very High Fire Hazard Severity Zones. Therefore, Alternative 3 would be environmentally equivalent to the Project regarding wildfire.

### Alternative 3 Summary

This Alternative would reduce a majority of the Project's environmental impacts, although other impacts would be similar, as illustrated in **Table 6-1**. Alternative 3 would likely lead to reduced impacts in aesthetics, air quality, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, population and housing, transportation and traffic, tribal cultural resources, and utilities and service systems. This Alternative fails to meet Project objectives pertaining to the development of a variety of businesses that provide new jobs and services.

## 6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior Alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

Based on the summary of information presented in **Table 6-1**, the environmentally superior alternative is Alternative 3: Residential Only. Because Alternative 3 would reduce the Project to only its residential components, this Alternative has fewer environmental impacts than the Project or any of the other alternatives.

Section 15126.6(e)(2) of the State CEQA Guidelines states that if the "No Project" alternative is found to be environmentally superior, "the EIR shall also identify an environmentally superior alternative among the other alternatives. The No Project Alternative was not found to be environmentally superior.

The context of an environmentally superior alternative is based on the consideration of several factors including the reduction of environmental impacts to a less than significant level, the Project objectives, and an alternative's ability to fulfill the objectives with minimal impacts to the existing site and surrounding environment. According to **Table 6-1**, the Residential Only Alternative would be the environmentally superior alternative because it would reduce some of the potentially significant impacts of the Project. However, while the Residential Only Alternative is the environmentally superior alternative, it is not capable of meeting all of the basic objectives of the Project.

**Table 6-1: Comparison of Project Alternatives Environmental Impacts with the Project**

| EIR Resource Section   | Alternatives Heading                       |                                  |   |                                      |
|--|--|----------------------------------|---|--------------------------------------|
|  | Project - Level of Impact After Mitigation | Alternative 1: No Project        | Alternative 2: Reduced Retail by 20 Percent | Alternative 3: Residential Only      |
| Aesthetics   | Less than Significant                      | -                                | =   | =                                    |
| Air Quality  | Significant and Unavoidable                | *                                | *   | *                                    |
| Biological Resources   | Less than Significant                      | -                                | =   | =                                    |
| Cultural Resources   | Less than Significant                      | -                                | =   | -                                    |
| Energy   | Less than Significant                      | -                                | -   | -                                    |
| Geology and Soils  | Less than Significant                      | -                                | =   | -                                    |
| Greenhouse Gas Emissions   | Significant and Unavoidable                | *                                | *   | *                                    |
| Hazards and Hazardous Materials  | Less than Significant                      | +                                | =   | -                                    |
| Hydrology and Water Quality  | Less than Significant                      | +                                | -   | -                                    |
| Land Use and Planning  | Less than Significant                      | =                                | =   | =                                    |
| Noise  | Less than Significant                      | -                                | =   | -                                    |
| Population and Housing   | Less than Significant                      | +                                | -   | =                                    |
| Public Services  | Less than Significant                      | =                                | =   | -                                    |
| Recreation   | Less than Significant                      | =                                | =   | =                                    |
| Transportation   | Less than Significant                      | +                                | -   | -                                    |
| Tribal Cultural Resources  | Less than Significant                      | -                                | =   | -                                    |
| Utilities and Service Systems  | Less than Significant                      | =                                | -   | -                                    |
| Wildfire   | Less than Significant                      | =                                | =   | =                                    |
| Compliance with Project Objectives?  | Meets all of the Project Objectives        | Does not meet Project Objectives | Meets Most of the Project Objectives        | Meets some of the Project Objectives |
| Notes:<br>A minus (-) sign means the Project Alternative is environmentally superior when compared to the Project.<br>A plus (+) sign means the Project Alternative is environmentally inferior when compared to the Project.<br>An equal sign (=) means the Project Alternative is environmental equivalent when compared to the Project.<br>*Although the Alternative would result in reduced impacts, the impact levels would remain significant and unavoidable. |  |                                  |   |                                      |

## 7.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

California Public Resources Code (PRC) §21003 (f) states: “...it is the policy of the state that...[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment.” This policy is reflected in the State California Environmental Quality Act (CEQA) Guidelines (Guidelines) §15126.2(a), which states that “[a]n EIR (Environmental Impact Report) shall identify and focus on the significant environmental impacts of the proposed project” and §15143, which states that “[t]he EIR shall focus on the significant effects on the environment.” State CEQA Guidelines §15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the Draft EIR.

