



NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Date: May 21, 2021

To:	State Agencies	From: City of Antioch
Planning Division		
Responsible Agencies	200 H Street	
Local and Public Agencies	Antioch, CA 94509	
Trustee Agencies	925-779-6159	
Organizations		
Interested Parties		

**Subject: Notice of Preparation of a Draft Environmental Impact Report for the
Wild Horse Multifamily Project**

The City of Antioch will be the Lead Agency under the California Environmental Quality Act (CEQA) for the project identified below and has prepared an Initial Study (IS) and Notice of Preparation (NOP) of an Environmental Impact Report (EIR) pursuant to CEQA. The Lead Agency has prepared this IS/NOP for the EIR to provide the widest exposure and opportunity for input from public agencies, stakeholders, organizations, and individuals on the scope of the environmental analysis addressing the potential effects of the proposed project.

Project Title: Wild Horse Multifamily Project

Project Applicant: CCP-Contra Costa Investor, LLC
Phillip Su
893 Corporate Way
Fremont, CA 94539

The Initial Study and NOP are available online at:
<https://www.antiochca.gov/community-development-department/planning-division/environmental-documents/>.

Comment Period: Comments may be sent anytime during the 30-day NOP comment period. The NOP review and comment period begins on May 21, 2021 and ends on June 21, 2021. All comments must be received during the comment period and no later than 5:00 PM on June 21, 2021.



The City of Antioch encourages the electronic submission of comments. Please indicate a contact person for your agency or organization and send your comments to: zmerideth@antiochca.gov and include Wild Horse Multifamily Project in the subject line.

Your comments may also be sent by mail to:

City of Antioch
Attention: Zoe Merideth, Associate Planner
PO Box 5007
Antioch, CA 94531-5007

Project Location: The proposed project is in the City of Antioch in Contra Costa County, California. The approximately 12-acre project site is triangular. The proposed project is on a vacant parcel identified as APN 041-022-003. Figure 1 is a regional overview, Figure 2 is the Project Site Location, and Figure 3 is the Project Site Plan.

Project Description: The Project would involve development of 126 multifamily residences on an approximately 12-acre site at the terminus of Wild Horse Road and State Route 4 in Antioch, California. The Project site is currently vacant and consists of a single parcel identified as APN 041-022-003. The Applicant is proposing to develop 126 multifamily residences with 25 buildings each with 2 to 8 units. The units would range in size from approximately 1,120 to 1,900 square feet, with 2 to 4 bedrooms and 2 to 3.5 baths. All units would have 2 car attached garages. The proposed project would also include parking, landscaping managed by a homeowner's association, and 1.6 acres of open space. The applicant is proposing to create design guidelines for a future development, but the Applicant is not proposing to develop the property at this time. The project site is inclusive of 1.6 acres as an offer of dedication for construction of Wild Horse Road along the property's southern boundary, of which construction began by another developer on September 1, 2020.

The project requires the following approvals listed below:

- Review and legislative action on a General Plan Amendment to amend the map, a rezone to Planned Development District, a Final Development Plan, approval of the Design Guidelines, and a vesting tentative map for condo purposes from the City of Antioch.
- In addition, the proposed project would require the following discretionary entitlements from the City of Antioch in the future: Conditional Use Permit(s) and Design Review
- The proposed project would require the following ministerial entitlements from the City of Antioch in the future: Grading permits and Building permits
- National Pollutant Discharge Elimination System Permit: Regional Water Quality Control Board.

Areas of Potential Impact: The IS found that the proposed project would have less than significant impacts (or could be mitigated to a less than significant level) for all resource areas except Transportation/Traffic. The IS documents the reasons for concluding that other effects will be less than significant or less than significant with mitigation. The EIR will focus on the potentially significant effects of the project. The topics listed below will be further analyzed in the EIR. However, certain criteria within the topic listed below have been scoped out of further analysis as discussed in the IS.

- Transportation/Traffic

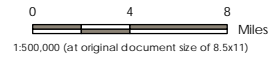
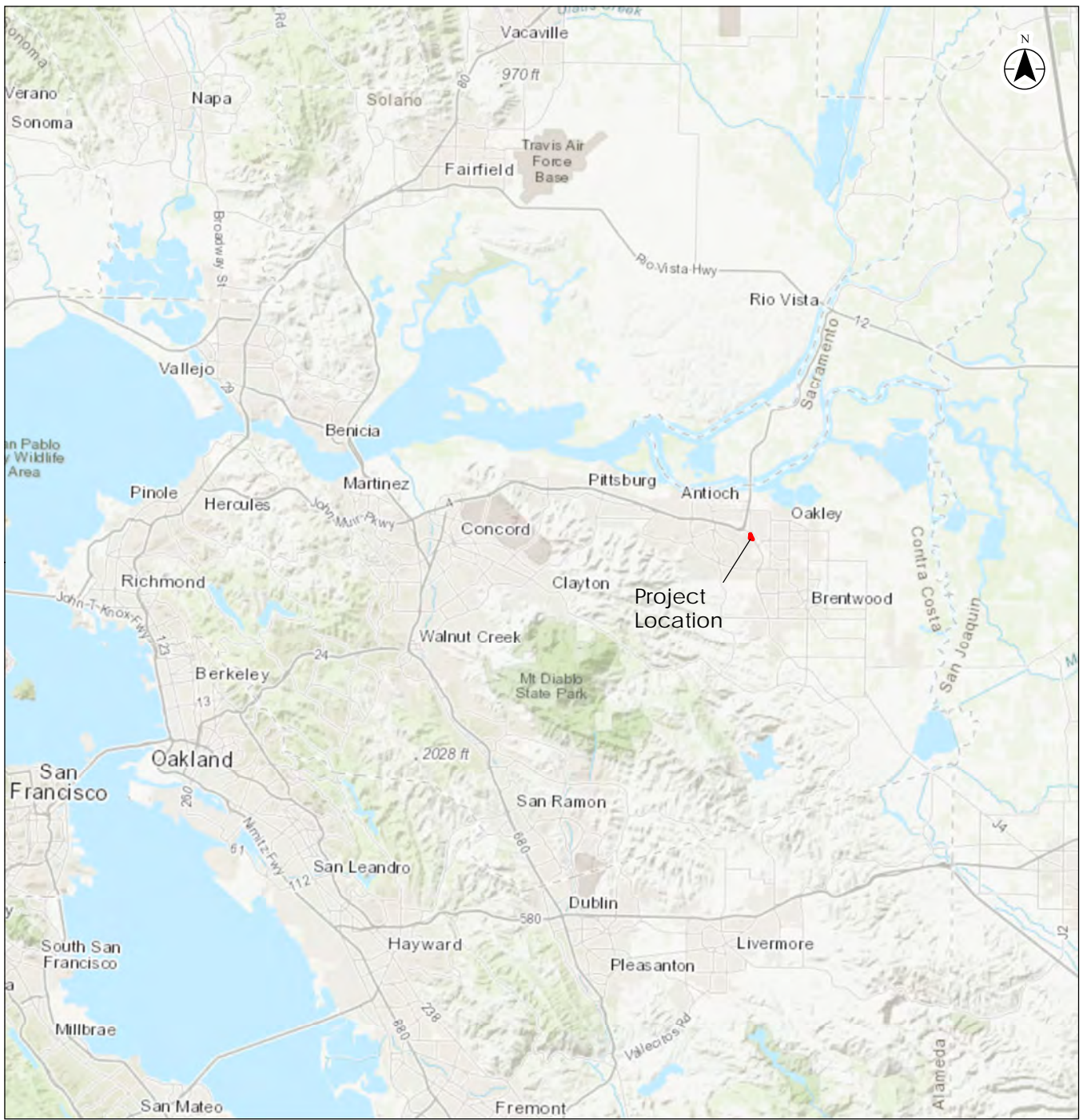
Alternatives: Based on the significance conclusions determined in the focused EIR, alternatives to the proposed project will be analyzed to reduce identified impacts. Section 15126.G(e) of the CEQA Guidelines requires the evaluation of a No Project Alternative. Other alternatives may be considered during preparation of the EIR and will comply with the CEQA Guidelines, which call for a "range of reasonable alternatives to the project, or 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.

EIR Process: Following the close of the NOP comment period, a draft focused EIR will be prepared that will consider all NOP comments. In accordance with CEQA Guidelines Section 15105(a), the draft focused EIR will be released for public review and comment for a required 45-day review period. Following the close of the 45-day public review period, the City will prepare a final EIR, which will include responses to all substantive comments received on the draft focused EIR. The draft focused EIR and final EIR will be considered by the Planning Commission and City Council in making the decision to certify the EIR and approve or deny the project.



Zoe Merideth, Associate Planner City of Antioch

5/19/2021
Date



Project Location: Antioch, California
 Prepared by BT on 2020-12-18
 Technical Review by MK on 2020-12-18

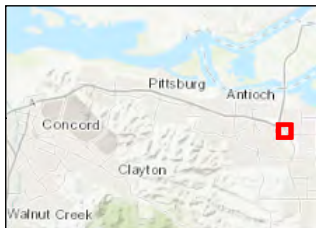
Client/Project:
**City of Antioch
 Wild Horse Multifamily Project**

Figure No.:
1

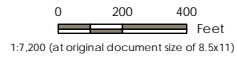
Title:
Regional Overview

Notes
 1. Coordinate System: NAD 1983 StatePlane California III
 FPS 0403 Feet
 2. Base features produced under license with the Ontario

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 Project Site



Project Location: Antioch, California
Prepared by BT on 2020-12-21
Technical Review by MK on 2020-12-21

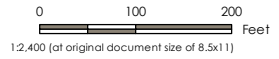
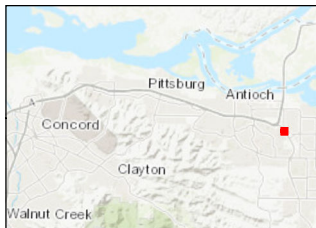
Client/Project: City of Antioch
Wild Horse Multifamily Project

Figure No.: 2

Title: Project Site Location

Notes
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Project Location: Antioch, California
 Prepared by BT on 2021-04-07
 Technical Review by MK on 2021-04-07

Client/Project:
 City of Antioch
 Wild Horse Multifamily Project

Figure No.:
3
 Title

Project Site Plan

- Notes**
1. Coordinate System: NAD 1983 StatePlane California III FPS 0403 Feet
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Wild Horse Multifamily Project

Initial Study

May 21, 2021

Lead Agency:

City of Antioch
Planning Division
200 H Street
Antioch, CA 94509

Technical Assistance:

Stantec Consulting Services Inc.
1340 Treat Boulevard, Suite 300
Walnut Creek, California 94597

Wild Horse Multifamily Project

Initial Study

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Acronyms and Abbreviations

°F.	degrees Fahrenheit
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AM	morning
APD	Antioch Police Department
APN	Assessor's Parcel Number
Applicant	CCP-Contra Costa Investor, LLC
AQP	air quality plan
AWS	Alameda Whipsnake
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BMPs	best management practices
CalEEMod	California Emissions Estimator Model
CALFIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
CAP	climate action plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCCFPD	Contra Costa County Fire Protection District
CCR	California Code of Regulations
CCWD	Contra Costa Water District
CDFW	California Fish and Wildlife Service
CEQA	California Environmental Quality Act
CH ₄	methane
CHRIS	California Historical Resources Information System
City	City of Antioch
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO ₂	carbon dioxide
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CY	cubic yards
dB	decibel
dB(A)	A-weighted decibels
DDSD	Delta Diablo Sanitation District



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DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
ECC Subbasin	East Contra Costa Subbasin
EIR	Environmental Impact Report
EMS	emergency medical services
EPA	U.S. Environmental Protection Agency
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
General Plan EIR	City of Antioch General Plan Environmental Impact Report
General Plan	City of Antioch General Plan
GIS	geographic information system
gpd	gallons per day
GSP	Groundwater Sustainability Plan
HB VMT	home-based vehicle miles traveled
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
HCP	habitat conservation plan
HRA	Health Risk Assessment
IS	Initial Study
ITE	Institute of Transportation Engineers
KBTU	kilo British thermal units
KWhr	kilowatt-hours
Ldn	day-night sound level
Leq	equivalent sound level
Lmax	maximum sound level
Lmin	minimum sound level
LOS	level of service
MEIR	maximally exposed individual receptor
mgd	million gallons per day
mgy	million gallons per year
MLD	most likely descendant
MM	Mitigation Measure
MTCO _{2e}	metric tons of carbon dioxide equivalent
MMTCO _{2e}	million metric tons of carbon dioxide equivalent
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission



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NCCP	Natural Community Conservation Plan
NOA	naturally occurring asbestos
NOI	Notice of Intent
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OPR	Governor's Office of Planning and Research
PC	project characteristics
PG&E	Pacific Gas and Electric Company
PM	afternoon
PM ₁₀	particulate matter between 2.5 and 10 microns
PM _{2.5}	fine particulate matter
POTWs	publicly owned treatment works
PPV	peak particle velocity
PRC	Public Resources Code
proposed project	Wild Horse Multifamily Project
RCNM	Roadway Construction Noise Model
ROG	reactive organic gases
RTP/SCS	Regional Transportation Plan and Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SIP	State Implementation Plan
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TAZ	traffic analysis zone
UCMP	University of California Museum of Paleontology
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
WWTP	wastewater treatment plant
WMP	waste management plan



Wild Horse Multifamily Project

Initial Study

1.0 introduction

1.0 INTRODUCTION

1.1 PURPOSE OF INITIAL STUDY

An Initial Study (IS) is a preliminary analysis which is prepared to determine the relative environmental impacts associated with a proposed project. It is designed as a measuring mechanism to determine if a project will have a significant adverse effect on the environment, thereby triggering the need to prepare an Environmental Impact Report (EIR). This IS has been prepared consistent with California Environmental Quality Act (CEQA) Guidelines Section 15063, to determine if the proposed project may have a significant effect upon the environment. A Notice of Preparation of an EIR has been prepared along with this IS.

1.2 PROJECT SUMMARY

CCP-Contra Costa Investor, LLC (Applicant) is proposing the Wild Horse Multifamily Project (proposed project) in the City of Antioch (City). The proposed project involves the development of 126 multifamily residences in 25 buildings with related amenities on an approximately 12-acre site. The proposed project would also include parking, landscaping managed by a homeowner's association, and 1.6 acres of usable open space. The project site includes approximately 1.6 acres as an offer of dedication for construction of Wild Horse Road, a paved road near the property's southern boundary, of which construction began by another developer on September 1, 2020.

1.3 PROJECT TITLE

Wild Horse Multifamily Project

1.4 LEAD AGENCY

City of Antioch
200 H Street
Antioch, CA 94509-1285



Wild Horse Multifamily Project

Initial Study

1.0 introduction

1.5 LEAD AGENCY CONTACT

City of Antioch

Zoe Merideth, Associate Planner

Phone: 925-779-6159

Email: zmerideth@antiochca.gov

1.6 PROJECT APPLICANT

CCP-Contra Costa Investor, LLC

Phillip Su

893 Corporate Way

Fremont, CA 94539

1.7 PROJECT LOCATION

The proposed project is located in the City of Antioch in Contra Costa County, California. The approximately 12-acre project site is triangular in shape. The proposed project is on a vacant parcel identified as Assessor's Parcel Number (APN) 041-022-003. Figure 1.7-1 is a regional overview, Figure 1.7-2 is the Project Site Location, and Figure 1.7-3 is the Project Site Plan.



Wild Horse Multifamily Project

Initial Study

1.0 introduction



Figure 1.7-1. Regional Overview



Wild Horse Multifamily Project

Initial Study

1.0 introduction



Figure 1.7-2. Project Site Location



Wild Horse Multifamily Project

Initial Study

1.0 introduction



Figure 1.7-3. Project Site Plan



Wild Horse Multifamily Project

Initial Study

1.0 introduction

1.8 EXISTING SETTING

The project site is on a vacant parcel located in the City of Antioch. The project site is surrounded by State Route 4 to the east, residential development to the west, and Wild Horse Road, the Contra Costa Water District (CCWD) Antioch Service Center, and the Contra Costa Canal to the south. The property is primarily covered with annual grasslands and no trees are present on the project site. There are no natural drainages on the Property. The topography of the Property is mostly flat with a slight rise to the southwest corner. There is also a man-made circular depressional area that makes up a detention basin at the north end of the Property. The topography outside the Property boundary is elevated on both the east and west sides. Elevations on the Property range from 70 feet above sea level at the north end to 108 feet above sea level at the southern end. The center of the constructed detention basin has an elevation of 66 feet above sea level.

1.9 LAND USE DESIGNATIONS AND ZONING

1.9.1 Existing General Plan and Zoning

General Plan Land Use Designation

The City of Antioch's General Plan (General Plan) designates the project site as Low Density Residential, which is defined as follows:

"These areas are generally characterized by single-family homes in traditional subdivisions. Areas designated Low Density Residential are typically located on gently rolling terrain with no or few geological or environmental constraints. The residential neighborhoods of southeast Antioch reflect this residential density."

(City of Antioch 2003a)

Zoning District

The City's Zoning Ordinance designates the project site as P-D 86-3.1: Planned Development District.



Wild Horse Multifamily Project

Initial Study

1.0 introduction

1.9.2 Proposed General Plan and Zoning

The proposed project includes a General Plan Amendment and Planned Development Rezone to develop higher density housing for multifamily uses. While the General Plan land use designation would change following approval of the proposed project, it would continue to provide for residential uses, similar to the existing designation. A Final Development Plan and a vesting tentative map for condo purposes would also be required.

Proposed General Plan Land Use Designation

The Applicant is proposing to change the General Plan designation of the project site to High Density Residential, and is defined as follows:

“High Density Residential densities may range up to thirty-five (35) dwelling units per gross developable acre, with density bonuses available for age-restricted, senior housing projects. Two-story apartments and condominiums with surface parking typify this density, although structures of greater height with compensating amounts of open space would be possible. This designation is intended primarily for multifamily dwellings. As part of mixed-use developments within the Rivertown area and designated transit nodes, residential development may occur on the upper floors of buildings whose ground floor is devoted to commercial use. Permitted densities and number of housing units will vary, depending on topography, environmental aspects of the area, geologic constraints, existing or nearby land uses, proximity to major streets and public transit, and distance to shopping districts and public parks. The Zoning Ordinance will establish specific density limits at or below 35 units per acre for zoning districts that correspond with the High Density Residential designation. Higher densities will be allowed where measurable community benefit is to be derived (i.e., provision of needed senior housing or low and moderate income housing units). In all cases, infrastructure, services, and facilities must be available to serve the proposed density, and the proposed project must be compatible with surrounding land uses.

Appropriate Land Use Types: Medium Density Residential, High Density Residential, Rivertown Commercial, Mixed Use, and Mixed Use Medical Facility



Wild Horse Multifamily Project

Initial Study

1.0 introduction

Maximum Allowable Density: Thirty-five (35) dwelling units per gross developable acre (35 du/ac) and up to a Floor Area Ratio of 1.5 within areas designed for mixed use or transit-oriented development.

Anticipated Population per Acre: Forty (40) to seventy (70) persons per acre.”

(City of Antioch 2015a)

Proposed Zoning District

The project would require a rezone to a new Planned Development District. The Planned Development District is described in the City’s municipal code as follows:

“Planned Development Districts are intended to accommodate a wide range of residential, commercial and industrial land uses which are mutually supportive and compatible with existing and proposed development on surrounding properties. P-D Districts shall encourage the use of flexible development standards designed to appropriately integrate a project into its natural and/or man-made setting and shall provide for a mix of land uses to serve identified community needs. In addition, P-D Districts shall orient pedestrian and bicycle facilities to encourage non-auto oriented circulation within the development. Further-more, the P-D process may be used to implement the various Specific Plans adopted by the City. Once established, the P-D District becomes, in effect, the zoning code for the area within its respective boundaries.”

(City of Antioch 2003a)

1.10 DOCUMENT ORGANIZATION

This IS is organized as follows:

- Section 1.0: Introduction. This section introduces the proposed project and describes the purpose and organization of this document.
- Section 2.0: Project Description. This section describes the purpose and need for the proposed project, identifies project objectives, and provides a detailed description of the project.



Wild Horse Multifamily Project

Initial Study

1.0 introduction

- Section 3.0: Environmental Checklist and Environmental Evaluation. This section presents an analysis of the range of environmental issues identified in the CEQA Environmental Checklist and determines for each topic whether the proposed project would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If impacts are determined to be potentially significant after incorporation of applicable mitigation measures, an Environmental Impact Report would be required.
- Section 4.0: References. This section lists the references used in preparing this Initial Study.
- Section 5.0: List of Preparers. This section identifies the report preparers.



Wild Horse Multifamily Project

Initial Study

2.0 Project Description

2.0 PROJECT DESCRIPTION

The project would involve development of multifamily residences on an approximately 12-acre site at the terminus of Wild Horse Road and State Route 4 in Antioch, California. The project site is currently vacant and consists of a single parcel identified as APN 041-022-003. The Applicant is proposing to develop 126 multifamily residences with 25 buildings each with 2 to 8 units. The applicant created design guidelines for a future development, but the Applicant is not proposing to develop the property at this time. The project design would be reviewed during the City's design review process in accordance with Section 9-5.2607 of the Antioch Code of Ordinances. The project site is inclusive of 1.6 acres as an offer of dedication for construction of Wild Horse Road near the property's southern boundary, of which construction began by another developer on September 1, 2020.

2.1 PROJECT CHARACTERISTICS

The Applicant is proposing to develop 126 multifamily residences with 25 buildings each with two to eight units. The units would range in size from approximately 1,120 to 1,900 square feet, with 2 to 4 bedrooms and 2 to 3.5 baths. Maximum height of buildings would be 45 feet. All units would have 2 car attached garages. The proposed project would also include parking, landscaping managed by a homeowner's association, and 1.6 acres of usable open space.

2.1.1 Architectural Styles

The proposed project would include one of four types of architectural styles: Spanish, Craftsman, Farmhouse, or Contemporary. Regardless of the architectural style chosen, unique architectural elements would be incorporated and would be required to meet the project's design guidelines, the City's architectural design requirements, and be subject to Design Review prior to the issuance of a building permit. The four potential architectural style options for the proposed project are described below:

- Spanish Style design characteristics are generally identified as low-pitched hipped or gable roof, S-tile or villa tile roof material, smooth finish or very little texture stucco, window shutters, and exposed wood posts and beams.
- Craftsman Style design characteristics are generally identified as low-pitched hipped or gable roof, wide-overhanging eaves, emphasis on horizontal lines,



Wild Horse Multifamily Project

Initial Study

2.0 Project Description

board and batten or clapboard siding with various course exposures, decorative beams or braces commonly added under gables, porches that cover the length of the front elevation and often wrap onto side elevations, and stone and/or brick veneer is often used at the lower portion of the elevation.

- Contemporary design characteristics are generally identified as minimal ornamentation, use of strong, organized, geometric forms and massing, juxtaposition of different, and sometimes contrasting materials, use of natural textures such as wood, metal and stone, and austere elevations with high contrast in areas of entry or interest.
- Farmhouse design characteristics are generally identified as variable size entry porch with style specific detailing, prominent gable roof forms with occasional use of hip roof forms, horizontal siding with various exposures, vertical proportioned windows, steep gable roof pitches, and wide entry porch with separate shed roof and minimal detailing.

2.1.2 Landscaping

Landscaping for the proposed project would be required to meet the general design standards outlined in the City's Municipal Code, which states that "all landscaping and irrigation systems shall be designed, installed and maintained in accord with the standards and requirements of this section, which shall apply to all commercial, industrial, and residential projects requiring planned development, use permit and/or Design Review Board approval(s)" (City of Antioch 2003a).

According to the preliminary landscape plan prepared for the proposed project, landscaped areas would generally incorporate plantings utilizing a three-tier system: (1) grasses and ground covers, (2) shrubs and vines, and (3) trees. All plant materials for the landscaping plan would be selected from the California Department of Water Resources "Water-Use Classification of Landscape Species" and would emphasize water-efficient plants. A bioretention basin would be located in the northern corner of the proposed project, trees would line the private streets and property boundaries, and the Paseos would include trees, shrub, and ground cover areas. Entrances, walls, and fences would be landscaped to provide buffers for security and privacy. Community features such as plazas, interactive water features, and community gardens would be included.



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2.1.3 Open Space Areas

The proposed project would include 1.6 acres of usable open space, that would serve as a central gathering place for the community. Buildings would be oriented to create courtyards and usable open space areas. The shared open space would include both active and passive recreational opportunities including a lawn, green landscaped areas, children's play equipment, four pedestal picnic tables, including two pedestal picnic tables in compliance with the American Disabilities Act, and grills. The Paseos would include entry arbors, paved pathways lined with trees, shrubs, and ground cover.

2.1.4 Vehicular Access

Primary site access would be via Wild Horse Road and onto two streets ("A" Street and "B" Street) within the project site. Shared open space would be designed with sidewalks, street trees, and pedestrian lighting. The proposed streets would be 26 feet wide to allow emergency vehicles to access the project site.

2.1.5 Parking

The proposed units would have two car attached garages, totaling 256 private parking spaces. The proposed project would include an additional 45 on street pull-in parking spaces. The proposed project would also include 10 common use bicycle racks for bicycle parking throughout the project. Each bicycle rack will accommodate two bicycles.

2.1.6 Lighting and Security

Lighting is a safety feature and shall be used to light all streets, pathways, and open areas. Street lighting interior to the site would be installed on both sides of the streets using a minimum 70-watt high pressure sodium light bulb. All lighting in parking areas would be arranged to provide safety and security for residents and visitors but prevent direct glare of illumination onto adjacent units. Pedestrian-scaled lighting would be located along all pedestrian routes of travel within multifamily communities. Pathway lighting is a safety feature and will be used to light all pathways and open areas including pathways from the parking lot to the building's entrance. All site entrances will be visible from a public street and well lighted.



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As required by the City, all developments must provide adequate lighting and illumination of parking areas and is subject to design review. Lighting fixtures shall not shine directly onto an adjacent street or property.

2.1.7 Utilities

Water and sewer would be provided by the City and gas and electric would be provided by Pacific Gas and Electric Company. The proposed development plans would be required to meet the City criteria during the City's development review phase, prior to issuance of a building permit. The proposed project would also include curbs, gutters, catch basins, fire hydrants, flow lines, sidewalks, manholes, utility boxes.

Water

The proposed project would connect new 8-inch and 6-inch water main lines that would run along the new proposed project streets to the existing 10-inch water main located along Wild Horse Road on the southern perimeter of the proposed project.

Wastewater

The City maintains and owns the local wastewater collection system and is responsible for the collection and conveyance of wastewater for the project site. Delta Diablo Sanitation District (DDSD) is the agency physically treating the wastewater at their facility. The proposed project would construct lateral 8-inch diameter sewer lines to service the residences and would connect to the existing 8-inch public sanitary sewer main line located along Wild Horse Road. All sewer distribution improvements would be constructed and designed in accordance with the City's Design Standards.

Stormwater

The proposed project would include installation of new 18-inch and 24-inch storm drains and storm drain outfall. The storm drains would connect to the bioretention basin and existing 48-inch and 36-inch storm drain pipes along the western perimeter of the proposed project. The proposed project would create 214,032 square feet of impervious surface. It would also include 284,502 square feet of pervious surface consisting of landscaping and bioswale landscaping throughout the project site and a bioretention basin in the northern corner of the project site. This bioretention area would be used to treat runoff from the impervious roofs, roadways and landscaped areas. The project would also implement low impact development design strategies, such as optimizing



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site layout to limit development envelope, preserve natural drainage features, minimize impervious surfaces, use drainage as a design element, dispersal of runoff to pervious areas, and bioretention facilities.

Electricity

Pacific Gas & Electric Company (PG&E) would provide electricity and natural gas services to the project site. The proposed project would connect to existing underground electric and natural gas lines on the project site and/or in adjacent roadways. Section 4.5, Energy, contains detailed information on the proposed project's energy usage.

2.2 PROJECT CONSTRUCTION

2.2.1 Schedule

It is anticipated that project construction would take approximately 13 months to complete, starting in January 2023. The proposed project would require up to 79 workers during the peak construction phase. Project construction activities would be consistent with the Antioch Municipal Code Section 5-17.05 and would occur on weekdays from 7:00 a.m. - 6:00 p.m., on weekdays within 300 feet of occupied dwellings, 8:00 a.m. - 5:00 p.m., and on weekends and holidays 9:00 a.m. - 5:00 p.m., irrespective of the distance from the occupied dwellings (City of Antioch 2020a). The construction worksite would be operated in accordance with applicable public health standards, including those required in response to the Coronavirus (COVID-19).

2.2.2 Construction Equipment, Access, and Staging Areas

The proposed project would require the use of heavy construction equipment for site work and construction of the multifamily residences. Construction equipment would include but not be limited to concrete/industrial saws, rubber-tired dozers, tractors/loaders/backhoes, graders, scrapers, cranes, forklifts, generator sets, welders, air compressors, cement and mortar mixers, pavers, paving equipment, and rollers. Construction workers would access the project site from Wild Horse Road. Project construction equipment and materials would be stored within the project site. Construction materials and equipment would be delivered using trucks during the daytime hours (between 7 a.m. and 6 p.m.). Road closures are not anticipated during project construction.



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2.2.3 Construction Activities

Construction activities associated with the proposed project would require demolition, grading, utility connections, building construction, construction of the new streets, and landscaping on the project site. Construction of the proposed project would involve approximately 11,600 cubic yards (CY) of cut and 86,000 CY of fill, of which approximately 74,400 CY of soil would be import fill, as deemed appropriate by the geotechnical engineer. The maximum depth of ground disturbance would be 15 feet.



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3.0 ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant” as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Land Use and Planning
<input type="checkbox"/>	Agriculture and Forestry Resources	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Air Quality	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Population and Housing
<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Energy	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Geology and Soils	<input checked="" type="checkbox"/>	Transportation
<input type="checkbox"/>	Greenhouse Gases	<input type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Hazards and Hazardous Materials	<input type="checkbox"/>	Utilities and Service Systems
<input type="checkbox"/>	Hydrology and Water Quality	<input type="checkbox"/>	Wildfire

Evaluation of Environmental Impacts

This section presents the environmental checklist form found in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures, if needed.

For the checklist, the following designations are used:

- **Potentially Significant Impact:** An impact that could be significant and for which mitigation has not been identified. If any potentially significant impacts are identified, an EIR must be prepared.
- **Less Than Significant with Mitigation Incorporated:** This designation applies when applicable and feasible mitigation measures have reduced an effect from “Potentially Significant Impact” to a “Less-Than-Significant Impact” and, pursuant to Section 21155.2 of the PRC, those measures are incorporated into the Initial Study.
- **Less-Than-Significant Impact:** Any impact that would not be considered significant under CEQA, relative to existing standards.
- **No Impact:** The proposed project would not have any impact.



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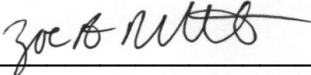
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DETERMINATION

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that are significant and unavoidable.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Zoe Merideth
Associate Planner City of Antioch

5/19/2021

Date



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3.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.1.1 Environmental Setting

Visual Character of the Project Site

The proposed project is located on an approximately 12-acre vacant site in the City. The project site is surrounded by State Route 4 to the east, residential developments to the west, and Wild Horse Road, the CCWD Antioch Service Center, and the Contra Costa Canal to the south. The project site is located at the eastern end of Wild Horse Road and existing developments near the project site are mostly single-family homes. The project site does not contain any General Plan designated scenic resources.



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Scenic Resources and Corridors

Most of the City's scenic resources are associated with open space and natural resources. Views of Mt. Diablo, the ridgelines, and the San Joaquin River are important resources to the City. Some historic and panoramic views of Mt. Diablo and the ridgelines that were once visible from roads and neighborhoods located at a distance from these features have now been obstructed due to new developments south of State Route (SR) 4, specifically those built on or near the ridgelines (City of Antioch 2003a). The General Plan designates landmarks within the City because they provide prominent visual features and focal points within the City. Designated landmarks within the City include the San Joaquin River, Mount Diablo, Antioch Bridge, and other historical buildings described in the General Plan. The General Plan designates important view corridors as public spaces. Natural ridgelines and landmarks, such as Mount Diablo and distant hills, local ridgelines, the San Joaquin River, and other water bodies, are also considered view corridors. The project site is visible from State Route 4. The City does not contain any officially designated scenic corridors or highways.

Light and Glare Conditions

The project site is vacant, and therefore, no substantial light and glare sources exist onsite. Nighttime lighting immediately surrounding the project site consists of street lighting, parking lot lighting, vehicle headlights on the adjacent streets and highways, and exterior lighting associated with the nearby developments. There are no electrical signs, billboards, or flashing or oscillating light sources in the project site.

3.1.2 Methodology

Analysis of the proposed project's visual impacts is based on an evaluation of the changes to the existing visual resources that would result from implementation of the proposed project. In determining the extent and implications of the visual changes, consideration was given to the existing visual quality of the affected environment; specific changes to the visual character and quality of the affected environment resulting from implementation of the proposed project; the extent to which the affected environment contains places or features that provide unique visual experiences or that have been designated in plans and policies for protection or special consideration; and the sensitivity of viewers, their activities, and the extent to which these activities are related to the aesthetic qualities that would be affected by implementation of the



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proposed project. The existing setting was based on a review of documents pertaining to the project site including the General Plan.

3.1.3 Environmental Impact Analysis

This section discusses the potential impacts on aesthetics associated with the proposed project and provides mitigation measures where necessary.

Impact AES-1 Have a substantial adverse effect on a scenic vista?

Impact Analysis

The General Plan indicates that views of Mt. Diablo, the ridgelines, and the San Joaquin River are important scenic resources to the City. The project site is within an urban area that mostly consists of residential developments. Views of scenic resources from the project site are obscured due to existing developments and vegetation. The proposed project would construct 126 new multifamily residences with a maximum building height of 45 feet. Given the amount of separation between the project site and these important scenic resources, the development of the proposed project would not substantially alter views of any scenic vistas. As such, the impacts on scenic vistas would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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Impact AES-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Impact Analysis

There are no scenic resources designated by the City on the project site. The project site is vacant and does not contain vegetation, rock outcroppings, or historic buildings that are identified as scenic resources by the General Plan. There are no state-designated scenic highways in the City. However, SR 4 located east of the project site is listed as an eligible state scenic highway, but the segment has not been officially designated. Therefore, the proposed project would have no impact on scenic resources within a State scenic highway. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AES-3 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?

Impact Analysis

The project site is in an urbanized area, and therefore, this analysis focuses on whether the proposed project would conflict with applicable zoning and other regulations governing scenic quality.



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The City's General Plan designates the project site as Low Density Residential, and the City's Zoning Ordinance designates the project site as P-D 86-3.1: Planned Development District. This project-specific Planned Development District allows for uses such as housing developments which are appropriate as part of a specific planned development. The proposed project includes a General Plan Amendment and Planned Development Rezone to develop higher density housing for multifamily uses. While the General Plan land use designation would change following approval of the proposed project, it would continue to provide for residential uses, similar to the existing designation. The proposed General Plan land use designation and zoning allows for multifamily dwellings with densities up to 35 dwelling units per gross developable acre. The proposed project would be consistent with the proposed General Plan land use designation and new project specific Planned Development zoning district.

The project would also provide 1.6-acres of usable open space, landscaping managed by a homeowner's association, and parking. The project design would be reviewed during the City's design review process in accordance with Section 9-5.2607 of the Antioch Code of Ordinances. As such, the proposed project would not conflict with any applicable zoning or other regulations governing scenic quality, and impacts would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact AES-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact Analysis

The project site is vacant and does not currently contain any onsite source of light or glare. However, there are existing sources of light and glare from surrounding



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developments and roadways consisting of exterior building lighting, parking lot lighting, street lighting and headlights from vehicles driving on SR 4 and other surrounding roadways.

The proposed project would include new sources of nighttime lighting at the project site. Lighting is a safety feature and shall be used to light all streets, pathways, and open areas. Street lighting interior to the site would be installed on both sides of the streets using a minimum 70-watt high pressure sodium light bulb. All lighting in parking areas would be arranged to provide safety and security for residents and visitors but prevent direct glare of illumination onto adjacent units. Pedestrian-scaled lighting would be located along all pedestrian routes of travel within multifamily communities. Pathway lighting is a safety feature and will be used to light all pathways and open areas including pathways from the parking lot to the building's entrance. All site entrances will be visible from a public street and well lighted. As required by the City, all developments must provide adequate lighting and illumination of parking areas and is subject to design review. Lighting fixtures shall not shine directly onto an adjacent street or property. Compliance with the City's requirements would ensure that light and glare impacts associated with the proposed project would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forestland (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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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 forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



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3.2.1 Environmental Setting

Antioch is located in an area of Contra Costa County that has traditionally contained areas of land used for grazing, orchards, field and row crops. The City has approximately 5,600 acres of grazing and former agricultural lands (City of Antioch 2003a). According to the City of Antioch General Plan Environmental Impact Report (General Plan EIR), there are agricultural lands located north of SR 4 as well as in the southern portion of the City.

The California Department of Conservation (DOC) Important Farmland Finder Map and the General Plan EIR classifies the project site as Farmland of Local Importance (DOC 2016, City of Antioch 2003b). The DOC defines Farmland of Local Importance as land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. However, the City's General Plan designates the project site as Low Density Residential, and the City's Zoning Ordinance designates the project site as P-D 86-3.1: Planned Development District. This project-specific Planned Development District allows for uses such as housing developments which are appropriate as part of a specific planned development. The proposed project includes a General Plan Amendment and Planned Development Rezone to develop higher density housing for multifamily uses. While the General Plan land use designation would change following approval of the proposed project, it would continue to provide for residential uses, similar to the existing designation.

3.2.2 Methodology

The following analysis is based on a review of documents pertaining to the project site, including the General Plan, General Plan EIR, the DOC Important Farmland Map, and Contra Costa County 2016 Agricultural Preserves Map.

3.2.3 Environmental Impact Analysis

This section discusses potential impacts on agriculture and forestry resources associated with the proposed project and provides mitigation measures where necessary.



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Impact AG-1 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?

Impact Analysis

The project site is designated as Farmland of Local Importance. The City's General Plan designates the project site as Low Density Residential, and the City's Zoning Ordinance designates the project site as P-D 86-3.1: Planned Development District. This project-specific Planned Development District allows for uses such as housing developments which are appropriate as part of a specific planned development. The proposed project includes a General Plan Amendment and Planned Development Rezone to develop higher density housing for multifamily uses. While the General Plan land use designation would change following approval of the proposed project, it would continue to provide for residential uses, similar to the existing designation. As such, the proposed project would not result in the conversion of prime, unique, or farmland of statewide importance and no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-2 Conflict with existing zoning for agricultural use or a Williamson Act contract?

Impact Analysis

The project site is within the Planned Development Zoning District, which allows for a wide range of residential, commercial and industrial land uses. This district



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accommodates various types of development, such as neighborhood and district shopping centers, professional and administrative offices, multiple housing developments, single-family residential developments, commercial service centers, and industrial parks, or any other use or combination of uses which are appropriately a part of a planned development. The project site is not zoned for agricultural use and is currently not under a Williamson Act contract. Therefore, no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-3	Conflict with existing zoning for, or cause rezoning of, forestland (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 Analysis

The project site does not contain forestland (as defined in Public Resources Code [PRC] Section 12220[g]), or timberland (as defined by PRC Section 4526). Furthermore, the project site is not zoned Timberland Production (as defined by Government Code section 51104[g]). The project site is zoned as Planned Development District which allows for a wide range of residential, commercial and industrial land uses. The site would not require rezoning of forestland or timberland production. As such, the proposed project would not convert forestland or timberland to a non-agricultural use, and no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.



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Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-4 Result in the loss of forestland or conversion of forestland to non-forest use?

Impact Analysis

The project site is designated Low Density Residential and is located within a Planned Development Zoning District. There are no forestland resources on the project site. Therefore, the proposed project would not result in the loss of forestland or conversion of forestland to non-forest use. No impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact AG-5 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 forestland to non-forest use?

Impact Analysis

The project site is classified as Farmland of Local Importance by the DOC; however, it is substantially surrounded by urban development and the project size of 12 acres would be inadequate for agricultural use. The project site and surrounding area is



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designated Planned Development/Low Density Residential by the General Plan, which indicates the City has contemplated urban development for vacant parcels in the vicinity of the project. The area surrounding the project site is not under agricultural use. Therefore, the proposed project would not cause changes to the existing environment that could result in conversion of Farmland outside the project site boundary to non-agricultural use. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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3.3 AIR QUALITY

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.3.1 Environmental Setting

The City of Antioch is in Contra Costa County, which is within the boundaries of the San Francisco Bay Area Air Basin and under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) and the California Air Resources Board (CARB). The regional climate within the San Francisco Bay Area is driven by a summertime high-pressure cell centered over the northeastern Pacific Ocean that dominates the summer climate of the West Coast. The persistence of this high-pressure cell generally results in negligible precipitation during the summer and meteorological conditions are typically stable with a steady northwesterly wind flow. This flow causes upwelling of cold ocean water from below the surface, which produces a band of cold water off the California coast. The cool and moisture-laden air approaching the coast from the Pacific Ocean is further cooled by the presence of the cold-water band, resulting in condensation and the presence of fog and stratus clouds along the Northern California coast. In the winter, the Pacific high-pressure cell weakens and shifts to the south, resulting in wind flows offshore, the absence of upwelling, and an increase in the occurrence of storms. Winter stagnation episodes are characterized by nocturnal drainage wind flows in coastal valleys. Drainage is a reversal of the usual daytime air-flow patterns; air moves from the



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Central Valley toward the coast and back down toward the Bay from the smaller valleys within the Air Basin.

Criteria Air Pollutants

The Federal Clean Air Act (FCAA) establishes the framework for modern air pollution control. The FCAA, enacted in 1970 and amended in 1990, directs the United States Environmental Protection Agency (EPA) to establish ambient air quality standards. These standards are divided into primary and secondary standards. The primary standards are set to protect human health, and the secondary standards are set to protect environmental values, such as plant and animal life. The FCAA requires the EPA to set National Ambient Air Quality Standards for the six criteria air pollutants. These pollutants include particulate matter, ground-level ozone, carbon monoxide (CO), sulfur oxides, oxides of nitrogen (NO_x), and lead. According to the BAAQMD, ozone and fine particulate matter (PM_{2.5}) are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily an issue in the summer and PM_{2.5} in the winter (BAAQMD 2016).

Toxic Air Contaminants

A toxic air contaminant (TAC) is an air pollutant not included in the California Ambient Air Quality Standards, but TACs are considered hazardous to human health. Toxic air contaminants are defined by CARB as those pollutants that, “may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health.”

The health effects associated with TACs are generally assessed locally rather than regionally. Toxic air contaminants can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage; TACs can also cause short-term acute effects such as eye watering, respiratory irritation, running nose, throat pain, and headaches. For evaluation purposes, TACs are separated into carcinogens and noncarcinogens. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and the cancer risk is expressed as excess cancer cases per one million exposed individuals (typically over a lifetime of exposure).



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Diesel Particulate Matter

Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases: gas and particle. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particle phase also has many different types of particles that can be classified by size or composition. The size of diesel particulates that are of greatest health concern are those that are in the categories of fine and ultra-fine particles. The composition of these fine and ultra-fine particles may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals, and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines, such as the on-road diesel engines of trucks, buses, and cars, and off-road diesel engines that include locomotives, marine vessels, and heavy-duty equipment (CARB 2019).

Asbestos

Asbestos is a fibrous mineral that both naturally occurs in ultramafic rock (a rock type commonly found in California) and is used as a processed component of building materials. Because asbestos has been proven to cause a number of disabling and fatal diseases, such as asbestosis and lung cancer, it is strictly regulated either based on its natural widespread occurrence or in its use as a building material. In the initial Asbestos National Emission Standards for Hazardous Air Pollutants rule promulgated in 1973, a distinction was made between building materials that would readily release asbestos fibers when damaged or disturbed (friable) and those materials that were unlikely to result in significant fiber release (non-friable). The EPA has since determined that, when severely damaged, otherwise non-friable materials can release significant amounts of asbestos fibers. Asbestos has been banned from many building materials under the Toxic Substances Control Act, the Clean Air Act, and the Consumer Product Safety Act. Naturally occurring asbestos (NOA) is known to occur in many parts of California and is commonly associated with ultramafic or serpentinite rock.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health



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problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics.

Air Quality Standards

The Clean Air Act requires states to develop a general plan to attain and maintain the standards in all areas of the country and a specific plan to attain the standards for each area designated nonattainment. These plans, known as State Implementation Plans (SIPs), are developed by state and local air quality management agencies and submitted to EPA for approval.

The SIP for the State of California is administered by the CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for each regional air district. SIPs are prepared by the regional air district and sent to CARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

The CARB also administers the California Ambient Air Quality Standards for the 10 air pollutants designated in the California Clean Air Act. The 10 state air pollutants include the six federal criteria pollutant standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The federal and state ambient air quality standards are summarized in Table 3.3-1.

Table 3.3-1. California and National Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard Concentration	National Standard Primary	National Standard Secondary
Ozone	1 Hour	0.09 ppm (180 µg/m ³)	—	Same as Primary Standard
	8 Hour	0.070 ppm (137 µg/m ³)	0.070ppm (137 µg/m ³)	
Respirable Particulate Matter	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	20 µg/m ³	—	



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Pollutant	Averaging Time	California Standard Concentration	National Standard Primary	National Standard Secondary
Fine Particulate Matter	24 Hour	—	35 µg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³	
Carbon Monoxide	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	—
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	—	—
Nitrogen Dioxide	1 Hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)	—
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary Standard
Sulfur Dioxide	1 Hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	—
	3 Hour	—	—	0.5 ppm (1300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas)	—
	Annual Arithmetic Mean	—	0.030 ppm (for certain areas)	—
Lead	30-Day Average	1.5 µg/m ³	—	—
	Calendar Quarter	—	1.5 µg/m ³	Same as Primary Standard
	Rolling 3-Month Average	—	0.15 µg/m ³	
Visibility-Reducing Particles	8 Hour	See Footnote 1	No National Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		

Notes:

1. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for statewide and Lake Tahoe Air Basin standards, respectively. µg/m³ = micrograms per cubic meter; CARB = California Air Resources Board; mg/m³ = milligrams per cubic meter; ppm = parts per million

Source: Bay Area Air Quality Management District Air Quality Standards and Attainment Status (BAAQMD 2017a)



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As summarized in Table 3.3-2, the San Francisco Bay Area Basin and Contra Costa County are currently designated as nonattainment areas for state ozone, PM_{2.5}, and particulate matter between 2.5 and 10 microns (PM₁₀) standards and for national ozone and PM_{2.5} standards; however, they are listed as unclassified under national PM₁₀ standards. The standards for CO, nitrogen dioxide, sulfur dioxide, and lead are being met in the Bay Area. The BAAQMD has developed its 2017 Clean Air Plan, Spare the Air, Cool the Climate (2017 Clean Air Plan) to update the most recent Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health and Safety Code. To fulfill state ozone planning requirements, the 2017 control strategy includes all feasible measures to reduce emissions of ozone precursors—reactive organic gases (ROG) and NO_x—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the 2017 Clean Air Plan builds upon and enhances the BAAQMD's efforts to reduce emissions of PM_{2.5} and TACs (BAAQMD 2017b).

Table 3.3-2. Contra Costa County Area Designations for State and National Ambient Air Quality

Criteria Pollutants	State Designation	National Designation
Ozone (1-hour)	Nonattainment	—
Ozone (8-hour)	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Unclassified
PM _{2.5}	Nonattainment	Unclassified/Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Attainment
Sulfates	Attainment	—
Lead	Attainment	Attainment
Hydrogen Sulfide	Unclassified	—
Visibility Reducing Particles	Unclassified	—

Notes:

PM_{2.5} = particulate matter less than 2.5 microns; PM₁₀ = particulate matter between 2.5 and 10 microns
Source: Bay Area Air Quality Management District Air Quality Standards and Attainment Status (BAAQMD 2017a)



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Table 3.3-3. Bay Area Air Quality Management District Project-Level Air Quality California Environmental Quality Act Thresholds of Significance

Criteria Air Pollutants and Precursors (regional)	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
Reactive organic gas	54	54	10
Nitrogen oxide	54	54	10
Particulate matter 10 microns in diameter or less (PM ₁₀)	82 (exhaust)	82	15
Particulate matter 2.5 microns in diameter or less (PM _{2.5})	54 (exhaust)	54	10
Fugitive dust (PM ₁₀ and PM _{2.5})	Best management practices	None	
Local carbon monoxide	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
Greenhouse gases (projects other than stationary sources)	None	Compliance with qualified greenhouse gas reduction strategy OR 1,100 MTCO ₂ e/yr OR 4.6 MTCO ₂ e/SP/yr (residents + employees)	

Notes:

lbs/day = pounds per day; tpy= trips per year; ppm = parts per million; MTCO₂e/yr= metric tons of carbon dioxide equivalent per year; MTCO₂e/SP/yr= metric tons of carbon dioxide equivalent per service population per year

Source: Bay Area Air Quality Management District CEQA Air Quality Guidelines (BAAQMD 2017c)

The BAAQMD has established rules and regulations to attain and maintain State and national air quality standards. The rules and regulations that apply to this proposed project include, but are not limited to, the following:

Regulation 8, Rule 3: Architectural Coatings

This rule governs the manufacture, distribution, and sale of architectural coatings and limits the ROG content in paints and paint solvents. Although this rule does not directly apply to the proposed project, it does dictate the ROG content of paint available for use during the construction.



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Regulation 8, Rule 15: Emulsified and Liquid Asphalts

Although this rule does not directly apply to the proposed project, it does dictate the ROG content of asphalt available for use during the construction through regulating the sale and use of asphalt and limits the ROG content in asphalt.

BAAQMD manages a naturally occurring asbestos program that administers the requirements of CARB's naturally occurring asbestos air toxic control measures, as discussed above. The BAAQMD provides an exemption application, notification form for road construction and maintenance operations, and asbestos dust mitigation plan applications for projects to submit prior to the start of construction, or upon discovery of asbestos, ultramafic rock, or serpentine during construction. Forms must be submitted to the BAAQMD in accordance with the procedures detailed in the BAAQMD Asbestos Air Toxic Control Measures Inspection Guidelines Policies and Procedures.

City of Antioch

As a component of the 2003 General Plan, the City has adopted policies to minimize air pollutant emissions within the Antioch planning area. The following policies are applicable to the proposed project:

10.6.2 Air Quality Policies

Construction Emissions

- Require development projects to minimize the generation of particulate emissions during construction through implementation of the dust abatement actions outlined in the CEQA Handbook of the Bay Area Air Quality Management District.

Stationary Sources

- Provide physical separation between (1) proposed new industries having the potential for emitting toxic air contaminants and (2) existing and proposed sensitive receptors (e.g., residential areas, schools, and hospitals).



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3.3.2 Methodology

Construction and operational emissions for the proposed project were modeled using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (Appendix A).

3.3.3 Environmental Impact Analysis

This section discusses potential impacts related to air quality associated with the proposed project and provides mitigation measures where necessary.

Impact AIR-1 Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis

The BAAQMD's 2017 Clean Air Plan is the regional air quality plan (AQP) for the Air Basin. It identifies strategies to bring regional emissions into compliance with federal and State air quality standards. The BAAQMD's Guidance provides two criteria for determining if a plan-level project is consistent with the current AQP control measures. However, the BAAQMD does not provide a threshold of significance for project-level consistency analysis. Therefore, the following criteria will be used for determining a project's consistency with the AQP.

- Criterion 1: Does the project support the primary goals of the AQP?
- Criterion 2: Does the project include applicable control measures from the AQP?
- Criterion 3: Does the project disrupt or hinder implementation of any AQP control measures?

Criterion 1

The primary goals of the 2017 Clean Air Plan, the current AQP, are to:

- Protect public health through the attainment air quality standards
- Protect the climate

As discussed in impact discussions AIR-2, AIR-3, and AIR-4 the proposed project would not significantly contribute to cumulative nonattainment pollutant violations, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors affecting a substantial number of people after implementation of Mitigation Measure



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AIR-1. Therefore, the project is consistent with criterion 1 with incorporation of Mitigation Measure AIR-1, which would require all construction contractors to implement the basic construction mitigation measures recommended by the BAAQMD to reduce fugitive dust emissions.

Criterion 2

The 2017 Clean Air Plan contains 85 control measures aimed at reducing air and climate pollutants in the Bay Area. For purposes of consistency with climate planning efforts at the state level, the control strategy in the Clean Air Plan is based upon the same economic sector framework used by the CARB for its 2014 update to the Assembly Bill (AB) 32 Scoping Plan. The sectors are as follows:

- Stationary Sources
- Transportation
- Energy
- Buildings
- Agriculture
- Natural and Working Lands
- Waste Management
- Water
- Super-GHG (Greenhouse Gas) Pollutants

The proposed project's potential to conflict with each of these measures is discussed below.

Stationary Source Control Measures. The Stationary Source Measures, which are designed to reduce emissions from stationary sources such as metal melting facilities, refineries, and glass furnaces, are incorporated into rules adopted by the BAAQMD and then enforced by the BAAQMD's Permit and Inspection programs. Since the proposed project is residential in nature would not include any stationary sources of emissions, the Stationary Source Measures of the Clean Air Plan are not applicable to the proposed project.

Transportation Control Measures. The BAAQMD identifies Transportation Measures as part of the Clean Air Plan to decrease emissions of criteria pollutants, TACs, and greenhouse gases (GHGs) by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying



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motor vehicles and equipment. The proposed project would develop new multifamily residences that would locate residents near existing and planned residential uses, commercial, office, and retail space uses, and public parks. The proposed project includes pedestrian access connections within and adjacent to the project site. The proposed project would be constructed in accordance with City standards and would be consistent with the BAAQMD's effort to encourage planning for bicycle and pedestrian facilities.

Energy Control Measures. The Clean Air Plan also includes Energy Control Measures, which are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation. Since these measures apply to electrical utility providers and local government agencies (and not individual projects), the Energy Control Measures of the Clean Air Plan are not applicable to the proposed project. However, the project applicant would be required to conform to the energy efficiency requirements of the California Building Standards Code, also known as Title 24. Specifically, the project must implement the requirements of the most recent Building Energy Efficiency Standards, which is the current version of Title 24.

Building Control Measures. The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters but has limited authority to regulate buildings themselves. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes, to facilitate adoption of best GHG control practices and policies. The proposed project would be required to comply with the latest California Green Building Standards Code (CALGreen) standards. Therefore, the Building Control Measures of the Clean Air Plan are not applicable to the proposed project.

Agriculture Control Measures. The Agriculture Control Measures are designed to primarily reduce emissions of methane. Since the proposed project does not include any agricultural activities, the Agriculture Control Measures of the Clean Air Plan are not applicable to the proposed project.

Natural and Working Lands Control Measures. The Natural and Working Lands Control Measures focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to ordinances that promote urban-



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tree plantings. Since the project does not include the disturbance of any rangelands or wetlands, the Natural and Working Lands Control Measures of the Clean Air Plan are not applicable to the proposed project.

Waste Management Control Measures. The Waste Management Measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would comply with local requirements for waste management (e.g., recycling and composting services). Therefore, the proposed project would be consistent with the Waste Management Control Measures of the Clean Air Plan.

Water Control Measures. The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Since these measures apply to POTWs and local government agencies (and not individual projects), the Water Control Measures are not applicable to the proposed project.

Super-GHG Control Measures. The Super-GHG Control Measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. Since these measures do not apply to individual projects, the Super-GHG Control Measures are not applicable to the proposed project.

As discussed above, most of the measures contained in the Clean Air Plan would not be applicable to the proposed project. The proposed project would not impede implementation of any measures contained in the Clean Air Plan and would be consistent with applicable measures outlined in the Clean Air Plan. Therefore, the project would not disrupt or hinder implementation of a control measure from the Clean Air Plan.

Criterion 3

If the approval of a project would not cause a disruption, delay, or otherwise hinder the implementation of any clean air plan control measure it would be considered consistent with the 2017 Clean Air Plan. Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path or proposes excessive parking beyond parking requirements. The project



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will not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to implementation of any AQP control measures. As shown above, the project incorporates several AQP control measures as project design features.

Conclusion

The proposed project would be consistent with the criteria of the AQP with incorporation of Mitigation Measure AIR-1. As such, with the incorporation of this mitigation measure this impact would be less than significant after incorporation of mitigation.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM AIR-1: Implement Construction Best Management Practices

The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by the BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by the BAAQMD or contractor as appropriate:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day
- All haul trucks transporting soil, sand, or other loose material off-site will be covered
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour



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- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used
- Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations; clear signage shall be provided for construction workers at all access points
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications
- All equipment shall be checked by a certified visible emissions evaluator or checked by a certified mechanic and determined to be running in proper condition prior to operation
- Post a publicly visible sign with the telephone number and person to contact at the City regarding dust complaints. This person will respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number will also be visible to ensure compliance with applicable regulations.

Level of Significance After Mitigation

Less Than Significant Impact with Mitigation.

Impact AIR-2 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?

Impact Analysis

In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Project construction and operational impacts are assessed separately below.



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Construction Emissions

Construction activities associated with development of the proposed project would include site preparation, grading, building construction, paving and architectural coatings. Emissions from construction-related activities are generally short-term in duration but may still cause adverse air quality impacts. During construction, fugitive dust would be generated from earth-moving activities. Exhaust emissions would also be generated from off-road construction equipment and construction-related vehicle trips. Emissions associated with construction of the proposed project are discussed below.

Construction Fugitive Dust (PM₁₀ and PM_{2.5})

During construction (grading), fugitive dust (PM₁₀ and PM_{2.5}) would be generated from site grading and other earth-moving activities. Most of this fugitive dust will remain localized and will be deposited near the project site.

The BAAQMD does not have a quantitative threshold for fugitive dust. The BAAQMD's Air Quality Guidelines recommend that projects determine the significance for fugitive dust through application of best management practices (BMPs). Mitigation Measure AIR-1 requires the implementation fugitive dust control measures that are consistent with BMPs established by the BAAQMD, which reduce the project's construction-generated fugitive dust impacts to a less than significant level.

Construction Emissions: ROG, NO_x, PM₁₀ (exhaust), PM_{2.5} (exhaust)

Table 3.3-4 provides the construction emissions estimate for the proposed project. Please refer to Appendix A for details regarding assumptions used to estimate construction emissions. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as require pursuant to CEQA guidelines. The construction emissions in each year are well below the recommended thresholds of significance. The project would implement Mitigation Measure (MM) AIR-1 as recommended by the BAAQMD. The emissions from construction would be less than significant.



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Table 3.3-4. Construction Annual and Daily Average Emissions (Unmitigated Average Daily Rate)

Parameter	Air Pollutants			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
2023 Construction Year (tons/year)	0.40	4.04	0.13	0.12
2024 Construction Year (tons/year)	1.79	0.37	0.01	0.01
<i>Total Emissions (tons/year)</i>	<i>2.19</i>	<i>4.41</i>	<i>0.14</i>	<i>0.13</i>
Total Emissions (pounds/year)	4,386	8,820	281	263
Average Daily Emissions (pounds/day)¹	11.54	23.21	0.74	0.69
Significance Threshold (pounds/day)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No

Notes:

¹ Calculated by dividing the total number of pounds by the total 380 working days of construction for the entire construction period.

Calculations use unrounded numbers.

lbs = pounds; NO_x = oxides of nitrogen; PM₁₀ = particulate matter 10 microns in diameter; PM_{2.5} = particulate matter 2.5 microns in diameter; ROG = reactive organic gases

Source: Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary (Appendix A)

Operational Emissions

As previously discussed, the pollutants of concern include ROG, NO_x, PM₁₀, and PM_{2.5}. Full buildout of the project is anticipated to occur in 2024, immediately following the completion of construction. Emissions were assessed for full buildout operations in the 2024 operational year as summarized in Tables 3.3-5 and 3.3-6. The BAAQMD Criteria Air Pollutant Significance thresholds were used to determine impacts.



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Table 3.3-5. Operational Annual Emissions for Full Buildout (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Area	1.16	0.01	0.01	0.01
Energy	0.01	0.11	0.01	0.01
Mobile (Motor Vehicles)	0.20	0.82	0.80	0.22
Total Project Annual Emissions	1.37	0.95	0.81	0.23
Thresholds of Significance	10	10	15	10
Exceeds Significance Threshold?	No	No	No	No

Notes:

NO_x = oxides of nitrogen; PM_{2.5} = particulate matter 2.5 microns or less in diameter; PM₁₀ = particulate matter 10 microns or less in diameter; ROG = reactive organic gases

Source: Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary (Appendix A)

Table 3.3-6. Operational Average Daily Emissions (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Total Project Annual Emissions ¹ (tons/year)	1.37	0.95	0.81	0.23
Total Project Annual Emissions ² (lbs/year)	2,731	1,891	1,625	465
Average Daily Emissions³ (lbs/day)	7.48	5.18	4.45	1.28
BAAQMD Average Daily Emission Thresholds (lbs/day)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No

Notes:

¹ Tons per year are shown in 3.3-5.

² Pounds per year were calculated using the unrounded annual project operational emissions.

³ The average daily operational emissions were estimated based on the total annual emissions divided by 365 days.

lbs = pounds; NO_x = oxides of nitrogen; PM_{2.5} = particulate matter 2.5 microns or less in diameter; PM₁₀ = particulate matter 10 microns or less in diameter; ROG = reactive organic gases

Source: Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary (Appendix A)

This impact will not be further addressed in the EIR.



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Level of Significance Before Mitigation

Mitigation Measure AIR-1 is required. Refer to Impact AIR-1 for complete details pertaining to this mitigation measure.

Mitigation Measures

Less Than Significant Impact with Mitigation.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact AIR-3 Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis

This discussion addresses whether the proposed project would expose sensitive receptors to substantial pollutant concentrations. The localized pollutants that could impact sensitive receptors include: NOA, construction-generated fugitive dust (PM₁₀ and PM_{2.5}), construction generated DPM, CO hotspots and operational-related TACs. Project construction and operational impacts are assessed separately below.

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, the following are land uses where sensitive receptors are typically located:

- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Hospitals
- Retirement homes
- Residences
- Schools, playgrounds, and childcare centers



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As a residential development project, the proposed project itself would be considered a sensitive receptor once operational. Most emissions during construction are generated during the site preparation and grading phases when heavy equipment is used to prepare the land for construction. As site preparation and grading are anticipated to occur for the entire project site prior to the completion of ground-up construction, emissions from grading and site preparation would not overlap with project operation. Earliest residential occupancy is expected to occur in 2024, following the completion of construction. If built in phases, construction activities following site preparation and grading would primarily include building construction, paving, painting, and landscaping. Relative to site preparation and grading activities, limited amounts of diesel equipment are used during these construction activities, which would not contribute substantially to the health risk during construction. Therefore, for the purposes of the Health Risk Assessment (HRA), sensitive receptors associated with future on-site residences were not included as part of the construction HRA. Planned off-site residential receptors were included as part of the construction HRA to provide a conservative estimate of impacts.

Project as a Source - Construction

Construction Fugitive Dust

During construction (grading), fugitive dust (PM_{10} and $PM_{2.5}$) is generated. As detailed in Impact AIR-1, the project would result in a less than significant dust impact after incorporation of Mitigation Measure AIR-1. Therefore, the proposed project would not expose adjacent receptors to significant amounts of construction dust after incorporation of mitigation.

Construction-Generated Diesel Particulate Matter

Construction activity using diesel-powered equipment emits DPM, a known carcinogen. DPM includes exhaust $PM_{2.5}$. A 10-year research program (CARB 2015) demonstrated that DPM (exhaust $PM_{2.5}$) from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. Health risks from TACs are a function of both concentration and duration of exposure. Construction diesel emissions are temporary, affecting an area for a period of weeks or months. Additionally, construction-related sources are mobile and transient in nature.

The health risk assessment evaluated DPM (represent as exhaust $PM_{2.5}$) and $PM_{2.5}$ (exhaust $PM_{2.5}$ and fugitive $PM_{2.5}$) emissions generated during construction of the



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proposed project and the related health risk impacts for sensitive receptors located within 1,000 feet of the project boundary. According to the BAAQMD, a project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in one million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient PM_{2.5} increase greater than 0.3 micrograms per cubic meter. As shown in Table 3.3-7 below, the health risk from these sources is determined to be less than significant.

The project site is located within 1,000 feet of existing and planned sensitive receptors that could be exposed to diesel emission exhaust during the construction period. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source location to concentrations at the receptor locations of interest (i.e., receptors at a nearby hospital). The maximally exposed individual receptor (MEIR) was found to be planned residence located approximately 34 feet west the of the project site.

Table 3.3-7. Unmitigated Health Risks from Project Construction to Off-Site Receptors

Health Impact Metric	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index ¹	Annual PM _{2.5} Concentration (µg/m ³)
Risks and Hazards at the MEIR²			
Risks and Hazards at the MEIR: Infants	7.41	0.009	0.06
Risks and Hazards at the MEIR: Infants	8.60	0.009	0.06
Risks and Hazards at the MEIR: Child	1.35	0.009	0.06
Risks and Hazards at the MEIR: Adult	0.15	0.009	0.06
BAAQMD Significance Threshold	10	1.0	0.3
Exceeds Individual Source Threshold?	No	No	No

Notes:

¹ Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM_{2.5} exhaust) by the REL of 5 µg/m³.

² The MEIR is located at a planned residence located approximately 34 feet west the of the project site. µg/m³ = micrograms per cubic meter; DPM = diesel particulate matter; MEIR = maximally exposed individual receptor; PM_{2.5} = particulate matter less than 2.5 microns

Source: Health Risk Assessment (Appendix B)



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Naturally Occurring Asbestos

The California DOC and the United States Geological Survey (USGS) have published a guide for generally identifying areas that are likely to contain NOA. There are no NOA areas located in the immediate vicinity of the project site. Therefore, there is no impact.

Project as a Source – Operation

Carbon Monoxide Hotspot

Localized high levels of CO (CO hotspots) are associated with traffic congestion and idling or slow-moving vehicles. The BAAQMD recommends a screening analysis to determine if a project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is necessary. The project would result in a less than significant impact to air quality for local CO if any of the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway)

Implementation of the proposed project would not conflict with the applicable congestion management program established by the Contra Costa Transportation Authority.

According to the Traffic Study Scope prepared for the project by Stantec Consulting Services, the project would generate approximately 58 net new trips during the a.m. peak hour and 71 net new trips during the p.m. peak hour and would not substantially increase traffic volumes on nearby roadways above 44,000 vehicles per hour.

Furthermore, the adjacent roadways are not located in an area where vertical and/or horizontal mixing, or the free movement of the air mass, is substantially limited by



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physical barriers such as bridge overpasses or urban or natural canyon walls. Therefore, the project would not significantly contribute to an existing or projected CO hotspot. Impacts are less than significant.

Toxic Air Contaminants

The proposed project would develop 126 dwelling units and would not generate substantial on-site TAC emissions during operation. Residential land uses are not land uses that are typically associated with TAC emissions and the proposed project does not include any features that would include more than usual TAC emission. As described in the Traffic Impact Study, the project is expected to generate a net increase of 7.32 daily vehicle trips per dwelling unit or 922 average daily trips. The proposed project would primarily generate trips associated with residents and visitors traveling to and from the project site. The daily travel trips to and from the project site would primarily be generated by passenger vehicles. Because nearly all passenger vehicles are gasoline-combusted, the proposed project would not generate significant amount of DPM emissions during operation. Therefore, the proposed project would not result in significant health impacts to nearby sensitive receptors during operation.

Cumulative Health Risk Assessment

The BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project. For a project-level analysis, the BAAQMD provides three tools for use in screening potential sources of TACs. The BAAQMD-provided tools that were used to assess the potential cumulative impacts from TACs are described below.

- **Stationary Source Risk and Hazard Screening Tools.** The BAAQMD prepared a geographic information system (GIS) tool with the location of permitted sources. For each emissions source, the Bay Area Air Quality Management District (BAAQMD) provides conservative estimates of cancer risk and PM_{2.5} concentrations. Based on information from the GIS tool, there are three BAAQMD-permitted stationary sources within 1,000 feet of the project site.
- **Health Risks for Local Roadways.** The BAAQMD pre-calculated concentrations and the associated potential cancer risks and PM_{2.5} concentration increases for each county within their jurisdiction for roadways that carry at least 30,000 average daily trips. For certain areas, the BAAQMD also included local roadways



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that meet BAAQMD's "major roadway" criteria of 10,000 vehicles or 1,000 trucks per day. The latest available screening tool is in the form of a GIS raster file.

- **Freeway Screening Analysis Tool.** The BAAQMD prepared a GIS raster file that contains pre-estimated cancer risk and PM_{2.5} concentration increases for highways within the Bay Area.
- **Rail Screening Tool.** The BAAQMD prepared a GIS raster file that contains estimated cancer risks and PM_{2.5} concentrations from railroad operations at any point within the Air Basin.

Cumulative Health Risk Assessment at the Maximum Impacted Receptor During Project Construction

The cumulative health risk results, including health risks from the existing TAC sources, are summarized during project construction in Table 3.3-8. Cumulative health risk results shown therein are representative of the health risks to the MEIR which would experience the highest concentration of pollutants.

Table 3.3-8. Summary of the Cumulative Health Impacts at the Maximally Exposed Individual Receptor during Project Construction

Source	Cancer Risk in One Million	Chronic Inhalation Hazard Index	Annual PM _{2.5} Concentration (µg/m ³)
Project Construction			
Project Construction	8.60	0.009	0.06
Existing Sources¹			
Ironhouse Sanitary District (FACID 1463)	33.11	0.110	0.04
Contra Costa Water District Antioch Service Center (FACID 14038)	5.17	0.010	0.01
Verizon Wireless (Oakley) (FACID ³ 18888)	1.59	<0.001	<0.01
Existing Major Local Roadways	0.32	ND	0.01
Existing Highways	2.12	ND	0.05
Existing Railways	1.04	ND	<0.01
Cumulative Health Risks at the MEIR²			
Cumulative Total with Unmitigated Project Construction	51.95	0.129	0.17



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Source	Cancer Risk in One Million	Chronic Inhalation Hazard Index	Annual PM _{2.5} Concentration (µg/m ³)
Bay Area Air Quality Management District's Cumulative Thresholds of Significance	100	10	0.8
Threshold Exceedance in Unmitigated Scenario?	No	No	No

Notes:

¹ No adjustments were made to reduce the cancer risk and hazard associated with sources that can be expected with farther distances from the source of emissions. This presents a conservative estimate.

² The MEIR is located at a planned residence located approximately 34 feet west the of the project site.

PM_{2.5} = particulate matter of 2.5 microns or less; µg/m³ = micrograms per cubic meter; FACID = Facility Identification Number; MEIR = maximally exposed individual receptor; ND = no data available
Source: Health Risk Assessment (Appendix B)

As noted in Table 3.3-8, the cumulative impacts from the project construction and existing sources of TACs would be less than the BAAQMD's cumulative thresholds of significance. Thus, the cumulative health risk impacts from project construction would be less than significant.

Cumulative HRA at the Project Site During Operations

The project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs at the project site. However, the California Supreme Court concluded in California Building Industry Association v. BAAQMD that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. Although impacts from existing sources of TAC emissions on sensitive receptors on the project site are not subject to CEQA, the BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project when siting new sensitive land uses. Therefore, for informational purposes and in the spirit of CEQA's full disclosure, the potential TAC risks to the project's future residents were analyzed. The BAAQMD's various screening tools, which quantify health risks from existing stationary and permitted sources, were used to estimate the health risks (associated with TAC sources within 1,000 feet of the project site) on future residents within the proposed project.

The cumulative health risk results for future receptors at the project site are summarized at project buildout in Table 3.3-9.



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Table 3.3-9 Summary of the Cumulative Health Impacts at the Project Site at Project Buildout

Source	Cancer Risk in One Million	Chronic Inhalation Hazard Index	Annual PM _{2.5} Concentration (µg/m ³)
Existing Sources¹			
Ironhouse Sanitary District (FACID 1463)	33.11	0.110	0.04
Contra Costa Water District Antioch Service Center (FACID 14038)	5.17	0.010	0.01
Verizon Wireless (Oakley) (FACID 18888)	1.59	<0.001	<0.01
Existing Major Local Roadways	0.32	ND	0.01
Existing Highways	2.12	ND	0.05
Existing Railways	1.04	ND	<0.01
Cumulative Health Risks at the MEIR²			
Cumulative Total with Unmitigated Project Construction	43.35	0.12	0.11
BAAQMD's Cumulative Thresholds of Significance	100	10	0.8
Threshold Exceedance in Unmitigated Scenario?	No	No	No

Notes:

¹ No adjustments were made to reduce the cancer risk and hazard associated with sources that can be expected with farther distances from the source of emissions. This presents a conservative estimate.

² The MEIR is located at a planned residence located approximately 34 feet west the of the project site.

PM_{2.5} = particulate matter of 2.5 microns or less; µg/m³ = micrograms per cubic meter; FACID = Facility Identification Number; MEIR = maximally exposed individual receptor; ND = no data available
Source: Health Risk Assessment (Appendix B)

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Mitigation Measure AIR-1 is required. Refer to Impact AIR-1 for complete details pertaining to this mitigation measure.

Mitigation Measures

Less Than Significant Impact with Mitigation.



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Level of Significance After Mitigation

Less Than Significant Impact.

Impact AIR-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Impact Analysis

As stated in the BAAQMD 2017 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard and the ability to detect odors varies considerably among the populations and overall is subjective. The BAAQMD does not have a recommended odor threshold for construction activities. However, BAAQMD recommends screening criteria that are based on distance between types of sources known to generate odor and the receptor. For projects within the screening distances, the BAAQMD has the following threshold for project operations:

- An odor source with five (5) or more confirmed complaints per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in the BAAQMD's guidance (see Table 3.3-3).

The BAAQMD's 2017 Air Quality Guidelines provide a table with odor screening distances recommended by BAAQMD for a variety of land uses. Projects that would site an odor source or a receptor farther than the applicable screening distance, shown in Table 3.3-10 below, would not likely result in a significant odor impact.

Table 3.3-10. Screening Levels for Potential Odor Sources

Odor Generator	Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile



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Odor Generator	Distance
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile

Source: Bay Area Air Quality Management District CEQA Air Quality Guidelines (BAAQMD 2017c)

Project Construction and Project Operation

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Project operations would not be anticipated to produce odorous emissions. Construction activities associated with the proposed project could result in short-term odorous emissions from diesel exhaust associated with construction equipment. However, these emissions would be intermittent and would dissipate rapidly from the source. In addition, this diesel-powered equipment would only be present onsite temporarily during construction activities. Therefore, construction would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.



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3.4 BIOLOGICAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



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3.4.1 Environmental Setting

The 12-acre project site consists of a single parcel identified as APN 041-022-003. The currently vacant site is an annual grassland and located within a suburban residential area. It is bordered by single-family residences to the west and south, and Highway 4 to the northeast. The project site has signs of past and ongoing disturbance. The property primarily extends over generally flat terrain with the site elevation ranging from approximately 70 feet above mean sea level at the north end to approximately 108 feet above mean sea level at the southern end. The center of the constructed detention basin has an elevation of ~66 feet above sea level. Regionally, the project site has a Mediterranean climate characterized by hot, dry summers and moderate winters, with average annual temperatures ranging from approximately 46 to 75 degrees Fahrenheit (°F). Historical data used to describe the climate was collected at the Antioch Pumping Plant #3 Station, located directly south of the project site. Precipitation in the study area occurs as rain. Average annual rainfall is 11.2 inches and occurs primarily from October through April. The growing season (i.e., 50 percent probability of air temperature 32°F or higher) in the study area is around 304 days and occurs between mid-February and early December (Western Regional Climate Center 2021).

3.4.2 Methodology

This section summarizes the methods used to identify and analyze potential impacts on sensitive habitats and effects on special-status plants and animals that may occur on the project site. As described below, biologists began their research with database searches and literature reviews to determine which rare natural communities and special-status species have the potential to occur on the project site. A more detailed description of these methods is provided in the project's Biological Resources Technical Report prepared by Olberding Environmental, Inc. in February 2021 (Appendix C).

Background Research

This analysis is based on a review of existing information about sensitive biological resources known to occur near the project site and followed by field surveys to determine whether biological resources are absent, present, and/or are likely to be present.



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For the purpose of this evaluation, special-status plant species include plants that fall into one of the following categories:

- Listed as threatened or endangered under the California Endangered Species Act or federal Endangered Species Act
- Proposed for federal listing as threatened or endangered
- State or federal candidate species
- Designated as rare by the California Department of Fish and Wildlife
- California Rare Plant Rank (CRPR) 1A, 1B, 2A or 2B species

For the purpose of this evaluation, special-status animal species include species that fall into one of the following categories:

- Listed as threatened or endangered under the California Endangered Species Act or federal Endangered Species Act
- Proposed for federal listing as threatened or endangered
- State or federal candidate species
- Identified by the California Department of Fish and Wildlife as species of special concern or fully protected species

Sensitive natural communities are those communities that are highly limited in distribution and may or may not contain rare, threatened, or endangered species. The California Natural Diversity Database (CNDDDB) ranks natural communities according to their rarity and endangerment in California. Habitats are considered sensitive if they are identified on the California Department of Fish and Wildlife (CDFW) List of Vegetation Alliances and Associations as being highly imperiled or classified by CDFW in the CNDDDB as natural communities of special concern – Ranks S1 to S3.

The potential for special-status species to occur within the study area were classified under one of four categories, as described below. Only those special-status species that have been determined to “may occur” are evaluated in detail.

- **Present:** The species has been recorded by CNDDDB or other literature as occurring on the Property and/or was observed on the Property during the reconnaissance survey or protocol surveys.
- **May Occur:** The species has been recorded by CNDDDB or other literature as occurring within five miles of the Property, and/or was observed within five miles



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of the Property, and/or suitable habitat for the species is present on the Property or its immediate vicinity.

- **Not Likely to Occur:** The species has historically occurred on or within five miles of the Property but has no current records. The species occurs within five miles of the Property, but only marginally suitable habitat conditions are present. The Property is likely to be used only as incidental foraging habitat or as an occasional migratory corridor.
- **Presumed Absent:** The species will not occur on the Property due to the absence of suitable habitat conditions, and/or the lack of current occurrences. Alternatively, if directed or protocol-level surveys were done during the proper occurrence period and the species was not found, it is presumed absent.

Prior to conducting a reconnaissance-level biological field survey, Olberding Environmental completed a desktop analysis to identify sensitive biological resources (wildlife species, plant species, and their habitats) that may occur within the proposed project site and region, as defined by the CDFW, U.S. Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS). The following resources were used to identify those potentially occurring biological resources:

- California Fish and Wildlife Service California Natural Diversity Database records search of special status species and habitat observations in the proposed project site and in for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay USGS 7.5-minute quadrangles (CDFW 2021a-c)
- CNPS online Inventory of Rare and Endangered Plants of California (CNPS 2020)
- USFWS list of endangered, threatened, and candidate species that may occur in the proposed project site (USFWS 2018a) (Appendix C)
- USFWS Designated Critical Habitat data for federally threatened and endangered species (USFWS 2018a)

Based on this background research, a list of special-status species that have the potential to occur or are known to occur in the project site and vicinity was developed.



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The list was refined based on reconnaissance-level biological field surveys to determine the potential for those species to occur in the project site.

Reconnaissance Survey

A reconnaissance-level biological survey was conducted by an Olberding Environmental biologist on January 28, 2019 and again on August 21, 2020. The survey was performed on foot, walking meandering transects throughout the entire project site to survey for existing conditions, observed plants and wildlife, adjacent land use, soils and potential biological resource constraints. The objectives of the field survey were to determine the potential presence or absence of special-status species habitat listed in the CNDDDB database report and to identify any wetland areas that could be potentially regulated by the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and/or CDFW (CDFW 2021a-c). In addition, the Olberding Environmental biologist looked for other potential sensitive species or habitats that may not have been obvious from background database reports or research. Based on information from the above sources, Olberding Environmental developed a target list of special-status plants and animals with the potential to occur within or in the vicinity of the Property (Attachment 2, Table 2).

Vegetation Communities

Habitat types in the study area were classified based on descriptions provided in the *California Natural Community List* (CDFW 2021a), which is adapted from the technical approach and vegetation alliance classification system described in *A Manual of California Vegetation* (Sawyer et al. 2009). The habitat community present in the study area includes non-native annual grassland and ruderal areas. A potential seasonal wetland was observed in the project site. Descriptions of the habitat is provided below.

Upland Habitat Type

Non-native Annual Grassland

The extent of the Property, approximately 12 acres, is dominated by non-native annual grassland habitat. Dominant vegetation observed within this habitat type includes but is not limited to wild oat (*Avena fatua*), bristly oxtongue (*Helminthotheca echioides*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow star thistle (*Carduus pycnocephalus*), and Italian rye grass (*Festuca perennis*). The project site is bound by roadway on one side and developed property to the south and west.



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Aquatic Habitats

No perennial streams were observed within the project site that would be covered under the jurisdiction of CDFW, the Corps or RWQCB; however, there are potential seasonal wetlands within the project site. The USFWS National Wetland Inventory database shows a linear seasonal wetland feature that crosses the northern corner of the Property and flows through the constructed detention basin feature, then along the base of the SR 4 embankment. This feature was not observed on the surface within the project site. The Property contains two artificially created features in the form of a concrete v-ditch with an associated storm drain outlet, and one constructed stormwater detention basin with associated utilities near the northern end of the parcel.

Special-Status Species

Plants

Regionally occurring special-status plant species were identified based on a review of pertinent literature, the USFWS species list, CNDDDB and CNPS database records, and the reconnaissance-level biological field survey results. For each species, habitat requirements were assessed and compared to the habitats in the project site and immediate vicinity to determine if potential habitat occurs in the project site. The special-status plant species identified by the CNDDDB as potentially occurring on the project site are known to grow only from specific habitat types. The specific habitats necessary for many of the plant species to occur are not found within the boundaries of the project site. Occurrences of special-status plants within a five-mile radius of the point roughly representing the center of the project site are described in detail in the Biological Resources Analysis Report (Appendix C), the project site does not provide suitable habitat for special-status plants.

Wildlife

Current agency status information was obtained from USFWS (2018a) for species listed as Threatened or Endangered, as well as Proposed and Candidate species for listing, under the federal Endangered Species Act; and from CDFW (2021a-c) for species listed as Threatened or Endangered by the state of California under the California Endangered Species Act or listed as “species of special concern” by CDFW. From the above sources, a list of special-status wildlife species with potential to occur in the project vicinity was developed (Appendix C, Table 2).



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For each species, habitat requirements were assessed and compared to the habitats in the project site and the immediate vicinity to determine the species' potential to occur in or near the project site. As described in the Biological Resources Analysis Report (Appendix C), the project site provides moderate suitable habitat for 13 special-status animal species, as discussed below in the impact analysis.

Critical Habitat

The project site lies within Critical Habitat for Delta Smelt; however, no streams or waterways are present in the project site and therefore, there is no suitable habitat for Delta Smelt.

3.4.3 Environmental Impact Analysis

This section discusses potential impacts on biological resources associated with the proposed project and provides mitigation measures where necessary.

Impact BIO-1 Have a substantial adverse effect, either directly or through habitat modifications on any 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?

Impact Analysis

Special-Status Plant Species

There is no potential habitat in the project site for special-status plant species. Although the reconnaissance-level biological surveys were conducted on January 28, 2019 and August 21, 2020 (i.e., outside of bloom period and late bloom period for the region, respectively), is outside the blooming period for most of the plants known to occur within five miles of the project site, the site is frequently disturbed. Historical aerial imagery indicates that this has been occurring over the course of several years, thereby limiting the opportunity for native vegetation to establish. Based on the lack of suitable habitat, the project site does not provide suitable potential habitat for special-status plant species to occur, and there would be no impacts to special-status plants.



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Special-Status Wildlife Species

From the results of the literature and database review, Olberding developed a list of special-status wildlife species to be evaluated (Appendix C, Table 2). Following the reconnaissance-level survey, the potential for these species to occur within the project site was assessed based on the habitats present within and adjacent to the project site, the proximity of known species occurrences, and knowledge of the species' range and/or mobility. The following special-status species may occur on the project site: burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), pallid bat (*Antrozous pallidus*), Townsend's Big-eared bat (*Corynorhinus townsendii*), Western red bat (*Lasiurus blossevillei*), hoary bat (*Lasiurus cinereus*), little brown bat (*Myotis lucifugus*), Yuma myotis (*Myotis yumanensis*), American Badger (*Taxidea taxus*), Alameda whipsnake (*Masticophis lateralis euryxanthus*) and San Joaquin Kit Fox (*Vulpes macrotis mutica*). The other special-status species that were in the literature searches are not likely to occur or presumed absence on the project site due to the absence of suitable habitat, and these species are not discussed further. The special-status species that may occur onsite are discussed in more detail in the Biological Resources Analysis Report (Appendix C).

Because special-status wildlife species may occur on the project site, there is potential for a substantial adverse effect on species as regulated by CDFW and/or the USFWS. With the implementation of MM BIO-1, through MM BIO-6, impacts to special-status wildlife species would be less than significant.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM BIO-1: Avoid Disturbance of Nesting Birds and Pre-Construction Nesting Bird Surveys.

If project activities occur during the nesting season for native birds (February 15 to August 31), the following measures shall be implemented to avoid or minimize the potential for adverse impacts on nesting migratory birds and raptors:



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- Pre-construction nesting bird survey for species protected by the Migratory Bird Treaty Act and California Fish and Game Code shall be conducted by a qualified biologist within a 100-foot radius of proposed construction activities for passerines and a 300-foot radius for raptors no more than 14 days prior to the start of construction activities.
- If active nests are found, a qualified biologist shall determine the size of the buffers based on the nesting species and its sensitivity to disturbance. The size of the buffers may be reduced at the discretion of a qualified biologist, but no construction activities shall be permitted within the buffer if they are demonstrated to be likely to disturb nesting birds. Active nest sites shall be monitored periodically to determine time of fledging.

MM BIO-2: Pre-construction Swainson's Hawk Surveys

If project construction-related activities would take place during the nesting season (February through August), pre-construction surveys for nesting Swainson's hawks within 0.5-mile radius of the project shall be conducted within 14 days prior to construction activity. Surveys shall be conducted in a manner that maximizes the potential to observe the adult Swainson's hawks, as well as the nest/chicks second. To meet the California Department of Fish and Game's recommendations for mitigation and protection of Swainson's hawks, surveys shall be conducted for a 0.5-mile radius around all project activities, and if active nesting is identified within the 0.5-mile radius, consultation is required. Methodology for surveys can be found in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley – Swainson's Hawk Technical Advisory Committee (2000).

MM BIO-3: Pre-construction Burrowing Owl Surveys

A burrowing owl pre-construction survey shall take place before any construction activities commence. They shall be conducted whenever burrowing owl habitat or sign is encountered on or adjacent to (within 150 meters) of a project site. If a burrowing owl or sign is present on the Property, three additional protocol level surveys shall be initiated.

Once these surveys have been completed to identify the owl's location, disturbance buffers shall be placed around each active burrow. No disturbance shall occur within 200 meters (approximately 655 feet) of occupied burrows during the breeding season



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(February 1 through August 31) and/or within 50 meters (approximately 165 feet) of occupied burrows during non-breeding season (September 1 through January 31). Preconstruction surveys shall be completed no more than 14 days prior to initiating ground disturbing activities.

MM BIO-4: Avoidance and Minimization Measures for Alameda Whipsnake

In order to prevent Alameda Whipsnake (AWS) from entering construction areas during project development, a wildlife exclusion fence shall be placed along the property boundary prior to ground disturbing activities. The avoidance and minimization measures for AWS are as follows:

- The wildlife exclusion fence shall be at least three feet high and entrenched three to six inches into the ground.
- Exclusion funnels shall be included in the fence design so that terrestrial species are able to vacate the project Site prior to disturbance.
- Monofilament netting, which is commonly used in straw wattle and other erosion preventatives, shall not be used on the project site in order to prevent possible entrapment of both common and special status terrestrial wildlife species.
- Trenches shall be backfilled, covered, or left with an escape ramp at the end of each workday. Trenches left open overnight shall be inspected each morning for trapped wildlife species.
- Immediately prior to initial ground disturbance (i.e., the morning of ground disturbance), a qualified biologist shall perform a preconstruction survey in order to ensure no AWS are present. The biologist shall remain on site for initial ground disturbance if suitable AWS refugia will be disturbed, i.e., small mammal burrows, foundations, large woody debris.
- Prior to the initiation of work activities, the qualified biologist shall also provide worker education regarding AWS. The training shall cover identification of AWS and what to do if an AWS is discovered in the project site.



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MM BIO-5: Pre-construction Surveys for San Joaquin Kit Fox

Pre-construction surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox. Surveys shall identify kit fox habitat features on the project site and evaluate use by kit fox and, if possible, assess the potential impacts to the kit fox by the proposed activity. The status of all dens shall be determined and mapped (USFWS 2011). Written results of pre-construction surveys must be received by the Service within five days after survey completion and prior to the start of ground disturbance and/or construction activities. If a natal/pupping den is discovered within the project site or within 200-feet of the project boundary, the Service shall be immediately notified and under no circumstances shall the den be disturbed or destroyed without prior authorization. If the pre-construction survey reveals an active natal pupping or new information, the project applicant shall contact the Service immediately to obtain the necessary take authorization/permit.

MM BIO-6: Pre-construction American Badger Surveys

A qualified biologist shall survey for American badger concurrent with the pre-construction survey for burrowing owl. If badgers are detected, the biologist shall passively relocate badgers out of the work area prior to construction if feasible. If an active den is detected within the work area, the project proponent shall avoid the den, if feasible, until the qualified biologist determines the den is no longer active. Dens that are determined to be inactive by the qualified biologist shall be collapsed by hand to prevent occupation of the burrow between the time of the survey and construction activities.

Level of Significance After Mitigation

Less Than Significant Impact with Mitigation.



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Impact BIO-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact Analysis

The project site does not contain any riparian habitat or other sensitive natural communities. Results of the biological resource analysis survey conducted by Olberding Environmental indicate that the project site contains two artificially created drainage features in the form of a concrete ditch, but these features do not contain any riparian habitat. Therefore, the proposed project would have no impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact BIO-3 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?

Impact Analysis

Results of the jurisdictional delineation survey conducted on February 23, 2021 did not identify the presence of waters/wetlands subject to Corps or RWQCB jurisdiction within the survey boundary. The Property contains two artificially created features in the form of a concrete ditch with an associated storm drain outlet, and one constructed stormwater detention basin with associated utilities near the northern end of the parcel. These features are not likely subject to the Corps or RWQCB jurisdiction and do not



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entail the placement of dredge or fill material into federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption or by other means. As such, the potential impacts to wetlands are considered less than significant.

Level of Significance Before Mitigation

Less than Significant.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than Significant.

Impact BIO-4 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?

Impact Analysis

Habitat corridors are segments of land that provide linkages between different habitats while also providing cover. On a broader level, corridors also function as avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas. Habitat corridors often consist of riparian areas along streams, rivers, or other natural features. Habitat corridors have been recognized by federal agencies such as the USFWS and the State as important habitats worthy of conservation. In general, movement corridors consist of areas of undisturbed land cover that connect larger, contiguous habitats. The project site does not act as a corridor for species dispersal or provide migration habitat connectivity to adjacent habitat and is not part of any defined essential connectivity areas as identified in the California Essential Habitat Connectivity Project (Spencer et al. 2010); therefore, the project would have no impact.



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Level of Significance Before Mitigation

No Impact

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact BIO-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact Analysis

The project site does not contain any trees or involve the removal of any trees; therefore, no tree preservation policies apply. As such, there would be no impact with respect to conflicting with local tree policies or local ordinances protecting biological resources such as a tree preservation policy or ordinance.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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Impact BIO-6 Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan?

Impact Analysis

The City is excluded from the jurisdiction of the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP). It is not within the jurisdiction of any adopted Habitat Conservation Plans (HCPs). The City is currently underway with the development of their own HCP/NCCP. The project site is within the draft HCP boundaries and designated an Urban Development area (East Contra Costa County Habitat Conservancy 2020). However, because this HCP/NCCP is still within the development stage, it is not applicable to the project. The project would not conflict with any adopted HCPs or other approved local, regional, or state habitat conservation plan. Therefore, there would be no impacts.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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3.5 CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5.1 Environmental Setting

The project site is located in the City of Antioch in Contra Costa County, California. Antioch is located in the Sacramento/San Joaquin Delta region to the south of the San Joaquin River. Regionally, the project site has a Mediterranean climate characterized by hot, dry summers and moderate winters.

3.5.2 Methodology

To determine the presence or absence of cultural resources within the project site and vicinity, Stantec prepared a Cultural Resources Assessment. The cultural resources assessment was conducted to satisfy the requirements of CEQA and follows CEQA Appendix G Guidelines. The Stantec Consulting Services Inc. 2021 Cultural Resources Assessment is provided in Appendix D.

Records Search and Literature Review

As part of the cultural resource review, a records search was conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) on January 11, 2021 (CHRIS 2021) for the project site and a quarter of a mile around it. The record search included a review of all previously recorded cultural resources and studies. Other sources reviewed include the Office of Historic Preservation Historic Property Data File, Determination of Eligibility, National Register of Historic Places (NRHP)/California Register of Historical Resources (CRHR) listings,



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California Inventory of Historical Resources, California State Historical Landmarks, Points of Historic Interest, Caltrans Bridge Inventory, and Historic Maps. No NRHP or CRHR eligible sites are within or adjacent to the project site. A record search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the project and the results were negative.

No cultural resources have been recorded in the project site. Two previously recorded historic-era resources (P-07-000813 and P-07-002695) are within a quarter mile of the project site. P-07-000813 is the Sothern Pacific Railroad and is across Highway 4 and approximately 500 feet to the north and east of but not visible from the project site. P-07-002695 is the Contra Costa Canal which is approximately 55 feet south of the project site. The Contra Costa Canal is eligible to both the NRHP and CRHR. However, as the Contra Costa Canal is already surrounded by housing developments and the resource is outside the project site, the project would not change the significance of this resource. Six previous studies have been completed within the project site and thirteen previous studies have been completed within a quarter mile of, but outside of, the project site. Appendix D includes the complete NWIC records search results.

Field Survey

A pedestrian archaeological survey of the project site was conducted by a Stantec archaeologist on January 28, 2021. The archaeologist took photographs of the survey area and ground surface visibility and used a Geographic Positioning System unit with sub-meter accuracy during the survey. Survey transects were spaced at intervals no greater than 15 meters. Ground visibility was good, with patches of exposed soil were visible throughout the lot. Regardless, periodic trowel and boot scrapings were employed to clear small patches of vegetation in areas with poor ground visibility due to ground vegetation cover in some areas. The lot appears to have been heavily modified in the last 20 years.

During the survey, all areas were examined closely for evidence of prehistoric archaeological site indicators such as obsidian or chert flakes; grinding and mashing implements (such as groundstone, mortars, and pestles); bone, and discolored soils (which could contain lithics, bone, shell, and/or fire-affected rocks). The areas were also examined closely for evidence of historic period-site indicators such as glass and ceramic fragments; metal objects; milled and split lumber, and structure or feature



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remains such as building foundations, fence posts, and discrete trash deposits such as wells, privy pits, or dumps.

No cultural resources were identified as a result of the survey.

Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18)

On January 19, 2021, the City mailed letters to all tribes who requested to be consulted on City projects under AB 52 and Senate Bill (SB) 18. Follow up phone calls were made to these tribes on February 2, 2021. The tribes contacted are listed below:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Chicken Ranch Rancheria of Me-Wuk Indians
- Confederated Villages of Lisjan
- Guidiville Indian Rancheria
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- North Valley Yokuts
- Ohlone Indian Tribe
- Tule River Indian Tribe
- Wilton Rancheria

On February 2, 2021, Chairperson Zwierlein of the Amah Mutsun Tribal Band of Mission San Juan Bautista did not have concerns with the project but recommended the construction crew be given a cultural resource awareness training. On February 3, 2021, the Confederated Villages of Lisjan requested the NWIC cultural resource records search results and NAHC Sacred Lands File results. These results were sent to the Confederated Villages of Lisjan. After review of these materials, the Confederated Villages of Lisjan, did not have any further comment on the project but requested to be contacted should there be any inadvertent finds during project construction.

On March 23, 2021, the Indian Canyon Band of Costanoan Ohlone People sent an email recommending Native American and Archaeological monitoring during project construction because the project overlapped or was near a cultural site. The email also discussed ways to bring about public awareness of the history of indigenous communities.



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On March 24, 2021, the City replied via email to the Indian Canyon Band of Costanoan Ohlone People email and requested additional information and further discussion with the tribe to confirm if a cultural site is within the project site.

On April 5, 2021, the City followed up with the Indian Canyon Band of Costanoan Ohlone People to make sure they had received the previous email on March 24, 2021.

On April 5, 2021, the Indian Canyon Band of Costanoan Ohlone People replied to the City's email and requested a zoom or phone call meeting on the morning of April 14, 2021.

On April 14, 2021, the City, Indian Canyon Band of Costanoan Ohlone People, and the City's project archaeological consultant met via a Zoom meeting to discuss the project. During the meeting, the tribe did not identify any cultural resources or sensitivity for cultural resources within or adjacent to the project site but said to be conservative, they recommended monitoring during construction. There were also discussions of recent construction adjacent to the project site and the City said they would follow up with a list development completed within the last 20 years. During the meeting, the City and the tribe also discussed ways to bring about public awareness of the history of indigenous communities.

On April 20, 2021, the City sent an email to the Indian Canyon Band of Costanoan Ohlone People as a follow-up to the Zoom meeting. The City provided a list of construction in the last 20 years adjacent to the project site. All of the construction was recent enough to have gone through the State environmental review process and no cultural resources were found during construction of these projects. Additionally, a desktop geologic sensitivity analysis indicated the project site has a low sensitivity for buried cultural resources. Based on these factors, the City does not think cultural monitoring is necessary. However, to ensure any potentially sensitive resources are protected, the City would implement mitigation measures requiring worker awareness training and inadvertent discovery procedures. The City also invited the tribe to participate in the upcoming comprehensive General Plan update so the tribe can participate in Citywide policy on how to bring about public awareness of the history of indigenous communities.

The other tribes contacted either did not respond or did not have any concerns with the proposed project. An AB 52 and SB 18 correspondence record can be found in Appendix D.



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Buried Site Sensitivity

Assessing the sensitivity for an area to contain buried archaeological sites takes into consideration the potential for the presence of buried cultural deposits by examining past use of a project location, factors that support human occupations such as access to resources and water, slope, and the underlying geomorphology of the area. This section summarizes the archaeological buried site sensitivity for the project site.

Generally speaking, a large proportion of archaeological sites are located within 150 meters of a water source and on relatively flat ground. Portions of the project that exhibit these parameters have an increased potential to contain buried cultural resources and buried stable land surfaces that may have supported prehistoric and/or historic human use.

According to the Geologic Map of California (DOC 2015), the project site is underlain by nonmarine (continental) sedimentary rocks dating to the Pliocene-Pleistocene characterized as Pliocene and/or Pleistocene sandstone, shale, and gravel deposits; mostly loosely consolidated. The geologic deposits predate human occupation of the project site. The project site is composed soils consisting of Capay clay, 0 to 3 percent slopes with a parent material of clayey alluvium derived from sedimentary rock, Diablo clay, 5 to 25 percent slopes, Diablo clay, 15-30 percent slopes, and Diablo clay, 30-50 percent slopes with a parent material of Residium weathered from calcareous shale (USDA 2021). Slope is also highly variable on the lot, ranging between 2 and 13 degrees. Based on the information provided above, the project site appears to have a low sensitivity for buried cultural resources.

3.5.3 Environmental Impact Analysis

This section discusses potential impacts on cultural resources associated with the proposed project and provides mitigation measures where necessary.

Impact CUL-1 Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?

Impact Analysis

No historic resources (eligible or likely eligible under state, federal, or local historic preservation criteria) were identified within or adjacent to the project site that would be impacted by the proposed project. Thus, the proposed project is not anticipated to have



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an impact on any known or potential historical resources. Therefore, there would be no impacts to historical resources. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact CUL-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Impact Analysis

An archival record search and literature review, AB 52 and SB 18 consultations, and pedestrian survey were performed as part of the cultural resources assessment for the proposed project. No archaeological resources were identified within the project site. The proposed project is therefore not anticipated to have an impact on any known or potential archeological resources. However, subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered unique archaeological resources. The proposed project would be required to implement Mitigation Measure CUL-1 which would require a worker awareness training for cultural resources and Mitigation Measure CUL-2 in the event previously undiscovered subsurface unique archaeological resources are found at the project site. The implementation of Mitigation Measures CUL-1 and CUL-2 would be in accordance with the standard worker awareness training and inadvertent discovery procedures to reduce potential impacts to previously undiscovered subsurface unique archaeological resources. Therefore, with the implementation of Mitigation Measures CUL-1 and CUL-2 potential impacts to undiscovered archaeological resources would be less than significant. This impact will not be further addressed in the EIR.



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Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM CUL-1: Workers Awareness Training

Prior to the start of any ground disturbing activities, a cultural resources awareness training shall be provided for all construction personnel involved in project implementation. The training shall be provided by a qualified cultural resources specialist and if they choose to participate, a representative of the Indian Canyon Band of Costanoan Ohlone People. The training program shall include relevant information regarding sensitive cultural resources and tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program shall also underscore the requirement for confidentiality and culturally appropriate treatment for any find of significance to Native Americans and behaviors, consistent with Native American tribal values. A sign-in sheet shall be distributed to all participants of the training program and submitted to the City within two weeks of program completion.

MM CUL-2: Cultural Materials Discovered During Construction

If any cultural resource is encountered during ground disturbance or subsurface construction activities (e.g., trenching, grading), all construction activities within a 50-foot radius of the identified potential resource shall cease until a Secretary of the Interior-qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation 523 series forms. All forms and associated reports will be submitted to the NWIC of the CHRIS. The archaeologist shall determine whether the resource requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the resource is determined to be eligible for listing on the CRHR as a unique archaeological resource as defined in PRC Section 15064.5, the archaeologist shall develop a plan for the treatment of the resource. The plan shall contain appropriate mitigation measures,



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including avoidance, preservation in place, data recovery excavation, or other appropriate measures outlined in PRC Section 21083.2.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact CUL-3 Disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis

There are no known human remains within the project site and no indications that the project site has been used for burial purposes in the past. Therefore, it is unlikely that human remains would be encountered during construction. However, ground disturbance and subsurface construction activities associated with the proposed project could potentially disturb previously undiscovered human burial sites. If previously undiscovered human burial sites are found on the project site, the proposed project would be required to implement Mitigation Measure CUL-3 in accordance with Section 7050.5 of the California Health and Safety Code and PRC 5097.98. Implementation of Mitigation Measure CUL-3 would require all work to stop within 50 feet of the remains and to contact the County Coroner and the appropriate City contact to evaluate the discovery. If the human remains are of Native American origin, the County Coroner must notify the NAHC within 24 hours of this identification. The NAHC would identify a Native American most likely descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains within 48 hours. As such, implementation of Mitigation Measure CUL-3 would reduce impacts to a less than significant level. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM CUL-3: Human Burials Encountered During Construction

If ground-disturbing activities uncover previously unknown human remains, Section 7050.5 of the California Health and Safety Code applies, and the following procedures



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shall be followed: There shall be no further excavation or disturbance of the area where the human remains were found or within 50 feet of the find until the County Coroner and the appropriate City representative are contacted. Duly authorized representatives of the Coroner and the City shall be permitted onto the project area and shall take all actions consistent with Health and Safety Code Section 7050.5 and Government Code Sections 5097.98, et seq. Excavation or disturbance of the area where the human remains were found or within 50 feet of the find shall not be permitted to re-commence until the Coroner determines that the remains are not subject to the provisions of law concerning investigation of the circumstances, manner, and cause of any death. If the Coroner determines that the remains are Native American, the Coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the MLD of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from further disturbance. If the landowner does not accept the MLD's recommendations, the owner or the MLD may request mediation by NAHC.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.



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3.6 ENERGY

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.6.1 Environmental Setting

Pacific Gas and Electric Company provides electricity and natural gas service to the City. Upon buildout of the project site, electricity to the project site would be provided by PG&E. All electricity infrastructure would be located underground and would tie-in to existing infrastructure.

In February 2018, PG&E announced that it had reached California's 2020 renewable energy goal 3 years ahead of schedule, and now delivers nearly 80 percent of its electricity from GHG-free resources. Approximately 33 percent of PG&E's electricity came from renewable resources including solar, wind, geothermal, biomass and small hydroelectric sources in 2017. Additionally, approximately 78.8 percent of PG&E's total electric power mix is from GHG-free sources including nuclear, large hydro and renewable sources of energy (PG&E 2018).

3.6.2 Methodology

The energy requirements for the proposed project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Appendix A). The calculation worksheets for diesel fuel consumption rates for off-road construction equipment and on-road vehicles are provided in Appendix E. Short-term construction energy consumption is discussed below.



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Short-Term Construction

Off-Road Equipment

The proposed project is anticipated to be constructed during 2023 and 2024, breaking ground in January 2023 and planned to be completed by March 2024. Table 3.6-1 provides estimates of the project's construction fuel consumption from off-road construction equipment.

Table 3.6-1. Construction Off-Road Fuel Consumption

Project Component	Phase	Fuel Consumption (gallons)
Wild Horse Multifamily Project Construction	Site Preparation	703.78
	Site Grading	3,880.36
	Building Construction	15,923.33
	Paving	843.63
	Architectural Coating	116.02
Total		21,467.12

Source: Energy Consumption Summary (Appendix E)

As shown in Table 3.6-1, construction activities associated with the proposed project would be estimated to consume 21,467.12 gallons of diesel fuel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 3.6-2 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.



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Table 3.6-2. Construction On-Road Fuel Consumption

Project Component	Total Annual Fuel Consumption (gallons)
Wild Horse Multifamily Project Construction	69,837
Total	69,837

Source: Energy Consumption Summary (Appendix E)

Long-Term Operations

Transportation Energy Demand

Table 3.6-3 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the proposed project. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed project.

Table 3.6-3. Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips ¹	Daily Vehicle Miles Traveled	Annual Vehicle Miles Traveled	Average Fuel Economy (miles/gallon) ²	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	59.4%	3,453	1,260,398	33.14	104.2	38,035
Light Trucks and Medium Duty Vehicles (LDT1, LDT2, MDV)	33.8%	1,964	716,852	23.26	84.4	30,819
Light-Heavy to Heavy-Heavy Diesel Trucks (LHD1, LHD2, MHDT, HHDT)	5.6%	323	118,066	9.46	34.2	12,482
Motorcycles (MCY)	0.7%	31	11,244	36.88	0.8	305
Other ³ (OBUS, UBUS, SBUS, MH)	0.5%	40	14,491	6.73	5.9	2,153
Total	100%	5,811	2,121,051	-	229.5	83,794

Notes:

¹Percent of Vehicle Trips and VMT provided by California Emissions Estimator Model.

²Average fuel economy is provided by United States Department of Transportation, Bureau of Transportation Statistics and reflects fuel economy of overall fleet, not just new vehicles.

³“Other” definitions are OBUS = other buses except school buses and urban buses; UBUS = Urban transit buses; SBUS = School bus; MH = Mobile Home

Source: Energy Consumption Summary (Appendix E)



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As shown above, daily vehicular fuel consumption is estimated to be 229.5 gallons of both gasoline and diesel fuel. Annual consumption is estimated at 83,794 gallons.

In terms of land use planning decisions, the proposed project would constitute development within an established community and would not be opening a new geographical area for development such that it would draw mostly new trips or substantially lengthen existing trips. The proposed project would be well positioned to accommodate existing population. For these reasons, it would be expected that vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region.

Building Energy Demand

As shown in Tables 3.6-4 and 3.6-5, the proposed project is estimated to demand 1,222,632 kilowatt-hours (KWhr) of electricity and 2,359,099.26 kilo British thermal units (KBTU) of natural gas, respectively, on an annual basis.

Table 3.6-4. Long-Term Electricity Usage

Land Use	Size (ksf)	Title 24 Electricity Energy Intensity (KWhr/size/year)	Nontitle 24 Electricity Energy Intensity (KWhr/size/year)	Lighting Energy Intensity (KWhr/size/year)	Total Electricity Energy Demand (KWhr/size/year)	Total Electricity Demand (KWhr/year)
Condo/Townhouse	239.4	249.32	3,795.01	1,001.1	2,655	635,724
Attached Garages	102.4	3.92	0	1.75	5,670	580,608
Parking Lot	18	0	0	0.35	350	6,300
Total						1,222,632

Notes:

ksf = 1,000 square feet; KWhr= kilowatt hour

Source: Energy Consumption Summary (Appendix E)



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Table 3.6-5. Long-Term Natural Gas Usage

Land Use	Size (ksf)	Title 24 Natural Gas Energy Intensity (KBTU/size/year)	Nontitle 24 Natural Gas Energy Intensity (KBTU/size/year)	Total Natural Gas Energy Demand (KBTU/size/year)	Total Natural Gas Demand (KBTU/year)
Condo/Townhouse	239.4	15,568.01	3,155	9,854	2,359,099.26
Attached Garages	102.4	0	0	0	0
Parking Lot	18	0	0	0	0
Total					2,359,099.26

Notes:

The proposed project could potentially include a variety of uses consistent with the development standards, however the land use selections above were based on estimating the “worst-case” scenario demand for electricity.

ksf = 1,000 square feet; KBTU= kilo British thermal units

Source: Energy Consumption Summary (Appendix E)

3.6.3 Environmental Impact Analysis

This section discusses potential energy impacts associated with the proposed project and provides mitigation measures where necessary.

Impact EN-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Impact Analysis

This impact addresses the energy consumption from both the short-term construction and long-term operations are discussed separately below.

Construction Energy Demand

As summarized in tables 3.6-1 and 3.6-2, the proposed project would require 21,467.12 gallons of diesel fuel for construction off-road equipment and 69,837 gallons of gasoline and diesel for on-road vehicles during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in other parts of the state.



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Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and as such, impacts would be less than significant.

Long-Term Energy Demand

Building Energy Demand

Buildings and infrastructure constructed pursuant to the proposed project would comply with the versions of California Code of Regulations (CCR) Titles 20 and 24, including CALGreen, that are applicable at the time that building permits are issued. The proposed project is estimated to demand 1,222,632 KWhr of electricity per year and 2,359,099.26 KBTU of natural gas per year. This would represent an increase in demand for electricity and natural gas.

It would be expected that building energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the region. Current state regulatory requirements for new building construction contained in the 2016 CALGreen and Title 24 standards would increase energy efficiency and reduce energy demand in comparison to existing commercial structures, and therefore would reduce actual environmental effects associated with energy use from the proposed project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update.

Therefore, while the proposed project would result in increased electricity and natural gas demand, the electricity and natural gas would be consumed more efficiently and would be typical of townhome development. Compliance with future building code standards would result in increased energy efficiency.

Based on the above information, the proposed project would not result in the inefficient or wasteful consumption of electricity or natural gas, and impacts would be less than significant.

Transportation Energy Demands

The daily vehicular fuel consumption is estimated to be 229.5 gallons of both gasoline and diesel fuel. Annual consumption is estimated at 83,794 gallons. The proposed project would constitute development within an established community and would not



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be opening a new geographical area for development such that it would draw mostly new trips or substantially lengthen existing trips. The proposed project would be well positioned to accommodate existing population and reduce vehicle miles traveled (VMT). For these reasons, it would be expected that vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact EN-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis

The City's General Plan includes an Energy Objective 10.8.1 to reduce the reliance on nonrenewable energy sources in existing and new commercial, industrial, and public structures through implementation of energy resource policies to encourage the use of renewable energy and decrease energy demand. Additionally, General Plan Objective 7.4.1 includes the Non-Motorized Transportation Objective to maintain a safe, convenient, and continuous network of pedestrian sidewalks, pathways, and bicycle facilities to facilitate bicycling and walking as alternatives to the automobile. The City's Climate Action Plan (CAP) also includes strategies focused on green building, renewable energy, transportation and land use, education, and waste management. The proposed project would not conflict with the energy objectives of the General Plan nor the strategies in its CAP. The proposed project would constitute development within an established community and would not be opening a new geographical area for



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development such that it would draw mostly new trips, or substantially lengthen existing trips. The proposed project would be well positioned to accommodate existing population and reduce VMT. The proposed project would comply with the versions of CCR Titles 20 and 24, including CALGreen, that are applicable at the time that building permits are issued and with all applicable City measures.

For the above reasons, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.



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3.7 GEOLOGY AND SOILS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



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Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.7.1 Environmental Setting

Regional Setting

The City of Antioch is in Contra Costa County and is characterized as a geologically young region. The City is defined by two general topographic areas: Lowland Area and Upland Area. The Lowland area includes the estuarine and flatland soils near the San Joaquin River and the low-lying areas the western and eastern portions of the City, and the Upland Area includes the hillside soils in the southern portion of the City. The Lowland Area is underlain by alluvium and consists of unconsolidated floodplain deposits with sand, silt, gravel, and clay. Soils in the Lowland Area include well drained Rincon clay loam with moderate shrink-swell potential and Delhi Sand with low shrink-swell potential. The Upland Area consists primarily of tilted sedimentary rocks, sandstone, siltstone, and surficial deposits (City of Antioch 2003b). Native soils in the Upland Area consist of clay, clay loam, loam, and loamy sand. The shrink-swell potential of these soils ranges from low to high depending on the soil type (City of Antioch 2003b).