The Project is a specific plan that serves as the regulatory mechanisms to guide all future development proposals within the approximately 112-acre Project site. Currently, there are no development projects proposed. All subsequent development projects, including construction and operations, undertaken within the Project’s Planning Areas (PAs) will be subject to project-specific City discretionary review and approval.

The Project proposes 22 PAs that encompass future development of residential, commercial, public utilities, and public park and open space uses, including associated on- and off-site infrastructure improvements. The Project consists of applications for a Specific Plan (SP 00-17), General Plan Amendment (GPA 17-01), Zone Change (ZC 17-02), Tentative Tract Map No. 20501 (TTM 18-01), and a Development Agreement.

During the environmental evaluation conducted for this EIR, certain impacts of the proposed Project were found to have “no impact” or a “less than significant” impact. This section briefly describes those effects found to have no impact or a less than significant impact based on the analysis conducted during the Draft EIR preparation process. Several issues, indicated as having no impact or less than significant impact, are nonetheless addressed in **Sections 4.1** through **4.18** of this Draft EIR as a matter of disclosure and clarification for the reader.

### 7.1 AGRICULTURAL AND FORESTRY RESOURCES

#### Agricultural Resources

During the early years of the City, most of the Specific Plan area was used for orchards. Over the years some land was converted to dry farming or left vacant. For more than two decades, the City has attempted to foster development in the Specific Plan area. According to the California Department of Conservation Farmland Mapping and Monitoring Program, the City contains Prime Farmland located near the

southeastern corner of the City.<sup>1</sup> However there are no areas presently in the City limits that are classified as being used for the managed production of agricultural resources.

**Impact 7.1-1:** *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

**Level of Significance: No Impact**

### Construction and Operations

Prime Farmland is considered land used for irrigated agriculture at some time in the four years prior to its designation. Farmland of Statewide Importance is also land that has been found suitable for sustained crop production. However, Farmland of Statewide Importance does not include public lands that have adopted policies that prevent agricultural use. Unique Farmland does not meet the criteria of Prime Farmland or Farmland of Statewide Importance. However, this land must still have been used for irrigated agriculture within the four years prior to its designation.

The City allows agricultural uses under the City's Agricultural and Agricultural 2 Overlay. However, the Project is not within an agricultural overlay zone and does not propose agricultural land uses. According to the California Department of Conservation's Farmland Mapping and Monitoring Program, the Project site is classified as Urban Built-Up Land, grazing land, other land. Therefore, the Project would not alter any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and no impact would occur.

### Mitigation Measures

No mitigation measures are needed.

**Impact 7.1-2:** *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

**Level of Significance: No Impact**

### Construction and Operations

The Williamson Act enables local governments to enter into contracts with private land owners to restrict parcels of land for agricultural or related open space use in return for financial assistance in the form of lower property tax assessments.<sup>2,3</sup> Portions of the City contain an Agricultural Overlay zoning designation; however, the Project site is not located within an Agricultural Overlay District.<sup>4</sup> Therefore, no impacts related to existing agricultural zoning would occur.

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<sup>1</sup> California Department of Conservation. 2016. *California Important Farmland Finder*. Retrieved from: <https://maps.conservation.ca.gov/dlrp/ciff/>. Accessed November 2022.

<sup>2</sup> California Department of Conservation. (2019). *Williamson Act Program*. Retrieved from: <https://www.conservation.ca.gov/dlrp/wa>. (accessed November 2022).

<sup>3</sup> California Department of Conservation (2017) *State of California Williamson Act Contract Land*. Retrieved from [https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/\(E\)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf](https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/(E)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf) (accessed November 2022).

<sup>4</sup> City of Grand Terrace. (2017). *Zoning Code Map*. Retrieved at: [https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning) (accessed November 2022).

**Mitigation Measures**

No mitigation measures are needed.

**Impact 7.1-3:** *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?*

**Impact 7.1-4:** *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

**Level of Significance: No Impact**

**Construction and Operations**

According to PRC §§12220(g), 4526, and 51104(g), the Project site does not contain forestland and does not meet the definition of lands designated as forestland or timberland. Therefore, no impact would occur to timberland.

**Mitigation Measures**

No mitigation measures are needed.

**Impact 7.1-5:** *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

**Level of Significance: No Impact**

**Construction and Operations**

As stated above, the Project is not within an agricultural overlay zone and does not propose agricultural uses. The Project does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, does not contain forestland, and does not meet the definition of lands designated as forestland or timberland. Therefore, no impact would occur.

**Mitigation Measures**

No mitigation is required.