Eastern Contra Costa County and the Bay Area are in a seismically active region. Major earthquakes have occurred near Antioch in the past and can be expected to occur in the near future (City of Antioch 2003b). The California Geological Survey defines an active fault as one that has had surface displacement in the last 11,000 years or has experienced earthquakes in recorded history. Although there are no active faults in the City, there are several major faults located within a few miles including, the Hayward Fault, Calaveras Fault, Concord-Green Valley Fault, and Marsh Creek-Greenville Fault (City of Antioch 2003b). The San Andreas Fault is located approximately 45 miles west of the City. The intensity of ground shaking that would occur in Antioch because of an earthquake in the Bay Area depends on the size, distance, and response of the geologic materials in the area (City of Antioch 2003b). Strong ground shaking that occurs during earthquakes can induce other geologic hazards such as liquefaction,



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landslides, subsidence, lateral spreading, or collapse. The potential for these geologic hazards ranges from low to very high and depends on soil conditions, groundwater levels, and slope stability.

The 1972 Alquist-Priolo Earthquake Fault Zoning Act requires the California Geological Survey to establish regulatory Earthquake Fault Zones around the surface ruptures of active faults to reduce the hazard of surface fault rupture to structures built for human occupancy. There are no Alquist-Priolo Earthquake Fault Zones in the City (City of Antioch 2003b). However, the City is located within a seismically active region, and earthquakes have the potential to cause ground shaking of significant magnitude.

Project Site Setting

The project site's topography consists of hills and slopes to a low point at the northern portion of the site. The existing site is vacant with the exception to the Wild Horse Road improvements. According to the Hydrologic & Hydraulic Analyses Report prepared by DK Engineering for the project site, elevations range from 70 feet above mean sea level at the north corner of the project site to 115 feet above mean sea level and the southwest corner of the project site (DK Engineering 2020). The site consists mainly of clay soils and is presumed to be hydrologic soil group C. According to Figure 4.5.4 in the EIR prepared for the General Plan, the project site is in an area with liquefaction risk ranging from very low, to moderate susceptibility in the southwest corner of the site, and high susceptibility in the northern and western portions of the site (City of Antioch 2003b, USGS 2021a, DOC 2019). The project site and surrounding area are located in a generally stable to marginally stable slope stability and is not located in a landslide hazard zone (City of Antioch 2003b, USGS 2021b, DOC 2019).

3.7.2 Methodology

The following analysis is based on a review of documents pertaining to the project site, including the General Plan, General Plan EIR, USGS earthquake seismic hazard maps, USGS land subsidence in California Map, and the University of California Museum of Paleontology (UCMP) database for mammal fossils. The following impact discussions consider the effects of the proposed project related to geology and soils in the City.



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Paleontological Resources

According to the General Plan EIR, numerous fossils have been collected from within the City. A fossil locality search at the Cultural Access Services identified marine fossils collected from almost all the sedimentary formations located in Antioch. Literature review also indicated that all the formations north of Mt. Diablo contain fossils. There are at least eight fossil localities within and immediately adjacent to the City's Planning Area and another five are within a 1-mile radius of the City's Planning Area. Fossils in the City's Planning Area identified by the California Museum of Paleontology, UC Berkeley include mammoths, primitive horses, bison, rats, beaver-type creatures, and sloths (City of Antioch 2003b). A search of the UCMP database for mammal fossils did not identify any paleontological resources within the project site (UCMP 2021).

3.7.3 Environmental Impact Analysis

This section discusses potential impacts related to geology and soils associated with the proposed project and provides mitigation measures where necessary.

Impact GEO-1 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.**
 - ii) Strong seismic ground shaking?**
 - iii) Seismic-related ground failure, including liquefaction?**
 - iv) Landslides?**
-

Impact Analysis

- i. Fault Rupture

There are no Alquist-Priolo Earthquake Fault Zones in the City. The nearest Alquist-Priolo Earthquake Fault Zones are the Concord-Green Valley Fault, located 15 miles



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southwest of the project site, and the Marsh Creek-Greenville Fault, located approximately 11 miles south of the project site (USGS 2021c). Due to the lack of Alquist-Priolo fault zones in the project site, the risk of surface rupture near the project site is low and the potential for damage to structures at the project site due to rupture of a known earthquake fault is low. Thus, the proposed project would not exacerbate existing conditions by bringing people or structures into areas potentially susceptible to substantial effects, including fault rupture, that could result in substantial damage to proposed structures or infrastructure, or expose people to substantial risk of injury. Impacts associated with surface rupture from a known earthquake fault would be less than significant. This impact will not be further addressed in the EIR.

ii. Ground Shaking

The project site is in a seismically active region and earthquake-related ground shaking is expected to occur during the design life of the proposed project. According to the USGS Fault Activity Map of California and the USGS National Seismic Hazard Maps—Source Parameters indicates the nearest major active fault is the Greenville Fault, located approximately 11 miles southwest of the project site (USGS 2021c). In addition, other faults in the San Francisco Bay Area may cause strong seismic ground shaking at the project site. The proposed project would be constructed in conformance with the latest edition of the California Building Code, which includes engineering standards appropriate to withstand anticipated ground accelerations at the project site. Conformance with the earthquake design parameters of the California Building Code would be subject to City review as part of the building site plan review and building permit review process. Furthermore, the proposed project would be required to comply with the General Plan Policy 11.3.2-a, which requires geologic and soils reports to be prepared for proposed development sites and incorporate the findings and recommendations of the studies into project development requirements and a site-specific assessment will be prepared to ascertain potential ground shaking impacts on new development, and General Plan Policy 11.3.2-k, which requires specialized soils reports (City of Antioch 2003a). The recommendations and findings identified in the site-specific geotechnical analysis would be incorporated into the proposed project as part of Mitigation Measure GEO-1. Therefore, impacts related to ground shaking at the project site would be less than significant with implementation of Mitigation Measure GEO-1. This impact will not be further addressed in the EIR.

iii. Ground Failure, including Liquefaction



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According to Figure 4.5.4 in the EIR prepared for the General Plan, the project site is in an area risk ranging from very low susceptibility in the eastern portion of the site, to moderate susceptibility in the southwest corner of the site, and high susceptibility in the northern and western portions of the site (City of Antioch 2003b, USGS 2021a). Buildout of the proposed project and adjacent off-site areas would potentially place buildings and structures on areas potentially susceptible to liquefaction. Therefore, the project could potentially expose people and structures to substantial adverse effects associated with ground shaking, ground failure, and liquefaction. Ground failure due to liquefaction or lateral spreading could compromise the structural stability of the buildings if they are not designed to accommodate liquefaction or lateral spreading.

As described above, the project design would be required to conform to the latest edition of the California Building Code, City Municipal Code (Section 9-4.513), and General Plan Policies 11.3.2-a, 11.3.2-k, which requires site-specific soil reports to be prepared for all new developments in the City. The project design would also be required to comply with General Plan Policy 11.3.2.I, which requires the project to implement adequate and appropriate measures to reduce potential liquefaction hazards where development is proposed within an identified or potential liquefaction hazard area (City of Antioch 2017; 2003a). The recommendations indicated in the site-specific soil report would be incorporated into the project design as part of Mitigation Measure GEO-1. Additionally, the project will implement the recommendations indicated in a design-level geotechnical engineering report and measures to address to mitigate, at a minimum, slope stability, liquefiable soils, and ground shaking as part of Mitigation Measure GEO-2. Therefore, impacts related to liquefaction would be less than significant with Mitigation Measures GEO-1 and GEO-2 incorporated. This impact will not be further addressed in the EIR.

iv. Landslides

According to the Hydrologic & Hydraulic Analyses Report prepared by DK Engineering for the project site, elevations range from 70 feet above mean sea level at the north corner of the project site to 115 feet above mean sea level and the southwest corner of the project site. The project site is mapped in an area that is mapped as generally stable and with low potential for landslides to occur (City of Antioch 2003b, USGS 2021d). Therefore, the potential for a landslide to occur is low. No impact would occur. This impact will not be further addressed in the EIR.



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Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM GEO-1: Implement Geotechnical Design Recommendations.

Prior to issuance of grading permits, the applicant shall incorporate all design specifications and recommendations contained within the geotechnical investigation report into relevant project plans and specifications. These specifications pertain to but are not limited to expansive soils, building foundations, foundation drainage, and backfill of excavations. The project site plans shall be submitted to the City and reviewed as part of the building permit review process.

MM GEO-2: Implement Potential Liquefaction Hazard Recommendations

Prior to the issue of building permits, the project applicant shall submit to the City of Antioch Building Department, for review and approval, a design-level geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer. The design-level report shall include measures to address construction requirements to mitigate, at a minimum, slope stability, liquefiable soils, and ground shaking. Recommendations of adequate and appropriate measures will be implemented, including, but not limited to designing foundations in a manner that limits the effects of liquefaction; the placement of an engineered fill with low liquefaction potential; and the alternative siting of structures in areas with a lower liquefaction risk.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact GEO-2 Result in substantial soil erosion or the loss of topsoil?

Impact Analysis

Construction activities associated with the proposed project would require demolition, grading, utility connections, building construction, construction of the new streets, development of 126 multifamily residences, and landscaping on the 12-acre project site. Construction of the proposed project would involve approximately 11,600 CY of cut and



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86,000 CY of fill. These activities could expose unprotected soils to stormwater runoff, causing erosion and loss of topsoil. Projects that disturb 1 acre or more of soils during construction are required to comply with the National Pollutant Discharge Elimination System (NPDES) permitting program and implement a Stormwater Pollution Prevention Plan (SWPPP) that identifies BMPs to control the discharge of sediment and other pollutants during construction. As described in Section 3.10, Hydrology and Water Quality, the proposed project would implement a SWPPP and associated BMPs as part of Mitigation Measure HYD-1 to reduce erosion impacts. Therefore, soil erosion impacts associated with construction impacts would be less than significant with implementation of Mitigation Measure HYD-1. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HYD-1 is required.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact GEO-3 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Impact Analysis

The project site and surrounding area contains generally flat relief and is in an area where slopes are considered stable (City of Antioch 2003b). The project site is not designated in an area where historic or current groundwater pumping, oil extraction, or mining operations have occurred (City of Antioch 2003b, USGS 2021d). Furthermore, the project site is not adjacent to a stream bank, levee, or other open face that would be susceptible to lateral spreading.

The proposed project would be required to comply with the latest edition of the California Building Code, City Municipal Code (Section 9-4.513), General Plan Policies



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11.3.2-a and 11.3.2-k, which requires site-specific soil reports to be prepared for all new developments in the City, and General Plan Policy 11.3.2.I, which requires the project to implement adequate and appropriate measures to reduce potential liquefaction hazards where development is proposed within an identified or potential liquefaction hazard area (City of Antioch 2017; 2003b). The recommendations indicated in the site-specific soil report would be incorporated into the project design as part of Mitigation Measure GEO-1. The City would review the project design plans during the building permit approval process to confirm these recommendations are incorporated into the proposed project. Additionally, the project will implement the recommendations indicated in a design-level geotechnical engineering report and measures to address to mitigate, at a minimum, slope stability, liquefiable soils, and ground shaking as part of Mitigation Measure GEO-2. As such, impacts related to unstable soils would be less than significant with Mitigation Measures GEO-1 and GEO-2 incorporated. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measures GEO-1 and GEO-2 are required.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact GEO-4 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?

Impact Analysis

The soils at the project site are comprised of Diablo Clay and Capay Clay. Diablo Clay soil is characterized as well drained, slow runoff when soil is dry, medium to rapid when soils are moist, and slow permeability. Capay Clay Moderately well and somewhat poorly drained; negligible to high runoff, slow to very slow permeability (USDA 2021). The proposed project would be required to comply with the latest edition of the California Building Code, City Municipal Code (Section 9-4.513), and General Plan



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Policies 11.3.2-a and 11.3.2-k, which requires site-specific soil reports to be prepared for all new developments in the City (City of Antioch 2003a). The recommendations indicated in the site-specific soil report would be incorporated into the project design as part of Mitigation Measure GEO-1. Therefore, impacts related to expansive soil would be less than significant with Mitigation Measure GEO-1 incorporated. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure GEO-1 is required.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact GEO-5 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?

Impact Analysis

The proposed project would connect directly to the City's municipal sewer system and would not require the construction of septic tanks or any other alternative wastewater disposal system. Therefore, no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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Impact GEO-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact Analysis

According to the General Plan EIR, numerous fossils have been collected from within the City. A fossil locality search at the Cultural Access Services identified marine fossils collected from almost all the sedimentary formations located in Antioch. Literature review also indicated that all the formations north of Mt. Diablo contain fossils. There are at least eight fossil localities within and immediately adjacent to the City's Planning Area and another five are within a 1-mile radius of the City's Planning Area. Fossils in the City's Planning Area identified by the California Museum of Paleontology, UC Berkeley include mammoths, primitive horses, bison, rats, beaver-type creatures, and sloths (City of Antioch 2003b). A search of the UCMP database for mammal fossils did not identify any paleontological resources within the project site (UCMP 2021). However, the proposed project would include ground disturbance during construction which could potentially directly or indirectly destroy an unknown unique paleontological or unique geologic feature. If unknown unique paleontological resources are discovered onsite during construction, all activities would be stopped within a 50-foot radius of the identified resource until a qualified paleontologist evaluates the finding as required by Mitigation Measure GEO-3. Therefore, impacts to paleontological or unique geologic features would be less than significant with implementation of Mitigation Measure GEO-3. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM GEO-3 Procedures for Paleontological Resources Discovered During Construction

If any paleontological resources are encountered during ground-disturbing or subsurface construction activities (e.g., trenching, grading), all construction activities within a 50-foot radius of the identified resource shall cease, and the City shall immediately be notified. The applicant shall retain a qualified paleontologist (as approved by the City) to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resource. The appropriate treatment of an



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inadvertently discovered paleontological resource shall be implemented to ensure that impacts to the resource are avoided.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.



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3.8 GREENHOUSE GASES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.8.1 Environmental Setting

The issue of combating climate change and reducing GHG emissions has been the subject of State legislation (AB 32 and Senate Bill 375). The Governor’s Office of Planning and Research (OPR) has adopted changes to CEQA Guidelines and the environmental checklist which is used for Initial Studies such as this one. The changes to the checklist, which were approved in 2010, are incorporated above in the two questions related to a project’s GHG impact.

Greenhouse Gases

Greenhouse gases and climate change are cumulative global issues. The CARB and EPA regulate GHG emissions within the State of California and the U.S., respectively. While the CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reduction.

Many chemical compounds in the Earth’s atmosphere act as GHGs as they absorb and emit radiation within the thermal infrared range. When radiation from the sun reaches the earth’s surface, some of it is reflected into the atmosphere as infrared radiation (heat). Greenhouse gases absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy from the sun to the earth’s surface should be approximately equal to the amount of energy radiated back into space, leaving the temperature of the earth’s surface roughly constant. Many gases exhibit these “greenhouse” properties. Some of them occur in nature (water vapor, carbon



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dioxide [CO₂], methane [CH₄], and oxides of nitrogen [NO_x]), while others are exclusively human made (like gases used for aerosols).

The principal climate change gases resulting from human activity that enter and accumulate in the atmosphere are listed below:

Carbon Dioxide

CO₂ enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). Carbon dioxide is also removed from the atmosphere (or “sequestered”) when it is absorbed by plants as part of the biological carbon cycle.

Methane

CH₄ is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills.

Nitrous Oxide

N₂O is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

Fluorinated Gases

Hydrofluorocarbons, perfluorinated chemicals, and sulfur hexafluoride are synthetic, powerful climate-change gases that are emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent climate-change gases, they are sometimes referred to as high global warming potential gases.

Emissions Inventories and Trends

According to the CARB’s recent GHG inventory for the state, released 2019, California produced 424 million metric tons of carbon dioxide equivalent (MMTCO_{2e}) in 2017 (CARB 2019). The major source of GHGs in California is transportation, contributing approximately 40.1 percent of the state’s total GHG emissions in 2017.



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California uses the annual statewide GHG emission inventory to track progress toward meeting statewide GHG targets. In 2018, emissions from routine GHG emitting activities statewide were 425 MMTCO_{2e}, 0.8 MMTCO_{2e} higher than 2017 levels. This puts total emissions at 6 MMTCO_{2e} below the 2020 target of 431 million metric tons (CARB 2020). California statewide GHG emissions dropped below the 2020 GHG limit in 2016 and have remained below the 2020 GHG limit since then.

Potential Environmental Impacts

For California, climate change in the form of warming has the potential to incur and exacerbate environmental impacts, including but not limited to changes to precipitation and runoff patterns, increased agricultural demand for water, inundation of low-lying coastal areas by sea-level rise, and increased incidents and severity of wildfire events (Moser et al. 2009). Cooling of the climate may have the opposite effects. Although certain environmental effects are widely accepted to be a potential hazard to certain locations, such as rising sea level for low-lying coastal areas, it is currently infeasible to predict all environmental effects of climate change on any one location.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial and manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and City, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

Regulatory Requirements

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this legislation establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. The governor has also issued several executive orders related to the state's evolving climate change policy. Of particular importance are AB 32 and SB 32, which outline the state's GHG reduction goals of achieving 1990 emissions levels by 2020 and a 40 percent reduction below 1990 emissions levels by 2030.

In the absence of federal regulations, control of GHGs is generally regulated at the state level and is typically approached by setting emission reduction targets for existing



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sources of GHGs, setting policies to promote renewable energy and increase energy efficiency, and developing statewide action plans.

In 2009, the City approved Resolution 2009/57 adopting GHG reduction targets to reduce overall City-wide carbon emissions by 25 percent of the 1990 levels by 2020 and 80 percent by 2050. The reduction targets adopted by the City are consistent with the statewide GHG reduction targets established by AB 32. On May 24, 2011, the City Council approved the Community and Municipal CAPs. The plan included potential programs and actions the City could implement to reach the reduction targets established by Resolution 2009/57. The City of Antioch Climate Action and Resilience Plan was adopted on May 12, 2020. The City's Plans include City-wide goals and strategies, but not a project-specific threshold for determining the significance of GHG emissions.

3.8.2 Methodology

Thresholds

BAAQMD provides multiple options for project-level GHG thresholds in its 2017 CEQA Guidelines. BAAQMD does not presently provide a construction-related GHG generation threshold but recommends that construction-generated GHGs be quantified and disclosed. BAAQMD also recommends that lead agencies (in this case, the City of Antioch) make a determination on the level of significance of construction-generated GHG emissions in relation to meeting AB 32 GHG reduction goals. The lead agency is also encouraged to incorporate BMPs to reduce GHG emissions during project construction, as feasible and applicable.

The project is located within the BAAQMD; therefore, the BAAQMD thresholds are the most appropriate to use for the project. The thresholds suggested by BAAQMD for project-level operational GHG generation are as follows:

- Compliance with a qualified Greenhouse Gas Reduction Strategy, or
- 1,100 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year, or
- 4.6 MTCO_{2e} per service population (employees plus residents)

BAAQMD's CEQA Guidelines state that if annual emissions of GHG exceed the thresholds, the project would result in a cumulatively considerable significant impact to global climate change. Therefore, if the project is less than any one of the thresholds



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identified above, then the project would result in a less than significant cumulative impact to global climate change.

Methodology

Construction and operational emissions were estimated using CalEEMod version 2016.3.2 (Appendix A).

3.8.3 Environmental Impact Analysis

This section discusses potential GHG impacts associated with the proposed project and provides mitigation measures where necessary.

Impact GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Impact Analysis

The proposed project may contribute to climate change impacts through its contribution of GHGs. The proposed project would generate a variety of GHGs during construction, including several defined by AB 32, such as CO₂, CH₄, and nitrous oxide (N₂O) from the exhaust of equipment, construction hauling trips, and worker commuter trips.

Constructions Emission Inventory

Construction emissions would be generated from the exhaust of equipment and the exhaust of construction equipment and material delivery trips and worker commuter trips. Detailed construction assumptions are provided in Appendix A. The BAAQMD does not presently provide a construction-related GHG generation threshold but recommends that construction-generated GHGs be quantified and disclosed. MTCO_{2e} emissions during construction of the project are presented in Table 3.8-1.



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Table 3.8-1. Construction Greenhouse Gas Emissions

Construction (2023-2024)	MTCO₂e
Project Construction (2023)	1,142
Project Construction (2024)	99
Total Construction MTCO₂e	1,241
Emissions Amortized Over 30 Years¹	41

Notes:

MTCO₂e = metric tons of carbon dioxide equivalent

¹ Construction GHG emissions are amortized over the 30-year lifetime of the project.

Source: Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary (Appendix A)

During the construction of the proposed project, approximately 1,241 MTCO₂e would be emitted. Neither the City nor the BAAQMD have an adopted threshold of significance for construction-related GHG emissions. Because impacts from construction activities occur over a relatively short-term period, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. Therefore, a standard practice is to amortize construction emissions over the anticipated lifetime of a project, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. In the absence of a construction emission threshold and in order to evaluate construction-related GHG emissions against a threshold, the total emissions generated during construction were amortized based on the life of the development (30 years) and added to the operational emissions to determine the total emissions from the project, as shown below.

Operational Emission Inventory

Operational or long-term emissions occur over the life of the project. The operational emissions for the proposed project are shown in Table 3.8-2. Sources for operational emissions include the following:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site.
- **Natural Gas:** These emissions refer to the GHG emissions that occur when natural gas is burned on the project site. Natural gas uses include heating water, space heating, dryers, stoves, or other uses.



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- Indirect Electricity: These emissions refer to those generated by offsite power plants to supply electricity required for the project.
- Water Transport: These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- Waste: These emissions refer to the GHG emissions produced by decomposing waste generated by the project. These include waste removed from car interiors during the cleaning process; waste generated in the restrooms; and waste generated from the operations of the facility.

The CalEEMod default assumptions were used for each of these sources of emissions except where applicant usage estimates exceeded the CalEEMod default value. Detailed modeling results and more information regarding assumptions used to estimate emissions are provided in Appendix A. The operational emissions are shown in Table 3.8-2.

Table 3.8-2. Operational Greenhouse Gas Emissions at Project Buildout

Source Category	MTCO ₂ e
Area	4
Energy Consumption	242
Mobile	767
Solid Waste Generation	29
Water Usage	14
Amortized Construction Emissions ¹	41
<i>Total</i>	<i>1,098</i>
Service Population (Residents + Employees)	413
Project Emission Generation (MTCO₂e/service population/year)	2.66
BAAQMD Operational Threshold (MTCO₂e/service population/year)²	3.4
Significant Impact?	No

Notes:

¹ Construction GHG emissions are amortized over the 30-year lifetime of the project.

² Value was calculated using the standard equation for linear interpolation between the data points for 2020 and 2030. An appropriate value was determined for the year 2024 based on interpolation of known data.

MTCO₂e = metric tons of carbon dioxide equivalent; BAAQMD = Bay Area Air Quality Management District

Source: Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary (Appendix A)



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During operation of the proposed project, approximately 1,056 MTCO₂e would be emitted. The proposed project is estimated to serve approximately 413 residents once fully operational using the Department of Finance factor of 3.28 persons per household for the City (State of California Department of Finance 2020). As shown in Table 3-8.2, the project would result in a generation of 2.66 MTCO₂e per service person per year. Estimated operational emissions would not exceed the BAAQMD recommended significance thresholds; therefore, impacts would be less than significant.

Post-2020 Emissions Impact

Given the recent legislative attention and case law regarding post-2020 goals and the scientific evidence that additional GHG reductions are needed through 2050 to stabilize CO₂ concentrations, the Association of Environmental Professionals' Climate Change Committee recommended in its Beyond 2020: The Challenges of Greenhouse Gas Reduction Planning by Local Governments in California (AEP 2015) white paper that CEQA analyses for most land use development projects can continue to rely on current thresholds for the immediate future, but that long-term projects should consider, "post-2020 emissions consistent with 'substantial progress' along a post-2020 reduction trajectory toward meeting the 2050 target." The Beyond 2020 white paper further recommends that the "significance determination... should be based on consistency with 'substantial progress' along a post-2020 trajectory."

The BAAQMD has developed a bright-line threshold of 1,100 MTCO₂e for determining whether projects would generate significant GHG emissions. While it is understood that this threshold was developed for projects operational prior to 2020, the BAAQMD has not yet updated their GHG significance thresholds past this date. As shown above in Table 3.8-2, the total GHG emissions generated by the proposed project would be 2.66 MTCO₂e/service population/ year and would not exceed the BAAQMD threshold of 4.6 MTCO₂e/service population/year. Many California air quality management districts are currently updating their GHG thresholds to meet GHG reduction goals pursuant to 2050 targets; therefore, in the absence of Beyond 2020 thresholds, consistency with 'substantial progress' along a post-2020 trajectory was used as a significance determination for the proposed project. The service population threshold of significance (4.6 MTCO₂e/service population/year) was adjusted to a substantial progress threshold that was calculated based on the GHG reduction goals of SB 32/Executive Order B-30-15 and the projected 2030 Statewide population and employment levels (Association of Environmental Professionals 2016). An adjusted efficiency threshold of 2.6



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MTCO₂e/service population/year is estimated to be needed by the land use sector for California to meet the 2030 target.¹ The estimated total net annual GHG emissions generated by the proposed project in the year 2030 were compared with the applicable threshold of 2.6 MTCO₂e/service population/year as shown in Table 3.8-3.

Table 3.8-3. Operational Greenhouse Gas Emissions in the 2030 Operational Year

Source Category	MTCO ₂ e
Area	4
Energy Consumption	234
Mobile	653
Solid Waste Generation	29
Water Usage	13
Amortized Construction Emissions ¹	41
<i>Total</i>	<i>975</i>
Service Population (Residents + Employees)	413
Project Emission Generation (MTCO₂e/service population/year)	2.36
Applicable Operational Threshold (MTCO₂e/service population/year)²	2.6
Significant Impact?	No

Notes:

¹ Construction GHG emissions are amortized over the 30-year lifetime of the project.

² Adjusted to Reflect Post-2020 GHG Emissions Reduction Targets

MTCO₂e = metric tons of carbon dioxide equivalent; BAAQMD = Bay Area Air Quality Management District; GHG = Greenhouse Gas

Source: Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary (Appendix A)

Due to being below the significance threshold adjusted to reflect post-2020 GHG emissions reduction targets, the project would be assumed to meet or fall below trajectory, and impacts would be less than significant.

This impact will not be further addressed in the EIR.

¹ The adjusted efficiency threshold was calculated for California using the GHG reduction goals per SB 32 and an adjusted service population that was updated using projected 2020 Statewide population and employment levels. The emissions used in calculating the threshold are assumed to be 40 percent 1990 emissions to meet SB 32 needed for 2030.



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Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Impact Analysis

The City has adopted two separate CAPs, the first being the Community CAP and the second, the Municipal CAP. The Community CAP is focused on implementing strategies to reduce GHG emissions through green building design, renewable energy, transit-oriented development, and education. The Municipal CAP has been developed to address GHG emissions resulting from municipal operations and infrastructure. The Community CAP includes a goal of reducing County GHG emissions by 25 percent below 2005 levels by 2020 and 80 percent below 2005 by 2050 but has no mandatory provisions that would apply to the proposed project. The Climate Action and Resilience Plan was adopted by City Council on May 12, 2020, with the goal to provide tools for the City and community to build community resilience to climate challenges (City of Antioch 2020b). The Climate Action and Resilience Plan outlines proposed actions that aim to benefit the community in the following broad categories: adaptation to climate related changes, mitigation of GHG emissions, and community development for building strong communities that can withstand the climate challenge. Although implementation of the proposed actions outlined in the Climate Action and Resilience Plan would reduce the community's reliance on carbon-based energy sources, the plan has no mandatory provisions that would apply to the proposed project.

The State of California has adopted regulations that apply to the proposed project that would help the City achieve its reduction goal. The proposed project would be subject to Title 24 energy efficiency standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases



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GHG emissions. The proposed project would comply with CALGreen, which includes requirements to increase recycling, reduce waste, reduce water use, increase bicycle use, and other measures that would reduce GHG emissions. Motor vehicle emissions associated with the proposed project would be reduced through compliance with State regulations on fuel efficiency and fuel carbon content. The regulations include the Pavley fuel efficiency standards that require manufacturers to meet increasing stringent fuel mileage rates for vehicles sold in California and the Low Carbon Fuel Standard that requires reductions in the average carbon content of motor vehicle fuels. Emissions related to electricity consumption by the proposed project would be reduced as the electric utility complies with the Renewables Portfolio Standard, which requires utilities to increase its mix of renewable energy sources to 50 percent by 2030. In 2018, SB 100 was signed into law, which again increases the Renewables Portfolio Standard to 60 percent by 2030 and requires all the state's electricity to come from carbon-free resources by 2045 (California Public Utilities Commission 2021). The proposed project would not conflict with the City's Community CAP or regulations adopted by the State of California to reduce GHG emissions; therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.



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3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to <i>Government Code Section 65962.5</i> and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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3.9.1 Environmental Setting

Hazardous materials, as defined by CCR, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed of, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic: Causes human health effects
- Ignitable: Has the ability to burn
- Corrosive: Causes severe burns or damage to materials
- Reactive: Causes explosions or generates toxic gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust.

California Government Code Section 65962.5 requires the California EPA to compile, maintain, and update specified lists of hazardous material release sites. The required lists of hazardous material release sites are commonly referred to as the "Cortese List," which are contained on internet websites, including the online EnviroStor database from the Department of Toxic Substances Control (DTSC) and the online GeoTracker database from the State Water Resources Control Board (SWRCB). These two databases include hazardous material release sites along with other categories of sites or facilities specific to each agency's jurisdiction. A search of EnviroStor and GeoTracker databases in February 2021 revealed the project site is not listed as a hazardous material release site and identified one site within 1 mile of the project site (DTSC 2021a, SWRCB 2021a). The Oakley Road Metering Station (SL0601346154), located 0.89 mile northwest of the project site, is listed on EnviroStor and GeoTracker Database as a "Cleanup Program Site." "Cleanup Program Sites" includes all "non-federally owned" sites that are regulated under the SWRCB's Site Cleanup Program. The Oakley Road Metering Station is owned by Standard Pacific Gas Lines, Pacific Gas and Electric Company, and Chevron Corporation. The site, until the mid-1970s, was utilized for routine operations associated with the handling of natural gas well liquids. These liquids consist of water and petroleum hydrocarbons. Currently, the site is used as a storage area for the Pacific Gas and Electric Company's natural gas pipeline



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equipment. (DTSC 2021b). The cleanup site is status is “OPEN – REMEDIATION” as of November 20, 2013 on the GeoTracker database, which means that an approved remedy has been selected for the impacted media at the site and the responsible party is implementing one or more remedy under an approved cleanup plan for the site. Since 1991, quarterly groundwater monitoring is performed in accordance with Monitoring and Reporting Program # R5-2005-0813 issued on April 11, 2005. Annual reports summarizing groundwater sampling results are provided to the Central Valley Water Board. (SWRCB 2021b).

There are no public or private airports within two miles of the City limits, and there are no lands in the City that are within an airport land use plan (City of Antioch 2003b). The nearest public airports to the project site are the Byron Airport and the Buchanan Field Airport, located approximately 12 miles southeast and 16.75 miles west of the project site, respectively. The nearest private airport is the Funny Farm Airport, approximately 6 miles southeast of the project site in the City of Brentwood (Tollfree Airline 2021). According to the California Department of Forestry and Fire Protection, the City is not located in a local or state fire hazard severity zone (CALFIRE 2020).

3.9.2 Methodology

The following analysis is based on a review of documents pertaining to the project site, including the General Plan, General Plan EIR, and online regulatory compliance databases.

3.9.3 Environmental Impact Analysis

This section discusses potential impacts related to hazards and hazardous materials associated with the proposed project and provides mitigation measures where necessary.

Impact HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact Analysis

The proposed project consists of the development of the 12-acre vacant project site as 126 multifamily residences in 25 buildings with related amenities. Residential uses



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would not involve the regular use, storage, transport, or disposal of significant amounts of hazardous materials. Construction of the proposed project would involve the minor routine transport and handling of hazardous substances such as diesel fuels, lubricants, solvents, asphalt, paints, building materials, finishing materials, pesticides, and fertilizers. The project contractor would be required to comply with all applicable federal, state, and local laws related to the transport, use, or disposal of hazardous materials, as overseen by the California EPA and DTSC. Hazardous materials used post construction would be those commonly found in other residential uses such as cleaning products, paints, oils, and pesticides for landscaping maintenance activities. These common household hazardous materials would be used in limited quantities and would not create a substantial hazard to the public or the environment. Therefore, impacts related to the routine transport, use, and disposal of hazardous materials during project construction and operation would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact HAZ-2 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?

Impact Analysis

As discussed in Impact HAZ-1, project construction and operation activities would involve limited use of common hazardous materials, including paints, solvents, fuels, oils, cleaners, and pesticides. The use of these substances is not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset or accident. The proposed project would be required to comply with applicable



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federal, state, and local laws pertaining to the safe handling, storage, and transport of hazardous materials. In addition, during construction activities, the applicant would be required to implement a SWPPP to prevent contaminated runoff from leaving the project site. The implementation of the SWPPP would be incorporated into the proposed project as Mitigation Measure HYD-1. Therefore, impacts related to the release of hazardous materials into the environment would be less than significant with the implementation of Mitigation Measure HYD-1. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HYD-1 is required.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Impact Analysis

The project site is not located within 0.25 mile of an existing or proposed school. The nearest school is the Mino Grant Elementary School, approximately 0.94 mile west of the project site. In addition, Orchard Park Elementary is approximately 1 mile northeast of the project site. The proposed project does not involve the development of a use that would emit hazardous materials, substances, or waste during operation. The use of heavy equipment and activities involving hazardous materials would be limited to the construction phase and confined to construction areas and within existing roadways. The use of hazardous materials would also be regulated by health and safety requirements under federal, state, and local laws, including handling, storage, and disposal of the materials, as well as emergency spill response. As such, the proposed project would have a less-than-significant impact related to the emission or handling of hazardous materials near a school. This impact will not be further addressed in the EIR.



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Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact HAZ-4 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?

Impact Analysis

The project site is not included on a list of hazardous materials sites pursuant to Government Code Section 65962.5 (DTSC 2021a, SWRCB 2021a). Therefore, the proposed project would not create a significant hazard to the public or the environment and no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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Impact HAZ-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 for people residing or working in the project area?

Impact Analysis

The project site is not located within 2 miles of a public airport. The nearest public airports to the project site are the Byron Airport and the Buchanan Field Airport, located approximately 12 miles southeast and 16.75 miles west of the project site, respectively. As such, the project site does not fall within an airport land use plan and would not result in a safety hazard for people residing or working in the project site. No impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact HAZ-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact Analysis

If the proposed project resulted in the complete or partial closure of roadways, interfered with identified evacuation routes, restricted access for emergency response vehicles, or restricted access to critical facilities such as hospitals or fire stations, then it would interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project would not involve permanent modification of existing roadways. Construction equipment and materials would be stored within the project site. There are no identified evacuation routes that would be potentially impacted by the construction of the project. Construction activities are anticipated to be confined to the project site, and no road closures or detours are anticipated. Therefore, project construction and



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operation activities would not interfere with an emergency evacuation or response plan, and impacts would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact HAZ-7 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Impact Analysis

The California Department of Fire and Forestry Protection does not identify the City in a local or state very high fire hazard severity zone (CALFIRE 2020). According to the General Plan EIR, the southern and unincorporated portions of the City are the most susceptible to wildland fire hazards because these areas contain rural, hilly terrain, and are adjacent to natural grasslands and brush (City of Antioch 2003b). The project site is in the northeast portion of the City and located in an urban area near other residential uses. In addition, any dry, potentially-flammable, vegetation currently on-site would be removed with development of the proposed project. As such, the proposed project is not expected to be exposed to risks associated with wildland fires. As discussed in Section 2.20 Wildfire, primary access to the project site would be via Wild Horse Road and onto two streets within the project site which would be 26 feet wide to allow emergency vehicles access to the project site. All utilities needed for the new development would be located underground and also includes installation of fire hydrants on the project site to mitigate fire hazards. The proposed project would be required to implement General Plan policies along with the implementation of the Uniform Fire Code and the Uniform Building Code which will reduce effects of development on wildland fire hazard impacts



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to a less than significant level (City of Antioch 2003a). As such, the proposed project is not expected to be exposed to risks associated with wildland fires, and impacts would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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3.10 HYDROLOGY AND WATER QUALITY

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 offsite;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 runoff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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3.10.1 Environmental Setting

Climate and Precipitation

Regionally, the project site has a Mediterranean climate characterized by hot, dry summers and moderate winters, with average annual temperatures ranging from 46.6 to 75°F. Historical data used to describe the climate was collected at the Antioch Pumping Plant #3 Station, located directly south of the project site. Precipitation in the study area occurs as rain. Average annual rainfall is 11.2 inches and occurs primarily from October through April. The growing season (i.e., 50 percent probability of air temperature 32°F or higher) in the study area is around 304 days and occurs between mid-February and early December (Western Regional Climate Center 2021).

Watershed and Regional Drainage

A watershed is the geographic area draining into a river system, ocean, or other body of water through a single outlet and includes the receiving waters. The proposed project site is located in the San Joaquin Delta watershed (USGS 2020). In general, the creeks flow from the hills southwest of Antioch to the north and ultimately drain into the Delta, located north of the project site. The existing drainage system in Antioch is comprised primarily of channelized creeks fed by groundwater, surface runoff, and underground storm drains.

Groundwater

The City is located within the East Contra Costa Subbasin (ECC Subbasin), which is part of the larger San Joaquin Valley Groundwater Basin. The ECC Subbasin is drained by the San Joaquin River and Marsh Creek. The San Joaquin River flows northward into the Sacramento and San Joaquin Delta, which ultimately discharges into the San Francisco Bay. The City does not pump groundwater for municipal water supplies (City of Antioch 2003b). The state has designated the ECC Subbasin as a medium-priority basin per the Sustainable Groundwater Management Act. Therefore, preparation of a Groundwater Sustainability Plan (GSP) is required by January 31, 2022. In May 2017, the City formed a Groundwater Sustainability Agency to manage groundwater resources beneath and within City limits. Accordingly, the City is working with other local agencies to prepare a GSP (East Contra Costa Irrigation District 2018).



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Water Quality

Water quality refers to the chemical, biological, and physical characteristics of water. The water quality within a watershed is influenced by surrounding land uses, geographic features, rainfall intensity, vehicle traffic, and percentage of impervious surfaces. During the seasonal dry period between May to September, pollutants such as vehicle exhaust, oil and gasoline spills, and atmospheric fallout accumulate within the watershed. During the seasonal wet period between October to April, precipitation can displace these pollutants into stormwater runoff and increase pollutant concentrations at the beginning of the season.

Flooding

Flood hazard zones are identified on official Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA). The project site is designated as Zone X. Zone X is defined as areas outside of the 100-year floodplain zone that also have a 0.2-percent probability of flooding in a given year (FEMA 2021).

Seiches, Dam Inundation, and Tsunamis

Seiches are standing waves oscillating in a landlocked body of water, typically caused by strong winds or seismic ground shaking. Tsunamis are tidal waves created by undersea fault movement. These waves are fast moving, create large swells of water, and upon reaching the coast can sweep inland with a large amount of force. Portions of the City located adjacent to Suisun Bay are susceptible to potential tsunami or seiche inundation. However, projected wave height and tsunami run-up is expected to be small in the interior portions of the San Francisco Bay. Some coastal inundation and damage could occur if a tsunami or seiche coincided with very high tides or an extreme storm.

A dam can pose a potential risk of failure particularly during seismic events or ground shaking, which can threaten the area below the dam with inundation. The City is not in the line of any flooding from dam or reservoir inundation (DWR 2015).

3.10.2 Methodology

The evaluation of potential hydrologic and water quality impacts was based on a review of City documents, including the General Plan and 2015 Urban Water Management Plan (UWMP). Mapping tools provided by FEMA were also reviewed. The information obtained from these sources are summarized to establish existing conditions and to



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identify potential environmental effects. In determining the level of significance, the analysis assumes that the proposed project would comply with relevant federal, state, and local ordinances and regulations.

3.10.3 Environmental Impact Analysis

This section discusses potential impacts related to hydrology and water quality associated with the proposed project and provides mitigation measures where necessary.

Impact HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact Analysis

Construction activities would include site clearing, grading, utility connections, building construction, frontage improvements (e.g., sidewalk and driveway construction), and landscaping onsite. Construction activities would involve grading of the entire project site and the permanent disturbance of the site. These activities have the potential to generate stormwater runoff and to discharge pollutants, such as fuel, solvents, oil, paints, and trash, into the City's storm drain system. The proposed project would comply with the NPDES General Construction Permit. The NPDES General Construction Permit includes the preparation of a SWPPP and incorporation of BMPs to control sedimentation, erosion, and hazardous materials from contacting stormwater, with the intent of keeping all products of erosion from moving offsite into receiving waters. The SWPPP and applicable BMPs have been incorporated into Mitigation Measure HYD-1 to reduce potential water quality impacts to a less than significant level.

The City has adopted the Contra Costa County's C.3 Stormwater Standards, which require new development and redevelopment projects that create or alter 10,000 or more square feet of impervious area to contain and treat all stormwater runoff from the project site. Given that the proposed project would create approximately 214,032 square feet of impervious area, the proposed project would be subject to the requirements of the SWRCB and the Regional Water Quality Control Board (RWQCB), including the C.3 Standards, which are included in the City's NPDES General Permit. This increase in impervious surface at the project site would alter the type and level of pollutants in stormwater runoff from the project site. Stormwater runoff from building



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rooftops, parking lot areas, sidewalks, access roads, and landscaped areas would potentially contain oils, grease, fuels, byproducts of combustion, pesticides, fertilizers, and herbicides. Compliance with the C.3 Standard requirements would ensure that impacts to water quality standards or waste discharge requirements would not occur during operation of the proposed project.

To control stormwater runoff, the proposed project would include the storm drains connecting to the bioretention basin and existing 48-inch and 36-inch storm drainpipes along the western perimeter of the proposed project. The proposed project would also include approximately 284,502 square feet of pervious surface, consisting of landscaping and bioswales, along the project site boundary. Stormwater generated at the project site would be directed and treated in the landscaped areas and the bioswales. As such, the proposed project would incorporate BMPs to prevent, control, and reduce the volume of pollutants in stormwater runoff. The proposed drainage system improvements would be designed and constructed in accordance with the City's Standard Specifications and General Plan. As such, operation of the proposed project would have a less-than-significant impact with mitigation related to water quality degradation. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM HYD-1: Prepare and Implement a SWPPP

Prior to the issuance of any construction-related permits, the applicant shall prepare and submit a Notice of Intent (NOI) to the SWRCB and prepare a SWPPP in compliance with the NPDES General Construction Permit. The SWPPP shall include a detailed, site-specific listing of the potential sources of stormwater pollution; pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills); description of the type and location of erosion and sediment control BMPs to be implemented at the project site; and a BMP monitoring and maintenance schedule to determine the amount of pollutants leaving the project site. A copy of the SWPPP must be current and remain onsite. Water quality BMPs identified in the SWPPP could include but are not limited to the following:



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- Surface water runoff shall be controlled by directing flowing water away from critical areas and by reducing runoff velocity. Diversion structures, such as terraces, dikes, and ditches, shall collect and direct runoff water around vulnerable areas to prepared drainage outlets.
- Surface roughening, berms, check dams, hay bales, or similar devices shall be used to reduce runoff velocity and erosion.
- Sediment shall be contained when conditions are too extreme for treatment by surface protection. Temporary sediment traps, filter fabric fences, inlet protectors, vegetative filters and buffers, or settling basins shall be used to detain runoff water long enough for sediment particles to settle out. Construction materials, including topsoil and chemicals, shall be stored, covered, and isolated to prevent runoff losses and contamination of groundwater.
- Topsoil removed during construction shall be carefully stored and treated as an important resource. Berms shall be placed around topsoil stockpiles to prevent runoff during storm events.
- Fuel and vehicle maintenance areas shall be established away from all drainage courses, and these areas shall be designed to control runoff.
- Temporary erosion control measures, such as silt fences, staked straw bales, and temporary revegetation, shall be employed for disturbed areas. No disturbed surfaces will be left without erosion control measures in place during the winter and spring months.
- A spill prevention and countermeasure plan shall be developed to identify proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used onsite. The plan will also require the proper storage, handling, use, and disposal of petroleum products.
- Construction activities shall be scheduled to reduce land disturbance during peak runoff periods and to the immediate area required for construction. Soil conservation practices shall be completed during the fall or late winter to reduce erosion during spring runoff. Existing vegetation will be retained where possible. To the extent feasible, grading activities shall be limited to the immediate area required for construction.



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Level of Significance After Mitigation

Less Than Significant with Mitigation.

Impact HYD-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact Analysis

The City currently does not rely on groundwater for water supplies. Therefore, any water demand associated with the proposed project would not result in a depletion of groundwater in the proposed project site.

The proposed project would create 214,032 square feet of impervious surface at the project site, which would potentially impact groundwater because areas currently available for the infiltration of rainfall would be reduced. The proposed project would incorporate 284,502 square feet of pervious surface at the project site consisting of landscape planters and bioswales along the project boundaries. Therefore, the proposed project would not substantially interfere with local groundwater recharge. In addition, the drainage system improvements would be designed and constructed in accordance with the City's Standard Specifications and General Plan. Impacts would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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Impact HYD-3 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 offsite;
 - ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - 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 runoff;
 - iv) Impede or redirect flood flows
-

Impact Analysis

- i. Result in substantial erosion or siltation on- or offsite

Construction of the proposed project would include ground-disturbing work that would involve grading of the entire project site, and the permanent disturbance of the 12-acre site. As a result, construction activities could result in erosion-related impacts. The proposed project would implement Mitigation Measure HYD-1, including preparation of a SWPPP in accordance with the NPDES General Construction Permit. The SWPPP would include BMPs, which would be implemented during construction activities to reduce the potential of erosion.

The proposed project would create 214,032 square feet of impervious surface at the project site, which would potentially impact groundwater because areas currently available for the infiltration of rainfall would be reduced. The proposed project would incorporate 284,502 square feet of pervious surface at the project site consisting of landscape planters and bioswales along the project boundaries. These features would collect impervious surface runoff prior to entering the piped storm drain system and would provide treatment, retention, and/or detention at the project site to reduce the volume of stormwater runoff and erosion impacts. With implementation of Mitigation Measure HYD-1, the impact would be less than significant. This impact will not be further addressed in the EIR.



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- ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite

The proposed project involves the development of a vacant lot with multifamily residences. As a result, the proposed project would create 214,032 square feet of impervious surface at the project site. This increase in impervious surface at the project site would increase the amount of stormwater runoff from the project site. To control stormwater runoff, the proposed project includes connecting the storm drains to the bioretention basin and existing 48-inch and 36-inch storm drainpipes along the western perimeter of the proposed project. The proposed project would also include approximately 284,502 square feet of pervious surface consisting of landscaping and bioswales along the project site boundary. Stormwater at the project site would be diverted to the landscaped areas and bioswales, which would control the volume of stormwater at the project site to reduce the potential for flooding. Therefore, the proposed project would not result in on- or offsite flooding, and the impact would be less than significant. This impact will not be further addressed in the EIR.

- 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 runoff

As described above, construction activities would have the potential to generate stormwater runoff and to discharge pollutants, such as fuel, solvents, oil, paints, and trash, into the City's storm drain system. In addition, the increase in impervious surface resulting from project implementation would alter the type and level of pollutants in stormwater runoff from the project site. During construction activities, the proposed project would conform to the requirements of the NPDES General Construction Permit, which involves the preparation and implementation of a SWPPP. The SWPPP would specify BMPs to incorporate during construction to prevent, control, and reduce polluted runoff from entering the City's storm drain system and waterways. Implementation of these BMPs would be part of Mitigation Measure HYD-1.

In addition, stormwater generated at the project site would be directed and treated in the landscaped areas and the bioswales prior to entering the piped storm drain system. With implementation of such a plan, the facilities would continue to properly manage runoff long after completion of construction activities. The impacts would be less than



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significant with Mitigation Measure HYD-1 incorporated. This impact will not be further addressed in the EIR.

- iv. Impede or redirect flood flows

The project site is designated as Zone X. Zone X is defined as areas outside of the 100-year floodplain zone that have a 0.2-percent probability of flooding in a given year (FEMA 2021). The project is not located within a dam inundation zone; therefore, the proposed project would not impede or redirect flood flows, and there would be no impact. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measure HYD-1 is required.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.

Impact HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis

The project site would not be susceptible to seiche, tsunami, or mudflow. Seiches affect locations adjacent to larger water bodies such as lakes or reservoirs; the project site is not located near any such water body. The project site is located more than 50 miles from the Pacific Ocean and miles from Suisun Bay, substantially reducing the potential for impacts from tsunamis. As noted above, the project site is not located within a flood hazard zone. As a result, there would be no impact. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.



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Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact HYD-5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis

The State Department of Water Resources identified the ECC Subbasin as a medium-priority basin. The City formed a Groundwater Sustainability Agency in May 2017 to manage groundwater resources beneath and within City limits. Accordingly, the City is working with other local agencies to prepare a GSP by January 31, 2022 (East Contra Costa Subbasin 2018). The GSP for the ECC Subbasin is still under development and has not been approved. Therefore, the proposed project would not conflict with or obstruct implementation of a sustainable groundwater management plan.

As discussed above, the proposed project does not plan to draw groundwater from the site and would not substantially deplete groundwater supplies. The proposed project is required to comply with the policies and objectives of the Water Quality Control Plan for the Central Valley RWQCB. As required by Mitigation Measure HYD-1, the proposed project would obtain coverage under the NPDES General Construction Permit and Industrial General Permit. Compliance with these regulations would require the proposed project to prepare a construction SWPPP and post-operation SWPPP that includes BMPs that meet the requirements of the Central Valley RWQCB's Water Quality Control Plan. The implementation of Mitigation Measure HYD-1 would reduce potential impacts to water quality to a less than significant level and ensure that the proposed project would not conflict with or obstruct implementation of the Water Quality Control Plan for the Central Valley RWQCB.

Level of Significance Before Mitigation

Potentially Significant Impact.



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Mitigation Measures

Mitigation Measure HYD-1 is required.

Level of Significance After Mitigation

Less-Than-Significant Impact with Mitigation.



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3.11 LAND USE AND PLANNING

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.11.1 Environmental Setting

The proposed project is located in the City of Antioch at the terminus of Wild Horse Road and State Route 4. The project site is currently vacant and consists of a single parcel identified as APN 041-022-003 and is approximately 12-acres.

The City’s General Plan designates the project site as Low Density Residential, and the City’s Zoning Ordinance designates the project site as P-D 86-3.1: Planned Development District. This project-specific Planned Development District allows for uses such as housing developments which are appropriate as part of a specific planned development. The proposed project includes a General Plan Amendment and Planned Development Rezone to develop higher density housing for multifamily uses. While the General Plan land use designation would change following approval of the proposed project, it would continue to provide for residential uses, similar to the existing designation.

The project site is surrounded by State Route 4 to the east, residential developments to the west, and Wild Horse Road, the CCWD Antioch Service Center, and the Contra Costa Canal to the south. The property is primarily covered in with annual grasslands and no trees are present on the project site.

3.11.2 Methodology

The evaluation of potential land use impacts was based on a review of applicable land use documents, including the General Plan, and the Antioch Code of Ordinance. This



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analysis examined the consistency of the proposed project with applicable General Plan policies.

3.11.3 Environmental Impact Analysis

This section discusses potential impacts related to land use and planning associated with the proposed project and provides mitigation measures where necessary.

Impact LU-1 Physically divide an established community?

Impact Analysis

The project site is vacant and is bordered by residential developments, roadways, and a water district pumping plant. The parcel is entirely vacant; therefore, the proposed project would not physically alter an established community. In addition, the proposed project would be accommodated by existing roadways and would not preclude access to adjacent developments. Therefore, the proposed project would not physically divide an established community, and no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact LU-2 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?

Impact Analysis

The City's General Plan designates the project site as Low Density Residential, and the City's Zoning Ordinance designates the project site as P-D 86-3.1: Planned



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Development District. This project-specific Planned Development District allows for uses such as housing developments which are appropriate as part of a specific planned development. The proposed project includes a General Plan Amendment and Planned Development Rezone to develop higher density housing for multifamily uses. While the General Plan land use designation would change following approval of the proposed project, it would continue to provide for residential uses, similar to the existing designation.

High Density Residential developments have a maximum allowable density of 35 dwelling units per gross developable acre and two-story apartments and condominiums with surface parking typify this district, although structures of greater height with compensating amounts of open space would be possible. The Zoning Ordinance will establish specific density limits at or below 35 units per acre for zoning districts that correspond with the High Density Residential designation. The proposed project would also require a rezone to a new Planned Development District. The Planned Development District does not have set standards and regulations for structures as they are to be determined by the City Council through the planned development process. Each P-D District established will have specific development standards set for that particular district such as minimum lot sizes, setback and open space requirements, architectural and landscaping guidelines, and maximum building heights and lot coverages. These standards are determined by the City Council through planned development process (City of Antioch 2020a).

The proposed project would construct multifamily residences which would be inconsistent with the current General Plan land use designation. However, with the amendment, the proposed project would be consistent with the proposed designation and the project would be consistent with the City of General Plan and impacts related to General Plan consistency would be less than significant.

The applicant proposes to amend the zoning code to a new P-D District. The rezoning of the site would establish and outline maximum density and units, minimum lot sizes, landscape requirements, open space requirements, architectural guidelines, and maximum building height and lot coverage. A preliminary development plan must be prepared for all proposed P-D Districts containing residential components and Planning Commission approval of the preliminary development plan is necessary. The applicant of the P-D District establishment request is required to develop a listing of the development standards proposed for the new P-D District (e.g., setbacks, lot sizes,



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building heights) (City of Antioch 2020a). The proposed project would implement all proposed development standards and guidelines. Therefore, the proposed project would be consistent with the City of Antioch Zoning Code and impacts related to Zoning Code consistency would be less than significant.

In summary, the proposed project would not conflict with the applicable land use plans, policies, or regulations of the City of General Plan or the Zoning Code adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, impacts on land use policies and plans would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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3.12 MINERAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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 plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.12.1 Environmental Setting

According to the Contra Costa County General Plan, mineral resources are not currently located near the City (Contra Costa County 2005). Additionally, the General Plan EIR does not identify any areas identified as available for new development by the General Plan to contain any known mineral resources that would be of value to the region and residents of the state (City of Antioch 2003b).

3.12.2 Methodology

The following analysis is based on a review of the General Plan EIR and the DOC's Division of Mine Reclamation mineral lands classification maps.

3.12.3 Environmental Impact Analysis

This section discusses potential impacts on mineral resources associated with the proposed project and provides mitigation measures where necessary.

Impact MIN-1 Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

Impact Analysis

The DOC's Mineral Lands Classification map of Aggregate Resources classifies the project site as an MRZ-3 zone. MRZ-3 zones are areas containing mineral deposits the significance of which cannot be evaluated from available data (DOC 1982). However,



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the Contra Costa County General Plan as well as the City's General Plan EIR do not identify any mineral resources of value on or near the project site. No mineral extraction activities exist on or near the site, and mineral extraction is not included as part of the proposed project. Furthermore, the project's Planned Development zoning will not allow mineral extraction. The proposed project would not 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, and no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

Impact MIN-2	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 plan?
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Impact Analysis

The DOC Division of Mine Reclamation identifies the project site as an MRZ-3 zone. MRZ-3 zone classifications are given to areas that contain mineral deposits but the significant of it cannot be evaluated from the available data. There are no locally important mineral resource recovery sites delineated on the City's General Plan and the Contra Costa County General Plan does not identify any valuable mineral resource areas in the City. Therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.



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Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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3.13 NOISE

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.13.1 Environmental Setting

Noise Fundamentals and Terminology

Noise is generally defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, evaluation of noise is necessary when considering the environmental impacts of a proposed project.

Sound is mechanical energy (vibration) transmitted by pressure waves over a medium such as air or water. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an existing sound level.

Although the decibel (dB) scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The



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perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called A-weighting, written as dB(A) and referred to as A-weighted decibels. There is a strong correlation between A-weighted sound levels and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. Table 3.13-1 summarizes typical A-weighted sound levels for different common noise sources.

Table 3.13-1. Typical A-Weighted Sound Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet flyover at 1,000 feet	110	Rock band
Gas lawnmower at 3 feet	100	Food blender at 3 Feet
Diesel truck at 50 Feet at 50 miles per hour	90	Garbage Disposal at 3 Feet
Noisy urban area, daytime	80	Vacuum Cleaner at 10 Feet
Gas lawnmower, 100 feet	70	Normal Speech at 3 Feet
Commercial area	60	Large business office
Heavy traffic at 300 feet	50	Dishwasher in next room
Quiet urban daytime	40	Theater, large conference room (Background)
Quiet urban nighttime	20	Library
Quiet suburban nighttime	10	Bedroom at night, concert hall (Background)
Quiet rural nighttime	0	Broadcast/recording studio

Source: Caltrans Technical Noise Supplement Traffic Noise Analysis Protocol (Caltrans 2013)

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (Leq), the minimum and maximum sound levels (Lmin and Lmax, respectively), percentile-exceeded sound levels (such as L10, L20), the day-night sound level (Ldn), and the community noise



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equivalent level (CNEL). Ldn and CNEL values often differ by less than 1 dB. As a matter of practice, Ldn and CNEL values are considered to be equivalent and are treated as such in this assessment. Table 3.13-2 defines sound measurements and other terminology used in this report.

Table 3.13-2. Definition of Sound Measurements

Sound Measurements	Definition
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dB(A))	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
Maximum Sound Level (Lmax)	The maximum sound level measured during the measurement period.
Minimum Sound Level (Lmin)	The minimum sound level measured during the measurement period.
Equivalent Sound Level (Leq)	The equivalent steady state sound level that in a stated period of time would contain the same acoustical energy.
Percentile-Exceeded Sound Level (Lxx)	The sound level exceeded xx % of a specific time period. L10 is the sound level exceeded 10% of the time. L90 is the sound level exceeded 90% of the time. L90 is often considered to be representative of the background noise level in a given area.
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.
Peak Particle Velocity (PPV)	A measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches/second.
Frequency: Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.

Source: Federal Highway Administration Construction Noise Handbook (FHWA 2006)



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With respect to how humans perceive and react to changes in noise levels, a 1 dB(A) increase is imperceptible, a 3 dB(A) increase is barely perceptible, a 5 dB(A) increase is clearly noticeable, and a 10 dB(A) increase is subjectively perceived as approximately twice as loud. These subjective reactions to changes in noise levels were developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broadband noise and to changes in levels of a given noise source. These statistical indicators are thought to be most applicable to noise levels in the range of 50 to 70 dB(A), as this is the usual range of voice and interior noise levels. Numbers of agencies and municipalities have developed or adopted noise level standards, consistent with these and other similar studies to help prevent annoyance and to protect against the degradation of the existing noise environment.

For a point source such as a stationary compressor or construction equipment, sound attenuates based on geometry at a rate of 6 dB per doubling of distance. For a line source such as free-flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance. Atmospheric conditions including wind, temperature gradients, and humidity can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface, such as grass, attenuates at a slightly greater rate than sound that travels over a hard surface, such as pavement. The increased attenuation is typically in the range of 1–2 dB per doubling of distance. Barriers, such as buildings and topography that block the line of sight between a source and receiver, also increase the attenuation of sound over distance.

Decibel Addition

Because dBs are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one source produces a sound pressure level of 70 dB(A), two identical sources would combine to produce 73 dB(A). The cumulative sound level of any number of sources can be determined using dB addition.



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Vibration Standards

Vibration is like noise such that noise involves a source, a transmission path, and a receiver. While related to noise, vibration differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system that is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocity (PPV) in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 3.13-3 notes the general threshold at which human annoyance could occur is 0.1 PPV for continuous/frequent sources. Table 3.13-4 indicates the threshold for damage to typical residential and commercial structures ranges from 0.3 to 0.5 PPV for continuous/frequent sources.

Table 3.13-3. Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum Peak Particle Velocity (inches/second)	
	Transient Sources	Continuous/Frequent Sources
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severe	2.0	0.40

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seal equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans Transportation and Construction Vibration Guidance Manual (Caltrans 2020)



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Table 3.13-4. Guideline Vibration Damage Potential Criteria

Structure and Condition	Maximum Peak Particle Velocity (inches/second)	
	Transient Sources	Continuous/Frequent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.30	0.12
Historic and some old buildings	0.50	0.20
Older residential structure	0.70	0.30
New residential structures	1.2	0.50
Modern industrial/commercial buildings	2.0	0.50

Notes: Transient sources again create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seal equipment, vibratory pile drivers, and vibratory compaction equipment.
Source: Caltrans Transportation and Construction Vibration Guidance Manual (Caltrans 2020)

The operation of heavy construction equipment, particularly pile driving and other impact devices, such as pavement breakers, create seismic waves that radiate along the surface of the ground and downward into the earth. These surface waves can be felt as ground vibration. Vibration from the operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance will result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes will decrease with increasing distance. Perceptible groundborne vibration is generally limited to areas within a few hundred feet of construction activities.

Table 7-4 “Vibration Source Levels for Construction Equipment” in the 2018 Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual lists vibration source levels for the construction equipment most likely to generate high levels of ground vibration (FTA 2018). The equipment listed in the FTA table includes impact and sonic pile drivers, clam shovel drops, hydromills, vibratory rollers, hoe rams, large and small bulldozers, caisson drilling, loaded trucks, and jackhammers. Table 3.13-5 below summarizes typical reference vibration levels generated by select construction equipment proposed for this project.



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Table 3.13-5. Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity at 25 Feet
Vibratory roller	0.210
Large bulldozer	0.089
Loaded trucks	0.076
Small bulldozer	0.003

Source: Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual (FTA 2018)

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil conditions through which the vibration is traveling. The following equation can be used to estimate the vibration level at a given distance for typical soil conditions (FTA 2018). “PPVref” is the reference PPV from Table 3.13-5 and “Distance” is the distance between the source and the receptor:

$$PPV = PPV_{ref} \times (25/Distance)^{1.5}$$

Noise Regulatory Framework

Federal, state, and local agencies regulate different aspects of environmental noise. Generally, the federal government sets standards for transportation-related noise sources closely linked to interstate commerce. These include aircraft, locomotives, and trucks. No federal noise standards are directly applicable to this project. The state government sets standards for transportation noise sources such as automobiles, light trucks, and motorcycles. Noise sources associated with industrial, commercial, and construction activities are generally subject to local control through noise ordinances and general plan policies. Local general plans identify general principles intended to guide and influence development plans.

State Regulations

California Building Code

Part 2, Title 24 of the CCR California Noise Insulation Standards establishes minimum noise insulation standards to protect persons within new hotels, motels, dormitories, long-term care facilities, apartment houses, and dwellings other than single-family residences. Under Section 1207.11 “Exterior Sound Transmission Control,” interior



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noise levels attributable to exterior noise sources cannot exceed 45 Ldn in any habitable room. Where such residences are located in an environment where exterior noise is 60 Ldn or greater, an acoustical analysis is required to ensure interior levels do not exceed the 45 Ldn interior standard. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the building must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local Regulations

City of Antioch General Plan

The General Plan sets forth noise and land use compatibility standards to guide development, as well as noise goals and policies to protect citizens from the harmful and annoying effects of excessive noise. The following noise objectives and policies are applicable to the proposed project.

Objective 11.6.1 Noise Objective. Achieve and maintain exterior noise levels appropriate to planned land uses throughout Antioch as described below:

- Residential
 - Single-Family: 60 dBA CNEL within rear yards
 - Multifamily: 60 dBA CNEL within exterior open space
- Schools
 - Classrooms: 65 dBA CNEL
 - Play and Sports Areas: 70 dBA CNEL
- Hospitals, Libraries: 60 dBA CNEL
- Commercial/Industrial: 70 dBA CNEL at the front setback

11.6.2 Noise Policies

- a. Implementation of the noise objective contained in Section 11.6.1 and the policies contained in 11.6.2 of the Environmental Hazards Element shall be based on noise data contained in Section 4.9 of the General Plan EIR, unless a noise analysis conducted pursuant to the City's development and environmental review process provides more up-to-date and accurate noise predictions, as determined by the City.



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- b. Maintain a pattern of land uses that separates noise sensitive land uses from major noise sources to the extent possible, and guide noise-tolerant land uses into the noisier portions of the Planning Area.
- c. Minimize motor vehicle noise in residential areas through proper route location and sensitive roadway design.
 - Provide planned industrial areas with truck access routes separated from residential areas to the maximum feasible extent.
 - Where needed, provide traffic calming devices to slow traffic speed within residential neighborhoods.
- d. Where new development (including construction and improvement of roadways) is proposed in areas exceeding the noise levels identified in the General Plan Noise Objective, or where the development of proposed uses could result in a significant increase in noise, require a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and implementation.
- e. When new development incorporating a potentially significant noise generator is proposed, require noise analyses to be prepared by a qualified acoustical engineer. Require the implementation of appropriate noise mitigation when the proposed project will cause new exceedances of General Plan noise objectives, or an audible (3.0 dB(A)) increase in noise in areas where General Plan noise objectives are already exceeded as the result of existing development.
- f. In reviewing noise impacts, utilize site design and architectural design features to the extent feasible to mitigate impacts on residential neighborhoods and other uses that are sensitive to noise. In addition to sound barriers, design techniques to mitigate noise impacts may include, but are not limited to:
 - Increased building setbacks to increase the distance between the noise source and sensitive receptor.



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- Orient buildings which are compatible with higher noise levels adjacent to noise generators or in clusters to shield more noise sensitive areas and uses.
 - Place noise tolerant use, such as parking areas, and noise tolerant structures, such as garages, between the noise source and sensitive receptor.
 - Cluster office, commercial, or multifamily residential structures to reduce noise levels within interior open space areas.
 - Provide double glazed and double paned windows on the side of the structure facing a major noise source, and place entries away from the noise source to the extent possible.
- g. Where feasible, require the use of noise barriers (walls, berms, or a combination thereof) to reduce significant noise impacts.
- Noise barriers must have sufficient mass to reduce noise transmission and high enough to shield the receptor from the noise source.
 - To be effective, the barrier needs to be constructed without cracks or openings.
 - The barrier must interrupt the line of sight between the noise sources and the noise receptor.
 - The effects of noise “flanking” the noise barrier should be minimized by bending the end of the barrier back from the noise source.
 - Require appropriate landscaping treatment to be provided in conjunction with noise barriers to mitigate their potential aesthetic impacts.
- h. Continue enforcement of California Noise Insulation Standards (Title 25, Section 1092, California Administrative Code).



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- i. Ensure that construction activities are regulated as to hours of operation in order to avoid or mitigate noise impacts on adjacent noise-sensitive land uses.
- j. Require proposed development adjacent to occupied noise sensitive land uses to implement a construction-related noise mitigation plan. This plan would depict the location of construction equipment storage and maintenance area, and document methods to be employed to minimize noise impacts on adjacent noise sensitive land uses.
- k. Require that all construction equipment utilize noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- l. Prior to the issuance of any grading plans, the City shall condition approval of subdivisions and non-residential development adjacent to any developed/occupied noise-sensitive land uses by requiring applicants to submit a construction-related noise mitigation plan to the City for review and approval. The plan should depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the project through the use of such methods as:
 - The construction contractor shall use temporary noise-attenuation fences, where feasible, to reduce construction noise impacts on adjacent noise sensitive land uses.
 - During all project site excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
 - The construction contractor shall locate equipment staging in areas that will create the greatest distance between



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construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

- The construction contractor shall limit all construction-related activities that would result in high noise levels to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. No construction shall be allowed on Sundays and public holidays.
- m. The construction-related noise mitigation plan required shall also specify that haul truck deliveries be subject to the same hours specified for construction equipment. Additionally, the plan shall denote any construction traffic haul routes where heavy trucks would exceed 100 daily trips (counting those both to and from the construction site). To the extent feasible, the plan shall denote haul routes that do not pass sensitive land uses or residential dwellings. Lastly, the construction-related noise mitigation plan shall incorporate any other restrictions imposed by the City.

(City of Antioch 2003a)

City of Antioch Code of Ordinances

Article 19 “Noise Attenuation Requirements”, Section 9-5.1901 “Noise Attenuation Requirements” provides the following noise attenuation requirements for proposed development.

- A. Stationary noise sources. Uses adjacent to outdoor living areas (e.g., backyards for single-family homes and patios for multifamily units) and parks shall not cause an increase in background ambient noise which will exceed 60 CNEL.
- B. Mobile noise sources.
 - 1) Arterial and street traffic shall not cause an increase in background ambient noise which will exceed 60 CNEL.
 - 2) Proposed outdoor residential living areas adjacent to the future expressway (State Route 4 Bypass) or to State Route 4, including BART



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or eBART development, may be allowed up to a maximum of 65 CNEL as approved by the City.

- 3) Existing outdoor residential living areas adjacent to the State Route 4 proposed widening, or to BART or eBART development, shall result in no significant increase (5 CNEL or greater) in existing noise levels.

C. Noise analysis. For new developments adjacent to the future bypass, applicants may be required to provide a noise and/or visual analysis conducted pursuant to the City's development and environmental review process as determined by staff during the project planning/entitlement phase.

D. Noise attenuation. The City may require noise attenuation measures be incorporated into a project to obtain compliance with this section. Measures outlined in the noise policies of the General Plan should be utilized to mitigate noise to the maximum feasible extent.

E. Flexible application. The City may allow up to 65 CNEL for residential projects adjacent to the future bypass or to State Route 4, BART or eBART if the applicant has demonstrated that noise attenuation down to 60 CNEL would result in significantly higher walls.

Section 5-17.04 "Heavy Construction Equipment Noise" states it shall be unlawful for any person to operate heavy construction equipment during the hours specified below:

- 1) On weekdays prior to 7:00 a.m. and after 6:00 p.m.
- 2) On weekdays within 300 feet of occupied dwelling space, prior to 8:00 a.m. and after 5:00 p.m.
- 3) On weekends and holidays, prior to 9:00 a.m. and after 5:00 p.m., irrespective of the distance from the occupied dwelling.

"Heavy Construction Equipment" is defined as equipment used in grading and earth moving, including diesel engine equipped machines used for that purpose, except pickup trucks of one ton or less. "Operate" includes the starting, warming-up, and idling of heavy construction equipment engines or motors.

Section 5-17.05 "Construction Activity Noise" states it shall be unlawful for any person to be involved in construction activity during the hours specified below:

- 1) On weekdays prior to 7:00 a.m. and after 6:00 p.m.



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- 2) On weekdays within 300 feet of occupied dwellings, prior to 8:00 a.m. and after 5:00 p.m.
- 3) On weekends and holidays, prior to 9:00 a.m. and after 5:00 p.m., irrespective of the distance from the occupied dwellings.

“Construction Activity” means the process or manner of constructing, building, refurbishing, remodeling or demolishing a structure, delivering supplies thereto and includes, but is not limited to, hammering, sawing, drilling, and other construction activities when the noise or sound therefrom can be heard beyond the perimeter of the parcel where such work is being performed. The term “Construction Activity” also includes the testing of any audible device such as a burglar or fire alarm or loudspeaker. “Construction Activity” does not include floor covering installation or painting when done with non-powered equipment.

(City of Antioch 2015b)

Identification of Sensitive Receptors and Existing Ambient Noise Levels

Sensitive Receptors

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are considered to be more sensitive to noise intrusion than commercial or industrial activities. Ambient noise levels can also affect the perceived desirability or livability of a development.

The project site is on a vacant parcel located in the City of Antioch. The project site is surrounded by State Route 4 to the east, the Monterra residential development to the west, and Wild Horse Road, the CCWD Antioch Service Center, and the Contra Costa Canal to the south. Byron Airport is approximately 12 miles south of the project site and a helipad at the Kaiser Permanente Antioch hospital is about 2.65 miles southwest.

The closest noise-sensitive receptors to the project site are the single-family residential homes in the Monterra neighborhood. Based on the October 2020 Vesting Tentative Map and Preliminary and Final Development Plan drawings, the west edge of the project site will be as close as 165' from the fence line of the residential homes within Monterra.



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Ambient Noise Levels

The existing noise environment in a project area is characterized by the area's general level of development because the level of development and ambient noise levels tend to be closely correlated. Areas that are not urbanized are typically relatively quiet, while areas that are more urbanized are noisier as a result of roadway traffic, industrial activities, and other human activities.

The City is exposed to noise generated by traffic on major freeways, such as SR 4, and to a lesser extent along major arterial roads, such as Wild Horse Road and Hillcrest Avenue. At the time of this report, traffic volumes and ambient noise levels at the project site were not reflective of typical conditions due to COVID-19 considerations. Therefore, to estimate the current ambient noise conditions at the site and better define how noise from surrounding sources will affect the project, a three-dimensional wireframe model of the key buildings and streets surrounding the site was constructed using the SoundPLAN sound propagation computer modeling software. Also included in the model were the sound reflective qualities of the surrounding structures, the topography of the area, and shielding from all existing and planned solid fences and barriers.

To calculate the ambient noise levels at the site, existing before-noon (AM) and afternoon (PM) peak hour traffic volumes developed by Stantec were input into the SoundPLAN model for the local roads, such as Wild Horse Road. Peak hour traffic volume levels for SR 4 were obtained from the Caltrans Traffic Census Program website, <https://dot.ca.gov/programs/traffic-operations/census>. Peak hour traffic counts used to model the ambient noise levels at the site are shown in Table 3.13-6.



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Table 3.13-6. Existing Peak Hour Traffic Counts

Road	Existing AM Peak Hour Count	Existing PM Peak Hour Count
State Route 4 North near Project Site	5,500	5,500
State Route 4 South near Project Site	5,500	5,500
Le Conte Circle North	7	28
Le Conte Circle South	26	15
Wild Horse Road East Near Le Conte Circle and the Project Site	33	46
Wild Horse Road West Near Le Conte Circle and the Project Site	8	30

Notes: AM = before noon; PM = afternoon

Site information along with the peak hour traffic volumes, vehicle type breakout, and speed allows the computer program to calculate the expected sound levels across the entire project area. A standard vehicle type breakout of 80% vehicles, 10% medium trucks, 5% heavy trucks, 3% buses, and 2% motorcycles was assumed for SR 4. A vehicle breakout of 98% vehicles, 1% motorcycles, and 1% medium trucks was assumed for Wild Horse Road and all roadways internal to residential complexes. Average vehicle speeds of 65 mph on SR 4, 45 mph on Wild Horse Road, and 25 mph on all roadways internal to residential complexes was assumed in the model.

Eleven receptor locations representing 10 future multifamily buildings and the future central open area space, were included in the SoundPLAN model. All modeled receptor locations are shown in Figure 3.13-1.



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Figure 3.13-1. Receptor Locations for the SoundPLAN Model

Modeled ambient noise levels at the 11 receptor locations around the project site without the project buildings are listed below in Table 3.13-7 and shown in Figure 3.13-2. The noise level at all receptor locations was modeled at 5 feet above ground to simulate what people may hear at the first floor of the future multifamily buildings and in the central open area. Ambient noise levels at 10 receptor locations were also calculated at 26 feet above ground to account for future upper-story multifamily building locations which may be situated above any highway noise barriers.



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Table 3.13-7. Modeled Ambient Noise Levels at Select Receptors

Receptor Location	Distance Above Ground (feet)	Modeled Ambient Noise Level without Project (dB(A) Ldn)
R1: Future Townhome Building Along SR 4	5 feet	69.3 dB(A)
	26 feet	74.2 dB(A)
R2: Future Townhome Building Along Wild Horse Road	5 feet	71.2 dB(A)
	26 feet	71.2 dB(A)
R5: Future Townhome Building Inset from Wild Horse Road	5 feet	71.5 dB(A)
	26 feet	72.2 dB(A)
R6: Future Townhome Building Along SR 4	5 feet	72.3 dB(A)
	26 feet	75.9 dB(A)
R9: Future Townhome Building Along Wild Horse Road	5 feet	70.4 dB(A)
	26 feet	70.6 dB(A)
R11: Future Townhome Building Near the Monterra Neighborhood	5 feet	70.0 dB(A)
	26 feet	70.9 dB(A)
R13: Future Townhome Building Along SR 4	5 feet	73.4 dB(A)
	26 feet	75.1 dB(A)
R17: Future Townhome Building Interior to the Project Site	5 feet	72.2 dB(A)
	26 feet	72.5 dB(A)
R23: Future Townhome Building Along SR 4	5 feet	74.2 dB(A)
	26 feet	75.5 dB(A)
R24: Future Townhome Building Near the Monterra Neighborhood	5 feet	71.7 dB(A)
	26 feet	72.3 dB(A)
OA: Future Central Open Area	5 feet	71.6 dB(A)

Notes:

dB(A) = A-weighted decibels; Ldn = day-night sound level; SR = State Route

All modeled ambient noise levels around the project site are expected to be above the 60-65 dB(A) CNEL/Ldn residential land use compatibility limit as defined in the Noise Objective in the General Plan.



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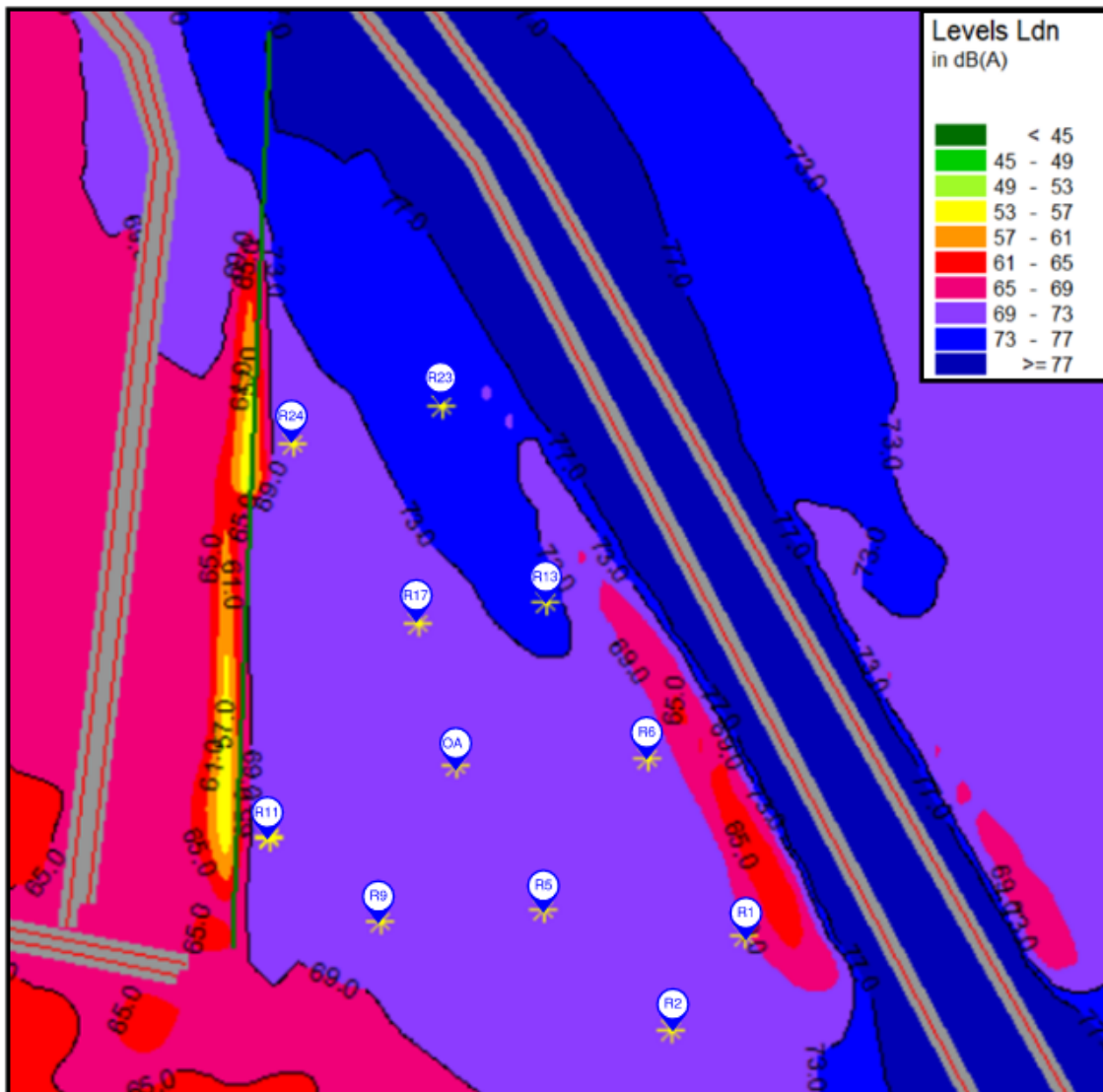


Figure 3.13-2. Modeled Ambient Traffic Noise Levels Without Project at 5 Feet Above Ground

3.13.2 Methodology

In accordance with the requirements of CEQA, the noise analysis evaluates the project's noise sources to determine the impact of the proposed project on the existing ambient noise environment. As noted above, existing traffic volumes provided by Stantec and the SoundPLAN sound propagation computer modeling software were used to provide baseline noise conditions at the project site. For the purpose of this



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analysis, potentially sensitive receptors were determined by reviewing current aerial photography.

Impacts from future project-related traffic were estimated using predicted peak hour volumes from the traffic report, prepared by Stantec.

Noise from the project's mechanical systems would operate regularly and are therefore required to comply with the policies and restrictions listed in the General Plan and Code of Ordinances.

The Federal Highway Administration Roadway Construction Noise Model (RCNM) was used to estimate the impact from short-term construction activities. The RCNM is used as the Federal Highway Administration's national standard for predicting noise generated from construction. The RCNM analysis includes the calculation of noise levels at a defined distance for a variety of construction equipment. The spreadsheet inputs include acoustical use factors and distance to receptors and calculates the expected L_{max} and L_{eq} values at a selected receptor.

EPA Guidelines

The EPA has established guidelines (EPA 1973) for assessing the impact of an increase in noise levels. These guidelines have been used as industry standard for several years to determine the potential impact of noise increases on communities. Most people will tolerate a small increase in background noise (up to about 5 dB(A)) without complaint, especially if the increase is gradual over a period of years (such as from gradually increasing traffic volumes). Increases greater than 5 dB(A) may cause complaints and interference with sleep. Increases above 10 dB(A) (heard as a doubling of judged loudness) are likely to cause complaints and should be considered a serious increase. Table 3.13-8 defines each of the traditional impact descriptions, their quantitative range, and the qualitative human response to changes in noise levels.



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Table 3.13-8. U.S. Environmental Protection Agency (EPA) Impact Guidelines

Increase over Existing or Baseline Sound Levels	Impact Per EPA Region Guidelines	Qualitative Human Perception of Difference in Sound Levels
0 decibels (dB) to 5 dB	Minimum Impact	Imperceivable or Slight Difference
6 dB to 10 dB	Significant Impact	Significant Noticeable Difference – Complaints Possible
Over 10 dB	Serious Impact	Loudness Changes by a Factor of Two or Greater. Clearly Audible Difference – Complaints Likely

3.13.3 Environmental Impact Analysis

Impact NOI-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?**

Impact Analysis

Exterior Traffic Noise Level Impacts

The level of traffic noise experienced at a location depends primarily on traffic speed (tire noise increases with speed) and the proportion of truck traffic on the road. Trucks generate engine, exhaust, and wind noise in addition to tire noise. Changes in traffic volumes can also have an impact on overall noise levels. For example, it takes 25 percent more traffic volume to produce an increase of only 1 dB(A) in the ambient noise level. For roads already heavy with traffic volume, an increase in traffic numbers could even reduce noise because the heavier volumes could slow down the average speed of the vehicles. A doubling of traffic volume results in a 3 dB(A) increase in noise levels.

To describe future noise levels due to traffic added from the project, AM and PM peak hour traffic counts (with and without the project) listed in the traffic study provided by Stantec were used to determine the percentage increase of traffic on the roads adjacent to the project site and nearby sensitive receptors.

Table 3-13.9 shows the peak hour counts associated with traffic on the local roadway network under the existing and existing plus project traffic conditions. The last columns in the table show the overall percentage change and the estimated difference in peak hour noise level in dB(A).



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Table 3.13-9. Traffic Peak Hour Counts and Estimated Noise Increase

Roadway Intersection	Existing Peak Hour Traffic Count	Peak Hour Traffic Count with Project	Percentage Change	Estimated dB(A) Change
Hillcrest Ave and Wild Horse Rd	1,127 (1,757)	1,179 (1,820)	4.6% (3.6%)	0.19 (0.14)
Folsom Dr and Wild Horse Rd	667 (795)	725 (865)	8.7% (8.8%)	0.35 (0.35)
Meadow Lake St. and Wild Horse Rd	374 (514)	432 (584)	15.5% (13.6%)	0.62 (0.55)
Goode St and Wild Horse Rd	303 (444)	361 (514)	19.1% (15.8%)	0.77 (0.63)
Sweet Water St and Wild Horse Rd	167 (222)	225 (292)	34.7% (31.5%)	1.39 (1.26)
Le Conte Circle and Wild Horse Rd	38 (78)	96 (148)	152.6% (89.7%)	6.11 (3.59)

Notes:

Numbers in parenthesis are afternoon peak hour traffic volumes.

The project is expected to minimally increase traffic counts along Wild Horse Road at Hillcrest Ave, Folsom Dr, Meadow Lake St, Goode St, and Sweet Water St. There will essentially be no change in traffic noise (1.39 dB(A) or less) expected along these streets. Traffic volumes will increase at the intersection of Le Conte Circle and Wild Horse Road potentially resulting in an increase in traffic noise up to 6.11 dB(A). Even though noise levels from traffic could increase at this intersection, the overall peak hour traffic count is still very low with only a maximum of 148 vehicles per hour. The peak hour traffic count on SR 4 is 11,000 vehicles per hour. Therefore, noise levels generated by traffic at this intersection are still expected to be below the ambient noise already experienced in the area. Therefore, the project should not cause increased traffic noise levels over the baseline conditions at the neighboring sensitive receptors, and this would be a less than significant impact relative to this topic.

Interior Traffic Noise Level Impacts

The California Building Code states that the interior noise levels attributable to exterior sources shall not exceed 45 dBA in any habitable room, including multifamily residences. The needed sound isolation requirements of a building's exterior façade system would be dependent on the following conditions:



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- The dimension of the rooms with exterior windows
- The finishes within the rooms
- The ratio of clear glass to solid wall in the exterior wall assembly
- The exterior solid wall construction

Modern construction with punch windows typically provides a 25 dB(A) exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise levels of 70 dB(A) Ldn or less would typically comply with the required interior noise level standard as stated in the California Building Code. Modern construction using window walls, curtainwalls, or a high ratio of exterior clear glass would provide less reduction with the windows closed. Buildings using a large amount of glass are required to comply with the required interior noise level standard as stated in the California Building Code if exposure to exterior noise levels of 67 dB(A) Ldn or less is anticipated.

To help determine future noise levels at the facades of the project buildings and the central open area, the SoundPLAN sound propagation computer modeling software was again utilized using traffic volumes including the project and the multifamily building layout shown in the October 2020 Preliminary Plan drawing. The modeled noise levels at the site at 5 feet above ground with the proposed project buildings and project traffic volumes are shown in Figure 3.13-3.



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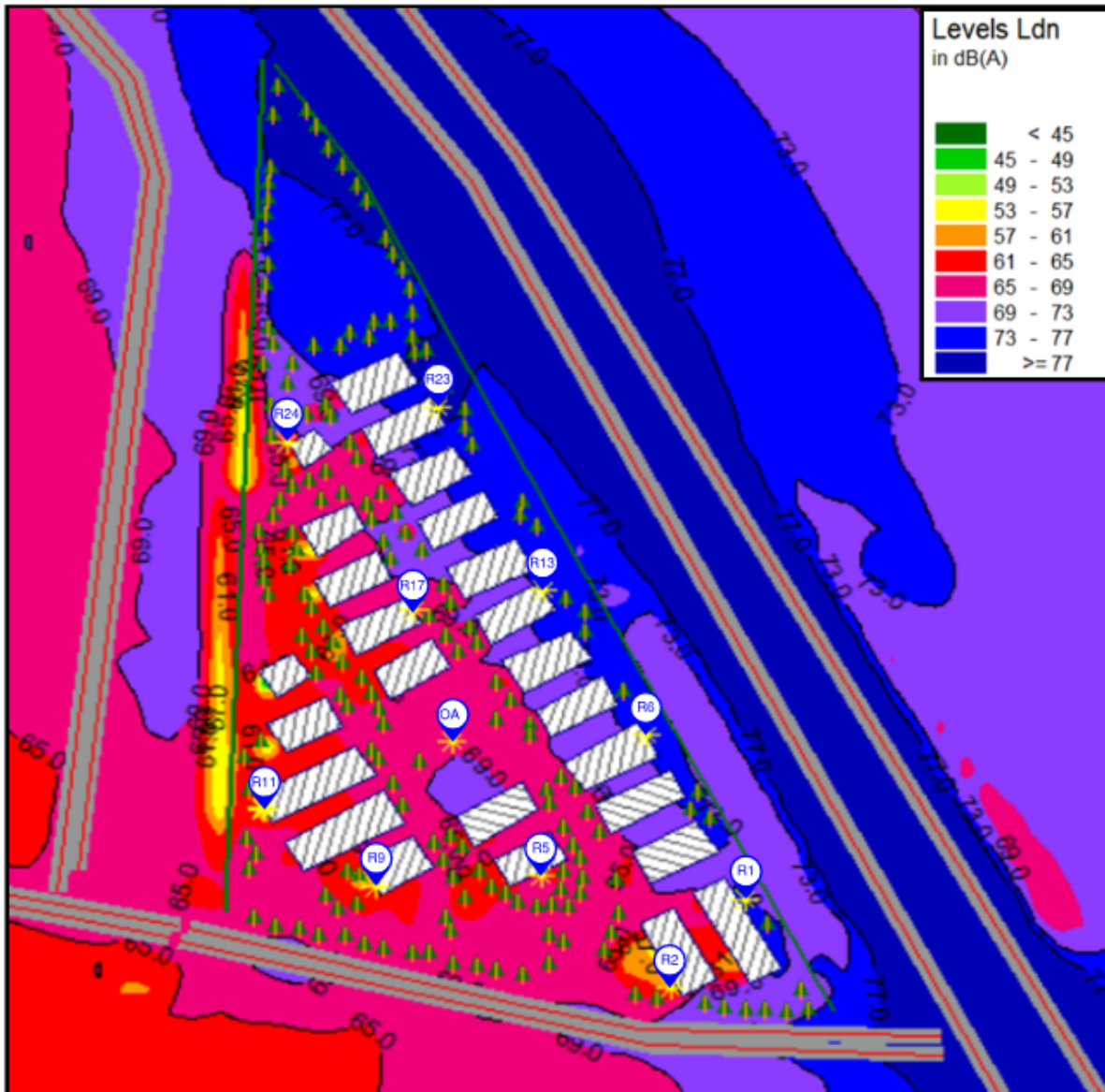


Figure 3.13-3: Modeled Ambient Traffic Noise Levels with Project at 5 Feet Above Ground

Estimated noise levels at select residential buildings and the central open area with the predicted project traffic volumes are listed below in Table 3.13-10. Again, noise levels at the residential buildings were modeled at 5' and 26' above ground to account for upper-story locations which may be situated above any highway noise barriers.



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Table 3.13-10. Modeled Noise Levels at Project Buildings

Receptor Location	Distance Above Ground, ft	Modeled Ambient Noise Level with Project dB(A) Ldn
R1: Future Townhome Building Along SR 4	5 ft	74.2 dB(A)
	26 ft	76.6 dB(A)
R2: Future Townhome Building Along Wild Horse Road	5 ft	58.8 dB(A)
	26 ft	58.8 dB(A)
R5: Future Townhome Building Inset from Wild Horse Road	5 ft	65.3 dB(A)
	26 ft	66.7 dB(A)
R6: Future Townhome Building Along SR 4	5 ft	75.8 dB(A)
	26 ft	78.3 dB(A)
R9: Future Townhome Building Along Wild Horse Road	5 ft	54.8 dB(A)
	26 ft	56.9 dB(A)
R11: Future Townhome Building Near the Monterra Neighborhood	5 ft	44.9 dB(A)
	26 ft	66.8 dB(A)
R13: Future Townhome Building Along SR 4	5 ft	76.7 dB(A)
	26 ft	77.4 dB(A)
R17: Future Townhome Building Interior to the Project Site	5 ft	68.9 dB(A)
	26 ft	72.3 dB(A)
R23: Future Townhome Building Along SR 4	5 ft	77.7 dB(A)
	26 ft	77.5 dB(A)
R24: Future Townhome Building Near the Monterra Neighborhood	5 ft	68.6 dB(A)
	26 ft	70.3 dB(A)
OA: Future Central Open Area	5 ft	68.6 dB(A)

Based on the modeled noise level contours in Figures 3.13-3 and the data listed in Table 3.13-10, noise levels around the project site range from below 60 dB(A) Ldn on the building facades which face Wild Horse Road to above 78 dB(A) Ldn at the upper story residential units which face SR 4. Therefore, the requirements listed in Policy 11.6.2.d in the General Plan would be required. A detailed noise attenuation study will be necessary to be prepared by a qualified acoustical engineer to determine appropriate mitigation to reduce interior noise levels within the multifamily buildings to 45 dB(A) Ldn and include ways to incorporate such mitigation into the project design and implementation. Therefore, with the requirements listed in Policy 11.6.2.d (as noted in



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Mitigation Measure MM-NOI-1), the impact of traffic noise on the interior of the residential units would be less than significant.

Proposed Project Fixed-Source Noise

Typical multifamily residential building construction would commonly involve new mechanical equipment, such as air conditioning units and exhaust fans. This equipment would generate noise that would radiate to neighboring properties. The noise from this equipment would be obliged to comply with the requirements in Policy 11.6.2.e in the General Plan and the maximum noise level limits listed in Section 9-5.1901, Paragraph A in the City of Antioch Code of Ordinances.

When the actual on-site equipment is selected, a noise analysis will be prepared by a qualified acoustical engineer and the equipment would be designed to incorporate measures as needed, such as shielding, barriers, and/or attenuators to reduce noise levels that may affect nearby properties. Noise levels from the project's fixed-source equipment will either be designed to achieve 60 dB(A) Ldn at the outdoor living areas of the existing residential receptors within the Monterra neighborhood or will not cause an audible (3.0 dB(A)) increase in noise in areas where General Plan noise objectives are already exceeded as the result of existing development.

With the requirements listed in Policy 11.6.2.e in the General Plan and Section 9-5.1901, Paragraph A (as noted in Mitigation Measure MM-NOI-2), the impact of fixed-source noise to the neighboring properties would be less than significant.

Short-term Construction Noise Impacts

Two types of short-term noise impacts could occur during construction. The first type of short-term noise impact is traffic noise from construction crew vehicular commutes on the access roads leading to and from the project site. The construction of the project would involve a maximum of 79 construction worker vehicles and 20 vendor vehicles per day (99 vehicles total) traveling to and from the site. Assuming a worst case of half of the construction workers arrive in an hour, this would add 50 vehicles to the peak hour traffic volume on Wild Horse Road. Adding 50 vehicles to the existing traffic on Wild Horse Road represents an increase of 4.4% to 29.9% in traffic volumes between Hillcrest Ave and Sweet Water St, which equates to a 0.18 dB(A) to 1.2 dB(A) increase in noise, which is imperceptible.



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Traffic volumes with construction worker vehicles will increase about 132% at the intersection of Le Conte Circle and Wild Horse Road potentially resulting in an increase in traffic noise levels up to 5.3 dB(A). Even though noise levels from traffic could increase at this intersection, the overall peak hour traffic count with construction vehicular traffic is still very low with only a maximum of 88 vehicles per hour. Again, the peak hour traffic volume on SR 4 is 11,000 vehicles per hour. Therefore, noise levels generated by traffic at this intersection are still expected to be below the ambient noise already experienced in the area. Therefore, noise generated by construction crew commutes should not cause increased traffic noise levels over the baseline conditions at the neighboring sensitive receptors and this would be a less than significant impact.

The second type of short-term noise impact is related to noise generated during construction. Construction activities would include site preparation, grading, building construction, paving, and architectural coating. Each construction stage has its own mix of equipment, and consequently, its own noise characteristics. The various construction operations would change the character of the noise generated at the project site and therefore, the noise level as construction progresses. The loudest stages of construction include the site preparation, building construction, and grading stages, as the noisiest construction equipment is typically earthmoving and grading equipment.

The construction of the Wild Horse Multifamily project would be conducted in five stages and each stage will use different construction equipment. The main types of noise-producing equipment for each construction stage are shown in Table 3.13-11.



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Table 3.13-11. Construction Stage Equipment

Construction Stage	Construction Equipment	
Site Preparation	<ul style="list-style-type: none"> • Rubber-Tired Dozers (3) • Tractors (2) • Haul Truck 	<ul style="list-style-type: none"> • Front-End Loader • Backhoe
Grading	<ul style="list-style-type: none"> • Excavators (2) • Grader • Rubber-Tired Dozer • Tractor 	<ul style="list-style-type: none"> • Scrapers (2) • Front-End Loader • Haul Trucks (8)
Building Construction	<ul style="list-style-type: none"> • Crane • Generator • Welders • Front End Loader 	<ul style="list-style-type: none"> • Forklifts (3) • Tractor • Backhoe • Haul Truck
Paving	<ul style="list-style-type: none"> • Pavers (2) • Paving Equipment (2) 	<ul style="list-style-type: none"> • Rollers (2) • Haul Truck
Architectural Coating	<ul style="list-style-type: none"> • Air Compressor 	<ul style="list-style-type: none"> • Haul Truck

Table 3.13-12 lists the types of construction equipment and the maximum and average operational noise level as measured at 165 feet from the operating equipment. The 165-foot distance represents the approximate closest distance between the west edge of the project site and the closest noise-sensitive receptors within the Monterra neighborhood.

Table 3.13-12. Summary of Federal Highway Administration Roadway Construction Noise Model

Construction Equipment Source at the Project Site	Distance to Nearest Sensitive Receptor	Sound Level at Receptor		
		Lmax, dB(A)	Acoustical Use Factor (%)	Leq, dB(A)
Backhoe	165 feet	67.2	40	63.2
Crane	165 feet	70.2	16	62.2
Compressor (air)	165 feet	67.3	40	63.3
Dozer	165 feet	71.3	40	67.3
Excavator	165 feet	70.3	40	66.4
Forklift ¹	165 feet	68.7	40	64.8
Front End Loader	165 feet	68.7	40	64.8
Generator	165 feet	70.3	50	67.2
Grader	165 feet	74.6	40	70.7



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Construction Equipment Source at the Project Site	Distance to Nearest Sensitive Receptor	Sound Level at Receptor		
		Lmax, dB(A)	Acoustical Use Factor (%)	Leq, dB(A)
Haul Truck ²	165 feet	66.1	40	62.1
Paver and Paving Equipment	165 feet	66.8	50	63.8
Roller	165 feet	69.6	20	62.6
Scraper	165 feet	73.2	40	69.2
Tractor	165 feet	73.6	40	69.7
Welder	165 feet	63.6	40	59.7

Notes:

1. The Roadway Construction Noise Model program does not have sound levels for a forklift. Therefore, the noise levels from a front-end loader were used in the analysis to simulate the forklift.
 2. The Roadway Construction Noise Model program does not have sound levels for a haul truck. Therefore, the noise levels from a dump truck were used in the analysis to simulate the haul truck.
- Source: Federal Highway Administration Road Construction Noise Model v1.1 2018

A worst-case condition for construction activity would assume all noise-generating equipment were operating at the same time and at the same distance from the closest noise-sensitive receptor. Using this assumption, the RCNM program calculated the following combined Leq and Lmax noise levels from each stage of construction as shown in Table 3.13-13.

Table 3.13-13. Calculated Noise Level from Each Construction Stage

Construction Phase	Distance to Closest Noise Sensitive Receptor (feet)	Calculated Maximum Sound Level in A-Weighted Decibels	Calculated Equivalent Sound Level in A-Weighted Decibels
Site Preparation	165	80.1	76.2
Grading	165	82.3	78.3
Building Construction	165	79.3	75.2
Paving	165	76.2	71.8
Architectural Coating	165	69.8	65.8

Although noise levels from construction could exceed the 60-65 dB(A) land use compatibility level for residential properties as defined by the General Plan (Antioch 2003a), increases in noise levels from construction activity would be temporary. All



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construction activities at the site would also follow the time and noise reduction measure requirements listed in Policies 11.6.2.i, j, k, m, and n in the General Plan and Sections 5-17.04 and 5-17.05 in the City of Antioch Code of Ordinances (Antioch 2015b).

In conclusion, construction noise would be short-term and intermittent (Appendix F). Furthermore, the implementation of the mitigation measures and hours restrictions as dictated by the City (as noted in Mitigation Measure MM-NOI-3) would reduce construction noise to the closest noise-sensitive receptors to the extent feasible. Therefore, impacts from construction noise would be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

MM NOI-1: Interior Traffic Noise Levels

Implement the requirements listed in Policy 11.6.2.d in the City of Antioch General Plan to reduce interior noise levels within the multifamily buildings to 45 dB(A) Ldn. Policy 11.6.2.d states the following: “Where new development (including construction and improvement of roadways) is proposed in areas exceeding the noise levels identified in the General Plan Noise Objective, or where the development of proposed uses could result in a significant increase in noise, require a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and implementation.”

MM NOI-2: Project Fixed-Source Noise

The noise from all mechanical equipment associated with the project shall comply with the requirements in Policy 11.6.2.e in the City of Antioch General Plan and the maximum noise level limits listed in Section 9-5.1901, Paragraph A in the City of Antioch Code of Ordinances. Policy 11.6.2.e in the City of Antioch General Plan states the following: “When new development incorporating a potentially significant noise generator is proposed, require noise analyses to be prepared by a qualified acoustical engineer. Require the implementation of appropriate noise mitigation when the proposed project will cause new exceedances of General Plan noise objectives, or an



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audible (3.0 dB(A)) increase in noise in areas where General Plan noise objectives are already exceeded as the result of existing development.”

Section 9-5.1901, Paragraph A in the City of Antioch Code of Ordinances states “Uses adjacent to outdoor living areas (e.g., backyards for single-family homes and patios for multifamily units) and parks shall not cause an increase in background ambient noise which will exceed 60 CNEL.”

MM NOI-3: Construction Activity

All construction activity shall follow the time and noise reduction measure requirements listed in Policies 11.6.2.i, j, k, m, and n in the City of Antioch General Plan and Sections 5-17.04 and 5-17.05 in the City of Antioch Code of Ordinances as follows:

- i. Ensure that construction activities are regulated as to hours of operation in order to avoid or mitigate noise impacts on adjacent noise-sensitive land uses.
- j. Require proposed development adjacent to occupied noise sensitive land uses to implement a construction-related noise mitigation plan. This plan would depict the location of construction equipment storage and maintenance area, and document methods to be employed to minimize noise impacts on adjacent noise sensitive land uses.
- k. Require that all construction equipment utilize noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- l. Prior to the issuance of any grading plans, the City shall condition approval of subdivisions and non-residential development adjacent to any developed/occupied noise-sensitive land uses by requiring applicants to submit a construction-related noise mitigation plan to the City for review and approval. The plan should depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of the project through the use of such methods as:



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- The construction contractor shall use temporary noise-attenuation fences, where feasible, to reduce construction noise impacts on adjacent noise sensitive land uses.
 - During all project site excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
 - The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
 - The construction contractor shall limit all construction-related activities that would result in high noise levels to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday. No construction shall be allowed on Sundays and public holidays.
- m. The construction-related noise mitigation plan required shall also specify that haul truck deliveries be subject to the same hours specified for construction equipment. Additionally, the plan shall denote any construction traffic haul routes where heavy trucks would exceed 100 daily trips (counting those both to and from the construction site). To the extent feasible, the plan shall denote haul routes that do not pass sensitive land uses or residential dwellings. Lastly, the construction-related noise mitigation plan shall incorporate any other restrictions imposed by the City.

Section 5-17.04 "Heavy Construction Equipment Noise" and Section 5-17.05 "Construction Activity Noise" states it shall be unlawful for any person to operate heavy construction equipment or be involved in construction activity during the hours specified below:



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- 1) On weekdays prior to 7:00 a.m. and after 6:00 p.m.
- 2) On weekdays within 300 feet of occupied dwelling space, prior to 8:00 a.m. and after 5:00 p.m.
- 3) On weekends and holidays, prior to 9:00 a.m. and after 5:00 p.m., irrespective of the distance from the occupied dwelling.

Level of Significance After Mitigation

Less Than Significant with Mitigation.

Impact NOI-2 Generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis

During construction of the proposed project, equipment such as trucks, bulldozers, and rollers may be used as close as 165 feet from the nearest sensitive receptors in the Monterra neighborhood. Equipment used during project construction could generate vibration levels between 0.0002 PPV and 0.0124 PPV at 165 feet, as shown below in Table 3.13-14. All the groundborne vibration levels are below the FTA vibration threshold at which human annoyance could occur of 0.10 PPV. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors. As such, implementation of the project would have a less than significant impact related to vibration.

Table 3.13-14. Vibration Source Levels for Construction Equipment

Type of Equipment	Peak Particle Velocity at 165 Feet	Threshold at which Human Annoyance Could Occur	Potential for Proposed Project to Exceed Threshold
Large Bulldozer	0.0052	0.10	None
Loaded Trucks	0.0045	0.10	None
Small Bulldozer	0.0002	0.10	None
Vibratory Roller	0.0124	0.10	None

Source: Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual (FTA 2018)



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This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact NOI-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?

Impact Analysis

The proposed project is not located within the vicinity of a private airstrip or an airport land use plan. The closest airport to the project site is the Byron Airport 12 miles to the south. A helipad is located at the Kaiser Permanente Antioch Hospital 2.65 miles southwest of the project site. Therefore, the project would not expose people residing or working in the project area to excessive noise levels, and impacts would be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.



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3.14 POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.14.1 Environmental Setting

Antioch is the second largest City in Contra Costa County. According to the U.S. Census, the City had a population of 102,372 in 2010 (California Department of Finance 2020a). Since 2010, the City's population has increased by 9.91 percent to 112,520 people in 2020 (California Department of Finance 2020b). By the year 2025, it is expected the City's population will increase to approximately 120,300 (City of Antioch 2015a). Antioch's economy functions as a small part of the Bay Area economy and comprises 1.1 percent of the Bay Area labor force (City of Antioch 2003b). One of the objectives of the General Plan is to create a larger employment base within the City by 2030 and includes policies to provide for a mix of employment generating uses and ample employment opportunities for City residents (City of Antioch 2003a). In 2010, the Association of Bay Area Governments estimated there were approximately 19,090 jobs in the City of Antioch (City of Antioch 2015a). It is projected the total number of jobs in the City would increase to 25,530 by 2040 (City of Antioch 2015a).

3.14.2 Methodology

The following evaluation of potential population, housing, and employment impacts associated with the proposed project was based on data obtained from the U.S. Census, the California Department of Finance, and applicable planning documents from the City. The following impact discussions consider the impacts of the proposed project related to employment, population, and housing in the City.



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3.14.3 Environmental Impact Analysis

This section discusses potential impacts related to population and housing associated with the proposed project and provides mitigation measures where necessary.

Impact POP-1 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)?

Impact Analysis

The proposed project would develop 126 multifamily residences, thereby directly inducing population growth in the project site. The question of whether the project would induce substantial *unplanned* growth is addressed below. According to the Department of Finance, the City of Antioch had an average household size of 3.28 persons per household (Department of Finance 2020). Based on the Department of Finance estimate of 3.28 persons per household, the projected population of the proposed project is approximately 413 residents. As discussed above, the General Plan estimates an increase of 120,300 residents by 2035. The proposed project would generate 413 new residents, which would represent approximately 0.33 percent of the City's growth anticipated by 2035. According to the City's General Plan, the site is planned for residential development. The proposed project would increase the intensity level of residential use by allowing more dwelling units, however, the increase in population would not be substantial. Therefore, implementation of the proposed project would not directly induce substantial unplanned growth in the area and the impact would be less than significant.

The proposed project would also not indirectly induce substantial unplanned population growth in the project site because it would not involve any new extensions to area roads or other infrastructure that could enable additional development in currently vacant areas not planned for growth and development in the General Plan. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.



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Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact POP-2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Impact Analysis

The project site is vacant and does not currently contain residential development. Construction of the proposed project would not result in the displacement of housing, so the construction of replacement housing elsewhere would not be necessary. The proposed project would have no impact related to replacement housing. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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3.15 PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.15.1 Environmental Setting

Fire Protection

Contra Costa County Fire Protection District (CCCFPD) provides fire suppression and emergency medical services (EMS) to nearly a million people across its 304-square mile district area, and through mutual aid, in and around the 19 cities and unincorporated communities of Contra Costa County California (Contra Costa County 2021). The CCCFPD is an “all-hazards” organization providing fire suppression, paramedic EMS, technical rescue, water rescue, and fire prevention/investigation services. The 2003 General Plan Update EIR states, that the CCCFPD operates 25 fire stations and responds to approximately 45,000 incidents annually (City of Antioch 2003b). Four of the fire stations are located within the City. CCCFPD Station No. 88 is located 0.73 miles to the west of the project site on 4288 Folsom Drive.

In 2018, CCCFPD responded to 60,000 fire, rescue, and medical emergency calls (CCCFPD 2018). Minimum response times are established by the county, which requires that 90 percent of all calls be responded to in an average of between 10 and 11



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minutes and 45 seconds. Additionally, the City's General Plan has a response time goal of 80 percent for all City emergencies within 5 minutes (City of Antioch 2003b). In 2018, CCCFPD's average response time was 4 minutes and 38 seconds. CCCFPD is meeting the County and City General Plan requirements by responding to 95 to 97 percent of calls (CCCFPD 2018).

As required by the CCCFPD, the proposed project would be conditioned to form or annex into a Community Facilities District in which taxes are collected, and development impact fees are assessed on new development projects in the CCCFPD's service area. Collection of these fees is the primary source of revenue to fund fire and EMS. According to the City's Municipal Code, Title 3 Section 7.06, development impact fees would be imposed and collected at the time the building permit for a new development is issued. As per Title 3 Section 7.05 of the City's Municipal Code, the fire protection facility fee is \$951 per single-family dwelling unit, and \$451.00 per multifamily dwelling unit (City of Antioch 2019).

Police Protection

The Antioch Police Department (APD) provides police services for the City. The department has a sworn staff of 120 officers and 33 nonsworn employees, which includes Dispatchers, Community Services Officers, and Administrative Support staff (City of Antioch 2021). In 2018, Antioch police saw a total of 199,073 overall calls by volume, of which 59,811 were emergency 9-1-1 calls, and 88,123 were calls for service (East County Today 2019). The average response time for Priority 1 calls was 8 minutes and 54 seconds and the average response times for non-emergency calls were approximately 60 minutes (East County Today 2019). The APD is located at 300 L Street, approximately 4.3 miles northwest of the project site.

Schools

The City is served by the Antioch Unified School District, which provides kindergarten through high school education in the City. The Grant Elementary School, Black Diamond Middle School, and Deer Valley High School serve the area surrounding the project site (AUSD 2021). In the 2019-2020 school year, the Grant Elementary School had an enrollment of approximately 439 students; Black Diamond Middle School had an enrollment of 382 students; and, Deer Valley High School had an enrollment of 1,886 students (California Department of Education 2021).



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Parks

The City owns and administers 31 parks, varying in size and amenities from 2 acres to 99 acres. Over 400 acres of parks, open space areas, and marinas are located within the City, 200 acres of which are developed. The remaining 200 acres consist of acreage waiting development or are managed exclusively as open space (City of Antioch 2003b). The nearest park to the project site is Nelson Ranch Park, which is a neighborhood park that is approximately 9.5 acres and is located at the end of Wild Horse Road adjacent to the project site.

3.15.2 Methodology

The following analysis is based on a review of documents pertaining to the project site, including the Public Facilities and Services Element of the General Plan, Parks and Recreation Element of the General Plan, the General Plan EIR, the Antioch Municipal Code, and Section 2.0, Project Description, of this IS.

3.15.3 Environmental Impact Analysis

This section discusses potential impacts on public services associated with the proposed project and provides mitigation measures where necessary.



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Impact PUB-1 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?

Other public facilities?

Impact Analysis

Fire Protection

The proposed project could incrementally increase demand for fire protection services. Upon completion of the proposed residential development, the CCCFPD would provide fire protection services to the project site. As required by the CCCFPD, the proposed project would be conditioned to form or annex into a Community Facilities District. The proposed project would be required to pay the applicable fire protection fees per the City's Master Fee Schedule, in accordance with Title 3 Section 7.05 of the City's Municipal Code, (City of Antioch 2019). In addition, the proposed buildings would be constructed in accordance with the fire protection requirements of the most recent California Fire Code. Conformance with the California Fire Code would reduce risks associated with fire hazards. The proposed streets would be 26 feet wide to allow emergency vehicles to access the project site. The CCCFPD and the City's Building Inspection Services Division would review the project building plans to ensure compliance with all code requirements. As described in Section 3.14, Population and Housing, the proposed project would have a less-than-significant impact on population in the City, because the population growth was accounted for in the General Plan buildout of the City. Additionally, payment of the Public Facilities Impact Fees would



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offset the cost of fire protection and paramedic service demands associated with the proposed project. Therefore, the impact to fire protection services would be less than significant. This impact will not be further addressed in the EIR.

Police Protection

Law enforcement services for the project site are provided by the APD. Implementation of the project would result in an incremental increase in demand for police protection services at the project site. According to the General Plan EIR, the need for officers estimated to be 1.2 to 1.5 officers per 1,000 residents. As the population of Antioch in 2020 is 112,520 and there are 120 sworn officers as of 2021, the City is currently below the ratio. The project applicant would be required to pay Development Impact Fees for police facilities per Section 9-3.50 of the City Municipal Code. Additionally, the population growth projected as a result of the proposed project was accounted for in the General Plan. The proposed project will not require the construction of new or physically altered police protection facilities. Therefore, the impact to police protection services would be less than significant. This impact will not be further addressed in the EIR.

Schools

The proposed project would include the development of the project site with 126 multifamily residences and would increase demand for school facilities and services. However, the AUSD collects development fees for new residential projects on a per square foot basis. The development fees serve to offset school facility costs associated with serving new students. Therefore, impacts to schools would be less than significant. This impact will not be further addressed in the EIR.