**Cumulative Impacts**

The Project would have no impact on agricultural and forestry resources. Therefore, the proposed Project would not contribute to a cumulatively considerable impact in the conversion of farmland to non-farmland or forest land to non-forest use.



## 7.2 MINERAL RESOURCES

**Impact 7.2-1:** *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?*

**Impact 7.2-2:** *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plans?*

**Level of Significance: No Impact**

The City of Grand Terrace General Plan does not contain goals and policies pertaining to mineral resources. Furthermore, no mineral resource areas are identified within the City. The Project site is located within a State Department of Conservation designated Mineral Resource Zone 3 (MRZ-3).<sup>5</sup> MRZ-3 is defined as an area containing minerals of undetermined significance. However, according to the City's General Plan EIR, there are no known or identified mineral resources of regional or statewide importance within the General Plan Area.<sup>6</sup> No mineral resource or mineral resource extraction or processing activity occurs on or adjacent to the Project site. Buildout of the Project would not result in the loss of City or State-identified mineral resources. Therefore, no impacts associated with the loss of mineral resources would occur and no mitigation is required.

## 7.3 REFERENCES

California Department of Conservation. 2016. California Important Farmland Finder. Retrieved from: <https://maps.conservation.ca.gov/dlrp/ciff/>.

California Department of Conservation (2017) State of California Williamson Act Contract Land. [https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/\(E\)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf](https://planning.lacity.org/eir/HollywoodCenter/Deir/ELDP/(E)%20Initial%20Study/Initial%20Study/Attachment%20B%20References/California%20Department%20of%20Conservation%20Williamson%20Map%202016.pdf).

California Department of Conservation. (2019). *Williamson Act Program*. Retrieved from: <https://www.conservation.ca.gov/dlrp/wa>

City of Grand Terrace. (2010). *City of Grand Terrace General Plan Draft EIR*. Retrieved from [https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning)

City of Grand Terrace General Plan Draft EIR, January 2010. Chapter 7, page 308

City of Grand Terrace. (2017). Zoning Code Map. [https://www.grandterrace-ca.gov/departments/planning\\_development\\_services/planning](https://www.grandterrace-ca.gov/departments/planning_development_services/planning).

Updated Mineral Land Classification Map for Portland Cement Concrete Grade Aggregate in the San Bernardino Production-Consumption (P C) Region, California Geologic Survey, 2008. Retrieved from: [https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR\\_240-MLC-Report.pdf](https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_240-MLC-Report.pdf).

<sup>5</sup> Updated Mineral Land Classification Map for Portland Cement Concrete Grade Aggregate in the San Bernardino Production-Consumption (P-C) Region, California Geologic Survey, 2008. Retrieved from: [https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR\\_240-MLC-Report.pdf](https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_240-MLC-Report.pdf).

<sup>6</sup> City of Grand Terrace General Plan Draft EIR, January 2010. Chapter 7, page 308.

## 8.0 ORGANIZATIONS AND PREPARATION

This section is consistent with the requirements set forth in §21153 of the Public Resources Code (PRC) and §15129 of the CEQA Guidelines, which states: “The EIR shall identify all federal, state, or local agencies, other organizations, and private individuals consulted in preparing the draft EIR, and the persons, firm, or agency preparing the draft EIR, by contract or other authorization.” Refer to **Section 2.3, EIR Scope, Issues, and Concerns**, for a summary of public notification and consultation.

The NOP and NOP comment letters are provided in **Appendix L, Notice of Preparation**. The City provided multiple opportunities for public input, both as part of the CEQA process and as part of Project scoping. In addition to required public notifications under CEQA, the City has engaged in consultation with the San Manuel Band of Mission Indians, Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Indians, Gabrieleno Band of Mission Indians – Kizh Nation, Cahuilla Band of Indians, and Rincon Band of Luiseno Indians, pursuant to AB 52 and SB 18, as discussed further in **Section 4.16, Tribal Cultural Resources**.