Parks

The proposed project would add approximately 413 new residents, which have been accounted for in the General Plan EIR 2035 full-build-out population. Section 9-4.1003 of the Antioch Subdivision Ordinance requires 5 acres of parks and open space per 1,000 residents. All park requirements for the City are based on the Quimby Act which requires no fewer than three acres of park area be provided per 1,000 residents. The Subdivision Ordinance requires the subdivider to either dedicate land, pay a fee in lieu thereof, or both, at the option of the City, for park or recreational purposes. The proposed project includes 1.6 acres of usable open space that would be used as a central gathering place for the community and would include both active and passive



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recreational opportunities, which would fall below the required 2 acres for the 413 residents. Additionally, the developer of the proposed project would also be required to pay a Development Impact Fee established under Section 9-3.50 of the Code of Ordinance which would be used by the City to fund public facilities such as parks and recreation facilities which would mitigate the impacts on existing parks and recreational facilities caused by new developments. The construction of any new parks or recreational facilities would be subject to further environmental review requiring mitigation for any potentially significant environmental impacts. Therefore, impacts to parks and recreation would be less than significant. This impact will not be further addressed in the EIR.

Other Public Facilities

The addition of up to 413 new residents would create an incremental increase in the demand for library facilities and community centers. In accordance with California Development Code Section 53090, development impact fees would be required to offset any additional service needs. With payment of legislated development fees, impacts would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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3.16 RECREATION

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.16.1 Environmental Setting

The City owns and administers 31 parks, varying in size and amenities from 2 acres to 99 acres. Over 400 acres of parks, open space areas, and marinas are located within the City, 200 acres of which are developed. The remaining 200 acres consist of acreage waiting development or are managed exclusively as open space (City of Antioch 2003a). The nearest park to the project site is Nelson Ranch Park, which is a neighborhood park that is approximately 9.5 acres and is located at the end of Wild Horse Road adjacent to the project site.

3.16.2 Methodology

The following analysis is based on a review of the General Plan, General Plan EIR and the Antioch Code of Ordinance.

3.16.3 Environmental Impact Analysis

This section discusses potential impacts to recreation associated with the proposed project and provides mitigation measures where necessary.



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Impact REC-1 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?

Impact Analysis

The proposed project would permanently increase the City's residential population. Section 9-4.1003 of the Antioch Subdivision Ordinance requires 5 acres of parks and open space per 1,000 residents. All park requirements for the City are based on the Quimby Act which requires no fewer than three acres of park area be provided per 1,000 residents. The Subdivision Ordinance requires the subdivider to either dedicate land, pay a fee in lieu thereof, or both, at the option of the City, for park or recreational purposes. The proposed project includes 1.6 acres of usable open space that would be used as a central gathering place for the community and would include both active and passive recreational opportunities. The developer of the proposed project would also be required to pay a Development Impact Fee established under Section 9-3.50 of the Code of Ordinance which would be used by the City to fund public facilities such as parks and recreation facilities which would mitigate the impacts on existing parks and recreational facilities caused by new developments. The proposed project would comply with all City ordinances set forth and impacts to parks and recreation facilities would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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Impact REC-2 Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impact Analysis

The proposed project would include 1.6 acres of shared usable open space on the project site that would serve as a central gathering place for community residents. The shared open space would include a lawn, green landscaped areas, children's play equipment, picnic tables and grills. The proposed project would not involve the construction or expansion of off-site recreational facilities and the developer would be required to pay Development Impact Fees to contribute to funding of park and recreational facilities. The construction of any new parks or recreational facilities would be subject to further environmental review requiring mitigation for any potentially significant environmental impacts. Therefore, impacts associated with adverse environmental impacts of recreational facilities would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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3.17 TRANSPORTATION

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.17.1 Environmental Setting

Roadway System

Freeways

The project is served by two freeways, SR 4 and SR 160, which are part of the state highway network. SR 4 has two travel lanes in each direction close transitioning to 7 lanes total SR 160 and connects Antioch with the wider bay area. SR 160 has two travel lanes in each direction, and a via a toll bridge allows motorists to connect to SR 12 and north to the City of Sacramento.

Arterials

The local street and roadway system within the City is composed of a hierarchy of streets with varying functions. Arterial roads range from two-lane arterials to six-lane arterials that link residential and commercial districts with the freeway network and provide intercity connections. Arterial roads near the project site include Hillcrest Avenue, a four-lane divided arterial, and Laurel Road, also a four-lane divided arterial. These roadways are located south of the project site. Hillcrest Avenue provides access to SR 4, and Laurel Road will also provide access to SR 4 once fully constructed (City of Antioch 2003a).



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Collectors and Local Streets

Collectors are designed to connect residential neighborhoods with arterials and have two travel lanes. Wild Horse Road is located immediately adjacent to the project site and is designated a major collector in the City's General Plan (City of Antioch 2003a). An eastward extension of Wild Horse Road is currently under construction as shown in the General Plan extending to east of SR 4 and connecting with the future Slatten Ranch Road extension. Both extensions will be collectors in the vicinity of the project. Once these roadways are fully constructed, they will provide more direct access from the project to SR 4 and the City of Oakley.

Local streets are intended to serve adjacent and nearby residential and commercial neighborhoods or business areas only. Motorists would not need to access any local streets to access the project site.

Bicycle Facilities

Existing bicycle facilities in the area consist of Class I trails and Class II lanes. In the General Plan Class I trails are defined as separate, multi-use trails or paths, and Class II lanes are defined as striped bicycle lanes on roadways (City of Antioch 2003a). Currently there are Class II lanes present on Wild Horse Road on both sides of the roadway, which connect to the wider bicycle network via Class II lanes on Hillcrest Avenue. The project is also close to the Delta De Anza Trail, which runs along the CCWD drainage channel through Antioch. The trail connects from Bay Point in the east (County of Contra Costa) to the City of Oakley in the west. The trail can be accessed via Ridgeline Drive or at the Hillcrest Avenue intersection. South of the project area, Class II lanes are provided on Laurel Road and a future eastward extension of Laurel Road will include Class II lanes connecting to existing Class II lanes at the SR 4 interchange. See Figure 3.17-1 for the existing and future bicycle facilities in the project vicinity.

Bus System

The Antioch Bay Area Rapid Transit (BART) station is located a travel distance of approximately 3 miles away from the project, which provides frequent services to the San Francisco area. Antioch is the end of the line, and services operate approximately every 15 minutes in the AM and PM peaks and every 30 minutes for the rest of the day.



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Tri Delta Transit operates bus transit services in the region to connect to local hubs and BART railway stations. The closest transit stop to the project is located approximately one mile away on Hillcrest Avenue adjacent to the Wild Horse Road intersection. It provides access to three routes; Routes 380 (weekday only) and 392 (weekend and holiday only) which connect from Pittsburg BART to Antioch BART, and Route 385 which connects from Antioch BART to Brentwood Park & Ride (Tri Delta Transit 2020). Tri Delta Transit buses are all equipped with bicycle racks, which would allow commuters to ride from the project to the transit stop and take the bus the remainder of the journey as an alternative to riding a bicycle the full distance to the BART station.

See Figure 3.17-2 for transit facilities in the project vicinity.

RTP/SCS and General Plan Consistency

The Final Bay Area 2040 is the long-range Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) for the nine-county San Francisco Bay Area. The RTP/SCS is prepared by the Metropolitan Transportation Commission and the Association of Bay Area Governments (ABAG) to guide the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities.

Per California State and federal law, the RTP/SCS is to be updated at least every four years to reflect changes to funding opportunities and respond to growth. Plan Bay Area 2050, an update to the RTP/SCS, is currently in progress. The preparation of the Final Bay Area 2040 RTP/SCS included an extensive public outreach program where members of the public and member agencies were engaged to provide input to the RTP/SCS. In addition, an environmental impact report was prepared and certified and the comment period allowed for members of the public and member agencies to review and comment on the RTP/SCS assumptions. The City is within the ABAG planning area and the City's General Plan assumptions have been considered and included in the RTP/SCS. Therefore, if the project is consistent with the City's General Plan the project is considered consistent with the RTP/SCS.



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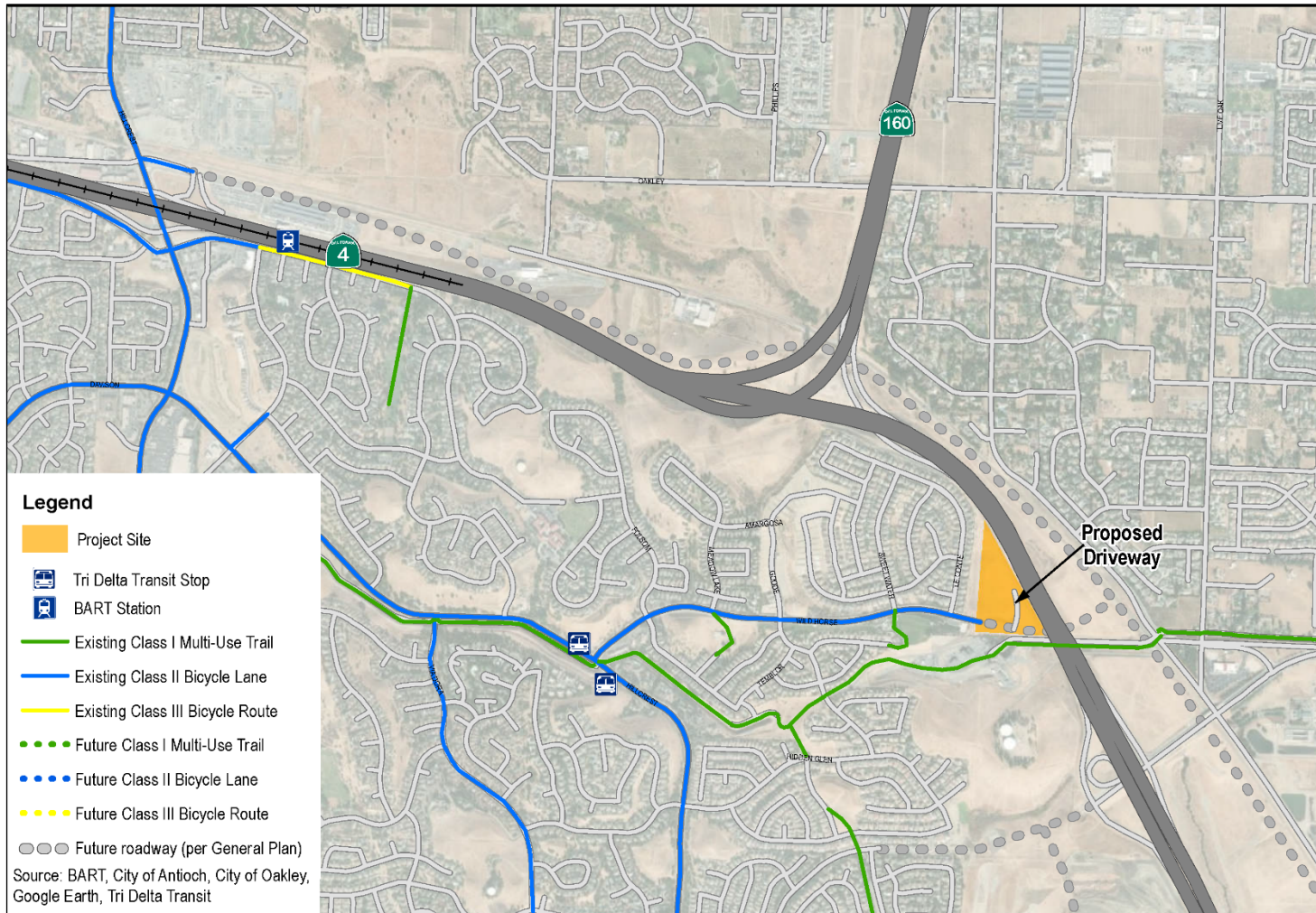


Figure 3.17-1. Existing and Future Bicycle Facilities



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Figure 3.17-2. Transit Facilities



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The General Plan Circulation Element includes policies relating to roadway and intersection level of service (LOS), which are not relevant to CEQA analysis due to the statewide change to VMT as the primary impact criteria for transportation. Therefore, LOS is not addressed in this study but is evaluated separately as part of the project's traffic study. The City's General Plan policies relating to circulation and transportation per the Circulation Element are as follows:

- Objective 7.3.1 Provide adequate roadway capacity to meet the roadway performance standards set forth in the Growth Management Element.
- Policy 7.3.2.a Facilitate meeting the roadway performance standards set forth in the Growth Management Element and improving traffic flow on arterial roadways.
- Work with the UP and BNSF railroads to construct grade separations along the tracks at Somersville Road, Hillcrest Avenue, "A" Street, the proposed Viera Road extension, and the proposed Phillips Lane extension.
 - Promote the design of roadways to optimize safe traffic flow within established roadway configurations by minimizing driveways and intersections, uncontrolled access to adjacent parcels, on-street parking, and frequent stops to the extent consistent with the character of adjacent land uses.
 - Provide adequate capacity at intersections to accommodate future traffic volumes by installing intersection traffic improvements and traffic control devices, as needed, as development occurs.
 - Facilitate the synchronization of traffic signals.
 - Where needed, provide acceleration and deceleration lanes for commercial access drives.
 - Provide for reciprocal access and parking agreements between adjacent land uses, thereby facilitating off-street



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vehicular movement between adjacent commercial and other nonresidential uses.

- Encourage regional goods movement to remain on area freeways and other appropriate routes.

Policy 7.3.2.b Design and reconfigure collector and local roadways to improve circulation within and connections to residential and commercial areas.

- Implement appropriate measures to mitigate speeding and other traffic impacts in residential areas.
- Implement roadway patterns that limit through traffic on local residential streets.

Policy 7.3.2.c Require the design of new developments to focus through traffic onto arterial streets.

Policy 7.3.2.d Where feasible, design arterial roadways, including routes of regional significance, to provide better service than the minimum standards set forth in Measure C and the Growth Management Element. Thus, where feasible, the City will strive to maintain a "High D" level of service (v/c [volume-to-capacity ratio] = 0.85 to 0.89) within regional commercial areas and at intersections within 1,000 feet of a freeway interchange. The City will also strive where feasible to maintain low-range "D" (v/c = 0.80 to 0.84) in all other areas of the City, including freeway interchanges.

Policy 7.3.2.e Establish Assessment Districts in areas that will require major roadway infrastructure improvements that will benefit only that area of the City, and thereby facilitate the up-front construction of needed roadways.

Policy 7.3.2.f Design street intersections to ensure the safe passage of through traffic and accommodate anticipated turning movements. Implement intersection improvements consistent



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with the following lane geometrics, unless traffic analyses indicate the need for additional turn lanes.

- Policy 7.3.2.g Require traffic impact studies for all new developments that propose to increase the approved density or intensity of development or are projected to generate 50 peak hour trips or more at any intersection of Circulation Element roadways. The purpose of these studies is to demonstrate that:
- The existing roadway system, along with roads to be improved by the proposed project, can meet the performance standards set forth in Sections 3.4.1 and 3.4.2 of the Growth Management Element; and
 - Required findings of consistency with the provisions of the Growth Management Element can be made.
- Policy 7.3.2.k Where single-family residences have no feasible alternative but to front on collector or arterial roadways, require, wherever possible, that circular driveways or onsite turnarounds be provided to eliminate the need for residents to back onto the street.
- Policy 7.3.2.l Locate driveways on corner parcels as far away from the intersection as is possible.
- Policy 7.3.2.m Avoid locating driveways within passenger waiting areas of bus stops or within bus bays. Locate driveways so that drivers will be able to see around bus stop improvements.
- Policy 7.3.2.n Use raised medians as a method for achieving one or more of the following objectives: access control, separation of opposing traffic flows, left turn storage, aesthetic improvement, and/or pedestrian refuge.
- Policy 7.3.2.o Where medians are constructed, provide openings at the maximum feasible intervals, typically no less than 1/8 mile.



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- Policy 7.3.2.v Private streets, where permitted, shall provide for adequate circulation and emergency vehicle access. Private streets that will accommodate more than 50 vehicles per hour in the peak hour or that are designed for on-street parking shall be designed to public street standards. The design of other private streets shall be subject to the review and approval of the City Engineer. Private streets shall be improved to public street standards prior to acceptance of dedications to the City.
- Policy 7.3.2.x Require new development to construct all on-site roadways, including Circulation Element routes, and provide a fair share contribution for needed off-site improvements needed to maintain the roadway performance standards set forth in the Growth Management Element. Contributions for off-site improvements may be in the form of fees and/or physical improvements, as determined by the City Engineer. Costs associated with mitigating off-site traffic impacts should be allocated on the basis of trip generation and should have provisions for lower rates for income-restricted lower income housing projects needed to meet the quantified objectives of the General Plan Housing Element.
- Objective 7.4.1 Maintenance of a safe, convenient, and continuous network of pedestrian sidewalks, pathways, and bicycle facilities serving both experienced and casual bicyclists to facilitate bicycling and walking as alternatives to the automobile.
- Policy 7.4.2.a Design new residential neighborhoods to provide safe pedestrian and bicycle access to schools, parks and neighborhood commercial facilities.
- Policy 7.4.2.b Design intersections for the safe passage of pedestrians and bicycles through the intersection.
- Policy 7.4.2.c Provide street lighting that is attractive, functional, and appropriate to the character and scale of the neighborhood or area, and that contributes to vehicular, pedestrian, and bicycle safety.



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- Policy 7.4.2.d Maintain roadway designs that maintain mobility and accessibility for bicyclists and pedestrians.
- Policy 7.4.2.e Integrate multi-use paths into creek corridors, railroad rights-of-way, utility corridors, and park facilities.
- Policy 7.4.2.f Provide, as appropriate, bicycle lanes (Class II) or parallel bicycle/pedestrian paths (Class I) along all arterial streets and high-volume collector streets, as well as along major access routes to schools and parks.
- Policy 7.4.2.j Permit the sharing or parallel development of pedestrian walkways with bicycle paths, where this can be safely accomplished, in order to maximize the use of public rights-of-way.
- Policy 7.4.2.l Require the construction of attractive walkways in new residential, commercial, office, and industrial developments, including provision of shading for pedestrian paths.
- Policy 7.4.2.m Maximize visibility and access for pedestrians and encourage the removal of barriers for safe and convenient movement of pedestrians.
- Policy 7.4.2.n Ensure that the site design of new developments provides for pedestrian access to existing and future transit routes and transit centers.
- Policy 7.4.2.o Pave walks and pedestrian pathways with a hard, all-weather surface that is easy to walk on. Walks and curbs should accommodate pedestrians with disabilities. Walks within open space areas should have specially paved surfaces that blend with the surrounding environment.
- Policy 7.4.2.p In general, design walks to provide a direct route for short to medium distance pedestrian trips, and to facilitate the movement of large numbers of pedestrians. Meandering sidewalks are appropriate in areas where the natural



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topography or low-density land uses lend themselves to informal landscapes.

- Objective 7.5.1 Maintenance of rail and bus transit, providing both local and regional service that is available throughout the week, and operates on par with automobile travel during peak commute hours.
- Policy 7.5.2.g Preserve options for future transit use when designing roadway and highway improvements.
- Policy 7.5.2.i Include Tri-Delta Transit in the review of new development projects and require new development to provide transit improvements in proportion to traffic demands created by the project. Transit improvements may include direct and paved access to transit stops, provision of bus turnout areas and bus shelters, and roadway geometric designs to accommodate bus traffic.
- Objective 3.4.3 Maintain acceptable traffic levels of service on City roadways through implementation of Transportation Systems Management, Growth Management, and the City's Capital Improvement Program, and ensure that individual development projects provide appropriate mitigation for their impacts.
- Policy 3.4.4.a Place ultimate responsibility for mitigating the impacts of future growth and development, including construction of new and widened roadways with individual development projects. The City's Capital Improvements Program will be used primarily to address the impacts of existing development, and to facilitate adopted economic development programs.
- Policy 3.4.4.b Continue to develop and implement action plans for routes of regional significance (see Circulation Element requirements).
- Policy 3.4.4.c Ensure that development projects pay applicable regional traffic mitigation fees and provide appropriate participation in relation



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to improvements for routes of regional significance (see also Circulation Element Policy 5.3.1f).

- Policy 3.4.4.d Consider level of service standards along basic routes to be met if 20-year projections based on the City's accepted traffic model indicate that conditions at the intersections that will be impacted by the project will be equivalent to or better than those specified in the standard, or that the proposed project has been required to pay its fair share of the improvement costs needed to bring operations at impacted intersections into conformance with the applicable performance standard.

Project Construction

The project would result in temporary construction activity with no ongoing operational changes to traffic generation or traffic patterns due to construction. Project construction is discussed in Section 2.3.

3.17.2 Methodology

In accordance with the updated CEQA guidelines that incorporate the requirements of SB 743, this analysis is prepared using VMT as the primary performance metric to measure project impacts. Generally, SB 743 moves away from using delay-based LOS as the metric for identifying a project's significant impact to instead use VMT.

SB 743 required the OPR to establish recommendations for identifying and mitigating transportation impacts within CEQA, as outlined in the Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018). The document is referred to in this memorandum as OPR's Technical Advisory. OPR's Technical Advisory recommends methodologies for quantifying VMT, significance thresholds for identifying a transportation impact, and screening criteria to quickly identify if a project can be presumed to have a less than significant impact without conducting a full VMT analysis. Lead agencies are to adopt local guidelines appropriate for their jurisdiction. At this time, the City has not formally adopted VMT guidelines. Therefore, this VMT analysis has been prepared in accordance with OPR's Technical Advisory guidance.

Prior to undertaking a detailed VMT analysis, OPR's Technical Advisory recommends that lead agencies conduct a screening process. If a project satisfies one or more of the



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screening criteria, the project could be presumed to have a less-than-significant impact. OPR's Technical Advisory suggests that lead agencies may screen out VMT impacts using project size, maps depicting areas of low VMT, transit availability and provision of affordable housing screening criteria as shown in Table 3.17-1.

Table 3.17-1. Project Screening Criteria and Threshold

Category	Criteria/Screening	Threshold	Screened Out (Yes/No)
Trip generation screening	Small projects can be screened out from completing a full VMT analysis.	If the project generates less than 110 trips per day, the project is assumed to have a less than significant impact. Projects of 10,000 square feet or less of non-residential space or 20 residential units or less, or otherwise generating less than 836 VMT per day.	No
Map-based screening	Residential and employment-generating projects that are located in areas with low VMT and that are similar in character to the existing development can be screened out from completing a full VMT analysis.	If the project is in a low VMT area, the project is assumed to have a less than significant impact.	No
Transit Priority Area Screening	Projects within ½ mile of a major transit stop or a stop located along a high-quality transit corridor reduce VMT and therefore can be screened out from completing a full VMT analysis.	If the project is within ½ mile of a major or high-quality transit stop/corridor, the project is assumed to have a less than significant impact. The project should generally also meet the following criteria: <ul style="list-style-type: none"> • FAR > 0.75 • Not provide more parking than required by City • Be consistent with the regional SCS • Does not result in a net reduction in multifamily housing units • Not replace existing affordable units with a smaller number of moderate to high-income units 	No



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Category	Criteria/Screening	Threshold	Screened Out (Yes/No)
Affordable residential development	Affordable housing in infill locations can be screened out from completing a full VMT analysis.	If the project is comprised 100% of affordable units and is located in an infill location, then the project is assumed to have a less than significant impact.	No

Notes:

FAR = floor area ratio; SCS = sustainable community strategy; VMT = vehicle miles traveled

Source: Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018)

Since the project does not meet any of the screening criteria described above, a VMT analysis is required.

OPR's Technical Advisory indicates that a lead agency may elect to use a traffic model to estimate a project's VMT. As such, the City has elected to use the Contra Costa Transportation Agency's travel demand model to assess VMT resulting from land use projects.

The project is located in traffic analysis zone (TAZ) 30143 (see Figure 3.17-3), which includes residential land uses similar in nature to the proposed project. Since the project's land uses are comparable to the land use in TAZ 30143, the project can be expected to exhibit trip generation and trip length characteristics similar to the other residential land use in the TAZ. The results of the analysis are summarized in Section 3.17.5 Impact TRANS-2.



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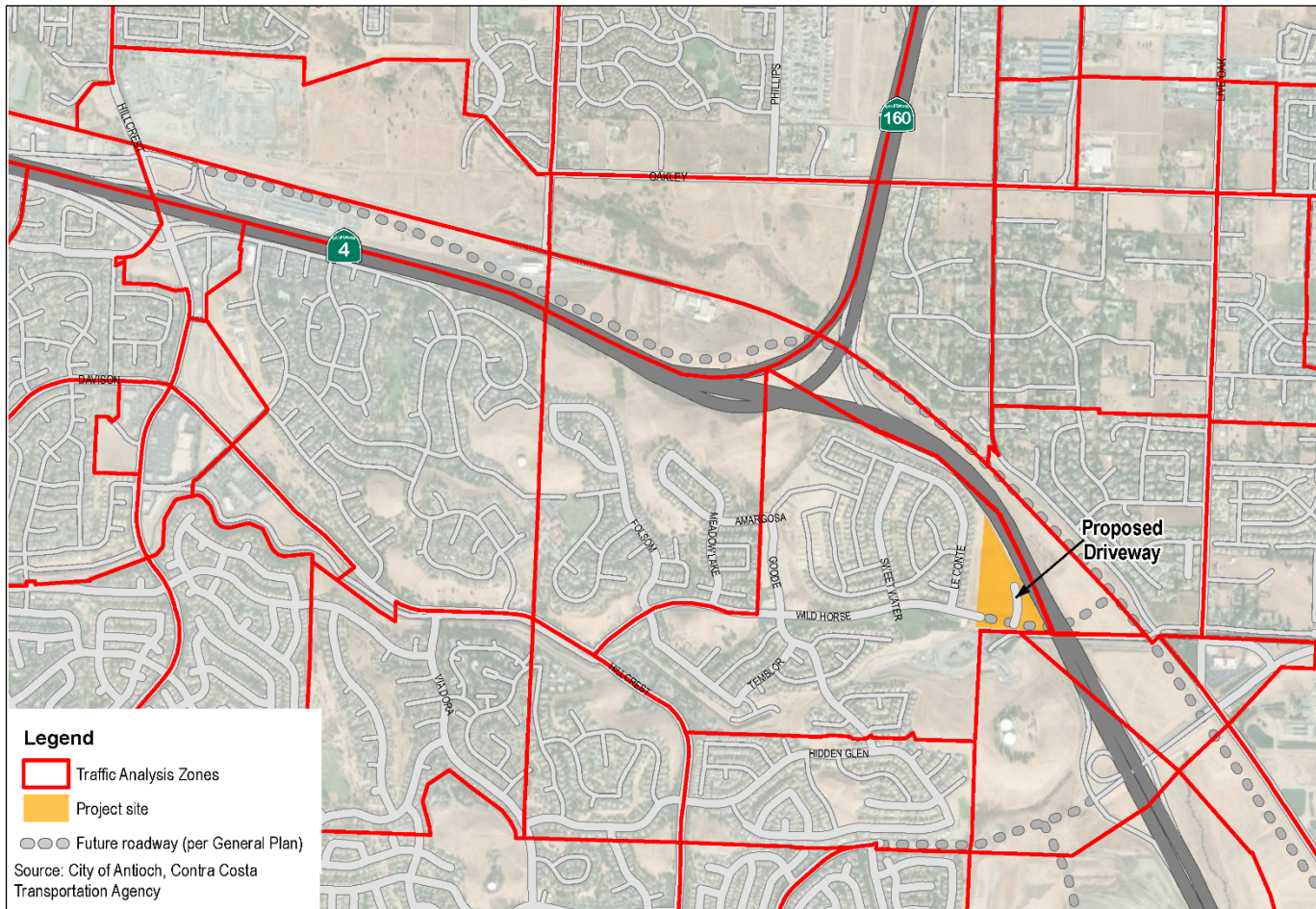


Figure 3.17-3. Contra Costa Transportation Agency Traffic Analysis Zones



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3.17.3 Environmental Impact Analysis

Impact TRANS-1 Conflict with program plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?

Impact Analysis

The project does not conflict with the General Plan Circulation Element, any program plan, ordinance or policy addressing the circulation system. The project does not propose to amend or adjust roadway classifications, the roadway network, transit routes, or bicycle network as identified in the General Plan.

Pedestrian movement will be enhanced by providing pedestrian access from Wild Horse Road along the project frontage in accordance with City requirements. This will facilitate connections to nearby amenities and public transit when the roadway network is built out per the General Plan. Pedestrian amenities to be constructed by the project include accessibility in compliance with the American Disabilities Act and an internal network of sidewalks which connect to public facilities offsite.

Site access improvements will not cause any conflicts with other improvements planned for the area, including the Wild Horse Road extension which is currently under construction in the vicinity of the project. Operation of the proposed project would include amenities and site improvements for bicyclists and pedestrians such as sidewalks along internal streets that connect to existing facilities on Wild Horse Road. As a result, the proposed project would not create hazards or barriers for pedestrians, bicyclists, or local transit service.

Construction of the proposed project would generate traffic through the transport of workers, equipment, and materials to and from the project site. It is currently anticipated that project construction would take approximately 13 months to complete, starting in January 2023 and ending in February 2024. Construction equipment and materials would be stored onsite, or on the undeveloped area north of the project site adjacent to New Horizons Way. Construction activities are anticipated to be confined to the project site, and no road closures or detours are anticipated. Project construction and grading activities would be consistent with the Antioch Municipal Code Section 5-17.05 and would occur on weekdays from 7:00 a.m. - 6:00 p.m., on weekdays within 300 feet of occupied dwellings, 8:00 a.m. - 5:00 p.m., and on weekends and holidays 9:00 a.m. -



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5:00 p.m., irrespective of the distance from the occupied dwellings (City of Antioch 2020b). Since construction traffic would be temporary and would be spread across the duration of construction, this impact would be less than significant.

As described, Class II bicycle facilities will be provided on Wild Horse Road adjacent to the project site after completion of the eastward extension of Wild Horse Road. In addition, Tri Delta Transit provides public transit service to a stop located approximately one mile from the project. The proposed project would not modify or interfere with the bicycle and bus facilities adjacent to the project site during construction or operation. During construction, project activities would be confined to the project site and no road closures or detours are anticipated.

General Plan goals and policies related to roadway operational conditions and LOS are addressed in the project's traffic study. The LOS analysis will not be included as part of the proposed project CEQA documents but will be used by the City to ensure General Plan compliance and will be considered by City decision-makers during the project approval process.

Therefore, the proposed project would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. This impact would be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.



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Impact TRANS-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision(b)?

Impact Analysis

According to CEQA Guidelines §15064.3 Subdivision (b)(1), VMT exceeding an applicable threshold of significance may indicate a significant impact. Projects that decrease VMT in the project area compared to existing conditions should be considered to have a less than significant transportation impact. As previously discussed, the project is anticipated to exhibit the same trip making characteristics as the existing residential uses and it is therefore appropriate to assume the same home-based VMT (HB VMT) as the existing TAZ. The project also has characteristics that would reduce VMT and quantification methodologies from California Air Pollution Control Officers Association (CAPCOA) are utilized to estimate the VMT reduction from project characteristics (PCs).

PC-1: The Project will increase density. CAPCOA describes that designing the project with increased densities reduces VMT, and thereby GHG emissions associated with travel in several ways. Density is generally measured in terms of persons, jobs, or dwellings per unit area. Increasing the project density will affect the distance people travel and provide greater options to choose for the mode of travel. The project site plan shows the gross density is 10.9 dwelling units per acre, which is greater than the General Plan specified 4.0 dwelling units per acre, and greater than the number of housing units per acre for Institute of Transportation Engineers (ITE)-typical residential development (CAPCOA 2018). To calculate the estimated VMT reductions from this measure, CAPCOA's quantification methodology was utilized. This measure would result in a project VMT reduction of approximately 3.0%.

Table 3.17-2 below shows the estimated VMT reduction based on CAPCOA's LUT-1 Land Use/Location Transportation- Increase Density methodology:



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Table 3.17-2. Vehicle Miles Traveled (VMT) Reduction Based on LUT-1

<p>Mitigation Method:</p> <p><i>% VMT Reduction = A X B [not to exceed 30%]</i></p> <p>where A = Percentage increase in housing units per acre = (the project's number of housing units per acre – number of housing units per acre for typical ITE development) / (number of housing units per acre for typical ITE development)</p> <p>*Per CAPCOA Table C-1 housing units per acre for typical ITE development = 7.6</p> <p>= (10.9 - 7.6) / 7.6 = 0.43</p> <p>B = Elasticity of VMT with respect to density = 0.07</p> <p><i>% VMT Reduction = 0.4 x 0.07 = 3.0%</i></p> <p>Source: California Air Pollution Control Officers Association</p>
--

PC-2: The Project will improve pedestrian connectivity by constructing an on-site pedestrian network. The project will construct pedestrian pathways that will facilitate pedestrian movements throughout the project and connect to new off-site pedestrian improvements along the project frontage. The Site Plan shows on-site pedestrian pathways that connect to Wild Horse Road, facilitating connectivity with the wider pedestrian network. To quantify the VMT reductions related to this site design feature, SDT-1 Improve Pedestrian Network from CAPCOA is utilized. This measure would result in a project VMT reduction of 2.0%.

Table 3.17-3 below shows the estimated VMT reduction based on CAPCOA's SDT-1 Neighborhood/Site Enhancements- Provide Pedestrian Network Improvements methodology.



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Table 3.17-3. VMT Reduction Based on SDT-1

Estimated VMT Reduction	Extent of Pedestrian Accommodations	Context
2%	Within project site and connecting offsite	Urban/Suburban
1%	Within project site	Urban/Suburban
<1%	Within project site and connecting offsite	Rural

Source: California Air Pollution Control Officers Association

The VMT reductions which apply to the project characteristics are outlined in Table 3.17-4. A reduction of 4.9% was calculated using the reduction formula contained in the CAPCOA guidelines as noted in the table.

Table 3.17-4. Vehicle Miles Traveled Reductions from Project Characteristics Summary

Description	Residential VMT Reduction (HB VMT)	Source
Project Characteristics		
PC-1. The project will increase density.	3.0%	CAPCOA Land Use/ Location LUT-1
PC-2. The project will improve pedestrian connectivity by constructing an on-site pedestrian network.	2.0%	CAPCOA Neighborhood / Site Enhancement SDT-1
Total VMT Reductions from Project Components	4.9% ¹	

Notes:

¹ The calculated reductions do not sum up to the total since individual strategies are multiplicative and not additive. e.g., overall % VMT Reduction = 1-(1-A)*(1-B)*(1-C) where A, B, C equals reductions for individual strategies

VMT = vehicle miles traveled; HB VMT = home-based vehicle miles traveled

The existing HB VMT per capita for the project TAZ is 24.8 VMT per capita. The Contra Costa Transportation Agency's VMT screening threshold for a residential development is 15% below the County average. As shown in Table 3.17-5, the County average is 17.3 HB VMT per capita and 15% below the average results in a significance threshold of 14.7 HB VMT per capita. The 4.9% VMT reduction due to project components results in a project VMT of 23.6 VMT per capita.



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Table 3.17-5. Vehicle Miles Traveled (VMT) Analysis Summary

Description	Residential HB VMT per Capita
Project	
Zonal Home-Based VMT per Capita (2020)	24.8 VMT per capita
% VMT reduction due to project Components (See Table 4)	4.9%
Project VMT	23.6 VMT per capita
Threshold	
City of Antioch Average Baseline HB VMT per Capita (2020)	17.3 VMT per capita
Threshold of Significance (15% reduction from baseline)	14.7 VMT per capita
Difference (project minus Threshold of Significance)	8.9 VMT per capita
Is project above or below Threshold of Significance	Above Threshold of Significance
Significant Transportation Impact	Yes
VMT = vehicle miles traveled; HB VMT = home-based vehicle miles travelled Source: <i>Contra Costa Travel Demand Model</i> (Contra Costa Transportation Authority 2021)	

Since the project VMT of 23.6 HB VMT per capita is greater than the significance threshold of 14.7 HB VMT per capita (difference of 8.9 HB VMT), the project would result in a significant impact.

This impact will be further addressed in the EIR.

Impact TRANS-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Impact Analysis

The project does not increase hazards due to a geometric design feature or incompatible uses. Development of the project site and site access improvements requires compliance with City development guidelines and code, which follow the General Plan policies and actions that encourage the safe design of streets. The project driveway will provide access from Wild Horse Road to the 20-foot private alleyways servicing the residential units. Vehicles would enter and exit the project site from this location.



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During construction, traffic management plans will be implemented to ensure the safety of roadway users accessing Wild Horse Road. During construction, the proposed project would generate traffic through the transport of workers, equipment, and materials to and from the project site. The use of roadways by heavy construction equipment can increase the risk to drivers and cyclists in the vicinity of the project site; however, construction equipment and materials would be stored onsite. Construction activities are anticipated to be confined to the project site, and no road closures or detours are anticipated; therefore, there would be no substantial increase in hazards. The project will comply with the City of Antioch's Traffic Control Plan Requirements for work area traffic control for work performed in the City's right-of-way. Also, there would be no incompatible uses introduced to the project area which could cause vehicle conflicts (e.g., farm equipment). The impact would be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.

Impact TRANS-4 Result in inadequate emergency access?

Impact Analysis

The project will not result in inadequate emergency access. Development of the project site will not alter or impede emergency response routes or plans set in place by the City.

In regard to site emergency access, the project driveways are designed to comply with turning radius requirements for emergency vehicles and will not cause hazardous driving conditions. The project's detailed design will be completed in compliance with California Fire Code requirements and not impair emergency vehicle access in the vicinity of the project during construction and in ongoing operation. Compliance with the



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California Fire and Building Codes will be mandated through the plan check and approval process. This process will also ensure that adequate access for emergency services is provided and the City's emergency response plan will be upheld during construction.

Some key site design requirements of the California Fire Code which will be implemented by the project to ensure adequate emergency access include provision of access roads to all facilities on-site with all-weather driving surfaces. They will be a minimum unobstructed width of 20 feet with a maximum grade of 15% as required by the Fire Code. Access roads shall have a minimum of 13 feet and 6 inches of vertical clearance and will not incorporate speed bumps or other vertical traffic calming devices. Access roads will be present and maintained prior to and during combustible construction. Appropriate signage and red curbs will be installed to ensure emergency access remains clear. As no non-compliant features are proposed, the impact is considered to be less than significant.

This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less Than Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less Than Significant Impact.



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3.18 TRIBAL CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the project: 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:				
a) 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.18.1 Environmental Setting

This section describes potential tribal cultural resources in the project site, defined as the project site and a 0.25-mile radius around the project site, and evaluates potential impacts to these resources from the construction and operation of project facilities. Under CEQA, local tribes and tribal representatives are the authority for identifying tribal cultural resources.

AB 52 and SB 18

AB 52 mandates consideration of Native American culture as part of the CEQA process. The goal of AB 52 is to promote involvement of California Native American tribes in the decision-making process when it comes to identifying resources of importance to their cultures and developing mitigation for impacts to these resources. To reach this goal, AB 52 establishes a formal role for tribes in the CEQA process. CEQA lead agencies



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are required to consult with tribes about potential tribal cultural resources in the project site, the potential significance of project impacts, the development of project alternatives, and the type of environmental document that should be prepared. AB 52 specifically states that a project that may cause a substantial adverse change in the significance of a tribal cultural resource may have a significant effect on the environment.

In addition, because the proposed project includes a request for a General Plan Amendment, in compliance with SB 18, the City also sent SB 18 notification letters to all the tribes included on the NAHC's tribal consultation list for Contra Costa County.

Ethnographic Context

The project is within the traditional tribal territory of the Bay Miwok, or *Saclan*, one of the five linguistic divisions of Eastern Miwok peoples (Levy 1978; Kroeber 1925; Map 1). Linguistic evidence suggests that the Eastern Miwok have inhabited the region for a long period of time, perhaps as early as the Middle Horizon of California prehistory (4,000 to 1,500 year before present) (Levy 1978; Breschini 1983). Around the time of European contact, the Bay Miwok occupied the eastern portions of Contra Costa County from Walnut Creek to the Sacramento-San Joaquin Delta (Levy 1978).

The foremost political unit of the Bay Miwok was the tribelet, an independent nation with defined geographical boundaries. Within their territory, each tribelet occupied one or more semi-permanent settlements and several seasonally occupied camps. Members of the tribelet moved between camps to fish, hunt, and gather resources as they became locally available (Levy 1978). The closest ethnographic village is *Chupcan* which is over 2 miles northwest of the project site; however, knowledge of individual tribelets and settlement locations is fragmentary due to rapid depopulation and relocation occurring throughout the 19th century (Levy 1978).

Within villages and camps, Miwok structures at lower elevations usually consisted of conical wood pole frames thatched with brush, grass, or tules (*Schoenoplectus acutus and californicus*). Larger semisubterranean and circular brush structures were also constructed for communal use at village sites, and granaries were built for the storage of gathered food, primarily acorns from several types of oak (*Quercus spp.*) (Levy 1978). The Bay Miwok also collected buckeye (*Aesculus californica*), hazelnut (*Corylus cornuta*), and pine nuts from digger pine (*Pinus sabiniana*) and sugar pine (*Pinus lambertiana*). A wide variety of seeds were also collected when available. Important



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terrestrial animal foods included mule deer (*Oedocoileus hemionus*), tule elk (*Cervuus nannodes*), and pronghorn antelope (*Antilocapra americana*). Salmon and trout (*Oncorhynchus spp.*), sturgeon (*Acipenser transmontanus*), and lamprey (*Lampetra tridentata*) were also important food species for all divisions of the Eastern Miwok (Levy 1978) and would have been especially important for indigenous peoples in the vicinity of the project site due to local environmental conditions and the proximity of wetlands (Tang 2009).

After initial contacts with Spanish explorers, the Bay Miwok were among the first indigenous people to be gathered into the Spanish missions. Subsequent influxes of Euro-Americans drove many of the remaining native inhabitants to hide in the delta, and later conflicts ended with the confiscation of Miwok lands by the United States government. Miwok populations, estimated to have been around 19,500 in 1808, rapidly declined to around 670 by 1910 (Cook 1943).

3.18.2 Methodology

To identify tribal cultural resources, Stantec prepared a cultural resources assessment (Appendix D) and the City completed AB 52 and SB 18 consultations. Available literature obtained through a record search performed at the NWIC of CHRIS was consulted for background information, ethnographical information, and to identify any previously recorded archaeological tribal resources in the project site. A Stantec archaeologist performed a pedestrian survey of the project site to identify any potential archaeological cultural resources present in the project site that had not been recorded during previous studies. A search of the Sacred Lands File for tribal cultural resources in the project site did not indicate the presence of Native American cultural resources in the project site.

AB 52 and SB 18 Consultation Results

On January 19, 2021, the City mailed letters to all tribes who requested to be consulted on City projects under AB 52 and SB 18. Follow up phone calls were made to these tribes on February 2, 2021. The tribes contacted are listed below:

- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Chicken Ranch Rancheria of Me-Wuk Indians
- Confederated Villages of Lisjan
- Guidiville Indian Rancheria



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- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- North Valley Yokuts
- Ohlone Indian Tribe
- Tule River Indian Tribe
- Wilton Rancheria

On February 2, 2021, Chairperson Zwierlein of the Amah Mutsun Tribal Band of Mission San Juan Bautista did not have concerns with the project but recommended the construction crew be given a cultural resource awareness training. On February 3, 2021, the Confederated Villages of Lisjan requested the NWIC cultural resource records search results and NAHC Sacred Lands File results. These results were sent to the Confederated Villages of Lisjan. After review of these materials, the Confederated Villages of Lisjan, did not have any further comment on the project but requested to be contacted should there be any inadvertent finds during project construction.

On March 23, 2021, the Indian Canyon Band of Costanoan Ohlone People sent an email recommending Native American and Archaeological monitoring during project construction because the project overlapped or was near a cultural site. The email also discussed ways to bring about public awareness of the history of indigenous communities.

On March 24, 2021, the City replied via email to the Indian Canyon Band of Costanoan Ohlone People email and requested additional information and further discussion with the tribe to confirm if a cultural site is within the project site.

On April 5, 2021, the City followed up with the Indian Canyon Band of Costanoan Ohlone People to make sure they had received the previous email on March 24, 2021.

On April 5, 2021, the Indian Canyon Band of Costanoan Ohlone People replied to the City's email and requested a zoom or phone call meeting on the morning of April 14, 2021.

On April 14, 2021, the City, Indian Canyon Band of Costanoan Ohlone People, and the City's project archaeological consultant met via a Zoom meeting to discuss the project. During the meeting, the tribe did not identify any cultural resources or sensitivity for cultural resources within or adjacent to the project site but said to be conservative, they



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recommended monitoring during construction. There were also discussions of recent construction adjacent to the project site and the City said they would follow up with a list development completed within the last 20 years. During the meeting, the City and the tribe also discussed ways to bring about public awareness of the history of indigenous communities.

On April 20, 2021, the City sent an email to the Indian Canyon Band of Costanoan Ohlone People as a follow-up to the Zoom meeting. The City provided a list of construction in the last 20 years adjacent to the project site. All of the construction was recent enough to have gone through the State environmental review process and no cultural resources were found during construction of these projects. Additionally, a desktop geologic sensitivity analysis indicated the project site has a low sensitivity for buried cultural resources. Based on these factors, the City does not think cultural monitoring is necessary. However, to ensure any potentially sensitive resources are protected, the City would implement mitigation measures requiring worker awareness training and inadvertent discovery procedures. The City also invited the tribe to participate in the upcoming comprehensive General Plan update so the tribe can participate in Citywide policy on how to bring about public awareness of the history of indigenous communities.

The other tribes contacted either did not respond or did not have any concerns with the proposed project. An AB 52 and SB 18 correspondence record can be found in Appendix D.

3.18.3 Environmental Impact Analysis

This section discusses potential impacts on tribal cultural resources associated with the proposed project and provides mitigation measures where necessary.



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Impact TRIB-1 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 California Native American tribe, and that is:

a) 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

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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact Analysis

Tribes contacted as part of the AB 52 and SB 18 process did not identified tribal cultural resources within or adjacent to the project site. No known tribal cultural resources were identified in the project site or within 0.25 mile of it during the archival records search and literature review performed as part of the cultural resources inventory. A field survey of the project site did not identify any archaeological tribal resources in the project site. As discussed above, a search of the NAHC Sacred Lands File did not indicate the presence of Native American cultural resources in the project site. However, subsurface construction activities associated with the proposed project could potentially damage or destroy previously undiscovered tribal cultural resources. The proposed project would be required to implement Mitigation Measures CUL-1, CUL-2, and CUL-3. Mitigation Measure CUL-1 requires a preconstruction worker awareness training for cultural resources. Mitigation Measures CUL-2 and CUL-3 are inadvertent discovery procedures that would be implemented in the event previously undiscovered subsurface cultural resources or human remains are found at the project site during construction. Therefore, with the implementation of Mitigation Measures CUL-1, CUL-2, and CUL-3, potential impacts to undiscovered tribal cultural resources would be less than significant. This impact will not be further addressed in the EIR.



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Level of Significance Before Mitigation

Potentially Significant Impact.

Mitigation Measures

Mitigation Measures CUL-1, CUL-2, and CUL-3 are required.

Level of Significance After Mitigation

Less Than Significant Impact with Mitigation.



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3.19 UTILITIES AND SERVICE SYSTEMS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a) 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 which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the waste water 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3.19.1 Environmental Setting

Wastewater Collection/Treatment

The City maintains and owns the local sewage collection system and is responsible for the collection and conveyance of wastewater to the Delta Diablo Wastewater Treatment Plant (WWTP). The DDSD owns and operates the regional interceptors and the WWTP. DDSD is located on the Pittsburg-Antioch border and serves nearly 213,000 customers in the communities of Pittsburg, Antioch and Bay Point (DDSD 2021). The WWTP



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operates under the San Francisco Bay Regional Water Quality Control Board (Order No. R2-2014-0030, NPDES No. CA0038547), and is permitted for up to 19.5 million gallons per day (mgd) average dry weather flow (SFBRWQCB 2014). The permit expired in 2019, and tentative order No. R2-2019-XXXX NPDES No. CA0038547 is in process with the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) (SFBRWQCB 2019). In 2015, the average dry weather flow to the WWTP, including the City of Pittsburg, was 13.2 mgd (City of Antioch 2016).

Stormwater Management

Stormwater collection in the City is overseen by the Contra Costa County Flood Control and Water Conservation District (Flood Control District). The City has over 110 miles of trunk lines to collect stormwater (City of Antioch 2003b). These trunk lines are independent from the wastewater collection system. The stormwater trunk lines discharge to channels owned and maintained by both the City and the Flood Control District. The Flood Control District releases stormwater from the channels to the San Joaquin River and is the holder of a NPDES permit. Contra Costa County Clean Water Program staff monitors the quality of the released water to comply with the specifications of the NPDES permit.

Water Supply

The City receives water from two sources. The City's primary source of surface water is the Sacramento-San Joaquin Delta through its own intake, or the water purchased from the CCWD through the Contra Costa Canal and Los Vaqueros Reservoir (City of Antioch 2016). The water from the CCWD is treated at the City Water Treatment Plant that has a capacity of 38 mgd. There are 6 water pressure zones in the City and the project site lies within Zone III East. Zone III East encompasses much of the newer residential and commercial growth in the City (City of Antioch 2016). According to the City's UWMP, the CCWD's water supply reliability goal is to meet 100 percent of demand in normal years and at least 85 percent of demand during a drought. The single dry year supply would be same as normal year demand; and multiple dry year supply would reduce by 15 percent (City of Antioch 2016).

Solid Waste

Republic Services provides solid waste collection, disposal, recycling, and yard waste services in in the City. Solid waste and recyclables from the City are taken to the Contra



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Costa Transfer and Recovery Station in Martinez. Solid waste is transferred from the Transfer and Recovery Station to the Keller Canyon Landfill in Pittsburg (City of Antioch 2003b). The landfill site is 1,399 acres, 244 of which comprise the actual current disposal acreage. The landfill is permitted to accept 3,500 tons of waste per day and has a total estimated permitted capacity of approximately 75 million CY (CalRecycle 2021). The remaining available disposal capacity of the existing landfill is over 55 million CY as of 2015, which is sufficient for several decades of continued operation (Contra Costa County Department of Conservation and Development 2015).

Electric Power, Natural Gas, and Telecommunications

PG&E provides electric power and natural gas services to the City. Pacific Bell is the provider of residential and commercial telephone service in the City. Pacific Bell also provides or hosts a variety of telecommunication services such as Digital Subscriber Lines, Internet Service Providers, web hosting, virtual private networking, and wireless/cellular and paging services (City of Antioch 2003b).

3.19.2 Methodology

The following analysis is based on a review of documents pertaining to the project site, including the General Plan, the General Plan EIR, 2015 UWMP, and Section 2.0, Project Description, of this IS. The following impact discussions consider the impacts of the proposed project related to utilities and service systems in the City.

3.19.3 Environmental Impact Analysis

This section discusses potential impacts related to utilities and service systems associated with the proposed project and provides mitigation measures where necessary.



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Impact UTIL-1 **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 which could cause significant environmental effects?**

Impact Analysis

Wastewater Treatment

According to the General Plan EIR, the standard multiplier for residential base wastewater flow is 220 gallons/per day (City of Antioch 2003b). The proposed project would include construction of 126 multifamily residences; therefore, the anticipated wastewater generation would be 27,720 gallons per day (gpd). The wastewater generated by the proposed project would flow to the project's lateral 8-inch diameter sewer lines to service the residences and would connect to the existing 8-inch public sanitary sewer main line located along Wild Horse Road.

An increase of 27,720 gpd would represent a fraction of the WWTP capacity and would allow the facility to operate at its current flow rate of 13.2 mgd, with a remaining capacity of 6 mgd. Since the WWTP is operating below its maximum capacity, the project would not result in the WWTP's existing wastewater treatment requirements. Additionally, the project applicant would be required to pay sewer connection fees, which work to fund needed sewer system improvements. Because the project applicant would pay sewer connection fees, and adequate long-term wastewater treatment capacity is available to serve full build-out of the project, the project would not require or result in the relocation or construction of new or expanded off-site wastewater facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts to wastewater treatment requirements would be less than significant. This impact will not be further addressed in the EIR.

Water Treatment

The proposed project would connect new 8-inch and 6-inch water main lines that would run along the new proposed project streets to the existing 10-inch water main located along Wild Horse Road on the southern perimeter of the proposed project. Based on the water demand factors used in the 2015 UWMP for single-family residences (multifamily not available) of 320 gpd/unit, the proposed project would result in an overall demand of approximately 44,100 gpd, or approximately 16 million gallons per year (mgy) (City of



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Antioch 2016). Although the proposed project is not specifically identified in the City's 2015 UWMP, the City's growth projections and water demand projections accommodate the proposed project's estimated population of approximately 413 residents and projected water demand of 16 mgd. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded off-site water facilities, the construction or relocation of which could cause significant environmental effects, and sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. Per the City's 2015 UWMP, adequate water supplies will be available to accommodate buildout of the City under normal year, single year, and multiple-dry year demand scenarios, accounting for mandatory measures included in the City's Water Shortage Contingency Plan (City of Antioch 2016). Therefore, the proposed project would not require or result in the relocation or construction of new or expanded off-site water facilities, the construction or relocation of which could cause significant environmental effects, and sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. This impact will not be further addressed in the EIR.

Stormwater Drainage

The proposed project would include installation of new 18-inch and 24-inch storm drains and storm drain outfall. The storm drains would connect to the bioretention basin and existing 48-inch and 36-inch storm drain pipes along the western perimeter of the proposed project. The proposed project would create 214,032 square feet of new impervious surface. It would also include 284,502 square feet of pervious surface consisting of landscaping and bioswale landscaping throughout the project site and a bioretention basin in the northern corner of the project site. The bio-retention areas would be sized to function as stormwater treatment and flow control. The project would not require new or expanded off-site stormwater infrastructure. Therefore, the impacts associated with stormwater drainage facilities would be less than significant. This impact will not be further addressed in the EIR.

Electric Power and Natural Gas

PG&E is the electric and natural gas provider to the City. Although the proposed project would demand additional electricity and natural gas, electrical and gas connections would be made with existing facilities located onsite. Although the proposed project will



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demand additional electricity and natural gas, the 2017 General Plan Update found that buildout of the General Plan would not exceed the demand for electricity and natural gas estimated in the 2003 General Plan (City of Antioch 2017). Furthermore, the proposed project and future development would be subject to more stringent energy efficiency standards through updates of the California Green Building Code and Title 24. No new expanded facilities would be required for electric and natural gas facilities that could potentially cause a significant environmental impact. This impact will not be further addressed in the EIR.

Telecommunications

Telecommunication services are provided by Pacific Bell to the project site. Any telecommunication connections that are deemed necessary during final site design would be placed within existing utility easements. No expanded capacity would be required for telecommunication facilities that could potentially cause a significant environmental impact. Therefore, impacts to telecommunications facilities would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact UTIL-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact Analysis

As previously discussed, based on the water demand factors used in the 2015 UWMP for single-family residences (multifamily not available) of 320 gpd/unit, the proposed project would result in an overall demand of approximately 44,100 gpd, or



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approximately 16 mgd (City of Antioch 2016). Although the proposed project is not specifically identified in the City's 2015 UWMP, the City's growth projections and water demand projections accommodate the proposed project's estimated population of approximately 413 residents and projected water demand of 16 mgd. The 2015 UWMP calculates the City's past, current, and projected water use and water supply through 2040. According to the UWMP, the future water supply would be adequate to offset future water demands from planned development during normal, single-dry, and multi-dry years through 2040 (City of Antioch 2016). The UWMP contemplated the build out of the uses and densities that were envisioned in the General Plan and, thus, a project-specific water supply analysis is not required. Additionally, the proposed project would be required to comply with the water conservation requirements codified in Title 6, Chapter 10 of the Municipal Code (City of Antioch 2015). Therefore, the impact would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact UTIL-3 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?

Impact Analysis

The Delta Diablo WWTP has a permitted treatment capacity of 19.5 mgd (SFBRWQCB 2014). The average volume of wastewater treated at the WWTP was 13.2 mgd in 2015 and is expected to stay similar considering the limited growth within the WWTP service area since 2015 (City of Antioch 2016). The proposed project would generate 27,720 gpd of wastewater that would be a fraction of the available capacity of 6 mgd. In



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In addition, the project applicant would pay sewer connection fees. Therefore, the impact would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact UTIL-4 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?

Impact Analysis

The proposed project would be expected to generate waste during the construction and operation phases; however, it would not be expected to result in inadequate landfill capacity. The proposed project does not involve demolition of structures or require the export of soils from the project site. Any construction waste generated would be minimal and disposed by the project contractor in accordance with the City's established programs that facilitate the diversion and disposal of construction waste. The City uses a standard multiplier of 8.2 pounds of solid waste per day for each resident (City of Antioch 2003b). Therefore, during operation the project would be anticipated to use approximately 3,386.6 pounds per day, or 618 tons per year. Solid waste from the proposed project would be disposed at the Keller Canyon Landfill. The landfill is permitted to accept 3,500 tons of waste per day and has a remaining capacity of 55 million CY (Contra Costa County Department of Conservation and Development 2015). Due to the substantial amount of available capacity remaining at Keller Canyon Landfill, sufficient capacity would be available to accommodate the proposed project's solid waste disposal needs. The City's waste prevention efforts have been successful, as the current per capita disposal rate is 3.1 pounds per person per day and the State mandated target is 4.2 pounds per person per day (City of Antioch 2021). The proposed project would also include solid waste, food waste, and recycling facilities at a readily



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available location. The proposed project would not be expected to generate solid waste in excess of State or local standards and would not impair attainment of solid waste reduction goals. Therefore, a less-than-significant impact related to solid waste would occur. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact UTIL-5 Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis

The proposed project would be served by curbside solid waste and recycling services, which are standard services for residential uses in the City. Solid waste disposal must follow the requirements of the contracted waste hauler and disposal facility, which follows local, state, and federal statutes and regulations related to the collection and disposal of solid waste.

The proposed project would include solid waste, food waste, and recycling facilities at a readily available location. Title 6, Chapter 3 of the City's Municipal Code also requires the construction contractor to prepare and submit a Waste Management Plan (WMP). The WMP shall identify the types of C&D debris materials that will be generated for disposal and recycling. The project would comply with all applicable local, State, and federal statutes and regulations related to solid waste. Therefore, the impacts would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.



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Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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3.20 WILDFIRE

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
If 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3.20.1 Environmental Setting

In the City, areas of potential wildland fire hazard exist within the southern, mostly unincorporated portions of the General Plan study area, including rural, hilly terrain, as well as areas adjacent to or covered by natural grassland or brush (City of Antioch 2003b). The project site is vacant and surrounded by existing residential developments and roadways. Based on a review of the Fire Hazard Severity Zone maps developed by California Department of Forestry and Fire Protection (CALFIRE), the project site is not within a state responsibility area and does not contain lands classified as very high fire hazard severity zone. The project site is within a local responsibility area and is classified as being in a moderate fire hazard severity zone (CALFIRE 2007a). The U.S. Forest Service (USFS) has also developed a Wildfire Hazard Potential Map. According



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to the USFS, the risk of wildfire at the project site and in the surrounding areas is low to very low (USFS 2020).

3.20.2 Methodology

The following analysis is based on a review of documents pertaining to the project site, including the General Plan, General Plan EIR, and review of CALFIRE's Fire Hazard Severity Zone Maps and the USFS Wildfire Hazard Potential Map.

3.20.3 Environmental Impact Analysis

This section discusses potential wildfire impacts on the proposed project and provides mitigation measures where necessary.

Impact WF-1 Substantially impair an adopted emergency response plan or emergency evacuation plan?

Impact Analysis

The project site is not in a state responsibility area and does not contain lands classified as being within a very high fire hazard severity zone (CALFIRE 2007b). The proposed project does not involve permanent modification to the existing roadways and road closures are not anticipated during the construction phase. There are no identified evacuation routes that would be potentially impacted by the construction of the project. The Traffic Control Plan would identify all detours, appropriate traffic controls, and ensure adequate circulation and emergency access are provided during the construction phase. Therefore, project construction and operation activities would not interfere with an emergency evacuation or response plan, and this impact would be less than significant. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.



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Level of Significance After Mitigation

Less-Than-Significant Impact.

Impact WF-2	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?
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Impact Analysis

The topography of the project site is mostly flat with a slight rise to the southwest corner and is located in an urban area surrounded by existing development and roadways. The area surrounding the project site is similarly flat. The project site is not in a state responsibility area and does not contain lands classified as being within a very high fire hazard severity zone (CALFIRE 2007b). Furthermore, the risk of wildfire in this portion of the City is classified as low to very low (USFS 2020). Given the characteristics of the project site, the proposed project would not exacerbate fire risk beyond what currently exists in the vicinity of the project site. Development of the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire, and there would be no impact. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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Impact WF-3 **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?**

Impact Analysis

The project site is not in a state responsibility area and does not contain lands classified as being within a very high fire hazard severity zone (CALFIRE 2007b). The project site is currently vacant, and the construction of the proposed project would require the installation of associated infrastructure. Primary access to the project site would be via Wild Horse Road and onto two streets within the project site which would be 26 feet wide to allow emergency vehicles access to the project site. All utilities needed for the new development would be located underground and also includes installation of fire hydrants on the project site to mitigate fire hazards. The proposed project would be required to implement General Plan policies along with the implementation of the Uniform Fire Code and the Uniform Building Code which will reduce effects of development on wildland fire hazard impacts to a less than significant level (City of Antioch 2003b). The proposed project would require the installation of associated infrastructure to support the new development but would not exacerbate fire risk beyond what currently exists in the vicinity of the project site. Compliance with City's policies, the Uniform Fire Code and the Uniform Building Code would reduce effects of installation of associated infrastructures that may exacerbate fire risk and there would be a less-than-significant impact. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

Less-Than-Significant Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less-Than-Significant Impact.



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Impact WF-4 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?

Impact Analysis

The project site is not in a state responsibility area and does not contain lands classified as being within a very high fire hazard severity zone (CALFIRE 2007b). The project site and surrounding area is relatively flat and not in an area subject to landslides or flooding. As such, the proposed project would not 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. As such, there would be no impact. This impact will not be further addressed in the EIR.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.



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5.0 List of Preparers

5.0 LIST OF PREPARERS

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Appendices

**APPENDIX A: CRITERIA POLLUTANTS
AND GREENHOUSE GAS EMISSIONS
ESTIMATION SUMMARY**

Wild Horse Multifamily Project

Date: March 17, 2021

Subject: Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary

This memorandum documents the results of the CalEEMod emission estimates for the Wild Horse Multifamily Project (proposed project).

Project Location and Description

The Wild Horse Multifamily Project (proposed project) would include the development of 126 townhomes in 25 buildings with related amenities on an approximately 12-acre site. The proposed project would also include parking, landscaping managed by a homeowner's association, and 1.6 acres of open space. The project site would also include approximately 1.6 acres as an offer of dedication for construction of Wild Horse Road, a paved road along the property's southern boundary, of which construction began by another developer on September 1, 2020. The proposed project would be located in the City of Antioch (City) in Contra Costa County, California (County). The approximately 12-acre project site is triangular in shape. The proposed project is on a vacant parcel identified as APN 041-022-003.

The site plan for the proposed project is overlaid at the project location in Figure 1.



Figure 1 – Proposed Project Site Plan Overlay

Modeling Parameters and Assumptions

The following modeling parameters and assumptions were used to generate criteria air pollutant and greenhouse gas (GHG) emissions for the Wild Horse Multifamily Project.

Model Selection

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. CalEEMod quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

CalEEMod was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements and conditions.

CalEEMod is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing CEQA or National Environmental Policy Act documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

CalEEMod version 2016.3.2 will be used to estimate construction and operational impacts of the proposed project.

Air Pollutants and GHGs that were Assessed

Criteria Pollutants Assessed

The following criteria air pollutants were assessed in this analysis: reactive organic gases (ROG), oxides of nitrogen (NO_x), particulate matter less than 10 microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}). Note that the proposed project would emit ozone precursors ROG and NO_x. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

GHGs Assessed

This analysis was restricted to GHGs identified by AB 32, which include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). The proposed project would generate a variety of GHGs, including several defined by AB 32 such as CO₂, CH₄, and N₂O.

Certain GHGs defined by AB 32 would not be emitted by the project. HFCs, PFCs, SF₆, and NF₃ are typically used in industrial applications, none of which would be used for typical multifamily residential operations. Therefore, it is not anticipated that the proposed project would emit those GHGs.

GHG emissions associated with the proposed project construction, as well as future operations were estimated using CO₂ equivalent (CO₂e) emissions as a proxy for all GHG emissions. Construction GHG emissions were amortized over the lifetime of the proposed project. In order to obtain the CO₂e, an individual GHG is multiplied by its Global Warming Potential (GWP). The GWP designates on a pound for pound basis the potency of the GHG compared to CO₂.

Assumptions

Construction Modeling Assumptions

Schedule

The proposed project would require various tasks including site preparation, grading, building construction, architectural coatings, and paving. Table 1 shows the anticipated construction schedule based on the assumption that construction would begin in January 2023, and it is estimated all construction tasks would be completed by March 2024 (approximately 15 months of construction). The construction schedule utilized in the analysis represents a “worst-case” analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years or is phased over multiple years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. The site-specific construction fleet may vary due to specific project needs at the time of construction. The estimated construction schedule of 15 months is a conservative assumption because potential impacts would be more concentrated rather than spreading construction activities out over four years. It is anticipated that ancillary improvements would occur concurrently with the construction of the facilities, by construction task. Project construction would occur six days per week, Monday through Saturday consistent with Antioch Municipal Code Section 5-17.05.

Table 1: Project Construction Schedule

Construction Task	Start Date	End Date	Workdays
Site Preparation	1/2/2023	1/12/2023	10
Grading	1/13/2023	2/16/2023	30
Building Construction	2/17/2023	2/1/2024	300
Architectural Coating	2/2/2024	2/24/2024	20
Paving	2/25/2024	3/19/2024	20

Source: CalEEMod Output (Attachment A).

Equipment

The off-road equipment fleet for construction was generated using default values from CalEEMod. CalEEMod generates construction fleets for construction activities based on the size of the construction areas. Construction equipment for each construction activity are shown in Table 2. No pile driving is proposed.

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Table 2: Project Construction Equipment

Construction Task	Equipment Type	Pieces of Equipment	Usage (hours/day)	Horsepower	Load Factor	Fuel Type
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	Diesel
	Tractors/Loaders/Backhoes	4	8	97	0.37	Diesel
Grading	Excavators	2	8	158	0.38	Diesel
	Graders	1	8	187	0.41	Diesel
	Rubber Tired Dozers	1	8	247	0.40	Diesel
	Scrapers	2	8	367	0.48	Diesel
	Tractors/Loaders/Backhoes	2	8	97	0.37	Diesel
Building Construction	Cranes	1	7	231	0.29	Diesel
	Forklifts	3	8	89	0.20	Diesel
	Generator Sets	1	8	84	0.74	Diesel
	Tractors/Loaders/Backhoes	3	7	97	0.37	Diesel
	Welders	1	8	46	0.45	Diesel
Architectural Coating	Air Compressors	1	6	78	0.48	Diesel
Paving	Pavers	2	8	130	0.42	Diesel
	Paving Equipment	2	8	132	0.36	Diesel
	Rollers	2	8	80	0.38	Diesel

Source: CalEEMod Output (Attachment A)

Vehicles Trips

Off-site construction emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM₁₀ and PM_{2.5}). Construction only evaluated exhaust emissions since the Bay Area Air Quality Management District (BAAQMD) thresholds for PM₁₀ and PM_{2.5} are based on engine exhaust. Table 3 provides a summary of the construction-related vehicle trips. CalEEMod quantifies the number of construction workers by multiplying 1.25 times the number of pieces of equipment for all phases (except Building Construction and Architectural Coating).

The number of construction workers for each task would fluctuate between 8 and 108 workers per day as shown in Table 3 (assumes two trips per worker), with an average of 87 workers per day. CalEEMod default values were used to estimate the number of vendor vehicle trips. The number of vendor trips during the Building Construction phase was derived from a study conducted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) as per the CalEEMod defaults. The SMAQMD trip survey during construction counted cement and water trucks as vendor trips (instead of counting them as off-road vehicle trips) and these trip rates were incorporated into the calculations for the Building Construction phase. The default values for hauling trips were based on the assumption that a truck can haul 20 tons (or 16 cubic yards) of material per load. If one load of material is delivered, CalEEMod assumes that one haul truck importing material will also have a return trip with an empty truck (e.g., 2 one-way trips).

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The fleet mix for worker trips is light-duty passenger vehicles to light-duty trucks. The vendor trips fleet mix is composed of a mixture of medium and heavy-duty diesel trucks. The hauling trips were assumed to be 100 percent heavy-duty diesel truck trips. CalEEMod default trip lengths were used for the worker (10.8 miles), vendor (7.3 miles), and hauling trips (20 miles).

Table 3: Construction Vehicle Trips

Construction Task	Worker Trips per Day	Vendor Trips per Day	Total Haul Truck Trips ¹
Site Preparation	18	0	8
Grading	20	0	9,308
Building Construction	215	62	8
Paving	15	0	8
Architectural Coating	43	0	8

1. Truck trips during grading were based on import of 74,400 cubic yards of fill. An additional eight truck trips were added to each phase for mobilization/demobilization.
Source: CalEEMod Output (Attachment A).

Operational Modeling Assumptions

Operational emissions are those emissions that occur during operation of the proposed project. The sources are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the proposed project site. The trip generation rates for each phase of the project are shown in Table 4.

Table 4: Trip Generation Used in the Project-specific Traffic Analysis

Land Use Type	Amount	Units	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
			In	Out	Total	In	Out	Total	
Trip Rates									
Multifamily Housing Mid-Rise (220)	—	DU	0.11	0.35	0.46	0.35	0.21	0.56	7.32
Trip Generation									
Wild Horse Townhome Project	126	DU	13	45	58	44	26	71	922
DU = Dwelling Unit Source of Trip Rates: Institute of Transportation Engineers (ITE), Trip generation Manual 10th Edition, 2017, with ITE code in parentheses									

Table 5: Trip Generation Rates Used to Estimate Emissions

Land Use Type	Units (Dwelling Units)	Weekday Average Daily Trip Rate	Saturday Average Daily Trip Rate	Sunday Average Daily Trip Rate
Daily Trip Rates				
Multifamily Housing Mid-Rise (220)	126	7.32	8.14	6.28
Daily Trips				
Multifamily Housing Mid-Rise (220)	126	922	1,026	791
Source of Trip Rates: Institute of Transportation Engineers (ITE), Trip generation Manual 10th Edition, 2017, with ITE code in parentheses				

Trip Lengths

The CalEEMod default round trip lengths for an urban setting were used in this analysis. Residential trip types are defined as home-work (H-W), home-shop (H-S), and home-other (H-O). The CalEEMod defaults of 31 percent for H-W, 15 percent for H-S, and 54 percent for H-O were used. The trip lengths are 10.8 miles for H-W trips, 4.8 miles for H-S trips, and 5.7 miles for H-O trips. Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips are assumed to take a slightly different path than a primary trip. The CalEEMod default rates of 86 percent for primary, 11 percent for diverted, and 3 percent for pass-by were used.

Vehicle Fleet Mix

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the proposed project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline- and diesel-powered vehicles). The CalEEMod default vehicle fleet mix was used for the proposed project.

Area Sources

Hearths

The proposed project would not include woodburning fireplaces in the residences.

Consumer Products

Consumer products are various solvents used in non-industrial applications that emit ROG during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics, and toiletries. The default CalEEMod value was used for this project.

Architectural Coatings (Painting)

Paints release VOC emissions. The building would be repainted on occasion. CalEEMod defaults were used for this purpose.

Landscaping Emissions

CalEEMod estimated a total of 180 days for which landscaping equipment would be used to estimate potential emissions for the proposed project.

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Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant. Since the electricity can vary greatly based on locations, the user should override these values if they have more specific information regarding their specific water supply and treatment.

Energy Use

The Renewables Portfolio Standard (RPS) is not accounted for in CalEEMod 2016.3.2. Reductions from RPS are addressed by revising the electricity emission intensity factor in CalEEMod to account for the utility RPS rate forecast for 2020. Pacific Gas and Electric (PG&E) would provide electricity and natural gas services to the project site. PG&E provides emission factors for the electricity it provides to customers for its energy portfolio that is used to estimate project emissions. The utilities will be required to increase the use of renewable energy sources to 60 percent by 2030. The latest information available in PG&E's 2020 Sustainability Report was used to adjust the project CO₂ intensity factor for the project buildout year and 2030 scenarios.

The emissions associated with the building electricity and natural gas usage (non-hearth) were estimated based on the land use type and size. The electricity energy use is in units of kilowatt hours per size metric for each land use type. Natural gas use is in units of one thousand British Thermal Units per size metric for each land use type.

Other Indirect Emissions (Water Use, Wastewater Use, and Solid Waste)

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project. For solid waste disposal, GHG emissions are associated with the disposal of solid waste generated by the proposed project into landfills. CalEEMod default data were used for inputs associated with solid waste.

Thresholds

The BAAQMD adopted significance thresholds for construction-related and operational ROG, NO_x, PM, CO, and CO₂e, these thresholds are included in Table 6.

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Table 6: BAAQMD Proposed Project-Level Air Quality CEQA Thresholds of Significance

Criteria Pollutants	Construction-Related	Operational-Related	
Criteria Air Pollutants and Precursors (regional)	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
PM ₁₀ /PM _{2.5} (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
GHGs (projects other than stationary sources)	None	Compliance with Qualified GHG Reduction Strategy OR 1,100 MTCO ₂ e/yr OR 4.6 MTCO ₂ e/SP/yr (residents + employees)	
<p>Notes: CO = carbon monoxide GHG = greenhouse gas lbs/day= pounds per day MTCO₂e/yr= metric tons of carbon dioxide equivalent per year MTCO₂e/SP/yr= metric tons of carbon dioxide equivalent per service population per year NO_x = nitrogen oxide PM_{2.5} = particulate matter 2.5 microns in diameter or less PM₁₀ = particulate matter 10 microns in diameter or less ppm = parts per million ROG = reactive organic gas tpy= trips per year</p> <p>Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed February 27, 2021.</p>			

Fugitive Dust

Construction

Fugitive dust would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the project site. Therefore, Mitigation Measure (MM) AIR-1 would be required. MM AIR-1 would require fugitive dust control measures that are consistent with best management practices (BMPs) established by the BAAQMD to reduce the proposed project's construction-generated fugitive dust impacts to a less than significant level.

MM AIR-1: Implement Construction Best Management Practices. The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by the BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by the BAAQMD or contractor as appropriate:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day;
- All haul trucks transporting soil, sand, or other loose material off-site will be covered;
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited;
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour;
- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used; and
- Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of CCR. Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator or checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City regarding dust complaints. This person will respond and take corrective action within 48 hours. The BAAQMD's phone number will also be visible to ensure compliance with applicable regulations.

Criteria Pollutant CalEEMod Results

Construction

Annual and daily average emissions for the entire construction duration are shown in Table 7 for the unmitigated scenario.

Table 7: Construction Annual and Daily Average Emissions (Unmitigated Average Daily Rate)

Parameter	Air Pollutants			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
2023 Construction Year (tons/year)	0.40	4.04	0.13	0.12
2024 Construction Year (tons/year)	1.79	0.37	0.01	0.01
<i>Total Emissions (tons/year)</i>	<i>2.19</i>	<i>4.41</i>	<i>0.14</i>	<i>0.13</i>
Total Emissions (pounds/year)	4,386	8,820	281	263
Average Daily Emissions (pounds/day)¹	11.54	23.21	0.74	0.69
Significance Threshold (pounds/day)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No
Notes: ¹ Calculated by dividing the total number of pounds by the total 380 working days of construction for the entire construction period. Calculations use unrounded numbers. lbs = pounds NO _x = oxides of nitrogen PM ₁₀ = particulate matter 10 microns in diameter PM _{2.5} = particulate matter 2.5 microns in diameter ROG = reactive organic gases Source of thresholds: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en . Accessed February 27, 2021. Source of emissions: CalEEMod Output (see Attachment A).				

As shown in Table 7, unmitigated construction emissions from all construction activities are below the recommended thresholds of significance.

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Operations

Full buildout of the project is anticipated to occur in 2024, immediately following the completion of construction. Emissions were assessed for full buildout operations in the 2024 operational year.

Table 8: Operational Annual Emissions for Full Buildout (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Area	1.16	0.01	0.01	0.01
Energy	0.01	0.11	0.01	0.01
Mobile (Motor Vehicles)	0.20	0.82	0.80	0.22
Total Project Annual Emissions	1.37	0.95	0.81	0.23
Thresholds of Significance	10	10	15	10
Exceeds Significance Threshold?	No	No	No	No
<p>Notes: NO_x = oxides of nitrogen PM_{2.5} = particulate matter 2.5 microns or less in diameter PM₁₀ = particulate matter 10 microns or less in diameter ROG = reactive organic gases Source of thresholds: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed February 27, 2021. Source of emissions: CalEEMod Output (see Attachment A).</p>				

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Table 9: Operational Average Daily Emissions (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Total Project Annual Emissions ¹ (tons/year)	1.37	0.95	0.81	0.23
Total Project Annual Emissions ² (lbs/year)	2,731	1,891	1,625	465
Average Daily Emissions³ (lbs/day)	7.48	5.18	4.45	1.28
BAAQMD Average Daily Emission Thresholds (lbs/day)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No
<p>Notes:</p> <p>¹ Tons per year are shown in Table 8.</p> <p>² Pounds per year were calculated using the unrounded annual project operational emissions.</p> <p>³ The average daily operational emissions were estimated based on the total annual emissions divided by 365 days.</p> <p>lbs = pounds</p> <p>NO_x = oxides of nitrogen</p> <p>PM_{2.5} = particulate matter 2.5 microns or less in diameter</p> <p>PM₁₀ = particulate matter 10 microns or less in diameter</p> <p>ROG = reactive organic gases</p> <p>Source of thresholds: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed February 27, 2021.</p> <p>Source of emissions: CalEEMod Output (see Attachment A).</p>				

Greenhouse Gas Emissions

This GHG emissions generation analysis is restricted to emissions of the GHGs identified as those of California concern by AB 32, which include CO₂, methane, nitrous oxide, HFC, PFC, and SF₆. GHG emissions discussed are presented in CO₂e emissions.

Thresholds

The BAAQMD's project-level significance threshold for operational GHG generation included in the 2017 BAAQMD CEQA Guidelines¹ are as follows:

- Compliance with a qualified GHG Reduction Strategy, or
- 1,100 MT CO₂e per year, or
- 4.6 MT CO₂e per service population (employees plus residents) per year.

It should be noted that the BAAQMD's thresholds of significance were established based on meeting the 2020 GHG targets presented in the AB 32 Scoping Plan. Although BAAQMD does not have an adopted threshold for 2030, BAAQMD is currently recommending evaluation of GHG significance based on 2030 GHG targets established in SB 32. For developments that would occur beyond 2020, the quantitative thresholds can be adjusted to determine a "substantial progress" threshold based on the SB 32 2030 GHG reduction goals.

Construction

Construction of the project would emit GHG emissions during construction from the construction equipment usage, worker vehicles travel, and hauling trips. Total GHG emissions generated during all construction activities were quantified and are presented in Table 10. BAAQMD does not currently provide a construction-related GHG generation threshold but recommends that construction-generated GHGs be quantified and disclosed. In order to assess the construction emissions, the total emissions generated during construction were amortized based on the life of the development (30 years) and added to the operational emissions.

Table 10: Annual Operational Emissions (Unmitigated)

Emission Source	Construction Emissions (MT CO₂e/year)
2023 Construction Emissions	1,142
2024 Construction Emissions	99
Total Construction Emissions	1,241
Construction Emissions Amortized Over 30 Years	41
Totals may not appear to sum exactly due to rounding. Source: CalEEMod output (see Attachment A).	

¹ Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Accessed February 27, 2021. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

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Operations

Operational GHG emissions by source are shown in Table 11. As previously indicated, the analysis includes construction emissions amortized over the life of the project. Full buildout of the project is anticipated to occur in 2024. Emissions were assessed for full buildout operations in years 2024 and 2030. The 2030 scenario summarized in Table 11 was prepared to assess the project's consistency with the SB 32 2030 target. The efficiency threshold of significance (4.6 MTCO_{2e}/service population/year) was adjusted to a substantial progress threshold that was calculated based on the GHG reduction goals of SB 32/Executive Order B-30-15 and the projected 2030 Statewide population and employment levels (Association of Environmental Professionals 2016). An adjusted efficiency threshold of 2.6 MTCO_{2e}/service population/year is estimated to be needed by the land use sector for California to meet the 2030 target.²

Table 11: Unmitigated Project Operational GHG Emissions (Full Buildout Scenarios)

Emission Source	Year 2024 Total Emissions (MT CO_{2e} per year)	Year 2030 Total Emissions (MT CO_{2e} per year)
Area	4	4
Energy	242	234
Mobile (Motor Vehicles)	767	653
Waste	29	29
Water	14	13
Amortized Construction Emissions	41	41
<i>Total Annual Proposed Project Emissions</i>	<i>1,098</i>	<i>975</i>
Service Population (Residents + Employees)	413	413
Project Emission Generation (MTCO_{2e}/service population/year)	2.66	2.36
BAAQMD Operational Threshold (MTCO_{2e}/service population/year)	3.4¹	2.6²
Exceeds Significance Threshold?	No	No
MT CO _{2e} = metric tons of carbon dioxide equivalent. BAAQMD = Bay Area Air Quality Management District Calculations use unrounded numbers; totals may not appear to sum exactly due to rounding. ¹ Value was calculated using the standard equation for linear interpolation between the data points for 2020 and 2030. An appropriate value was determined for the year 2024 based on interpolation of known data. The threshold of 4.6 MTCO _{2e} /service population/year for year 2020 and the adjusted threshold of .2.6 MTCO _{2e} /service population/year for 2030 were used as known data to determine an appropriate threshold for 2024 operational year. ² Adjusted threshold to account for 2017 Scoping Plan Update 40 percent reduction goal by 2030. Totals were calculated using unrounded emissions; totals may not appear to sum exactly due to rounding. Source of 2020 Efficiency Threshold: Bay Area Air Quality Management District (BAAQMD). 2017. CEQA Air Quality Guidelines. Accessed March 14, 2021. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en .		

² The adjusted efficiency threshold was calculated for California using the GHG reduction goals per SB 32 and an adjusted service population that was updated using projected 2020 Statewide population and employment levels. The emissions used in calculating the threshold are assumed to be 40 percent 1990 emissions to meet SB 32 needed for 2030.

Wild Horse Multifamily Project
Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary

March 17, 2021

Emission Source	Year 2024 Total Emissions (MT CO₂e per year)	Year 2030 Total Emissions (MT CO₂e per year)
Source of 2030 Adjusted Efficiency Threshold: Association of Environmental Professionals (AEP). 2016. Final White Paper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California. Accessed March 14, 2021. https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf . Source of Emissions: CalEEMod output (see Attachment A).		

As shown in Table 11, the proposed project's total GHG annual emissions would not exceed applicable thresholds of significance in either scenario analyzed.

ATTACHMENT A

CalEEMod Results

CalEEMod Output

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Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations - Contra Costa County, Annual

**Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations
Contra Costa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	256.00	Space	0.00	102,400.00	0
Other Asphalt Surfaces	2.43	Acre	2.43	105,850.80	0
Other Non-Asphalt Surfaces	1.61	Acre	1.61	70,131.60	0
Parking Lot	45.00	Space	0.41	18,000.00	0
Condo/Townhouse	126.00	Dwelling Unit	2.35	239,400.00	413

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio and PG&E's Corporate Responsibility and Sustainability Report. Construction start date and buildout year based on information provided in the Project Description.

Land Use - Based on project description and site plan.

11.72 acres - (3.28 acres of unusable open space + 1.64 acres Wild Horse Road) = 6.80 acres

Multiple residential buildings, 126 dwelling units, open space, landscaping, paving, and parking.

Construction Phase - Anticipated construction schedule based on the assumption that construction would begin in January 2023, and it is estimated all construction tasks would be completed by March 2024 (approximately 15 months of construction).

Off-road Equipment - Building construction equipment adjusted to match project-specific information.

Trips and VMT - Truck trips during grading were based on import of 74,400 cubic yards of fill. An additional eight truck trips were added to each phase for mobilization/demobilization.

Grading - Approximately 74,400 cubic yards of soil would be import fill.

No export of cut is anticipated.

Vehicle Trips - ITE 10th Ed Trip Generation Rates for ITE land use 220, consistent with rates presented in the Scope of Work to Prepare a Traffic Study for the Wild Horse Townhome Project in the City of Antioch, CA prepared by Stantec (dated January 22, 2021).

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Area Mitigation - Compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	21.42	0.00
tblGrading	MaterialImported	0.00	74,400.00
tblLandUse	LandUseSquareFeet	126,000.00	239,400.00
tblLandUse	LotAcreage	2.30	0.00
tblLandUse	LotAcreage	7.88	2.35
tblLandUse	Population	360.00	413.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	9,300.00	9,308.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblVehicleTrips	ST_TR	5.67	8.14
tblVehicleTrips	SU_TR	4.84	6.28
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3992	4.0439	3.6982	0.0124	0.5941	0.1265	0.7206	0.2045	0.1184	0.3229	0.0000	1,139.0458	1,139.0458	0.1313	0.0000	1,142.3276
2024	1.7940	0.3663	0.4736	1.1000e-003	0.0344	0.0141	0.0485	9.2700e-003	0.0132	0.0225	0.0000	98.4974	98.4974	0.0155	0.0000	98.8851
Maximum	1.7940	4.0439	3.6982	0.0124	0.5941	0.1265	0.7206	0.2045	0.1184	0.3229	0.0000	1,139.0458	1,139.0458	0.1313	0.0000	1,142.3276

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3992	4.0439	3.6982	0.0124	0.4705	0.1265	0.5970	0.1472	0.1184	0.2656	0.0000	1,139.0453	1,139.0453	0.1313	0.0000	1,142.3272
2024	1.7940	0.3663	0.4736	1.1000e-003	0.0344	0.0141	0.0485	9.2700e-003	0.0132	0.0225	0.0000	98.4974	98.4974	0.0155	0.0000	98.8850
Maximum	1.7940	4.0439	3.6982	0.0124	0.4705	0.1265	0.5970	0.1472	0.1184	0.2656	0.0000	1,139.0453	1,139.0453	0.1313	0.0000	1,142.3272
Percent Reduction	0.00	0.00	0.00	0.00	19.66	0.00	16.07	26.82	0.00	16.60	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	1.8994	1.8994
2	4-2-2023	7-1-2023	0.8437	0.8437
3	7-2-2023	10-1-2023	0.8531	0.8531
4	10-2-2023	1-1-2024	0.8572	0.8572
5	1-2-2024	4-1-2024	2.1250	2.1250
		Highest	2.1250	2.1250

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442
Energy	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	240.1333	240.1333	0.0185	5.6400e-003	242.2751
Mobile	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719
Waste						0.0000	0.0000		0.0000	0.0000	11.7654	0.0000	11.7654	0.6953	0.0000	29.1482
Water						0.0000	0.0000		0.0000	0.0000	2.6045	5.8433	8.4478	0.2683	6.4900e-003	17.0889
Total	1.3657	0.9453	3.2010	9.1100e-003	0.7919	0.0207	0.8126	0.2125	0.0202	0.2327	14.3698	1,016.6109	1,030.9808	1.0089	0.0122	1,059.8282

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442
Energy	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	240.1333	240.1333	0.0185	5.6400e-003	242.2751
Mobile	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719
Waste						0.0000	0.0000		0.0000	0.0000	11.7654	0.0000	11.7654	0.6953	0.0000	29.1482
Water						0.0000	0.0000		0.0000	0.0000	2.0836	4.6746	6.7582	0.2147	5.1900e-003	13.6711
Total	1.3657	0.9453	3.2010	9.1100e-003	0.7919	0.0207	0.8126	0.2125	0.0202	0.2327	13.8489	1,015.4423	1,029.2912	0.9552	0.0109	1,056.4104

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62	0.11	0.16	5.32	10.68	0.32

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	1/12/2023	6	10	
2	Grading	Grading	1/13/2023	2/16/2023	6	30	
3	Building Construction	Building Construction	2/17/2023	2/1/2024	6	300	
4	Architectural Coating	Architectural Coating	2/2/2024	2/24/2024	6	20	
5	Paving	Paving	2/25/2024	3/19/2024	6	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.45

Residential Indoor: 484,785; Residential Outdoor: 161,595; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	
Site Preparation		7	18.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading		8	20.00	0.00	9,308.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction		9	215.00	62.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating		1	43.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving		6	15.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0903	6.3300e-003	0.0967	0.0497	5.8200e-003	0.0555	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.5000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2843	0.2843	1.0000e-005	0.0000	0.2846
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.6000e-004	1.7400e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5590	0.5590	1.0000e-005	0.0000	0.5593
Total	2.6000e-004	8.1000e-004	1.9300e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.8433	0.8433	2.0000e-005	0.0000	0.8439

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0407	6.3300e-003	0.0470	0.0223	5.8200e-003	0.0282	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.5000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2843	0.2843	1.0000e-005	0.0000	0.2846
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.6000e-004	1.7400e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5590	0.5590	1.0000e-005	0.0000	0.5593
Total	2.6000e-004	8.1000e-004	1.9300e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.8433	0.8433	2.0000e-005	0.0000	0.8439

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1343	0.0000	0.1343	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.1343	0.0214	0.1557	0.0546	0.0197	0.0742	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0233	0.7528	0.2183	3.4200e-003	0.0789	1.3800e-003	0.0803	0.0217	1.3200e-003	0.0230	0.0000	330.7928	330.7928	0.0129	0.0000	331.1145
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.2000e-004	5.8000e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	1.8633	1.8633	4.0000e-005	0.0000	1.8642
Total	0.0241	0.7533	0.2241	3.4400e-003	0.0812	1.3900e-003	0.0826	0.0223	1.3300e-003	0.0237	0.0000	332.6561	332.6561	0.0129	0.0000	332.9787

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0604	0.0000	0.0604	0.0246	0.0000	0.0246	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0604	0.0214	0.0818	0.0246	0.0197	0.0442	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0233	0.7528	0.2183	3.4200e-003	0.0789	1.3800e-003	0.0803	0.0217	1.3200e-003	0.0230	0.0000	330.7928	330.7928	0.0129	0.0000	331.1145
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.2000e-004	5.8000e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	1.8633	1.8633	4.0000e-005	0.0000	1.8642
Total	0.0241	0.7533	0.2241	3.4400e-003	0.0812	1.3900e-003	0.0826	0.0223	1.3300e-003	0.0237	0.0000	332.6561	332.6561	0.0129	0.0000	332.9787

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2139	1.9564	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2545	315.2545	0.0750	0.0000	317.1293
Total	0.2139	1.9564	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2545	315.2545	0.0750	0.0000	317.1293

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	5.9000e-004	1.7000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2578	0.2578	1.0000e-005	0.0000	0.2580
Vendor	0.0194	0.6266	0.1851	2.1900e-003	0.0555	7.5000e-004	0.0562	0.0160	7.1000e-004	0.0168	0.0000	209.8957	209.8957	7.9000e-003	0.0000	210.0931
Worker	0.0784	0.0510	0.5657	2.0100e-003	0.2319	1.4400e-003	0.2334	0.0617	1.3300e-003	0.0630	0.0000	181.6103	181.6103	3.5800e-003	0.0000	181.6998
Total	0.0979	0.6781	0.7510	4.2000e-003	0.2874	2.1900e-003	0.2896	0.0777	2.0400e-003	0.0798	0.0000	391.7638	391.7638	0.0115	0.0000	392.0510

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2139	1.9563	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2541	315.2541	0.0750	0.0000	317.1289
Total	0.2139	1.9563	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2541	315.2541	0.0750	0.0000	317.1289

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	5.9000e-004	1.7000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2578	0.2578	1.0000e-005	0.0000	0.2580
Vendor	0.0194	0.6266	0.1851	2.1900e-003	0.0555	7.5000e-004	0.0562	0.0160	7.1000e-004	0.0168	0.0000	209.8957	209.8957	7.9000e-003	0.0000	210.0931
Worker	0.0784	0.0510	0.5657	2.0100e-003	0.2319	1.4400e-003	0.2334	0.0617	1.3300e-003	0.0630	0.0000	181.6103	181.6103	3.5800e-003	0.0000	181.6998
Total	0.0979	0.6781	0.7510	4.2000e-003	0.2874	2.1900e-003	0.2896	0.0777	2.0400e-003	0.0798	0.0000	391.7638	391.7638	0.0115	0.0000	392.0510

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4589	32.4589	7.6800e-003	0.0000	32.6508
Total	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4589	32.4589	7.6800e-003	0.0000	32.6508

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	6.0000e-005	2.0000e-005	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0264	0.0264	0.0000	0.0000	0.0264
Vendor	1.9300e-003	0.0637	0.0183	2.2000e-004	5.7100e-003	8.0000e-005	5.7800e-003	1.6500e-003	7.0000e-005	1.7200e-003	0.0000	21.4658	21.4658	7.9000e-004	0.0000	21.4855
Worker	7.5500e-003	4.7300e-003	0.0539	2.0000e-004	0.0239	1.5000e-004	0.0240	6.3500e-003	1.3000e-004	6.4800e-003	0.0000	17.9444	17.9444	3.3000e-004	0.0000	17.9527
Total	9.4800e-003	0.0684	0.0721	4.2000e-004	0.0296	2.3000e-004	0.0299	8.0100e-003	2.0000e-004	8.2100e-003	0.0000	39.4365	39.4365	1.1200e-003	0.0000	39.4646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4588	32.4588	7.6800e-003	0.0000	32.6507
Total	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4588	32.4588	7.6800e-003	0.0000	32.6507

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	6.0000e-005	2.0000e-005	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0264	0.0264	0.0000	0.0000	0.0264
Vendor	1.9300e-003	0.0637	0.0183	2.2000e-004	5.7100e-003	8.0000e-005	5.7800e-003	1.6500e-003	7.0000e-005	1.7200e-003	0.0000	21.4658	21.4658	7.9000e-004	0.0000	21.4855
Worker	7.5500e-003	4.7300e-003	0.0539	2.0000e-004	0.0239	1.5000e-004	0.0240	6.3500e-003	1.3000e-004	6.4800e-003	0.0000	17.9444	17.9444	3.3000e-004	0.0000	17.9527
Total	9.4800e-003	0.0684	0.0721	4.2000e-004	0.0296	2.3000e-004	0.0299	8.0100e-003	2.0000e-004	8.2100e-003	0.0000	39.4365	39.4365	1.1200e-003	0.0000	39.4646

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7471					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	1.7489	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	6.8000e-004	7.6900e-003	3.0000e-005	3.4100e-003	2.0000e-005	3.4300e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5635	2.5635	5.0000e-005	0.0000	2.5647
Total	1.1000e-003	1.3100e-003	7.8800e-003	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.8458	2.8458	6.0000e-005	0.0000	2.8472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7471					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	1.7489	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	6.8000e-004	7.6900e-003	3.0000e-005	3.4100e-003	2.0000e-005	3.4300e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5635	2.5635	5.0000e-005	0.0000	2.5647
Total	1.1000e-003	1.3100e-003	7.8800e-003	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.8458	2.8458	6.0000e-005	0.0000	2.8472

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	3.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0136	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.4000e-004	2.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8942	0.8942	2.0000e-005	0.0000	0.8947
Total	4.0000e-004	8.7000e-004	2.8700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.1765	1.1765	3.0000e-005	0.0000	1.1772

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	3.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0136	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.4000e-004	2.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8942	0.8942	2.0000e-005	0.0000	0.8947
Total	4.0000e-004	8.7000e-004	2.8700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.1765	1.1765	3.0000e-005	0.0000	1.1772

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719
Unmitigated	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	922.32	1,025.64	791.28	2,121,051	2,121,051
Enclosed Parking Structure	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	922.32	1,025.64	791.28	2,121,051	2,121,051

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Enclosed Parking Structure	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Non-Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Parking Lot	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	114.2428	114.2428	0.0161	3.3300e-003	115.6364
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	114.2428	114.2428	0.0161	3.3300e-003	115.6364
NaturalGas Mitigated	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
NaturalGas Unmitigated	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	2.3591e+06	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	2.3591e+06	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	635724	59.4021	8.3600e-003	1.7300e-003	60.1267
Enclosed Parking Structure	580608	54.2520	7.6400e-003	1.5800e-003	54.9139
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6300	0.5887	8.0000e-005	2.0000e-005	0.5959
Total		114.2428	0.0161	3.3300e-003	115.6364

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	635724	59.4021	8.3600e-003	1.7300e-003	60.1267
Enclosed Parking Structure	580608	54.2520	7.6400e-003	1.5800e-003	54.9139
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6300	0.5887	8.0000e-005	2.0000e-005	0.5959
Total		114.2428	0.0161	3.3300e-003	115.6364

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442
Unmitigated	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4000e-004	2.0400e-003	8.7000e-004	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3595	2.3595	5.0000e-005	4.0000e-005	2.3735
Landscaping	0.0284	0.0108	0.9380	5.0000e-005		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	1.5337	1.5337	1.4800e-003	0.0000	1.5707
Total	1.1575	0.0128	0.9388	6.0000e-005		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4000e-004	2.0400e-003	8.7000e-004	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3595	2.3595	5.0000e-005	4.0000e-005	2.3735
Landscaping	0.0284	0.0108	0.9380	5.0000e-005		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	1.5337	1.5337	1.4800e-003	0.0000	1.5707
Total	1.1575	0.0128	0.9388	6.0000e-005		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.7582	0.2147	5.1900e-003	13.6711
Unmitigated	8.4478	0.2683	6.4900e-003	17.0889

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	8.20941 / 5.1755	8.4478	0.2683	6.4900e-003	17.0889
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.4478	0.2683	6.4900e-003	17.0889

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	6.56753 / 4.1404	6.7582	0.2147	5.1900e-003	13.6711
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		6.7582	0.2147	5.1900e-003	13.6711

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.7654	0.6953	0.0000	29.1482
Unmitigated	11.7654	0.6953	0.0000	29.1482

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	57.96	11.7654	0.6953	0.0000	29.1482
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7654	0.6953	0.0000	29.1482

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	57.96	11.7654	0.6953	0.0000	29.1482
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7654	0.6953	0.0000	29.1482

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations - Contra Costa County, Summer

**Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations
Contra Costa County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	256.00	Space	0.00	102,400.00	0
Other Asphalt Surfaces	2.43	Acre	2.43	105,850.80	0
Other Non-Asphalt Surfaces	1.61	Acre	1.61	70,131.60	0
Parking Lot	45.00	Space	0.41	18,000.00	0
Condo/Townhouse	126.00	Dwelling Unit	2.35	239,400.00	413

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	206	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio and PG&E's Corporate Responsibility and Sustainability Report.

Construction start date and buildout year based on information provided in the Project Description.

Land Use - Based on project description and site plan.

11.72 acres - (3.28 acres of unusable open space + 1.64 acres Wild Horse Road) = 6.80 acres

Multiple residential buildings, 126 dwelling units, open space, landscaping, paving, and parking.

Construction Phase - Anticipated construction schedule based on the assumption that construction would begin in January 2023, and it is estimated all construction tasks would be completed by March 2024 (approximately 15 months of construction).

Off-road Equipment - Building construction equipment adjusted to match project-specific information.

Trips and VMT - Truck trips during grading were based on import of 74,400 cubic yards of fill. An additional eight truck trips were added to each phase for mobilization/demobilization.

Grading - Approximately 74,400 cubic yards of soil would be import fill.

No export of cut is anticipated.

Vehicle Trips - ITE 10th Ed Trip Generation Rates for ITE land use 220, consistent with rates presented in the Scope of Work to Prepare a Traffic Study for the Wild Horse Townhome Project in the City of Antioch, CA prepared by Stantec (dated January 22, 2021).

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Area Mitigation - Compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	21.42	0.00
tblGrading	MaterialImported	0.00	74,400.00
tblLandUse	LandUseSquareFeet	126,000.00	239,400.00
tblLandUse	LotAcreage	2.30	0.00
tblLandUse	LotAcreage	7.88	2.35
tblLandUse	Population	360.00	413.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	9,300.00	9,308.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblVehicleTrips	ST_TR	5.67	8.14
tblVehicleTrips	SU_TR	4.84	6.28
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.9112	84.0232	42.6807	0.2934	18.2281	1.5167	19.4952	9.9737	1.3987	11.1395	0.0000	30,648.7739	30,648.7739	2.8723	0.0000	30,720.5810
2024	175.0045	18.2641	21.7396	0.0586	2.1898	0.6290	2.8188	0.5903	0.5915	1.1818	0.0000	5,806.0727	5,806.0727	0.7171	0.0000	5,823.3972
Maximum	175.0045	84.0232	42.6807	0.2934	18.2281	1.5167	19.4952	9.9737	1.3987	11.1395	0.0000	30,648.7739	30,648.7739	2.8723	0.0000	30,720.5810

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.9112	84.0232	42.6807	0.2934	9.6140	1.5167	11.1307	4.5119	1.3987	5.6777	0.0000	30,648.7739	30,648.7739	2.8723	0.0000	30,720.5810
2024	175.0045	18.2641	21.7396	0.0586	2.1898	0.6290	2.8188	0.5903	0.5915	1.1818	0.0000	5,806.0727	5,806.0727	0.7171	0.0000	5,823.3972
Maximum	175.0045	84.0232	42.6807	0.2934	9.6140	1.5167	11.1307	4.5119	1.3987	5.6777	0.0000	30,648.7739	30,648.7739	2.8723	0.0000	30,720.5810

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	42.19	0.00	37.49	51.70	0.00	44.33	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537
Energy	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051
Mobile	1.4411	4.9102	14.4749	0.0549	5.0304	0.0399	5.0703	1.3456	0.0371	1.3828		5,548.5334	5,548.5334	0.1728		5,552.8535
Total	8.0543	5.9916	25.3059	0.0616	5.0304	0.1753	5.2057	1.3456	0.1726	1.5182	0.0000	6,794.6454	6,794.6454	0.2145	0.0225	6,806.7123

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537
Energy	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051
Mobile	1.4411	4.9102	14.4749	0.0549	5.0304	0.0399	5.0703	1.3456	0.0371	1.3828		5,548.5334	5,548.5334	0.1728		5,552.8535
Total	8.0543	5.9916	25.3059	0.0616	5.0304	0.1753	5.2057	1.3456	0.1726	1.5182	0.0000	6,794.6454	6,794.6454	0.2145	0.0225	6,806.7123

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	1/12/2023	6	10	
2	Grading	Grading	1/13/2023	2/16/2023	6	30	
3	Building Construction	Building Construction	2/17/2023	2/1/2024	6	300	
4	Architectural Coating	Architectural Coating	2/2/2024	2/24/2024	6	20	
5	Paving	Paving	2/25/2024	3/19/2024	6	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.45

Residential Indoor: 484,785; Residential Outdoor: 161,595; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	
Site Preparation		7	18.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading		8	20.00	0.00	9,308.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction		9	215.00	62.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating		1	43.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving		6	15.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954		3,687.3081	3,687.3081	1.1926		3,717.1219

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9500e-003	0.1276	0.0366	5.9000e-004	0.0140	2.4000e-004	0.0142	3.8300e-003	2.3000e-004	4.0600e-003		63.1406	63.1406	2.3900e-003		63.2003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0522	0.0281	0.3927	1.3500e-003	0.1479	8.9000e-004	0.1488	0.0392	8.2000e-004	0.0400		134.3292	134.3292	2.6500e-003		134.3955
Total	0.0562	0.1557	0.4293	1.9400e-003	0.1619	1.1300e-003	0.1630	0.0431	1.0500e-003	0.0441		197.4698	197.4698	5.0400e-003		197.5958

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	8.1298	1.2660	9.3958	4.4688	1.1647	5.6336	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.9500e-003	0.1276	0.0366	5.9000e-004	0.0140	2.4000e-004	0.0142	3.8300e-003	2.3000e-004	4.0600e-003		63.1406	63.1406	2.3900e-003		63.2003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0522	0.0281	0.3927	1.3500e-003	0.1479	8.9000e-004	0.1488	0.0392	8.2000e-004	0.0400		134.3292	134.3292	2.6500e-003		134.3955
Total	0.0562	0.1557	0.4293	1.9400e-003	0.1619	1.1300e-003	0.1630	0.0431	1.0500e-003	0.0441		197.4698	197.4698	5.0400e-003		197.5958

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9538	0.0000	8.9538	3.6390	0.0000	3.6390			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	8.9538	1.4245	10.3783	3.6390	1.3105	4.9495		6,011.4777	6,011.4777	1.9442		6,060.0836

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5314	49.4764	14.1932	0.2298	5.4205	0.0912	5.5117	1.4854	0.0873	1.5727		24,488.0415	24,488.0415	0.9251		24,511.1691
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0580	0.0312	0.4364	1.5000e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		149.2547	149.2547	2.9500e-003		149.3283
Total	1.5895	49.5076	14.6295	0.2313	5.5848	0.0922	5.6770	1.5290	0.0882	1.6172		24,637.2962	24,637.2962	0.9281		24,660.4974

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0292	0.0000	4.0292	1.6375	0.0000	1.6375			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	4.0292	1.4245	5.4537	1.6375	1.3105	2.9481	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5314	49.4764	14.1932	0.2298	5.4205	0.0912	5.5117	1.4854	0.0873	1.5727		24,488.0415	24,488.0415	0.9251		24,511.1691
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0580	0.0312	0.4364	1.5000e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		149.2547	149.2547	2.9500e-003		149.3283
Total	1.5895	49.5076	14.6295	0.2313	5.5848	0.0922	5.6770	1.5290	0.0882	1.6172		24,637.2962	24,637.2962	0.9281		24,660.4974

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.2500e-003	1.2200e-003	2.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.4000e-004	1.0000e-005	1.4000e-004		2.1047	2.1047	8.0000e-005		2.1067
Vendor	0.1396	4.5731	1.2760	0.0163	0.4197	5.4000e-003	0.4251	0.1208	5.1600e-003	0.1260		1,719.6823	1,719.6823	0.0617		1,721.2240
Worker	0.6240	0.3357	4.6911	0.0161	1.7662	0.0106	1.7768	0.4685	9.7600e-003	0.4782		1,604.4874	1,604.4874	0.0317		1,605.2795
Total	0.7636	4.9131	5.9683	0.0324	2.1864	0.0160	2.2024	0.5894	0.0149	0.6043		3,326.2744	3,326.2744	0.0934		3,328.6102

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.2500e-003	1.2200e-003	2.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.4000e-004	1.0000e-005	1.4000e-004		2.1047	2.1047	8.0000e-005		2.1067
Vendor	0.1396	4.5731	1.2760	0.0163	0.4197	5.4000e-003	0.4251	0.1208	5.1600e-003	0.1260		1,719.6823	1,719.6823	0.0617		1,721.2240
Worker	0.6240	0.3357	4.6911	0.0161	1.7662	0.0106	1.7768	0.4685	9.7600e-003	0.4782		1,604.4874	1,604.4874	0.0317		1,605.2795
Total	0.7636	4.9131	5.9683	0.0324	2.1864	0.0160	2.2024	0.5894	0.0149	0.6043		3,326.2744	3,326.2744	0.0934		3,328.6102

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.1600e-003	1.2200e-003	2.0000e-005	3.8900e-003	1.0000e-005	3.9000e-003	9.7000e-004	1.0000e-005	9.8000e-004		2.0895	2.0895	8.0000e-005		2.0915
Vendor	0.1347	4.5134	1.2240	0.0162	0.4197	5.3000e-003	0.4250	0.1208	5.0600e-003	0.1259		1,708.2956	1,708.2956	0.0600		1,709.7966
Worker	0.5830	0.3028	4.3476	0.0154	1.7662	0.0104	1.7766	0.4685	9.5600e-003	0.4780		1,539.9887	1,539.9887	0.0285		1,540.7015
Total	0.7179	4.8203	5.5728	0.0316	2.1898	0.0157	2.2055	0.5903	0.0146	0.6049		3,250.3738	3,250.3738	0.0886		3,252.5895

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.1600e-003	1.2200e-003	2.0000e-005	3.8900e-003	1.0000e-005	3.9000e-003	9.7000e-004	1.0000e-005	9.8000e-004		2.0895	2.0895	8.0000e-005		2.0915
Vendor	0.1347	4.5134	1.2240	0.0162	0.4197	5.3000e-003	0.4250	0.1208	5.0600e-003	0.1259		1,708.2956	1,708.2956	0.0600		1,709.7966
Worker	0.5830	0.3028	4.3476	0.0154	1.7662	0.0104	1.7766	0.4685	9.5600e-003	0.4780		1,539.9887	1,539.9887	0.0285		1,540.7015
Total	0.7179	4.8203	5.5728	0.0316	2.1898	0.0157	2.2055	0.5903	0.0146	0.6049		3,250.3738	3,250.3738	0.0886		3,252.5895

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	174.7052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	174.8860	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9500e-003	0.0625	0.0184	2.9000e-004	6.9900e-003	1.2000e-004	7.1000e-003	1.9200e-003	1.1000e-004	2.0300e-003		31.3430	31.3430	1.1800e-003		31.3726
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1166	0.0606	0.8695	3.0900e-003	0.3532	2.0800e-003	0.3553	0.0937	1.9100e-003	0.0956		307.9977	307.9977	5.7000e-003		308.1403
Total	0.1186	0.1230	0.8879	3.3800e-003	0.3602	2.2000e-003	0.3624	0.0956	2.0200e-003	0.0976		339.3408	339.3408	6.8800e-003		339.5129

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	174.7052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	174.8860	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9500e-003	0.0625	0.0184	2.9000e-004	6.9900e-003	1.2000e-004	7.1000e-003	1.9200e-003	1.1000e-004	2.0300e-003		31.3430	31.3430	1.1800e-003		31.3726
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1166	0.0606	0.8695	3.0900e-003	0.3532	2.0800e-003	0.3553	0.0937	1.9100e-003	0.0956		307.9977	307.9977	5.7000e-003		308.1403
Total	0.1186	0.1230	0.8879	3.3800e-003	0.3602	2.2000e-003	0.3624	0.0956	2.0200e-003	0.0976		339.3408	339.3408	6.8800e-003		339.5129

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.3720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3602	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9500e-003	0.0625	0.0184	2.9000e-004	6.9900e-003	1.2000e-004	7.1000e-003	1.9200e-003	1.1000e-004	2.0300e-003		31.3430	31.3430	1.1800e-003		31.3726
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0407	0.0211	0.3033	1.0800e-003	0.1232	7.2000e-004	0.1240	0.0327	6.7000e-004	0.0334		107.4411	107.4411	1.9900e-003		107.4908
Total	0.0426	0.0836	0.3217	1.3700e-003	0.1302	8.4000e-004	0.1311	0.0346	7.8000e-004	0.0354		138.7841	138.7841	3.1700e-003		138.8634

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.3720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3602	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.9500e-003	0.0625	0.0184	2.9000e-004	6.9900e-003	1.2000e-004	7.1000e-003	1.9200e-003	1.1000e-004	2.0300e-003		31.3430	31.3430	1.1800e-003		31.3726
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0407	0.0211	0.3033	1.0800e-003	0.1232	7.2000e-004	0.1240	0.0327	6.7000e-004	0.0334		107.4411	107.4411	1.9900e-003		107.4908
Total	0.0426	0.0836	0.3217	1.3700e-003	0.1302	8.4000e-004	0.1311	0.0346	7.8000e-004	0.0354		138.7841	138.7841	3.1700e-003		138.8634

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.4411	4.9102	14.4749	0.0549	5.0304	0.0399	5.0703	1.3456	0.0371	1.3828		5,548.5334	5,548.5334	0.1728		5,552.8535
Unmitigated	1.4411	4.9102	14.4749	0.0549	5.0304	0.0399	5.0703	1.3456	0.0371	1.3828		5,548.5334	5,548.5334	0.1728		5,552.8535

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	922.32	1,025.64	791.28	2,121,051	2,121,051
Enclosed Parking Structure	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	922.32	1,025.64	791.28	2,121,051	2,121,051

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Enclosed Parking Structure	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Non-Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Parking Lot	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051
NaturalGas Unmitigated	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Condo/Townhouse	6463.29	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482			760.3866	760.3866	0.0146	0.0139	764.9051
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482			760.3866	760.3866	0.0146	0.0139	764.9051

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Condo/Townhouse	6.46329	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482			760.3866	760.3866	0.0146	0.0139	764.9051
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482			760.3866	760.3866	0.0146	0.0139	764.9051

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537
Unmitigated	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2281					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0428	0.3658	0.1557	2.3300e-003		0.0296	0.0296		0.0296	0.0296	0.0000	466.9412	466.9412	8.9500e-003	8.5600e-003	469.7160
Landscaping	0.3153	0.1200	10.4219	5.5000e-004		0.0577	0.0577		0.0577	0.0577		18.7844	18.7844	0.0181		19.2377
Total	6.5435	0.4858	10.5775	2.8800e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2281					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0428	0.3658	0.1557	2.3300e-003		0.0296	0.0296		0.0296	0.0296	0.0000	466.9412	466.9412	8.9500e-003	8.5600e-003	469.7160
Landscaping	0.3153	0.1200	10.4219	5.5000e-004		0.0577	0.0577		0.0577	0.0577		18.7844	18.7844	0.0181		19.2377
Total	6.5435	0.4858	10.5775	2.8800e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations - Contra Costa County, Winter

**Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations
Contra Costa County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	256.00	Space	0.00	102,400.00	0
Other Asphalt Surfaces	2.43	Acre	2.43	105,850.80	0
Other Non-Asphalt Surfaces	1.61	Acre	1.61	70,131.60	0
Parking Lot	45.00	Space	0.41	18,000.00	0
Condo/Townhouse	126.00	Dwelling Unit	2.35	239,400.00	413

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	206	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio and PG&E's Corporate Responsibility and Sustainability Report. Construction start date and buildout year based on information provided in the Project Description.