### 8.1 EIR CONSULTATION

#### CEQA Lead Agency

##### City of Grand Terrace

Planning Department

22795 Barton Road

Grand Terrace, CA 92313

*Contacts: Konrad Bolowich, City Manager/Acting Planning Director  
Cheryl Tubbs, Lilburn Corporation, City CEQA Peer Reviewer*

#### Project Applicant

##### Lewis Management Corporation

1156 N. Mountain Ave.

Upland, CA 91786

*Contacts: Adam Collier, Vice President  
Waen Messner, Project Manager*

#### Interested Parties

As noted above, the City engaged in public and agency consultation through the NOP and public scoping process. The following entities provided comments on the NOP, which have been considered as part of this EIR preparation process:

- City of Riverside
- California Department of Fish and Wildlife – Inland Deserts Region
- California Department of Transportation – District 8
- San Bernardino County – Department of Public Works

- Mitchell M. Tsai – Attorneys for Southwest Regional Council of Carpenters
- Patricia Farley – Resident
- Cathy Armstead – Resident
- Burt Seuylemezian – Resident
- Colton Joint Unified School District
- Southern California Association of Governments
- Bryan Grissinger – Frontera Real Estate Investments on behalf of De Berry Self-Storage Associates, L.P.
- South Coast Air Quality Management District

## 8.2 ENVIRONMENTAL DOCUMENT PREPARERS

### Environmental Consultant

#### Kimley-Horn & Associates, Inc.

3801 University Avenue, Suite 300  
Riverside, CA 92501

*Contacts:*        *Kari Cano, Project Manager*  
                          *Achilles Malisos, Air Quality/Greenhouse Gas Emissions/Health Risk*  
    *Assessment/Noise/Energy*  
                          *Alex Pohlman, Air Quality/Greenhouse Gas/Health Risk Assessment/Noise/Energy*  
                          *Elena Ajdari, Air Quality/ Greenhouse Gas Emissions/Health Risk*  
    *Assessment/Noise/Energy*  
                          *Meghan D. Karadimos, Senior Environmental Analyst*  
                          *Aldo Perez, Environmental Analyst, Graphics*  
                          *Sabrina Wallace, Environmental Analyst*  
                          *Cameron Bauer, Environmental Analyst*  
                          *Hannah Thurlow, Environmental Analyst*  
                          *Amanda McCallum, Document Production*

## 8.3 TECHNICAL STUDY PREPARATION

#### Kimley-Horn and Associates, Inc.

*(Air Quality Assessment)*

*(Greenhouse Gas Emissions Assessment)*

100 W. Town and Country Road, Suite 700  
Orange, CA 92868

*Contact:*        *Mr. Ace Malisos*

**Kimley-Horn and Associates, Inc.***(Acoustical Assessment)*

3801 University Avenue, Suite 300  
Riverside, CA 92501

Contact: *Mr. Alex Pohlman*

**Glen Lukos Associates, Inc.***(Biological Technical Report)*

1940 E. Deere Avenue, Suite 250  
Santa Ana, CA 92705

Contacts: *David F. Moskovitz*

**BCR Consulting***(Updated Cultural Resources Records Search)**(Cultural Resources Records Search)*

505 W 8th Street  
Claremont, CA 91711

Contacts: *David Brunzell, M.A./RPA*

**CRM Tech***(Historical/Archaeological Resources Survey Report for Assessor's Parcel Numbers 1167-161-03 and -04)**(Historical/Archaeological Resources Survey Report for Grand Terrace Crossing Project)**(Historical, Archaeological, and Paleontological Resources Reconnaissance)**(Update and Addendum to Cultural Resources Survey Report)**(Summary of Cultural Resources Survey Coverage)*

1016 E. Cooley Drive, Suite A/B  
Colton, CA 92324

Contacts: *Bai "Tom" Tang, M.A., Principal Investigator*

**LOR Geotechnical Group, Inc.***(Geotechnical Feasibility Investigations, Phase I and II Environmental Site Assessments)*

6121 Quail Valley Court  
Riverside, CA 92507

Contacts: *John P. Leuer, President*  
*Robert M. Markoff, Engineering Geologist*  
*Mathew L. Hunt, Environmental Scientist*

**KWC Engineers***(Preliminary Water Quality Management Plan and Sewer System Analysis)*

1880 Compton Avenue, Suite 100  
Corona, CA 92881

Contact: *Brandon Barnett, P.E.*  
*Stephen M. Nielsen*

**Q3 Consulting**

*(Hydrology and Hydraulics Report)*

27042 Towne Centre Drive, Suite 110  
Foothill Ranch, CA 92610

Contact: *Thomas J. Ryan, P.E.*

**Fehr & Peers**

*(Transportation Impact Analysis Report)*

27042 Towne Centre Drive, Suite 110  
Foothill Ranch, CA 92610

Contacts: *Paul Herrmann*  
*Ethan Yue Sun*  
*Logan Aspeitia*

**Engineering Resources of Southern California**

*(Water Supply Assessment)*

1861 W. Redlands Boulevard,  
Redlands, CA 92373

Contact: *John G. Egan, P.E.*  
*Benjamin R. Booth, P.E.*