Land Use - Based on project description and site plan.

11.72 acres - (3.28 acres of unusable open space + 1.64 acres Wild Horse Road) = 6.80 acres

Multiple residential buildings, 126 dwelling units, open space, landscaping, paving, and parking.

Construction Phase - Anticipated construction schedule based on the assumption that construction would begin in January 2023, and it is estimated all construction tasks would be completed by March 2024 (approximately 15 months of construction).

Off-road Equipment - Building construction equipment adjusted to match project-specific information.

Trips and VMT - Truck trips during grading were based on import of 74,400 cubic yards of fill. An additional eight truck trips were added to each phase for mobilization/demobilization.

Grading - Approximately 74,400 cubic yards of soil would be import fill.

No export of cut is anticipated.

Vehicle Trips - ITE 10th Ed Trip Generation Rates for ITE land use 220, consistent with rates presented in the Scope of Work to Prepare a Traffic Study for the Wild Horse Townhome Project in the City of Antioch, CA prepared by Stantec (dated January 22, 2021).

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Area Mitigation - Compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	21.42	0.00
tblGrading	MaterialImported	0.00	74,400.00
tblLandUse	LandUseSquareFeet	126,000.00	239,400.00
tblLandUse	LotAcreage	2.30	0.00
tblLandUse	LotAcreage	7.88	2.35
tblLandUse	Population	360.00	413.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	9,300.00	9,308.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblVehicleTrips	ST_TR	5.67	8.14
tblVehicleTrips	SU_TR	4.84	6.28
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.9564	84.7687	43.5000	0.2893	18.2281	1.5190	19.4953	9.9737	1.4009	11.1395	0.0000	30,208.7316	30,208.7316	2.9190	0.0000	30,281.7054
2024	175.0071	18.3550	21.4860	0.0567	2.1898	0.6292	2.8190	0.5903	0.5917	1.1820	0.0000	5,618.3080	5,618.3080	0.7170	0.0000	5,635.6929
Maximum	175.0071	84.7687	43.5000	0.2893	18.2281	1.5190	19.4953	9.9737	1.4009	11.1395	0.0000	30,208.7316	30,208.7316	2.9190	0.0000	30,281.7054

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	4.9564	84.7687	43.5000	0.2893	9.6140	1.5190	11.1330	4.5119	1.4009	5.6777	0.0000	30,208.7316	30,208.7316	2.9190	0.0000	30,281.7054
2024	175.0071	18.3550	21.4860	0.0567	2.1898	0.6292	2.8190	0.5903	0.5917	1.1820	0.0000	5,618.3080	5,618.3080	0.7170	0.0000	5,635.6929
Maximum	175.0071	84.7687	43.5000	0.2893	9.6140	1.5190	11.1330	4.5119	1.4009	5.6777	0.0000	30,208.7316	30,208.7316	2.9190	0.0000	30,281.7054

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	42.19	0.00	37.48	51.70	0.00	44.33	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537
Energy	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051
Mobile	1.1677	5.1602	14.2375	0.0507	5.0304	0.0401	5.0705	1.3456	0.0373	1.3830		5,124.7802	5,124.7802	0.1750		5,129.1557
Total	7.7810	6.2416	25.0685	0.0574	5.0304	0.1755	5.2059	1.3456	0.1728	1.5184	0.0000	6,370.8922	6,370.8922	0.2167	0.0225	6,383.0145

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537
Energy	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051
Mobile	1.1677	5.1602	14.2375	0.0507	5.0304	0.0401	5.0705	1.3456	0.0373	1.3830		5,124.7802	5,124.7802	0.1750		5,129.1557
Total	7.7810	6.2416	25.0685	0.0574	5.0304	0.1755	5.2059	1.3456	0.1728	1.5184	0.0000	6,370.8922	6,370.8922	0.2167	0.0225	6,383.0145

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	1/12/2023	6	10	
2	Grading	Grading	1/13/2023	2/16/2023	6	30	
3	Building Construction	Building Construction	2/17/2023	2/1/2024	6	300	
4	Architectural Coating	Architectural Coating	2/2/2024	2/24/2024	6	20	
5	Paving	Paving	2/25/2024	3/19/2024	6	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.45

Residential Indoor: 484,785; Residential Outdoor: 161,595; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	156	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	9,308.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	215.00	62.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	43.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954		3,687.3081	3,687.3081	1.1926		3,717.1219

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.0600e-003	0.1295	0.0388	5.8000e-004	0.0140	2.4000e-004	0.0142	3.8300e-003	2.3000e-004	4.0600e-003		62.0422	62.0422	2.5100e-003		62.1048
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3555	1.2200e-003	0.1479	8.9000e-004	0.1488	0.0392	8.2000e-004	0.0400		121.7168	121.7168	2.4200e-003		121.7772
Total	0.0573	0.1641	0.3943	1.8000e-003	0.1619	1.1300e-003	0.1630	0.0431	1.0500e-003	0.0441		183.7589	183.7589	4.9300e-003		183.8820

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	8.1298	1.2660	9.3958	4.4688	1.1647	5.6336	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.0600e-003	0.1295	0.0388	5.8000e-004	0.0140	2.4000e-004	0.0142	3.8300e-003	2.3000e-004	4.0600e-003		62.0422	62.0422	2.5100e-003		62.1048
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3555	1.2200e-003	0.1479	8.9000e-004	0.1488	0.0392	8.2000e-004	0.0400		121.7168	121.7168	2.4200e-003		121.7772
Total	0.0573	0.1641	0.3943	1.8000e-003	0.1619	1.1300e-003	0.1630	0.0431	1.0500e-003	0.0441		183.7589	183.7589	4.9300e-003		183.8820

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.9538	0.0000	8.9538	3.6390	0.0000	3.6390			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	8.9538	1.4245	10.3783	3.6390	1.3105	4.9495		6,011.4777	6,011.4777	1.9442		6,060.0836

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5755	50.2147	15.0539	0.2258	5.4205	0.0935	5.5140	1.4854	0.0895	1.5749		24,062.0130	24,062.0130	0.9720		24,086.3138
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0591	0.0385	0.3950	1.3600e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		135.2409	135.2409	2.6900e-003		135.3080
Total	1.6346	50.2531	15.4488	0.2272	5.5848	0.0945	5.6793	1.5290	0.0904	1.6193		24,197.2539	24,197.2539	0.9747		24,221.6219

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0292	0.0000	4.0292	1.6375	0.0000	1.6375			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	4.0292	1.4245	5.4537	1.6375	1.3105	2.9481	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5755	50.2147	15.0539	0.2258	5.4205	0.0935	5.5140	1.4854	0.0895	1.5749		24,062.0130	24,062.0130	0.9720		24,086.3138
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0591	0.0385	0.3950	1.3600e-003	0.1643	9.9000e-004	0.1653	0.0436	9.1000e-004	0.0445		135.2409	135.2409	2.6900e-003		135.3080
Total	1.6346	50.2531	15.4488	0.2272	5.5848	0.0945	5.6793	1.5290	0.0904	1.6193		24,197.2539	24,197.2539	0.9747		24,221.6219

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.3200e-003	1.2900e-003	2.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.4000e-004	1.0000e-005	1.4000e-004		2.0681	2.0681	8.0000e-005		2.0702
Vendor	0.1485	4.5950	1.4568	0.0159	0.4197	5.6300e-003	0.4253	0.1208	5.3800e-003	0.1262		1,675.8288	1,675.8288	0.0669		1,677.5012
Worker	0.6353	0.4135	4.2458	0.0146	1.7662	0.0106	1.7768	0.4685	9.7600e-003	0.4782		1,453.8394	1,453.8394	0.0289		1,454.5612
Total	0.7839	5.0128	5.7039	0.0305	2.1864	0.0162	2.2026	0.5894	0.0152	0.6046		3,131.7363	3,131.7363	0.0959		3,134.1326

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.4000e-004	4.3200e-003	1.2900e-003	2.0000e-005	5.0000e-004	1.0000e-005	5.1000e-004	1.4000e-004	1.0000e-005	1.4000e-004		2.0681	2.0681	8.0000e-005		2.0702
Vendor	0.1485	4.5950	1.4568	0.0159	0.4197	5.6300e-003	0.4253	0.1208	5.3800e-003	0.1262		1,675.8288	1,675.8288	0.0669		1,677.5012
Worker	0.6353	0.4135	4.2458	0.0146	1.7662	0.0106	1.7768	0.4685	9.7600e-003	0.4782		1,453.8394	1,453.8394	0.0289		1,454.5612
Total	0.7839	5.0128	5.7039	0.0305	2.1864	0.0162	2.2026	0.5894	0.0152	0.6046		3,131.7363	3,131.7363	0.0959		3,134.1326

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.2300e-003	1.3000e-003	2.0000e-005	3.8900e-003	1.0000e-005	3.9000e-003	9.7000e-004	1.0000e-005	9.8000e-004		2.0535	2.0535	8.0000e-005		2.0556
Vendor	0.1433	4.5342	1.3966	0.0158	0.4197	5.5100e-003	0.4252	0.1208	5.2600e-003	0.1261		1,665.0938	1,665.0938	0.0651		1,666.7203
Worker	0.5955	0.3728	3.9213	0.0140	1.7662	0.0104	1.7766	0.4685	9.5600e-003	0.4780		1,395.4618	1,395.4618	0.0259		1,396.1094
Total	0.7388	4.9112	5.3192	0.0298	2.1898	0.0159	2.2057	0.5903	0.0148	0.6051		3,062.6091	3,062.6091	0.0910		3,064.8853

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.3000e-004	4.2300e-003	1.3000e-003	2.0000e-005	3.8900e-003	1.0000e-005	3.9000e-003	9.7000e-004	1.0000e-005	9.8000e-004		2.0535	2.0535	8.0000e-005		2.0556
Vendor	0.1433	4.5342	1.3966	0.0158	0.4197	5.5100e-003	0.4252	0.1208	5.2600e-003	0.1261		1,665.0938	1,665.0938	0.0651		1,666.7203
Worker	0.5955	0.3728	3.9213	0.0140	1.7662	0.0104	1.7766	0.4685	9.5600e-003	0.4780		1,395.4618	1,395.4618	0.0259		1,396.1094
Total	0.7388	4.9112	5.3192	0.0298	2.1898	0.0159	2.2057	0.5903	0.0148	0.6051		3,062.6091	3,062.6091	0.0910		3,064.8853

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	174.7052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	174.8860	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0100e-003	0.0634	0.0194	2.9000e-004	6.9900e-003	1.2000e-004	7.1100e-003	1.9200e-003	1.1000e-004	2.0300e-003		30.8023	30.8023	1.2400e-003		30.8333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1191	0.0746	0.7843	2.8000e-003	0.3532	2.0800e-003	0.3553	0.0937	1.9100e-003	0.0956		279.0924	279.0924	5.1800e-003		279.2219
Total	0.1211	0.1379	0.8037	3.0900e-003	0.3602	2.2000e-003	0.3624	0.0956	2.0200e-003	0.0976		309.8946	309.8946	6.4200e-003		310.0552

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	174.7052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	174.8860	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0100e-003	0.0634	0.0194	2.9000e-004	6.9900e-003	1.2000e-004	7.1100e-003	1.9200e-003	1.1000e-004	2.0300e-003		30.8023	30.8023	1.2400e-003		30.8333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1191	0.0746	0.7843	2.8000e-003	0.3532	2.0800e-003	0.3553	0.0937	1.9100e-003	0.0956		279.0924	279.0924	5.1800e-003		279.2219
Total	0.1211	0.1379	0.8037	3.0900e-003	0.3602	2.2000e-003	0.3624	0.0956	2.0200e-003	0.0976		309.8946	309.8946	6.4200e-003		310.0552

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.3720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3602	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0100e-003	0.0634	0.0194	2.9000e-004	6.9900e-003	1.2000e-004	7.1100e-003	1.9200e-003	1.1000e-004	2.0300e-003		30.8023	30.8023	1.2400e-003		30.8333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0260	0.2736	9.8000e-004	0.1232	7.2000e-004	0.1240	0.0327	6.7000e-004	0.0334		97.3578	97.3578	1.8100e-003		97.4030
Total	0.0436	0.0894	0.2930	1.2700e-003	0.1302	8.4000e-004	0.1311	0.0346	7.8000e-004	0.0354		128.1601	128.1601	3.0500e-003		128.2363

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.3720					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3602	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.0100e-003	0.0634	0.0194	2.9000e-004	6.9900e-003	1.2000e-004	7.1100e-003	1.9200e-003	1.1000e-004	2.0300e-003		30.8023	30.8023	1.2400e-003		30.8333
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0415	0.0260	0.2736	9.8000e-004	0.1232	7.2000e-004	0.1240	0.0327	6.7000e-004	0.0334		97.3578	97.3578	1.8100e-003		97.4030
Total	0.0436	0.0894	0.2930	1.2700e-003	0.1302	8.4000e-004	0.1311	0.0346	7.8000e-004	0.0354		128.1601	128.1601	3.0500e-003		128.2363

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.1677	5.1602	14.2375	0.0507	5.0304	0.0401	5.0705	1.3456	0.0373	1.3830		5,124.7802	5,124.7802	0.1750		5,129.1557
Unmitigated	1.1677	5.1602	14.2375	0.0507	5.0304	0.0401	5.0705	1.3456	0.0373	1.3830		5,124.7802	5,124.7802	0.1750		5,129.1557

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	922.32	1,025.64	791.28	2,121,051	2,121,051
Enclosed Parking Structure	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	922.32	1,025.64	791.28	2,121,051	2,121,051

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Enclosed Parking Structure	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Non-Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Parking Lot	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
	lb/day										lb/day						
NaturalGas Mitigated	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482			760.3866	760.3866	0.0146	0.0139	764.9051
NaturalGas Unmitigated	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482			760.3866	760.3866	0.0146	0.0139	764.9051

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	6463.29	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	6.46329	0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0697	0.5956	0.2535	3.8000e-003		0.0482	0.0482		0.0482	0.0482		760.3866	760.3866	0.0146	0.0139	764.9051

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537
Unmitigated	6.5435	0.4858	10.5775	2.8900e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2281					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0428	0.3658	0.1557	2.3300e-003		0.0296	0.0296		0.0296	0.0296	0.0000	466.9412	466.9412	8.9500e-003	8.5600e-003	469.7160
Landscaping	0.3153	0.1200	10.4219	5.5000e-004		0.0577	0.0577		0.0577	0.0577		18.7844	18.7844	0.0181		19.2377
Total	6.5435	0.4858	10.5775	2.8800e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9573					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2281					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0428	0.3658	0.1557	2.3300e-003		0.0296	0.0296		0.0296	0.0296	0.0000	466.9412	466.9412	8.9500e-003	8.5600e-003	469.7160
Landscaping	0.3153	0.1200	10.4219	5.5000e-004		0.0577	0.0577		0.0577	0.0577		18.7844	18.7844	0.0181		19.2377
Total	6.5435	0.4858	10.5775	2.8800e-003		0.0873	0.0873		0.0873	0.0873	0.0000	485.7255	485.7255	0.0271	8.5600e-003	488.9537

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Wild Horse Multifamily Project - 2030 Project Operations - Contra Costa County, Annual

Wild Horse Multifamily Project - 2030 Project Operations
Contra Costa County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	256.00	Space	0.00	102,400.00	0
Other Asphalt Surfaces	2.43	Acre	2.43	105,850.80	0
Other Non-Asphalt Surfaces	1.61	Acre	1.61	70,131.60	0
Parking Lot	45.00	Space	0.41	18,000.00	0
Condo/Townhouse	126.00	Dwelling Unit	2.35	239,400.00	413

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4	Operational Year	2030		
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	191	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio and PG&E's 2020 Corporate Responsibility and Sustainability Report (see supporting documentation for calculated 2030 CO2 intensity factor).

Land Use - Based on project description and site plan.

11.72 acres - (3.28 acres of unusable open space + 1.64 acres Wild Horse Road) = 6.80 acres

Multiple residential buildings, 126 dwelling units, open space, landscaping, paving, and parking.

Construction Phase - Operational run only - zeroed out construction parameters.

Vehicle Trips - ITE 10th Ed Trip Generation Rates for ITE land use 220, consistent with rates presented in the Scope of Work to Prepare a Traffic Study for the Wild Horse Townhome Project in the City of Antioch, CA prepared by Stantec (dated January 22, 2021).

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Area Mitigation - Compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	1.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	21.42	0.00
tblLandUse	LandUseSquareFeet	126,000.00	239,400.00
tblLandUse	LotAcreage	2.30	0.00
tblLandUse	LotAcreage	7.88	2.35
tblLandUse	Population	360.00	413.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	191
tblTripsAndVMT	WorkerTripNumber	43.00	0.00
tblVehicleTrips	ST_TR	5.67	8.14
tblVehicleTrips	SU_TR	4.84	6.28
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1572	0.0128	0.9368	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5200e-003	4.0000e-005	3.9439
Energy	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	231.8147	231.8147	0.0185	5.6400e-003	233.9564
Mobile	0.1435	0.6722	1.6019	7.1000e-003	0.7915	4.6400e-003	0.7961	0.2123	4.3100e-003	0.2166	0.0000	652.9805	652.9805	0.0197	0.0000	653.4730
Waste						0.0000	0.0000		0.0000	0.0000	11.7654	0.0000	11.7654	0.6953	0.0000	29.1482
Water						0.0000	0.0000		0.0000	0.0000	2.6045	5.4178	8.0223	0.2683	6.4900e-003	16.6634
Total	1.3134	0.7937	2.5849	7.8500e-003	0.7915	0.0188	0.8103	0.2123	0.0185	0.2307	14.3698	894.1062	908.4760	1.0034	0.0122	937.1849

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1572	0.0128	0.9368	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5200e-003	4.0000e-005	3.9439
Energy	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	231.8147	231.8147	0.0185	5.6400e-003	233.9564
Mobile	0.1435	0.6722	1.6019	7.1000e-003	0.7915	4.6400e-003	0.7961	0.2123	4.3100e-003	0.2166	0.0000	652.9805	652.9805	0.0197	0.0000	653.4730
Waste						0.0000	0.0000		0.0000	0.0000	11.7654	0.0000	11.7654	0.6953	0.0000	29.1482
Water						0.0000	0.0000		0.0000	0.0000	2.0836	4.3343	6.4178	0.2147	5.1900e-003	13.3307
Total	1.3134	0.7937	2.5849	7.8500e-003	0.7915	0.0188	0.8103	0.2123	0.0185	0.2307	13.8489	893.0226	906.8715	0.9497	0.0109	933.8522

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62	0.12	0.18	5.35	10.68	0.36

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1435	0.6722	1.6019	7.1000e-003	0.7915	4.6400e-003	0.7961	0.2123	4.3100e-003	0.2166	0.0000	652.9805	652.9805	0.0197	0.0000	653.4730
Unmitigated	0.1435	0.6722	1.6019	7.1000e-003	0.7915	4.6400e-003	0.7961	0.2123	4.3100e-003	0.2166	0.0000	652.9805	652.9805	0.0197	0.0000	653.4730

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	922.32	1,025.64	791.28	2,121,051	2,121,051
Enclosed Parking Structure	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	922.32	1,025.64	791.28	2,121,051	2,121,051

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659
Enclosed Parking Structure	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659
Other Asphalt Surfaces	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659
Other Non-Asphalt Surfaces	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659
Parking Lot	0.606524	0.034895	0.184335	0.108602	0.012129	0.004836	0.010863	0.026200	0.001662	0.001538	0.005105	0.002652	0.000659

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	105.9241	105.9241	0.0161	3.3300e-003	107.3178
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	105.9241	105.9241	0.0161	3.3300e-003	107.3178
NaturalGas Mitigated	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
NaturalGas Unmitigated	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	2.3591e+006	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	2.3591e+06	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	635724	55.0767	8.3600e-003	1.7300e-003	55.8013
Enclosed Parking Structure	580608	50.3016	7.6400e-003	1.5800e-003	50.9635
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6300	0.5458	8.0000e-005	2.0000e-005	0.5530
Total		105.9241	0.0161	3.3300e-003	107.3178

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	635724	55.0767	8.3600e-003	1.7300e-003	55.8013
Enclosed Parking Structure	580608	50.3016	7.6400e-003	1.5800e-003	50.9635
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6300	0.5458	8.0000e-005	2.0000e-005	0.5530
Total		105.9241	0.0161	3.3300e-003	107.3178

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1572	0.0128	0.9368	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5200e-003	4.0000e-005	3.9439
Unmitigated	1.1572	0.0128	0.9368	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5200e-003	4.0000e-005	3.9439

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4000e-004	2.0400e-003	8.7000e-004	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3595	2.3595	5.0000e-005	4.0000e-005	2.3735
Landscaping	0.0282	0.0108	0.9359	5.0000e-005		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	1.5337	1.5337	1.4700e-003	0.0000	1.5704
Total	1.1573	0.0128	0.9368	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5200e-003	4.0000e-005	3.9439

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4000e-004	2.0400e-003	8.7000e-004	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3595	2.3595	5.0000e-005	4.0000e-005	2.3735
Landscaping	0.0282	0.0108	0.9359	5.0000e-005		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	1.5337	1.5337	1.4700e-003	0.0000	1.5704
Total	1.1573	0.0128	0.9368	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5200e-003	4.0000e-005	3.9439

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.4178	0.2147	5.1900e-003	13.3307
Unmitigated	8.0223	0.2683	6.4900e-003	16.6634

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	8.20941 / 5.1755	8.0223	0.2683	6.4900e-003	16.6634
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.0223	0.2683	6.4900e-003	16.6634

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	6.56753 / 4.1404	6.4178	0.2147	5.1900e-003	13.3307
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		6.4178	0.2147	5.1900e-003	13.3307

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.7654	0.6953	0.0000	29.1482
Unmitigated	11.7654	0.6953	0.0000	29.1482

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	57.96	11.7654	0.6953	0.0000	29.1482
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7654	0.6953	0.0000	29.1482

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	57.96	11.7654	0.6953	0.0000	29.1482
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7654	0.6953	0.0000	29.1482

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

ATTACHMENT B
Additional Supporting Information

Wild Horse Multifamily Project Construction Assumptions

Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations
Date: 3/9/2021 3:26 PM

Construction Phase	Num Days			
Phase Name	Start Date	End Date	Week	Num Days
Site Preparation	1/2/2023	1/12/2023	6	10
Grading	1/13/2023	2/16/2023	6	30
Building Construction	2/17/2023	2/1/2024	6	300
Architectural Coating	2/2/2024	2/24/2024	6	20
Paving	2/25/2024	3/19/2024	6	20

OffRoad Equipment					Horse	Load
Phase Name	Offroad Equipment Type	Amount	Usage Hours	Power	Factor	
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	
Grading	Excavators	2	8	158	0.38	
Grading	Graders	1	8	187	0.41	
Grading	Rubber Tired Dozers	1	8	247	0.40	
Grading	Scrapers	2	8	367	0.48	
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	
Building Construction	Cranes	1	7	231	0.29	
Building Construction	Forklifts	3	8	89	0.20	
Building Construction	Generator Sets	1	8	84	0.74	
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	
Building Construction	Welders	1	8	46	0.45	
Architectural Coating	Air Compressors	1	6	78	0.48	
Paving	Pavers	2	8	130	0.42	
Paving	Paving Equipment	2	8	132	0.36	
Paving	Rollers	2	8	80	0.38	

Trips and VMT	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor	Hauling
Phase Name	Number	Number	Number	Length	Trip	Trip
Site Preparation	18	0	8	10.8	7.3	20
Grading	20	0	9,308	10.8	7.3	20
Building Construction	215	62	8	10.8	7.3	20
Architectural Coating	43	0	8	10.8	7.3	20
Paving	15	0	8	10.8	7.3	20

Construction activities associated with the proposed project would require demolition, grading, utility connections, building construction, construction of the new streets, and landscaping on the project site. Construction of the proposed project would involve approximately 11,600 cubic yards (CY) of cut and 86,000 CY of fill, of which approximately 74,400 CY of soil would be import fill, as deemed appropriate by the geotechnical engineer. The maximum depth of ground disturbance would be 15 feet.

Pacific Gas Electric CO₂ Intensity Factors

Table 1. PG&E's 2018 Electric Power Mix¹

Power Source	Percent of Total Mix
Eligible Renewable	39%
Natural Gas	15%
Nuclear	34%
Large Hydroelectric	13%
Coal	0%
Other	0%
Non-Renewable Total	61%
Total	100%

Table 3. PG&E's 2030 Electric Power Mix¹

Power Source	Percent of Total Mix
Eligible Renewable	60%
Natural Gas	10%
Nuclear	22%
Large Hydroelectric	9%
Coal	0%
Other	0%
Non-Renewable Total	40%
Total	100%

Notes:

¹ Adjustment to 2030 power mix is based on equal proportions of generation sources in 2018. The only factor that has been adjusted is the change of eligible renewable energy sources total proportion to 60% to reflect compliance with Senate Bill 100's 2030 performance goals.

² PG&E's total CO₂ emission intensity factor of 206 lbs/MWh and CO₂ emission intensity factor specifically for all owned generation sources of 163 lbs/MWh were identified in PG&E's 2020 Corporate Responsibility and Sustainability Report; however, the CO₂ emission intensity factor for non-owned sources is unknown. Therefore, the 2018 CO₂ emission intensity factor for all non-owned generation sources were identified based on the given 206 lbs/MWh and 163 lbs/MWh values and the 2018 power mix using a convex combination equation. PG&E-owned sources are identified in PG&E's Reports as nuclear, hydroelectric, and renewable. All nuclear, hydroelectric, and renewable sources were assumed to be PG&E-owned, having an unweighted average CO₂ intensity factor of the provided 163 lbs/MWh. All remaining generation sources were assumed to not be owned by PG&E with an unweighted average CO₂ intensity factor necessary for the weighted average to total 206 lbs/MWh.

³ PG&E's 2030 CO₂ emission intensity factor is based on equal proportions of renewable and non-renewable generation sources in 2018, as seen in Table 3. The only factor that was uniquely adjusted was the change of eligible renewable energy sources total proportion to 60% to reflect compliance with Senate Bill 100's 2030 performance goals. The CO₂ emission intensity factor is the weighted average using the adjusted renewable generation proportion (see Table 3) and the identified owned source intensity factors for 2018 (see Table 2).

Table 2. PG&E's 2018 CO₂ Intensity Factors²

Power Source	Individual Intensity Factors
Eligible Renewable	163
Natural Gas	439
Nuclear	163
Large Hydroelectric	163
Coal	439
Other	439
<i>Owned Sources %</i>	<i>86%</i>
<i>Not Owned Sources %</i>	<i>15%</i>
Weighted Average	206

Table 4. PG&E's 2030 CO₂ Intensity Factors³

Power Source	Weighted Intensity Factors
Eligible Renewable	163
Natural Gas	439
Nuclear	163
Large Hydroelectric	163
Coal	439
Other	439
<i>Owned Sources %</i>	<i>91%</i>
<i>Not Owned Sources %</i>	<i>10%</i>
Weighted Average	191

PG&E's CO₂ Emission Intensity Factor (2018)

PG&E's 2020 Corporate Responsibility and Sustainability Report, page 121

Voluntary Emissions Reporting

PG&E's voluntary greenhouse gas emissions reporting showed that PG&E's CO₂ emissions rate was our lowest level on record in 2018, the most recent year for which verified data are available. PG&E's emissions rate of 206 pounds of CO₂ per megawatt-hour of delivered electricity represented a slight reduction from the prior year's figure of 210. The emissions rate takes into account both PG&E-owned power generation and power purchased from third parties.

Benchmarking Greenhouse Gas Emissions for Delivered Electricity (Pounds of CO₂ per MWh)

U.S. Average ¹	947
Pacific Gas and Electric Company²	
2018	206
2017	210
2016	294
2015	405
2014	435
2013	427
2012	445
2011	393
2010	445

1. U.S. Environmental Protection Agency eGRID 2018.

2. Because PG&E purchases a portion of its electricity from the wholesale market, we are not able to track some of our delivered electricity back to a specific generator. Therefore, there is some unavoidable uncertainty in PG&E's total emissions and emissions rate for delivered electricity.

PG&E's Renewable Power Mix (2019)

PG&E's 2020 Corporate Responsibility and Sustainability Report, page 120

Measuring Progress

Mandatory Emissions Reporting

Under AB 32's annual reporting requirements, PG&E reports greenhouse gas emissions to CARB. These reports include emissions from our electric generation facilities, natural gas compressor stations, natural gas supplied to customers and the fugitive emissions from our natural gas distribution system and compressor stations.

The following table shows the greenhouse gas emissions data PG&E reported to CARB under AB 32.

PG&E Emissions Reported to the California Air Resources Board: CO₂-e Emissions from Owned Power Generation¹ and Operations

	2017	2018	2019
Total CO₂-e Emissions (metric tons)	2,292,218	2,512,130	2,484,127
Humboldt Bay Generating Station	199,338	179,025	189,163
Gateway Generating Station	1,111,268	1,163,952	1,137,160
Colusa Generating Station	981,613	1,169,153	1,157,804
CO₂ Emissions Rates (lbs/MWh)			
Humboldt Bay Generating Station	1,017	1,025	1,028
Gateway Generating Station	881	872	872
Colusa Generating Station	866	861	842
Fossil Plants ²	940	876	868
All Plants ²	146	171	163
Other CO₂-e Emissions (metric tons)			
Natural Gas Compressor Stations ³	289,133	299,256	344,810
Distribution Fugitive Natural Gas Emissions	830,249	497,299	496,789
Customer Natural Gas Use ⁴	38,202,174	41,664,525	42,058,499

1. PG&E's owned net generation was 33,549 GWh in 2019.

2. Applies to fossil-fuel combustion generating stations.

3. Includes all PG&E-owned generation sources, including nuclear, hydroelectric and renewable energy.

4. Includes, but is not limited to, compressor stations and storage facilities emitting more than 25,000 metric tons of CO₂-e annually.

PG&E also reports the greenhouse gas emissions from our facilities and operations to EPA under EPA's mandatory reporting requirements.

PG&E's Power Mix (2018)

PG&E's 2018 Power Content Label

Version: July 2019

2018 POWER CONTENT LABEL				
Pacific Gas and Electric Company				
www.pge.com/billinserts				
ENERGY RESOURCES	Base Plan	100% Solar Choice	50% Solar Choice	2018 CA Power Mix**
Eligible Renewable	39%	100%	69%	31%
Biomass & Biowaste	4%	0%	2%	2%
Geothermal	4%	0%	2%	5%
Eligible Hydroelectric	3%	0%	1%	2%
Solar	18%	100%	59%	11%
Wind	10%	0%	5%	11%
Coal	0%	0%	0%	3%
Large Hydroelectric	13%	0%	6%	11%
Natural Gas	15%	0%	7%	35%
Nuclear	34%	0%	17%	9%
Other	0%	0%	0%	<1%
Unspecified sources of power*	0%	0%	0%	11%
TOTAL	100%	100%	100%	100%
<p>* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.</p> <p>** Percentages are estimated annually by the California Energy Commission based on the electricity generated in California and net imports as reported to the Quarterly Fuel and Energy Report database and the Power Source Disclosure program.</p>				
For specific information about this electricity product, contact:	Pacific Gas and Electric Company 415-973-0640			
For general information about the Power Content Label, please visit:	http://www.energy.ca.gov/pcl/			
For additional questions, please contact the California Energy Commission at:	Toll-free in California: 844-454-2906 Outside California: 916-653-0237			

APPENDIX B: HEALTH RISK ASSESSMENT

Wild Horse Multifamily Project Construction Health Risk Assessment

March 15, 2021

March 15, 2021

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Abbreviations

$\mu\text{g}/\text{m}^3$	microgram per cubic meter
AERMOD	Atmospheric Dispersion Modeling System
CARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
CalEEMod	California Emission Estimator Model
CAPCOA	California Air Pollution Control Officer's Association
CEQA	California Environmental Quality Act
CPF	Cancer Potency Factor
CO	carbon monoxide
DPM	Diesel Particulate Matter
g/s	grams per second
GIS	Geographic Information System
HI	hazard index
HRA	Health Risk Assessment
MEIR	maximally exposed individual receptor
NO _x	oxides of nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
PM _{2.5}	particulate matter less than 2.5 micrometers in aerodynamic diameter
PM ₁₀	particulate matter less than 10 micrometers in diameter
REL	reference exposure level
ROG	reactive organic gases
TACs	toxic air contaminants
USEPA	United States Environmental Protection Agency

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1.0 INTRODUCTION

This Health Risk Assessment (HRA) was prepared to evaluate potential air quality impacts for construction of the proposed Wild Horse Multifamily Project (proposed project or project) located in the City of Antioch, California.

This HRA provides a discussion of the proposed project, the physical setting of the project area, and the regulatory framework for air quality as it relates to the construction HRA. This evaluation was prepared in conformance with appropriate standards. Where applicable, guidelines and methodologies from the Bay Area Air Quality Management District (BAAQMD), California Air Resources Board (CARB), California Office of Environmental Health Hazard Assessment (OEHHA), and the United States Environmental Protection Agency (USEPA) were followed.

1.1 PROJECT LOCATION AND DESCRIPTION

The Wild Horse Multifamily Project (proposed project) would include the development of 126 townhomes in 25 buildings with related amenities on an approximately 12-acre site. The proposed project would also include parking, landscaping managed by a homeowner's association, and 1.6 acres of open space. The project site would also include approximately 1.6 acres as an offer of dedication for construction of Wild Horse Road, a paved road along the property's southern boundary, of which construction began by another developer on September 1, 2020. The proposed project would be located in the City of Antioch (City) in Contra Costa County, California (County). The approximately 12-acre project site is triangular in shape. The proposed project is on a vacant parcel identified as APN 041-022-003.

The site plan for the proposed project is overlaid at the project location in Figure 1.

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Figure 1 – Proposed Project Site Plan Overlay

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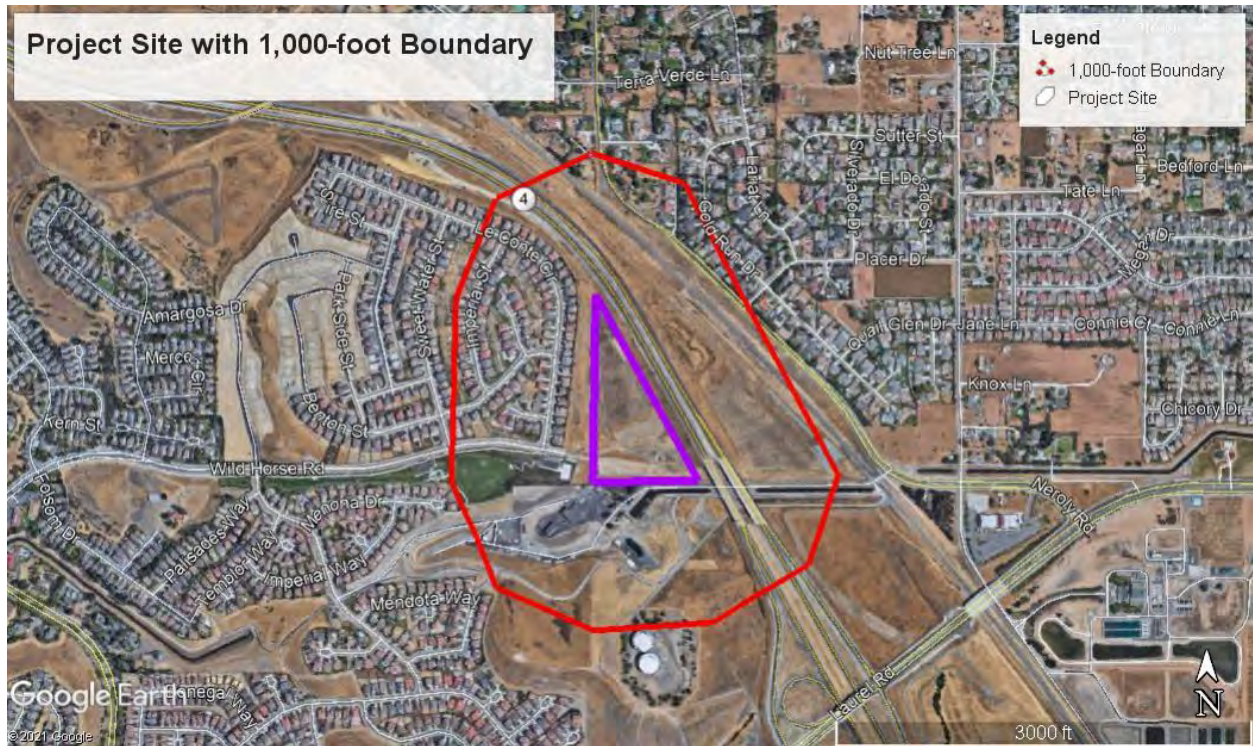


Figure 2 – Project Site Boundary and 1,000-ft Buffer

1.2 PURPOSE

The purpose of this construction HRA is to assess potential elevated toxic air contaminant (TAC) concentrations and associated health impacts that could result from construction of the proposed project, consistent with guidelines and methodologies from BAAQMD, CARB, OEHHA, and the USEPA. Consistent with the methods recommended in the applicable guidelines, this HRA evaluates the estimated excess lifetime cancer risk as well as particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}) concentrations associated with diesel emissions that would be emitted by on-site construction activities and exhaust emissions that would be emitted from construction-generated vehicle trips.

Health risks were estimated for sensitive receptors located within 1,000 feet of the project boundary. A sensitive receptor is defined by the BAAQMD as the following: “Facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas.”

1.3 SUMMARY OF RESULTS

On the basis of the assessment provided herein, the project’s construction emissions would not exceed any of the project-level health risk significance thresholds adopted for this assessment after incorporation of mitigation measure (MM) AIR-1. Therefore, project-related emissions would not result in significant health impacts to nearby existing sensitive receptors during construction with incorporation of mitigation.

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- **Individual Source Health Risks.** The impacts to sensitive receptors would not exceed the BAAQMD's health risk significance thresholds for emissions associated with construction of the proposed project after incorporation of mitigation.
- **Cumulative Health Risk Impact.** The cumulative health risk impacts from existing TAC emission sources located within 1,000 feet of the project site combined with impacts from emissions associated with construction of the proposed project would not exceed the BAAQMD's cumulative health risk significance thresholds.

1.4 GENERAL HEALTH RISKS OF TOXICS

Determining how hazardous a substance is dependent on a variety of factors, including the amount of the substance in the air, how it enters the body, how long the exposure lasts, and what organs in the body are affected. One major way hazardous substances might enter the body is through inhalation of either gases or particulates. Many gases and very small particles that penetrate deeply into the lungs are potentially harmful and can contribute to a variety of health problems. Exhaust from diesel engines is a major source of harmful airborne particles. The inhalation of diesel exhaust particulates is associated with both cancer and non-cancer health effects.

OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs; additionally, it can cause coughs, headaches, lightheaded-ness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Over time, there have been improvements made to diesel fuel and diesel engines which have reduced emissions of some of the contaminants. Similarly, improvements have been made to significantly reduce TAC emissions from gasoline-powered vehicles. These improvements are anticipated to continue in the foreseeable future.

1.4.1 Analysis of Site-Specific Toxics

When conducting an HRA, the surrogate for whole diesel exhaust is diesel particulate matter (DPM) and is used as the basis for the potential risk calculations. The potential cancer risk from inhalation exposure to DPM will outweigh the potential noncancerous health impacts. Therefore, inhalation cancer risk is required for every HRA. When comparing whole diesel exhaust to speciated diesel exhaust (i.e., looking at the individual components of the diesel exhaust, such as polynuclear aromatic hydrocarbons and metals), potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multi-pathway cancer risk from the speciated components. For this reason, there are few situations where an analysis of multi-pathway risk is necessary (OEHHA 2015). The analysis herein assesses whole diesel

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exhaust emissions as DPM and gasoline exhaust. For the purposes of this assessment, DPM and gasoline exhaust are represented as PM_{2.5} exhaust emissions.

1.4.2 Significance Criteria

The project site is located in the City of Antioch, within the Contra Costa County portion of the San Francisco Bay Area Air Basin and within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). In accordance with CEQA Guidelines Section 15064.7 (Thresholds of Significance), the City of Antioch exercises its own discretion to use the significance thresholds in the BAAQMD's CEQA thresholds based on substantial evidence contained in BAAQMD's record for adoption of the thresholds (which is relied on and incorporated herein).

The BAAQMD has established a maximum threshold for land use projects that have the potential to expose sensitive receptors (including residential areas) or the general public to substantial levels of toxic air contaminants. The BAAQMD thresholds of significance for single TAC sources are: 1) probability of contracting cancer for the maximally exposed individual receptor (MEIR) exceeds 10 in one million; or 2) ground-level concentrations of non-carcinogenic toxic air contaminants would result in a Hazard Index greater than one (1) for the MEIR. According to the BAAQMD, a project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in one million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient PM_{2.5} increase greater than 0.3 micrograms per liter (µg/m³).

2.0 EMISSIONS ASSESSMENT

Emissions estimates used for this construction HRA were based on the project-specific Criteria Pollutant and Greenhouse Gas Emissions Estimate Summary and the CalEEMod files prepared for the Wild Horse Multifamily Project. The relevant CalEEMod output files are included in Attachment A of this HRA report. Emissions used for this assessment are discussed in more detail below.

2.1 CONSTRUCTION ASSUMPTIONS

The proposed project would require various tasks including site preparation, grading, building construction, architectural coatings, and paving. Table 1 shows the anticipated construction schedule based on the assumption that construction would begin in January 2023, and it is estimated all construction tasks would be completed by March 2024 (approximately 15 months of construction). The construction schedule utilized in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years or is phased over multiple years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. The site-specific construction fleet may vary due to specific project needs at the time of construction. The estimated construction schedule of 15 months is a

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conservative assumption because potential impacts would be more concentrated rather than spreading construction activities out over four years. It is anticipated that ancillary improvements would occur concurrently with the construction of the facilities, by construction task. Project construction would occur six days per week, Monday through Saturday consistent with Antioch Municipal Code Section 5-17.05.

Table 1: Project Construction Schedule

Construction Activity	Start Date	End Date	Working Days per Week	Total Construction Workdays
Site Preparation	1/2/2023	1/12/2023	6	10
Grading	1/13/2023	2/16/2023	6	30
Building Construction	2/17/2023	2/1/2024	6	300
Architectural Coating	2/2/2024	2/24/2024	6	20
Paving	2/25/2024	3/19/2024	6	20

Source of Construction Schedule: CalEEMod Output (Attachment A).

2.2 CONSTRUCTION EMISSIONS

During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions generated by excavation, grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include carbon monoxide (CO), oxides of nitrogen (NO_x), reactive organic gases (ROG), directly emitted particulate matter (PM_{2.5} and PM₁₀), and TACs such as diesel exhaust particulate matter. Emissions used for the construction HRA include DPM (represented as PM_{2.5} exhaust) and PM_{2.5} (exhaust PM_{2.5} and fugitive PM_{2.5} combined).

The proposed project would be required to implement MM AIR-1, which would ensure incorporation of applicable dust control measures during project construction.

MM AIR-1: Implement Construction Best Management Practices. The applicant shall require all construction contractors to implement the basic construction mitigation measures recommended by the BAAQMD to reduce fugitive dust emissions. Emission reduction measures will include, at a minimum, the following measures. Additional measures may be identified by the BAAQMD or contractor as appropriate:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) will be watered two times per day;
- All haul trucks transporting soil, sand, or other loose material off-site will be covered;
- All visible mud or dirt track-out onto adjacent public roads will be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited;
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour;

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- All roadways, driveways, and sidewalks to be paved will be completed as soon as possible. Building pads will be laid as soon as possible after grading unless seeding or soil binders are used; and
- Idling times shall be minimized either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of CCR. Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified visible emissions evaluator or checked by a certified mechanic and determined to be running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City regarding dust complaints. This person will respond and take corrective action within 48 hours. The BAAQMD’s phone number will also be visible to ensure compliance with applicable regulations.

Emissions generated during construction of the proposed project would be temporary and limited to the immediate area surrounding the construction site. Table 2 shows a summary of construction emissions by construction activity, while Table 3 shows the emissions by location (on-site or off-site).

Table 2: Construction Emissions Summary by Year of Construction Activity

Year of Construction Activity	Tons per Year	
	Unmitigated	
	DPM	Total PM _{2.5}
2023 Proposed Project Construction	0.118	0.266
2024 Proposed Project Construction	0.013	0.023
Total Construction Emissions	0.132	0.288
Source: Attachment A.		

Table 3: Construction Emissions Summary by Construction Location

Construction Location	Tons per Year	
	Unmitigated	
	DPM	Total PM _{2.5}
On-site Emissions	0.128	0.175
Off-site Emissions	0.004	0.113
Total Construction Emissions	0.132	0.288
Source: Attachment A.		

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3.0 CONSTRUCTION HEALTH RISK ASSESSMENT

The HRA evaluated DPM (represented as exhaust $PM_{2.5}$) and $PM_{2.5}$ (total $PM_{2.5}$) emissions generated during construction of the proposed project and the related health risk impacts for sensitive receptors located within 1,000 feet of the project boundary. As previously noted, a project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 10.0 in one million, an increased non-cancer risk of greater than 1.0 on the hazard index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 micrograms per liter ($\mu\text{g}/\text{m}^3$).

The project site is located within 1,000 feet from existing sensitive receptors that could be exposed to diesel emission exhaust during the construction period. The nearest sensitive receptors are existing and proposed residential land uses to the northeast, east, southwest, west, and northwest. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model was used to translate an emission rate from the source locations to concentrations at the receptor locations of interest (i.e., existing and planned sensitive receptors). The location of the MEIR was determined to be a planned residence located approximately 34 feet west the project site's western boundary. The location of the MEIR is shown in Figure 3.

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Figure 3 – Location of Maximally Exposed Individual Receptor

3.1 AIR DISPERSION MODELING

An air dispersion model is a mathematical formulation used to estimate the air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the USEPA Atmospheric Dispersion Modeling System (AERMOD) (version 19191) air dispersion model, which is approved by the BAAQMD for air dispersion assessments. Specifically, the AERMOD model was used to estimate levels of pollutant concentrations at sensitive receptor locations from the proposed project's construction DPM and PM_{2.5} emissions. The use of the AERMOD model provides a detailed estimate of concentrations based on site and source geometry, source emissions strength, distance from the source to the receptor, and site-specific meteorological data.

Terrain elevations were obtained for the project site using the AERMAP model, the AERMOD terrain data pre-processor. The air dispersion model assessment was performed using meteorological data from the Travis Air Force Base, which is located approximately 21.7 miles northwest of the project site.

Receptor locations within the AERMOD model were placed at locations of existing sensitive receptor sites within approximately 1,000 feet of the project boundary. The z-coordinate (receptor breathing height) for placed receptors must be specified. To evaluate the proposed project's localized construction impacts at

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the point of maximum impact, all receptors were placed within the breathing zone at zero meters above ground level.

The on-site construction area sources were assumed to cover the entire construction area. The emissions from the on-site construction exhaust source were assumed to be emitted at a height of 5 meters above ground to account for the top of the equipment exhaust stack where the emissions are released to the atmosphere and the increase in the height of the emissions due to its heated exhaust. The off-site construction vehicle emissions were represented in the AERMOD model as line volume sources. Figure 4 shows a representation of the modeling parameters, including a 1,000-foot buffer, the project area (construction area source), modeled roadway segments, and locations of sensitive receptors.

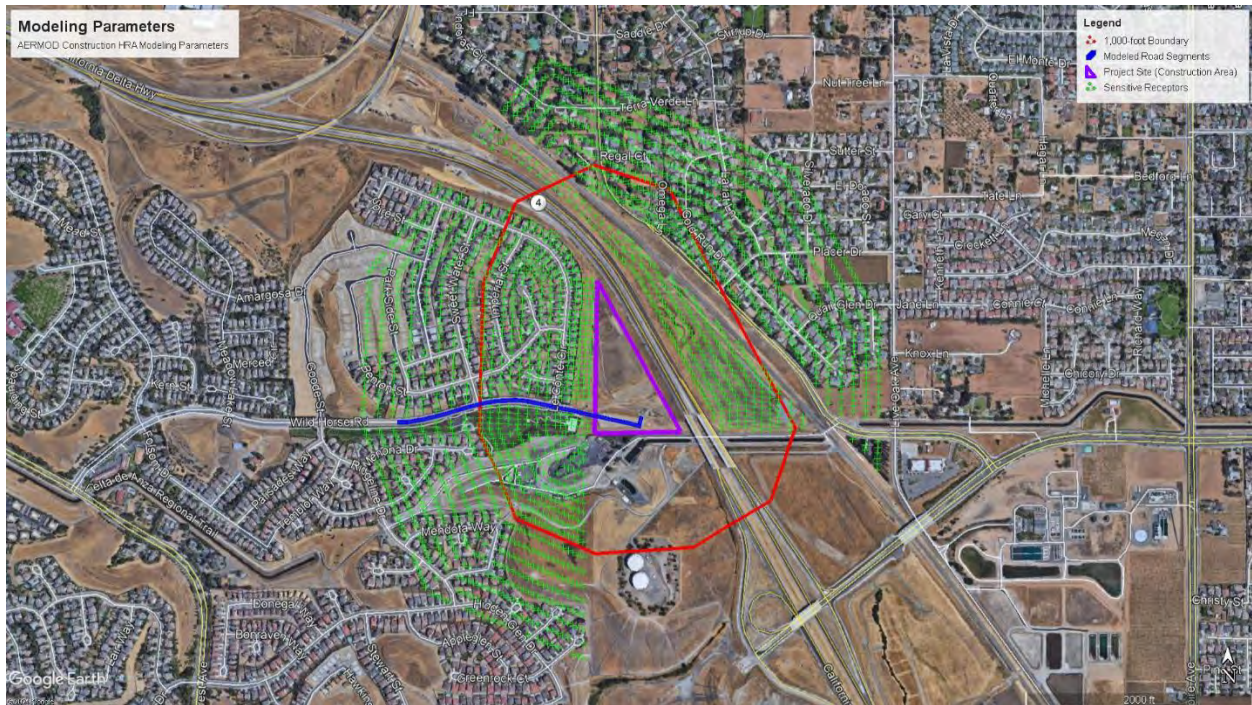


Figure 4 – Modeling Parameters

The construction emissions were assumed to be distributed over the project site with a working schedule of eight hours per day and six days per week. Emissions were adjusted by a factor of 3.5 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Detailed parameters and complete calculations are contained in Attachment B.

Table 4 summarizes emission rates of DPM and PM_{2.5} during project construction under the scenarios analyzed for the construction HRA.

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Table 4: Construction Emission Rates Summary

Modeled Construction Location	Tons per Year	
	Unmitigated	
	DPM	Total PM _{2.5}
On-site Area	0.12812	0.17500
Off-site Road Segments	0.00011	0.00437
Total Construction Emissions	0.12823	0.17937
Notes: ¹ The off-site emissions are estimated over the construction vehicle travel route within approximately 1,000 feet of the project site. Source: CalEEMod Output and Construction Health Risk Assessment Calculations; see Attachment A and Attachment B.		

3.2 ESTIMATION OF CANCER RISKS

The OEHHA has developed guidance for estimating cancer risks that takes into account the increased sensitivity of infants to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from surrounding sources during construction of the proposed project.

Consistent with the OEHHA guidance mentioned above, the BAAQMD has developed a set of guidelines for estimating cancer risks that provide adjustment factors including:

- Age-sensitivity weighting factors;
- Age-specific daily breathing rates; and
- Age-specific time-at-home factors.

The cancer risk adjustment factors used in this construction HRA are provided in Table 5 for infant, child, and adult sensitive receptors. To provide a conservative assessment, two infant scenarios are presented: one beginning in the third trimester and one beginning at age zero.

Table 5: Inhalation Health Risks from Project Construction to Off-Site Receptors

Receptor Type	Exposure Frequency		Exposure Duration (years)	Age Sensitivity Factors	Time at Home Factor (%)	Daily Breathing Rate ¹ (l/kg-day)
	Hours/day	Days/year				
Sensitive—Infant Beginning in the 3rd Trimester						
3 rd Trimester	24	350	0.25	10	100	361
0–2 years	24	350	0.96	10	100	1,090
Sensitive Receptor—Infant Beginning at Age Zero						
0–2 years	24	350	1.21	10	100	1,090
Sensitive Receptor—Child						
3–16 years	24	350	1.21	3	100	572
Sensitive Receptor—Adult						
> 16 to 30 years	24	350	1.21	1	73	261
Notes: ¹ The daily breathing rates recommended by the BAAQMD for sensitive/residential receptors assume the 95 th percentile breathing rates for all individuals less than 2 years of age and 80 th percentile breathing rates for all older individuals.						

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Receptor Type	Exposure Frequency		Exposure Duration (years)	Age Sensitivity Factors	Time at Home Factor (%)	Daily Breathing Rate ¹ (l/kg-day)
	Hours/day	Days/year				
(l/kg-day) = liters per kilogram body weight per day						

3.3 ESTIMATION OF NON-CANCER CHRONIC HAZARDS

An evaluation of the potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate reference exposure level (REL). Available RELs promulgated by OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the proposed project's emissions to a concentration considered acceptable to public health professionals, termed the REL.

To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. Where the total equals or exceeds one (1), a health hazard is presumed to exist. For purposes of this assessment, the TAC of concern is DPM, for which the OEHHA has defined a REL for DPM of 5 µg/m³. The principal toxicological endpoint assumed in this assessment was through inhalation.

3.4 ESTIMATION OF ANNUAL PM_{2.5} CONCENTRATION

The BAAQMD's guidance also includes a significance threshold for PM_{2.5} based on studies that show health impacts from exposure to this pollutant. The construction emissions of PM_{2.5} evaluated in this assessment include DPM (as PM_{2.5} exhaust) and fugitive dust. These emissions are referred to as PM_{2.5} total or PM_{2.5}.

3.5 PROJECT CONSTRUCTION TOXIC AIR POLLUTANTS—RESULTS

Results of the analysis of the unmitigated scenario are summarized and compared to the applicable thresholds in Table 6. Calculations and AERMOD output data used in the construction HRA are included in Attachment B. Annual PM_{2.5} emissions were estimated assuming compliance with MM AIR-1. It should be noted that inclusion of MM AIR-1 only reduces PM_{2.5} total and not PM_{2.5} exhaust.

Table 6: Health Risks from Unmitigated Project Construction at the Maximally Exposed Individual Receptor

Health Impact Metric	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Annual PM _{2.5} Concentration (µg/m ³)
Risks and Hazards at the MEIR¹ - Unmitigated			
Risks and Hazards at the MEIR: Infant (3 rd Trimester)	7.41	0.009	0.06
Risks and Hazards at the MEIR: Infant (Age Zero)	8.60	0.009	0.06
Risks and Hazards at the MEIR: Child	1.35	0.009	0.06

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Health Impact Metric	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index	Annual PM _{2.5} Concentration (µg/m ³)
Risks and Hazards at the MEIR: Adult	0.15	0.009	0.06
BAAQMD Significance Threshold	10	1.0	0.3
Exceeds Individual Source Threshold?	No	No	No
Notes: MEIR = maximally exposed individual receptor ¹ The MEIR is located at a planned residence located approximately 34 feet west the of the project site. ² Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM _{2.5} exhaust) by the REL of 5 µg/m ³ . Source: Attachment B.			

As indicated in Table 6, construction of the proposed project would not expose nearby sensitive receptors to substantial pollutant concentrations.

4.0 CUMULATIVE HEALTH RISK ASSESSMENT DURING PROJECT CONSTRUCTION

The BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project. A cumulative HRA was performed that examined the cumulative impacts of the proposed project's construction emissions and sources of TAC emissions within 1,000 feet of the project boundary. For a project-level analysis, BAAQMD provides several tools for use in screening potential sources of TACs. The BAAQMD-provided tools that were used to assess the potential cumulative impacts from TACs during construction of the proposed project at the MEIR are described below.

- Stationary Source Risk and Hazard Screening Tools.** The BAAQMD prepared a Geographic Information System (GIS) tool with the location of permitted sources. For each emissions source, the BAAQMD provides conservative estimates of cancer risk and PM_{2.5} concentrations. Based on information from the GIS tool, there are three BAAQMD-permitted stationary sources within 1,000 feet of the project site.
- Health Risks for Local Roadways.** The BAAQMD pre-calculated concentrations and the associated potential cancer risks and PM_{2.5} concentration increases for each county within their jurisdiction for roadways that carry at least 30,000 average daily trips. For certain areas, the BAAQMD also included local roadways that meet BAAQMD's "major roadway" criteria of 10,000 vehicles or 1,000 trucks per day. The latest available screening tool is in the form of a GIS raster file.
- Freeway Screening Analysis Tool.** The BAAQMD prepared a GIS raster file that contains pre-estimated cancer risk and PM_{2.5} concentration increases for highways within the Bay Area.
- Rail Screening Tool.** The BAAQMD prepared a GIS raster file that contains estimated cancer risks and PM_{2.5} concentrations from railroad operations at any point within the Air Basin.

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The cumulative health risk results, including health risks from the existing TAC sources, are summarized during project construction in Table 7. Cumulative health risk results shown therein are representative of the health risks to the MEIR which would experience the highest concentration of pollutants.

Table 7: Summary of the Cumulative Health Impacts at the Maximally Exposed Individual Receptor during Project Construction

Source	Cancer Risk in One Million	Chronic Inhalation Hazard Index	Annual PM _{2.5} Concentration (µg/m ³)
Project Construction			
Project Construction	8.60	0.009	0.06
Existing Sources¹			
Ironhouse Sanitary District (FACID 1463)	33.110	0.110	0.04
Contra Costa Water District/Antioch Service Center (FACID 14038)	5.170	0.010	0.01
Verizon Wireless (Oakley) (FACID 18888)	1.590	<0.001	<0.01
Existing Major Local Roadways	0.32	—	0.01
Existing Highways	2.12	—	0.05
Existing Railways	1.04	—	<0.01
Cumulative Health Risks at the MEIR²			
Cumulative Total with Unmitigated Project Construction	51.95	0.129	0.17
BAAQMD's Cumulative Thresholds of Significance	100	10	0.8
Threshold Exceedance in Unmitigated Scenario?	No	No	No
Notes: MEIR = maximally exposed individual receptor ND = no data available ¹ No adjustments were made to reduce the cancer risk and hazard associated with sources that can be expected with farther distances from the source of emissions. This presents a conservative estimate. ² The MEIR is located at a planned residence located approximately 34 feet west the of the project site. Source: Attachment B and Attachment C.			

As noted in Table 7, the cumulative impacts from existing sources of TACs and construction of the proposed project would be less than the BAAQMD's cumulative thresholds of significance.

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ATTACHMENT A

CalEEMod Results

Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations - Contra Costa County, Annual

**Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations
Contra Costa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	256.00	Space	0.00	102,400.00	0
Other Asphalt Surfaces	2.43	Acre	2.43	105,850.80	0
Other Non-Asphalt Surfaces	1.61	Acre	1.61	70,131.60	0
Parking Lot	45.00	Space	0.41	18,000.00	0
Condo/Townhouse	126.00	Dwelling Unit	2.35	239,400.00	413

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4	Operational Year	2024		
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted based on Renewable Energy Portfolio and PG&E's Corporate Responsibility and Sustainability Report. Construction start date and buildout year based on information provided in the Project Description.

Land Use - Based on project description and site plan.

11.72 acres - (3.28 acres of unusable open space + 1.64 acres Wild Horse Road) = 6.80 acres

Multiple residential buildings, 126 dwelling units, open space, landscaping, paving, and parking.

Construction Phase - Anticipated construction schedule based on the assumption that construction would begin in January 2023, and it is estimated all construction tasks would be completed by March 2024 (approximately 15 months of construction).

Off-road Equipment - Building construction equipment adjusted to match project-specific information.

Trips and VMT - Truck trips during grading were based on import of 74,400 cubic yards of fill. An additional eight truck trips were added to each phase for mobilization/demobilization.

Grading - Approximately 74,400 cubic yards of soil would be import fill.

No export of cut is anticipated.

Vehicle Trips - ITE 10th Ed Trip Generation Rates for ITE land use 220, consistent with rates presented in the Scope of Work to Prepare a Traffic Study for the Wild Horse Townhome Project in the City of Antioch, CA prepared by Stantec (dated January 22, 2021).

Woodstoves - No woodburning fireplaces or woodstoves in compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Construction Off-road Equipment Mitigation - Compliance with BAAQMD best management practices threshold for fugitive dust; recommended measures from BAAQMD's Basic Construction Mitigation Measures for all Proposed Projects.

Area Mitigation - Compliance with BAAQMD Regulation 6 Particulate Matter and visible emissions, Rule 3 Wood-burning devices.

Water Mitigation - Compliance with the Green Building Code Standards and the Water Efficient Land Use Ordinance.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberWood	21.42	0.00
tblGrading	MaterialImported	0.00	74,400.00
tblLandUse	LandUseSquareFeet	126,000.00	239,400.00
tblLandUse	LotAcreage	2.30	0.00
tblLandUse	LotAcreage	7.88	2.35
tblLandUse	Population	360.00	413.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	PhaseName		Grading
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	9,300.00	9,308.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	8.00
tblVehicleTrips	ST_TR	5.67	8.14
tblVehicleTrips	SU_TR	4.84	6.28
tblVehicleTrips	WD_TR	5.81	7.32
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3992	4.0439	3.6982	0.0124	0.5941	0.1265	0.7206	0.2045	0.1184	0.3229	0.0000	1,139.0458	1,139.0458	0.1313	0.0000	1,142.3276
2024	1.7940	0.3663	0.4736	1.1000e-003	0.0344	0.0141	0.0485	9.2700e-003	0.0132	0.0225	0.0000	98.4974	98.4974	0.0155	0.0000	98.8851
Maximum	1.7940	4.0439	3.6982	0.0124	0.5941	0.1265	0.7206	0.2045	0.1184	0.3229	0.0000	1,139.0458	1,139.0458	0.1313	0.0000	1,142.3276

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3992	4.0439	3.6982	0.0124	0.4705	0.1265	0.5970	0.1472	0.1184	0.2656	0.0000	1,139.0453	1,139.0453	0.1313	0.0000	1,142.3272
2024	1.7940	0.3663	0.4736	1.1000e-003	0.0344	0.0141	0.0485	9.2700e-003	0.0132	0.0225	0.0000	98.4974	98.4974	0.0155	0.0000	98.8850
Maximum	1.7940	4.0439	3.6982	0.0124	0.4705	0.1265	0.5970	0.1472	0.1184	0.2656	0.0000	1,139.0453	1,139.0453	0.1313	0.0000	1,142.3272
Percent Reduction	0.00	0.00	0.00	0.00	19.66	0.00	16.07	26.82	0.00	16.60	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	1.8994	1.8994
2	4-2-2023	7-1-2023	0.8437	0.8437
3	7-2-2023	10-1-2023	0.8531	0.8531
4	10-2-2023	1-1-2024	0.8572	0.8572
5	1-2-2024	4-1-2024	2.1250	2.1250
		Highest	2.1250	2.1250

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442
Energy	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	240.1333	240.1333	0.0185	5.6400e-003	242.2751
Mobile	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719
Waste						0.0000	0.0000		0.0000	0.0000	11.7654	0.0000	11.7654	0.6953	0.0000	29.1482
Water						0.0000	0.0000		0.0000	0.0000	2.6045	5.8433	8.4478	0.2683	6.4900e-003	17.0889
Total	1.3657	0.9453	3.2010	9.1100e-003	0.7919	0.0207	0.8126	0.2125	0.0202	0.2327	14.3698	1,016.6109	1,030.9808	1.0089	0.0122	1,059.8282

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442
Energy	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	240.1333	240.1333	0.0185	5.6400e-003	242.2751
Mobile	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719
Waste						0.0000	0.0000		0.0000	0.0000	11.7654	0.0000	11.7654	0.6953	0.0000	29.1482
Water						0.0000	0.0000		0.0000	0.0000	2.0836	4.6746	6.7582	0.2147	5.1900e-003	13.6711
Total	1.3657	0.9453	3.2010	9.1100e-003	0.7919	0.0207	0.8126	0.2125	0.0202	0.2327	13.8489	1,015.4423	1,029.2912	0.9552	0.0109	1,056.4104

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62	0.11	0.16	5.32	10.68	0.32

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	1/12/2023	6	10	
2	Grading	Grading	1/13/2023	2/16/2023	6	30	
3	Building Construction	Building Construction	2/17/2023	2/1/2024	6	300	
4	Architectural Coating	Architectural Coating	2/2/2024	2/24/2024	6	20	
5	Paving	Paving	2/25/2024	3/19/2024	6	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 4.45

Residential Indoor: 484,785; Residential Outdoor: 161,595; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	
Site Preparation		7	18.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading		8	20.00	0.00	9,308.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction		9	215.00	62.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating		1	43.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving		6	15.00	0.00	8.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0903	6.3300e-003	0.0967	0.0497	5.8200e-003	0.0555	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.5000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2843	0.2843	1.0000e-005	0.0000	0.2846
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.6000e-004	1.7400e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5590	0.5590	1.0000e-005	0.0000	0.5593
Total	2.6000e-004	8.1000e-004	1.9300e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.8433	0.8433	2.0000e-005	0.0000	0.8439

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0407	0.0000	0.0407	0.0223	0.0000	0.0223	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0407	6.3300e-003	0.0470	0.0223	5.8200e-003	0.0282	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.5000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2843	0.2843	1.0000e-005	0.0000	0.2846
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.6000e-004	1.7400e-003	1.0000e-005	7.1000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5590	0.5590	1.0000e-005	0.0000	0.5593
Total	2.6000e-004	8.1000e-004	1.9300e-003	1.0000e-005	7.8000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.8433	0.8433	2.0000e-005	0.0000	0.8439

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1343	0.0000	0.1343	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.1343	0.0214	0.1557	0.0546	0.0197	0.0742	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0233	0.7528	0.2183	3.4200e-003	0.0789	1.3800e-003	0.0803	0.0217	1.3200e-003	0.0230	0.0000	330.7928	330.7928	0.0129	0.0000	331.1145
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.2000e-004	5.8000e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	1.8633	1.8633	4.0000e-005	0.0000	1.8642
Total	0.0241	0.7533	0.2241	3.4400e-003	0.0812	1.3900e-003	0.0826	0.0223	1.3300e-003	0.0237	0.0000	332.6561	332.6561	0.0129	0.0000	332.9787

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0604	0.0000	0.0604	0.0246	0.0000	0.0246	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0604	0.0214	0.0818	0.0246	0.0197	0.0442	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0233	0.7528	0.2183	3.4200e-003	0.0789	1.3800e-003	0.0803	0.0217	1.3200e-003	0.0230	0.0000	330.7928	330.7928	0.0129	0.0000	331.1145
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-004	5.2000e-004	5.8000e-003	2.0000e-005	2.3800e-003	1.0000e-005	2.3900e-003	6.3000e-004	1.0000e-005	6.5000e-004	0.0000	1.8633	1.8633	4.0000e-005	0.0000	1.8642
Total	0.0241	0.7533	0.2241	3.4400e-003	0.0812	1.3900e-003	0.0826	0.0223	1.3300e-003	0.0237	0.0000	332.6561	332.6561	0.0129	0.0000	332.9787

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2139	1.9564	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2545	315.2545	0.0750	0.0000	317.1293
Total	0.2139	1.9564	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2545	315.2545	0.0750	0.0000	317.1293

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	5.9000e-004	1.7000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2578	0.2578	1.0000e-005	0.0000	0.2580
Vendor	0.0194	0.6266	0.1851	2.1900e-003	0.0555	7.5000e-004	0.0562	0.0160	7.1000e-004	0.0168	0.0000	209.8957	209.8957	7.9000e-003	0.0000	210.0931
Worker	0.0784	0.0510	0.5657	2.0100e-003	0.2319	1.4400e-003	0.2334	0.0617	1.3300e-003	0.0630	0.0000	181.6103	181.6103	3.5800e-003	0.0000	181.6998
Total	0.0979	0.6781	0.7510	4.2000e-003	0.2874	2.1900e-003	0.2896	0.0777	2.0400e-003	0.0798	0.0000	391.7638	391.7638	0.0115	0.0000	392.0510

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2139	1.9563	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2541	315.2541	0.0750	0.0000	317.1289
Total	0.2139	1.9563	2.2092	3.6600e-003		0.0952	0.0952		0.0896	0.0896	0.0000	315.2541	315.2541	0.0750	0.0000	317.1289

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	5.9000e-004	1.7000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2578	0.2578	1.0000e-005	0.0000	0.2580
Vendor	0.0194	0.6266	0.1851	2.1900e-003	0.0555	7.5000e-004	0.0562	0.0160	7.1000e-004	0.0168	0.0000	209.8957	209.8957	7.9000e-003	0.0000	210.0931
Worker	0.0784	0.0510	0.5657	2.0100e-003	0.2319	1.4400e-003	0.2334	0.0617	1.3300e-003	0.0630	0.0000	181.6103	181.6103	3.5800e-003	0.0000	181.6998
Total	0.0979	0.6781	0.7510	4.2000e-003	0.2874	2.1900e-003	0.2896	0.0777	2.0400e-003	0.0798	0.0000	391.7638	391.7638	0.0115	0.0000	392.0510

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4589	32.4589	7.6800e-003	0.0000	32.6508
Total	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4589	32.4589	7.6800e-003	0.0000	32.6508

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	6.0000e-005	2.0000e-005	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0264	0.0264	0.0000	0.0000	0.0264
Vendor	1.9300e-003	0.0637	0.0183	2.2000e-004	5.7100e-003	8.0000e-005	5.7800e-003	1.6500e-003	7.0000e-005	1.7200e-003	0.0000	21.4658	21.4658	7.9000e-004	0.0000	21.4855
Worker	7.5500e-003	4.7300e-003	0.0539	2.0000e-004	0.0239	1.5000e-004	0.0240	6.3500e-003	1.3000e-004	6.4800e-003	0.0000	17.9444	17.9444	3.3000e-004	0.0000	17.9527
Total	9.4800e-003	0.0684	0.0721	4.2000e-004	0.0296	2.3000e-004	0.0299	8.0100e-003	2.0000e-004	8.2100e-003	0.0000	39.4365	39.4365	1.1200e-003	0.0000	39.4646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4588	32.4588	7.6800e-003	0.0000	32.6507
Total	0.0206	0.1882	0.2263	3.8000e-004		8.5900e-003	8.5900e-003		8.0800e-003	8.0800e-003	0.0000	32.4588	32.4588	7.6800e-003	0.0000	32.6507

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	6.0000e-005	2.0000e-005	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0264	0.0264	0.0000	0.0000	0.0264
Vendor	1.9300e-003	0.0637	0.0183	2.2000e-004	5.7100e-003	8.0000e-005	5.7800e-003	1.6500e-003	7.0000e-005	1.7200e-003	0.0000	21.4658	21.4658	7.9000e-004	0.0000	21.4855
Worker	7.5500e-003	4.7300e-003	0.0539	2.0000e-004	0.0239	1.5000e-004	0.0240	6.3500e-003	1.3000e-004	6.4800e-003	0.0000	17.9444	17.9444	3.3000e-004	0.0000	17.9527
Total	9.4800e-003	0.0684	0.0721	4.2000e-004	0.0296	2.3000e-004	0.0299	8.0100e-003	2.0000e-004	8.2100e-003	0.0000	39.4365	39.4365	1.1200e-003	0.0000	39.4646

3.5 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7471					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	1.7489	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	6.8000e-004	7.6900e-003	3.0000e-005	3.4100e-003	2.0000e-005	3.4300e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5635	2.5635	5.0000e-005	0.0000	2.5647
Total	1.1000e-003	1.3100e-003	7.8800e-003	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.8458	2.8458	6.0000e-005	0.0000	2.8472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7471					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	1.7489	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0800e-003	6.8000e-004	7.6900e-003	3.0000e-005	3.4100e-003	2.0000e-005	3.4300e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.5635	2.5635	5.0000e-005	0.0000	2.5647
Total	1.1000e-003	1.3100e-003	7.8800e-003	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.3000e-004	2.0000e-005	9.5000e-004	0.0000	2.8458	2.8458	6.0000e-005	0.0000	2.8472

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	3.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0136	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.4000e-004	2.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8942	0.8942	2.0000e-005	0.0000	0.8947
Total	4.0000e-004	8.7000e-004	2.8700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.1765	1.1765	3.0000e-005	0.0000	1.1772

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	3.7200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0136	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	6.3000e-004	1.9000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2823	0.2823	1.0000e-005	0.0000	0.2826
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.4000e-004	2.6800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.2000e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.8942	0.8942	2.0000e-005	0.0000	0.8947
Total	4.0000e-004	8.7000e-004	2.8700e-003	1.0000e-005	1.2600e-003	1.0000e-005	1.2700e-003	3.4000e-004	1.0000e-005	3.4000e-004	0.0000	1.1765	1.1765	3.0000e-005	0.0000	1.1772

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719
Unmitigated	0.1955	0.8237	2.2159	8.3600e-003	0.7919	6.5000e-003	0.7984	0.2125	6.0600e-003	0.2185	0.0000	766.7412	766.7412	0.0252	0.0000	767.3719

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	922.32	1,025.64	791.28	2,121,051	2,121,051
Enclosed Parking Structure	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	922.32	1,025.64	791.28	2,121,051	2,121,051

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Enclosed Parking Structure	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Other Non-Asphalt Surfaces	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771
Parking Lot	0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	114.2428	114.2428	0.0161	3.3300e-003	115.6364
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	114.2428	114.2428	0.0161	3.3300e-003	115.6364
NaturalGas Mitigated	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
NaturalGas Unmitigated	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	2.3591e+06	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	2.3591e+06	0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0127	0.1087	0.0463	6.9000e-004		8.7900e-003	8.7900e-003		8.7900e-003	8.7900e-003	0.0000	125.8905	125.8905	2.4100e-003	2.3100e-003	126.6386

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	635724	59.4021	8.3600e-003	1.7300e-003	60.1267
Enclosed Parking Structure	580608	54.2520	7.6400e-003	1.5800e-003	54.9139
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6300	0.5887	8.0000e-005	2.0000e-005	0.5959
Total		114.2428	0.0161	3.3300e-003	115.6364

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	635724	59.4021	8.3600e-003	1.7300e-003	60.1267
Enclosed Parking Structure	580608	54.2520	7.6400e-003	1.5800e-003	54.9139
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	6300	0.5887	8.0000e-005	2.0000e-005	0.5959
Total		114.2428	0.0161	3.3300e-003	115.6364

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442
Unmitigated	1.1575	0.0128	0.9388	6.0000e-005		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4000e-004	2.0400e-003	8.7000e-004	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3595	2.3595	5.0000e-005	4.0000e-005	2.3735
Landscaping	0.0284	0.0108	0.9380	5.0000e-005		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	1.5337	1.5337	1.4800e-003	0.0000	1.5707
Total	1.1575	0.0128	0.9388	6.0000e-005		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1747					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9541					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.4000e-004	2.0400e-003	8.7000e-004	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3595	2.3595	5.0000e-005	4.0000e-005	2.3735
Landscaping	0.0284	0.0108	0.9380	5.0000e-005		5.1900e-003	5.1900e-003		5.1900e-003	5.1900e-003	0.0000	1.5337	1.5337	1.4800e-003	0.0000	1.5707
Total	1.1575	0.0128	0.9388	6.0000e-005		5.3500e-003	5.3500e-003		5.3500e-003	5.3500e-003	0.0000	3.8931	3.8931	1.5300e-003	4.0000e-005	3.9442

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.7582	0.2147	5.1900e-003	13.6711
Unmitigated	8.4478	0.2683	6.4900e-003	17.0889

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	8.20941 / 5.1755	8.4478	0.2683	6.4900e-003	17.0889
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		8.4478	0.2683	6.4900e-003	17.0889

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	6.56753 / 4.1404	6.7582	0.2147	5.1900e-003	13.6711
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		6.7582	0.2147	5.1900e-003	13.6711

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.7654	0.6953	0.0000	29.1482
Unmitigated	11.7654	0.6953	0.0000	29.1482

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	57.96	11.7654	0.6953	0.0000	29.1482
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7654	0.6953	0.0000	29.1482

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	57.96	11.7654	0.6953	0.0000	29.1482
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		11.7654	0.6953	0.0000	29.1482

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

ATTACHMENT B

**Construction Health Risk Assessment Calculations and
AERMOD Output Results**

Wild Horse Multifamily Project

Estimation of Annual On-site Construction Emissions

Start of Construction	1/2/2023	
End of Construction	3/19/2024	Total
Number of Days	442	442
Number of Hours	10,608	10,608

Size of the construction area source accounted for in AERMOD

Year	On-site Construction Activity	Unmitigated On-site DPM (tons)	Unmitigated Onsite PM2.5 (tons)
2023	On-site Site Preparation	0.00582	0.02820
2023	On-site Grading	0.01970	0.04420
2023	On-site Building Construction	0.08960	0.08960
2024	On-site Building Construction	0.00808	0.00808
2024	On-site Architectural Coating	0.00061	0.00061
2024	On-site Paving	0.00431	0.00431
Total Unmitigated DPM (On-site)		1.281E-01	tons
Average Emission		1.163E+05 grams	3.046E-03 grams/sec
Total Unmitigated PM2.5 (On-site)		1.750E-01	tons
Average Emission		1.589E+05 grams	4.161E-03 grams/sec

Wild Horse Multifamily Project

Estimation of Annual Offsite Construction DPM and PM2.5 Emissions (No Mitigation)

							Total	
Start of Construction		1/2/2023						
End of Construction		3/19/2024						
Number of Days		442					442	
Number of Hours		10,608					10,608	
		2023	2023	2023	2024	2024	2024	
	Construction Trip Type	Site Preparation	Grading	Building Construction	Building Construction	Architectural Coating	Paving	
DPM	Haul Truck	0.00000	0.00132	0.00000	0.00000	0.00000	0.00000	
DPM	Vendor Truck	0.00000	0.00000	0.00071	0.00007	0.00000	0.00000	
DPM	Worker	0.00000	0.00001	0.00133	0.00013	0.00002	0.00001	
DPM	Total	0.00000	0.00133	0.00204	0.00020	0.00002	0.00001	
PM2.5 Total	Haul Truck	0.00002	0.02300	0.00002	0.00001	0.00002	0.00002	
PM2.5 Total	Vendor Truck	0.00000	0.00000	0.01680	0.00172	0.00000	0.00000	
PM2.5 Total	Worker	0.00019	0.00065	0.06300	0.00648	0.00093	0.00032	
PM2.5 Total	Total	0.00021	0.02370	0.07980	0.00821	0.00095	0.00034	
		Haul Truck (tons)	Vendor Truck (tons)	Worker (tons)	Total (tons)			
Total DPM		1.320E-03	7.800E-04	1.500E-03	3.600E-03	Total PM2.5 Total		
						2.309E-02	1.852E-02	
						7.157E-02	1.132E-01	
Average Emissions	Grams	1.199E+03	7.082E+02	1.362E+03		Average Emissions	Grams	
	Grams/sec	3.139E-05	1.855E-05	3.566E-05			Grams/sec	
							2.097E+04	
							1.682E+04	
							6.499E+04	
							1.702E-03	
	Default Vehicle Travel Distance in CalEEMod	20	7.3	10.8		Default Vehicle Travel Distance in CalEEMod	20	
							7.3	
							10.8	
	Vehicle Travel Distances in the Construction HRA (miles)					Vehicle Travel Distances in the Construction HRA (miles)		
	Road Segment 1 (mi)	0.42	0.42	0.42	miles	Road Segment 1 (mi)	0.42	
							0.42	
							0.42	
	Trip Distribution (percent)					Trip Distribution (percent)		
	Road Segment 1	100%	100%	100%		Road Segment 1	100%	
							100%	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)					Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)		
	Road Segment 1	6.644E-07	1.076E-06	1.398E-06	3.138E-06	Road Segment 1	1.162E-05	
							2.554E-05	
							6.671E-05	
							1.039E-04	
	Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)					Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)		
	Road Segment 1 (mi)	6.986E-06	4.524E-05	5.880E-05	1.110E-04	Road Segment 1 (mi)	4.888E-04	
							1.074E-03	
							2.806E-03	
							4.368E-03	
				Total	1.110E-04		Total	
							4.368E-03	

OEHHA Cancer/BAAQMD Risk Methodology

$$\text{Cancer Risk} = \text{DPM} \times \text{CPF} \times \text{ASF} \times \text{DBR} \times \text{ED} \times \text{EF} \times \text{TAH} \times \text{AF} / \text{AT}$$

Cancer Risk = probability of an individual contracting cancer out of a population of 1 million people over a lifetime exposure duration of 30 years

DPM = long-term average concentration of diesel PM as predicted by the air dispersion model (ug/m³)

CPF = cancer potency factor for DPM (mg.ke-day)

ASF = age sensitivity factors that are dependent on the age of the exposed individual (unitless)

DBR = daily breathing rates that are dependent on the age of the exposed individual (liters/kg-day)

ED = exposure duration (years)

EF = exposure frequency (days/year)

TAH = time at home factors that are dependent on the age of the exposed individual (%)

AT = averaging time over the lifetime of an individual (days)

AF = adjustment factor for workers and students (unitless)

Cancer Risk Equation Values as recommended by the California Office of Environmental Health Hazards Assessment

**Cancer Risk Calculations Using OEHA Cancer Risk Assumptions
Wild Horse Multifamily Project**

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant Starting in the 3rd Trimester

UTM: 609694.68 4204842.52

Cancer Potency Factor: 1.1 (mg/kg-day)⁻¹
 Exposure Frequency 350 days/year
 Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Year	Maximum DPM Concentration	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
	(ug/m3)					
3rd Trimester	0.043230064	10	361	1	0.25	0.588
0-1	0.043230064	10	1090	1	0.96	6.823
Total						7.411

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant Starting at Age Zero

UTM: 609694.68 4204842.52

Cancer Potency Factor: 1.1 (mg/kg-day)⁻¹
 Exposure Frequency 350 days/year
 Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Year	Maximum DPM Concentration	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
	(ug/m3)					
0-1	0.043230064	10	1090	1	1.21	8.598
Total						8.598

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

UTM: 609694.68 4204842.52

Cancer Potency Factor: 1.1 (mg/kg-day)⁻¹
 Exposure Frequency 350 days/year
 Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor
	(ug/m3)					(ug/m3) ⁻¹
1	0.043230064	3	572	0.72	1.21	0.975
Total						0.975

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

UTM: 609694.68 4204842.52

Cancer Potency Factor: 1.1 (mg/kg-day)⁻¹
 Exposure Frequency 350 days/year
 Averaging Period 25550 days

Construction Annual DPM Emissions (as PM2.5 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor
	(ug/m3)					(ug/m3) ⁻¹
1	0.043230064	1	261	0.73	1.21	0.150
Total						0.150

Wild Horse Multifamily Project

UTM: 609694.68 4204842.52

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL		Average	Max DPM	CNCHI
X	Y	DPM	(ug/m3)	
(m)	(m)	(ug/m3)		
609694.68	4204842.52	0.0432	0.0432	0.009

Unmitigated

Annual PM2.5 Total (Exhaust + Fugitive Dust)

X	Y	Average	Max
(m)	(m)	PM2.5 Total	PM2.5
(m)	(m)	(ug/m3)	(ug/m3)
609694.68	4204842.52	0.0600	0.0600

Wild Horse Multifamily Project

Construction Annual DPM Emissions (PM2.5 Exhaust)—Unmitigated Concentrations

Annual Average Onsite Total DPM Emission Rate (grams/sec): 3.05E-03
 Annual Average Offsite Total DPM Emission Rate - Road Segment 1 (grams/sec): 3.14E-06

Maximum DPM (ug/m3) 4.3230E-02

UTM

X 609694.680 Y 4204842.520

X	Y	Unit Emissions VALUES AVERAGED SITE AREA	Unit Emissions VALUES AVERAGED ROAD 1	Onsite	Offsite-Road	Total DPM (ug/m3)	GROUP
				Annual DPM Exhaust w/Actual Emissions (ug/m3)	Segment 1 Exhaust w/Actual Emissions (ug/m3)		
609694.68	4204842.52	14.18158	9.33838	4.32E-02	2.93E-05	4.3230E-02	Planned
609694.37	4204828.03	14.12386	11.03786	4.30E-02	3.46E-05	4.3060E-02	Planned
609694.99	4204857.01	14.07222	8.06813	4.29E-02	2.53E-05	4.2893E-02	Planned
609695.31	4204871.50	13.90743	7.04888	4.24E-02	2.21E-05	4.2388E-02	Planned
609695.62	4204885.99	13.67568	6.20896	4.17E-02	1.95E-05	4.1679E-02	Planned
609695.94	4204900.48	13.43714	5.49413	4.09E-02	1.72E-05	4.0950E-02	Planned
609696.25	4204914.97	13.10275	4.88885	3.99E-02	1.53E-05	3.9930E-02	Planned
609694.05	4204813.54	12.85774	13.59849	3.92E-02	4.27E-05	3.9211E-02	Planned
609949.60	4204893.49	12.77556	3.80487	3.89E-02	1.19E-05	3.8930E-02	Planned
609942.19	4204906.45	12.73617	3.66077	3.88E-02	1.15E-05	3.8809E-02	Planned
609957.01	4204880.53	12.71456	3.93081	3.87E-02	1.23E-05	3.8744E-02	Planned
609696.57	4204929.46	12.68365	4.36775	3.86E-02	1.37E-05	3.8651E-02	Planned
609934.78	4204919.41	12.64234	3.49433	3.85E-02	1.10E-05	3.8523E-02	Planned
609964.42	4204867.58	12.54081	4.02761	3.82E-02	1.26E-05	3.8215E-02	Planned
609927.38	4204932.37	12.42795	3.31449	3.79E-02	1.04E-05	3.7869E-02	Planned
609971.83	4204854.62	12.24667	4.07883	3.73E-02	1.28E-05	3.7319E-02	Planned
609696.88	4204943.95	12.18259	3.90871	3.71E-02	1.23E-05	3.7124E-02	Planned
609919.97	4204945.32	12.14696	3.15049	3.70E-02	9.89E-06	3.7013E-02	Planned
609979.23	4204841.66	11.82050	4.07100	3.60E-02	1.28E-05	3.6021E-02	Planned
609912.56	4204958.28	11.80109	2.98926	3.59E-02	9.38E-06	3.5959E-02	Planned
609693.74	4204799.05	11.45759	17.71123	3.49E-02	5.56E-05	3.4958E-02	Planned
609697.19	4204958.44	11.43271	3.49960	3.48E-02	1.10E-05	3.4838E-02	Planned
609905.15	4204971.22	11.40719	2.83394	3.47E-02	8.89E-06	3.4758E-02	Planned
609986.64	4204828.70	11.24903	3.98762	3.43E-02	1.25E-05	3.4280E-02	Planned
609897.74	4204984.20	10.96985	2.68403	3.34E-02	8.42E-06	3.3425E-02	Planned
609971.30	4204905.90	10.61275	3.38805	3.23E-02	1.06E-05	3.2340E-02	Planned
609963.90	4204918.86	10.59683	3.28111	3.23E-02	1.03E-05	3.2291E-02	Planned
609978.71	4204892.94	10.54411	3.48068	3.21E-02	1.09E-05	3.2131E-02	Planned
609890.33	4204997.16	10.52491	2.54617	3.21E-02	7.99E-06	3.2070E-02	Planned
609994.05	4204815.74	10.52408	3.81994	3.21E-02	1.20E-05	3.2071E-02	Planned
609956.49	4204931.82	10.51066	3.15734	3.20E-02	9.91E-06	3.2028E-02	Planned
609691.54	4204697.63	10.48593	15.23127	3.19E-02	4.78E-05	3.1991E-02	Non-res
609697.51	4204972.93	10.40325	3.13485	3.17E-02	9.84E-06	3.1701E-02	Planned
609986.12	4204879.98	10.38651	3.54158	3.16E-02	1.11E-05	3.1651E-02	Planned
609949.08	4204944.77	10.30052	2.99601	3.14E-02	9.40E-06	3.1387E-02	Planned
609693.42	4204784.57	10.13439	24.74027	3.09E-02	7.76E-05	3.0950E-02	Planned
609993.53	4204867.03	10.13073	3.56352	3.09E-02	1.12E-05	3.0872E-02	Planned
609941.67	4204957.73	10.06589	2.85964	3.07E-02	8.97E-06	3.0672E-02	Planned
609882.93	4205010.11	9.99951	2.40404	3.05E-02	7.54E-06	3.0469E-02	Planned
609691.85	4204712.12	9.97057	22.31727	3.04E-02	7.00E-05	3.0443E-02	Non-res
609934.26	4204970.69	9.79509	2.72850	2.98E-02	8.56E-06	2.9847E-02	Planned
610000.94	4204854.07	9.76877	3.53602	2.98E-02	1.11E-05	2.9769E-02	Planned
609680.40	4204842.83	9.68461	9.88435	2.95E-02	3.10E-05	2.9533E-02	Planned
609680.08	4204828.34	9.68128	11.72085	2.95E-02	3.68E-05	2.9528E-02	Planned
610001.46	4204802.79	9.63794	3.57612	2.94E-02	1.12E-05	2.9371E-02	Planned
609692.17	4204726.61	9.63579	36.90912	2.94E-02	1.16E-04	2.9469E-02	Non-res
609681.34	4204886.30	9.61948	6.44137	2.93E-02	2.02E-05	2.9324E-02	Planned
609680.71	4204857.32	9.59960	8.48545	2.92E-02	2.66E-05	2.9269E-02	Planned
609697.82	4204987.42	9.55441	2.82648	2.91E-02	8.87E-06	2.9114E-02	Planned
609681.03	4204871.81	9.50398	7.35490	2.90E-02	2.31E-05	2.8975E-02	Planned
609926.85	4204983.65	9.47612	2.59826	2.89E-02	8.15E-06	2.8875E-02	Planned
609875.52	4205023.07	9.43169	2.26584	2.87E-02	7.11E-06	2.8738E-02	Planned
609681.66	4204900.79	9.36096	5.67323	2.85E-02	1.78E-05	2.8534E-02	Planned
609679.77	4204813.85	9.35335	14.44841	2.85E-02	4.53E-05	2.8538E-02	Planned
610008.35	4204841.11	9.29352	3.45270	2.83E-02	1.08E-05	2.8321E-02	Planned
609919.45	4204996.61	9.11226	2.46951	2.78E-02	7.75E-06	2.7766E-02	Planned
609681.97	4204915.28	9.06030	5.01978	2.76E-02	1.58E-05	2.7616E-02	Planned
609993.01	4204918.31	8.98516	3.04067	2.74E-02	9.54E-06	2.7381E-02	Planned
609681.41	4204687.55	8.98198	11.99309	2.74E-02	3.76E-05	2.7399E-02	Non-res
609985.60	4204931.27	8.98053	2.95332	2.74E-02	9.27E-06	2.7366E-02	Planned
610000.42	4204905.35	8.92114	3.10826	2.72E-02	9.75E-06	2.7186E-02	Planned
609978.19	4204944.22	8.91354	2.86396	2.72E-02	8.99E-06	2.7162E-02	Planned
609698.14	4205001.90	8.82829	2.56222	2.69E-02	8.04E-06	2.6901E-02	Planned

609868.11	4205036.03	8.81002	2.12926	2.68E-02	6.68E-06	2.6844E-02	Planned
610007.82	4204892.39	8.78171	3.14583	2.68E-02	9.87E-06	2.6761E-02	Planned
609970.78	4204957.18	8.77381	2.74667	2.67E-02	8.62E-06	2.6736E-02	Planned
609912.04	4205009.56	8.71024	2.34338	2.65E-02	7.35E-06	2.6541E-02	Planned
610015.75	4204828.15	8.70191	3.31175	2.65E-02	1.04E-05	2.6519E-02	Planned
609682.28	4204929.77	8.69192	4.46347	2.65E-02	1.40E-05	2.6492E-02	Planned
609679.46	4204799.36	8.64607	18.94275	2.63E-02	5.94E-05	2.6398E-02	Planned
610008.87	4204789.83	8.59167	3.27409	2.62E-02	1.03E-05	2.6183E-02	Planned
609963.37	4204970.14	8.56016	2.62242	2.61E-02	8.23E-06	2.6085E-02	Planned
610015.23	4204879.43	8.55980	3.14985	2.61E-02	9.88E-06	2.6085E-02	Planned
609685.81	4204662.88	8.43689	8.23134	2.57E-02	2.58E-05	2.5727E-02	FENCEGRD
609955.97	4204983.10	8.33451	2.51184	2.54E-02	7.88E-06	2.5397E-02	Planned
609682.60	4204944.26	8.30886	3.97553	2.53E-02	1.25E-05	2.5323E-02	Planned
609904.63	4205022.52	8.26830	2.21918	2.52E-02	6.96E-06	2.5194E-02	Planned
610022.64	4204866.48	8.25080	3.11492	2.51E-02	9.77E-06	2.5144E-02	Planned
609860.70	4205048.99	8.20708	2.01226	2.50E-02	6.31E-06	2.5007E-02	Planned
609698.45	4205016.39	8.12001	2.33057	2.47E-02	7.31E-06	2.4743E-02	Planned
609948.56	4204996.06	8.07266	2.40263	2.46E-02	7.54E-06	2.4599E-02	Planned
610023.16	4204815.19	7.99521	3.11666	2.44E-02	9.78E-06	2.4365E-02	Planned
609677.57	4204712.43	7.98829	21.01788	2.43E-02	6.60E-05	2.4400E-02	Non-res
609679.14	4204784.88	7.94655	27.03913	2.42E-02	8.48E-05	2.4292E-02	Planned
609677.88	4204726.92	7.91894	33.29880	2.41E-02	1.04E-04	2.4228E-02	Non-res
609682.91	4204958.75	7.91461	3.54402	2.41E-02	1.11E-05	2.4121E-02	Planned
610030.05	4204853.52	7.85230	3.03818	2.39E-02	9.53E-06	2.3930E-02	Planned
609897.22	4205035.48	7.79462	2.09859	2.37E-02	6.59E-06	2.3751E-02	Planned
609941.15	4205009.01	7.77275	2.29395	2.37E-02	7.20E-06	2.3685E-02	Planned
610007.30	4204943.67	7.72667	2.68344	2.35E-02	8.42E-06	2.3546E-02	Planned
610014.71	4204930.72	7.72400	2.74799	2.35E-02	8.62E-06	2.3538E-02	Planned
609999.89	4204956.63	7.67311	2.60882	2.34E-02	8.19E-06	2.3382E-02	Planned
610022.12	4204917.76	7.66550	2.79419	2.34E-02	8.77E-06	2.3360E-02	Planned
609992.49	4204969.59	7.56807	2.52517	2.31E-02	7.92E-06	2.3062E-02	Planned
610029.53	4204904.80	7.54158	2.81597	2.30E-02	8.84E-06	2.2982E-02	Planned
609853.29	4205061.95	7.48524	1.89122	2.28E-02	5.93E-06	2.2808E-02	Planned
609683.23	4204973.24	7.46853	3.16807	2.28E-02	9.94E-06	2.2761E-02	Planned
609933.74	4205021.97	7.44102	2.18846	2.27E-02	6.87E-06	2.2674E-02	Planned
609985.08	4204982.55	7.41688	2.43288	2.26E-02	7.63E-06	2.2601E-02	Planned
610016.28	4204776.87	7.41446	2.93271	2.26E-02	9.20E-06	2.2596E-02	Planned
610037.46	4204840.56	7.36542	2.91994	2.24E-02	9.16E-06	2.2446E-02	Planned
610036.94	4204891.84	7.34908	2.81014	2.24E-02	8.82E-06	2.2396E-02	Planned
609889.81	4205048.44	7.30109	1.98454	2.22E-02	6.23E-06	2.2247E-02	Planned
609977.67	4204995.51	7.22299	2.33527	2.20E-02	7.33E-06	2.2010E-02	Planned
610030.57	4204802.24	7.18802	2.87965	2.19E-02	9.04E-06	2.1906E-02	Planned
609698.77	4205030.88	7.17554	2.11795	2.19E-02	6.65E-06	2.1865E-02	Planned
609675.68	4204652.81	7.17312	7.08723	2.19E-02	2.22E-05	2.1873E-02	FENCEGRD
609667.13	4204687.86	7.15022	11.72756	2.18E-02	3.68E-05	2.1818E-02	Non-res
610044.34	4204878.88	7.08619	2.77380	2.16E-02	8.70E-06	2.1595E-02	Planned
609926.33	4205034.93	7.07023	2.08280	2.15E-02	6.54E-06	2.1544E-02	Planned
609970.26	4205008.46	6.98876	2.23553	2.13E-02	7.02E-06	2.1297E-02	Planned
609683.54	4204987.73	6.90679	2.84615	2.10E-02	8.93E-06	2.1049E-02	Planned
610044.87	4204827.60	6.79472	2.76244	2.07E-02	8.67E-06	2.0707E-02	Planned
609882.40	4205061.40	6.78826	1.88313	2.07E-02	5.91E-06	2.0685E-02	Planned
610051.75	4204865.93	6.75251	2.70566	2.06E-02	8.49E-06	2.0578E-02	Planned
609845.88	4205074.90	6.74707	1.76823	2.06E-02	5.55E-06	2.0559E-02	Planned
610029.01	4204956.08	6.72656	2.44655	2.05E-02	7.68E-06	2.0499E-02	Planned
609962.85	4205021.42	6.72395	2.13846	2.05E-02	6.71E-06	2.0490E-02	Planned
610036.41	4204943.12	6.72101	2.49517	2.05E-02	7.83E-06	2.0482E-02	Planned
610021.60	4204969.04	6.68283	2.38434	2.04E-02	7.48E-06	2.0365E-02	Planned
609665.80	4204828.65	6.67552	12.85603	2.03E-02	4.03E-05	2.0376E-02	Planned
609665.49	4204814.16	6.67008	15.86596	2.03E-02	4.98E-05	2.0369E-02	Planned
610043.82	4204930.17	6.66596	2.52690	2.03E-02	7.93E-06	2.0314E-02	Planned
609918.92	4205047.89	6.65841	1.97726	2.03E-02	6.20E-06	2.0289E-02	Planned
610014.19	4204982.00	6.59639	2.31640	2.01E-02	7.27E-06	2.0102E-02	Planned
609666.12	4204843.14	6.58464	10.75609	2.01E-02	3.38E-05	2.0092E-02	Planned
609681.10	4204636.42	6.58432	5.93458	2.01E-02	1.86E-05	2.0076E-02	FENCEGRD
609661.16	4204667.40	6.56497	8.36287	2.00E-02	2.62E-05	2.0025E-02	Planned
610051.23	4204917.21	6.55680	2.53852	2.00E-02	7.97E-06	1.9982E-02	Planned
609666.43	4204857.63	6.51133	9.14283	1.98E-02	2.87E-05	1.9864E-02	Planned
609663.60	4204727.23	6.50679	30.07676	1.98E-02	9.44E-05	1.9916E-02	Non-res
609663.29	4204712.74	6.50280	19.61818	1.98E-02	6.16E-05	1.9871E-02	Non-res
609665.17	4204799.67	6.49797	20.75860	1.98E-02	6.51E-05	1.9860E-02	Planned
610006.78	4204994.96	6.46784	2.24011	1.97E-02	7.03E-06	1.9710E-02	Planned
609955.44	4205034.38	6.42484	2.04044	1.96E-02	6.40E-06	1.9578E-02	Planned
609666.74	4204872.12	6.41055	7.86916	1.95E-02	2.47E-05	1.9553E-02	Planned
610058.64	4204904.25	6.39203	2.52824	1.95E-02	7.93E-06	1.9480E-02	Planned
609664.86	4204785.19	6.37912	29.35425	1.94E-02	9.21E-05	1.9525E-02	Planned
610059.16	4204852.97	6.34884	2.60478	1.93E-02	8.17E-06	1.9348E-02	Planned
610037.98	4204789.28	6.30470	2.61362	1.92E-02	8.20E-06	1.9214E-02	Planned
609999.37	4205007.91	6.30208	2.15939	1.92E-02	6.78E-06	1.9205E-02	Planned
609683.86	4205002.21	6.28951	2.56276	1.92E-02	8.04E-06	1.9168E-02	Planned
609667.06	4204886.61	6.28383	6.82936	1.91E-02	2.14E-05	1.9164E-02	Planned
609668.15	4204641.68	6.27122	6.15753	1.91E-02	1.93E-05	1.9123E-02	FENCEGRD
609911.52	4205060.85	6.21514	1.87044	1.89E-02	5.87E-06	1.8939E-02	Planned

609875.00	4205074.35	6.18563	1.77415	1.88E-02	5.57E-06	1.8849E-02	Planned
610066.05	4204891.29	6.16984	2.49380	1.88E-02	7.83E-06	1.8803E-02	Planned
610023.69	4204763.91	6.16330	2.57771	1.88E-02	8.09E-06	1.8783E-02	Planned
610052.27	4204814.64	6.15370	2.57245	1.87E-02	8.07E-06	1.8754E-02	Planned
609667.37	4204901.10	6.12770	5.96565	1.87E-02	1.87E-05	1.8685E-02	Planned
609991.96	4205020.87	6.10176	2.07599	1.86E-02	6.51E-06	1.8594E-02	Planned
609948.04	4205047.34	6.09676	1.94339	1.86E-02	6.10E-06	1.8578E-02	Planned
609699.08	4205045.37	6.03308	1.92497	1.84E-02	6.04E-06	1.8384E-02	Planned
609838.48	4205087.86	5.96686	1.65119	1.82E-02	5.18E-06	1.8182E-02	Planned
609667.69	4204915.59	5.92020	5.24365	1.80E-02	1.65E-05	1.8051E-02	Planned
609682.38	4204621.71	5.91649	5.08640	1.80E-02	1.60E-05	1.8039E-02	FENCEGRD
610050.71	4204968.49	5.91259	2.23661	1.80E-02	7.02E-06	1.8018E-02	Planned
610058.12	4204955.53	5.90620	2.27311	1.80E-02	7.13E-06	1.7999E-02	Planned
610073.46	4204878.33	5.88882	2.43329	1.79E-02	7.64E-06	1.7947E-02	Planned
610066.57	4204840.01	5.88228	2.47417	1.79E-02	7.76E-06	1.7927E-02	Planned
610043.30	4204981.45	5.87916	2.19111	1.79E-02	6.88E-06	1.7916E-02	Planned
609984.56	4205033.83	5.87035	1.98994	1.79E-02	6.24E-06	1.7889E-02	Planned
609652.85	4204688.17	5.86699	11.39075	1.79E-02	3.57E-05	1.7908E-02	Non-res
610065.53	4204942.57	5.85422	2.29610	1.78E-02	7.21E-06	1.7841E-02	Planned
610035.89	4204994.41	5.80534	2.13659	1.77E-02	6.70E-06	1.7691E-02	Planned
610072.93	4204929.62	5.75606	2.30199	1.75E-02	7.22E-06	1.7542E-02	Planned
609904.11	4205073.80	5.74739	1.76610	1.75E-02	5.54E-06	1.7514E-02	Planned
609940.63	4205060.30	5.73935	1.84740	1.75E-02	5.80E-06	1.7489E-02	Planned
609668.00	4204930.08	5.66818	4.63128	1.73E-02	1.45E-05	1.7281E-02	Planned
610080.34	4204916.66	5.61453	2.28910	1.71E-02	7.18E-06	1.7110E-02	Planned
609977.15	4205046.79	5.61137	1.90271	1.71E-02	5.97E-06	1.7100E-02	Planned
609684.17	4205016.70	5.59518	2.31385	1.70E-02	7.26E-06	1.7052E-02	Planned
609649.32	4204727.54	5.58221	27.53027	1.70E-02	8.64E-05	1.7091E-02	Non-res
609649.00	4204713.05	5.57717	18.42873	1.70E-02	5.78E-05	1.7047E-02	Non-res
609867.59	4205087.31	5.57035	1.66538	1.70E-02	5.23E-06	1.6974E-02	Non-res
609649.63	4204742.03	5.55686	46.92555	1.69E-02	1.47E-04	1.7075E-02	Non-res
610080.86	4204865.38	5.55308	2.34795	1.69E-02	7.37E-06	1.6923E-02	Planned
609657.50	4204631.81	5.47812	5.46112	1.67E-02	1.71E-05	1.6705E-02	FENCEGRD
610059.68	4204801.69	5.46190	2.36002	1.66E-02	7.41E-06	1.6646E-02	Planned
610087.75	4204903.70	5.42568	2.25617	1.65E-02	7.08E-06	1.6535E-02	Planned
610045.39	4204776.32	5.38621	2.33373	1.64E-02	7.32E-06	1.6415E-02	Planned
609668.32	4204944.57	5.38357	4.10525	1.64E-02	1.29E-05	1.6413E-02	Planned
609644.80	4204672.90	5.36740	8.82004	1.64E-02	2.77E-05	1.6378E-02	Planned
610073.98	4204827.05	5.36425	2.31945	1.63E-02	7.28E-06	1.6348E-02	Planned
609933.22	4205073.26	5.36214	1.75110	1.63E-02	5.50E-06	1.6340E-02	Planned
609969.74	4205059.75	5.32684	1.81551	1.62E-02	5.70E-06	1.6233E-02	Planned
609896.70	4205086.76	5.25312	1.66537	1.60E-02	5.23E-06	1.6008E-02	Planned
609671.22	4204612.06	5.22178	4.57992	1.59E-02	1.44E-05	1.5921E-02	FENCEGRD
610095.16	4204890.74	5.18913	2.20249	1.58E-02	6.91E-06	1.5814E-02	Planned
609650.58	4204785.49	5.17519	31.75086	1.58E-02	9.96E-05	1.5865E-02	Planned
609831.07	4205100.82	5.16699	1.53906	1.57E-02	4.83E-06	1.5745E-02	Planned
610088.27	4204852.42	5.16643	2.23774	1.57E-02	7.02E-06	1.5745E-02	Planned
610094.64	4204942.03	5.10161	2.10171	1.55E-02	6.60E-06	1.5547E-02	Planned
609650.89	4204799.98	5.09597	22.31089	1.55E-02	7.00E-05	1.5594E-02	Planned
609668.63	4204959.06	5.09103	3.64609	1.55E-02	1.14E-05	1.5520E-02	Planned
609651.20	4204814.47	5.01185	17.11732	1.53E-02	5.37E-05	1.5321E-02	FENCEGRD
610102.05	4204929.07	4.97526	2.08494	1.52E-02	6.54E-06	1.5162E-02	Planned
609925.81	4205086.21	4.96392	1.65731	1.51E-02	5.20E-06	1.5127E-02	Planned
609952.96	4205078.06	4.95633	1.69854	1.51E-02	5.33E-06	1.5104E-02	Planned
609860.18	4205100.27	4.93721	1.56049	1.50E-02	4.90E-06	1.5045E-02	Planned
610031.09	4204750.95	4.93580	2.23040	1.50E-02	7.00E-06	1.5043E-02	Planned
609651.52	4204828.96	4.92933	13.78783	1.50E-02	4.33E-05	1.5059E-02	FENCEGRD
610102.57	4204877.78	4.90696	2.12796	1.49E-02	6.68E-06	1.4955E-02	Planned
609651.83	4204843.45	4.86197	11.41106	1.48E-02	3.58E-05	1.4847E-02	FENCEGRD
609635.04	4204727.85	4.83916	25.23765	1.47E-02	7.92E-05	1.4821E-02	Non-res
609647.03	4204621.88	4.83719	4.89670	1.47E-02	1.54E-05	1.4751E-02	FENCEGRD
609652.15	4204857.94	4.83036	9.59412	1.47E-02	3.01E-05	1.4745E-02	FENCEGRD
609684.48	4205031.19	4.81839	2.09605	1.47E-02	6.58E-06	1.4685E-02	Planned
609635.09	4204661.79	4.81610	7.47851	1.47E-02	2.35E-05	1.4695E-02	Planned
610109.45	4204916.11	4.81044	2.05322	1.47E-02	6.44E-06	1.4660E-02	Planned
610081.39	4204814.09	4.80926	2.14635	1.47E-02	6.74E-06	1.4657E-02	Planned
609634.72	4204713.36	4.78110	17.42169	1.46E-02	5.47E-05	1.4619E-02	Non-res
609652.46	4204872.43	4.76897	8.17850	1.45E-02	2.57E-05	1.4553E-02	FENCEGRD
609699.39	4205059.86	4.76357	1.75139	1.45E-02	5.50E-06	1.4517E-02	Planned
609668.94	4204973.55	4.75942	3.24794	1.45E-02	1.02E-05	1.4509E-02	Planned
609635.35	4204742.34	4.75092	42.48421	1.45E-02	1.33E-04	1.4606E-02	Non-res
610067.09	4204788.73	4.74546	2.13541	1.45E-02	6.70E-06	1.4463E-02	Planned
610095.68	4204839.46	4.74086	2.10727	1.44E-02	6.61E-06	1.4448E-02	Planned
609652.78	4204886.92	4.73856	7.02036	1.44E-02	2.20E-05	1.4457E-02	FENCEGRD
609889.29	4205099.72	4.73795	1.56833	1.44E-02	4.92E-06	1.4438E-02	Planned
609653.09	4204901.41	4.65525	6.08529	1.42E-02	1.91E-05	1.4200E-02	FENCEGRD
609634.41	4204698.87	4.61732	13.03806	1.41E-02	4.09E-05	1.4106E-02	Non-res
610116.86	4204903.15	4.61016	2.00553	1.40E-02	6.29E-06	1.4050E-02	Planned
610109.98	4204864.83	4.58615	2.03491	1.40E-02	6.39E-06	1.3977E-02	Planned
609918.40	4205099.17	4.54310	1.56706	1.38E-02	4.92E-06	1.3844E-02	Planned
609653.40	4204915.90	4.49673	5.31756	1.37E-02	1.67E-05	1.3715E-02	FENCEGRD
609630.09	4204638.90	4.48419	5.70787	1.37E-02	1.79E-05	1.3678E-02	FENCEGRD

610052.80	4204763.36	4.47570	2.05668	1.36E-02	6.45E-06	1.3641E-02	Planned
609669.26	4204988.04	4.39364	2.90089	1.34E-02	9.10E-06	1.3393E-02	Planned
610124.27	4204890.19	4.37250	1.94043	1.33E-02	6.09E-06	1.3326E-02	Planned
609823.66	4205113.78	4.35705	1.43307	1.33E-02	4.50E-06	1.3277E-02	Planned
609669.04	4204588.11	4.34444	3.70677	1.32E-02	1.16E-05	1.3246E-02	FENCEGRD
609656.09	4204593.37	4.32015	3.83420	1.32E-02	1.20E-05	1.3172E-02	FENCEGRD
609636.29	4204785.80	4.31990	34.11294	1.32E-02	1.07E-04	1.3267E-02	FENCEGRD
609653.72	4204930.39	4.31641	4.66580	1.31E-02	1.46E-05	1.3164E-02	FENCEGRD
609852.77	4205113.23	4.29932	1.45945	1.31E-02	4.58E-06	1.3101E-02	Planned
610103.09	4204826.50	4.28938	1.96277	1.31E-02	6.16E-06	1.3073E-02	Planned
609636.61	4204800.29	4.27868	23.56269	1.30E-02	7.39E-05	1.3108E-02	FENCEGRD
610088.80	4204801.14	4.23889	1.96159	1.29E-02	6.16E-06	1.2919E-02	Planned
610117.39	4204851.87	4.23444	1.92634	1.29E-02	6.04E-06	1.2905E-02	Planned
609636.92	4204814.78	4.21992	17.85119	1.29E-02	5.60E-05	1.2911E-02	FENCEGRD
609881.88	4205112.68	4.21230	1.47457	1.28E-02	4.63E-06	1.2836E-02	Planned
609682.00	4204582.86	4.17794	3.57574	1.27E-02	1.12E-05	1.2738E-02	FENCEGRD
609643.13	4204598.63	4.16914	3.97957	1.27E-02	1.25E-05	1.2713E-02	FENCEGRD
609637.24	4204829.27	4.15505	14.23906	1.27E-02	4.47E-05	1.2702E-02	FENCEGRD
609620.75	4204728.16	4.15184	23.63038	1.26E-02	7.42E-05	1.2722E-02	Non-res
609910.99	4205112.13	4.11198	1.47894	1.25E-02	4.64E-06	1.2531E-02	Planned
609620.39	4204663.14	4.10847	7.47168	1.25E-02	2.34E-05	1.2539E-02	Planned
610131.68	4204877.23	4.10632	1.86145	1.25E-02	5.84E-06	1.2515E-02	Planned
609654.03	4204944.88	4.09169	4.11449	1.25E-02	1.29E-05	1.2477E-02	FENCEGRD
610031.11	4204736.80	4.08581	1.99671	1.24E-02	6.27E-06	1.2453E-02	Planned
609625.11	4204686.72	4.08571	10.27426	1.24E-02	3.22E-05	1.2478E-02	Non-res
609637.55	4204843.76	4.08508	11.69391	1.24E-02	3.67E-05	1.2481E-02	FENCEGRD
609621.07	4204742.65	4.07096	38.91982	1.24E-02	1.22E-04	1.2523E-02	Non-res
610093.59	4205044.59	4.06954	1.66599	1.24E-02	5.23E-06	1.2402E-02	FENCEGRD
609637.87	4204858.25	4.04667	9.75877	1.23E-02	3.06E-05	1.2358E-02	FENCEGRD
610074.50	4204775.77	4.03697	1.90870	1.23E-02	5.99E-06	1.2304E-02	Planned
609684.80	4205045.68	4.02667	1.90076	1.23E-02	5.96E-06	1.2272E-02	Planned
609669.57	4205002.52	3.99487	2.59758	1.22E-02	8.15E-06	1.2178E-02	Planned
609620.44	4204713.67	3.99258	16.55763	1.22E-02	5.20E-05	1.2214E-02	Non-res
609638.18	4204872.74	3.98254	8.26491	1.21E-02	2.59E-05	1.2158E-02	FENCEGRD
610086.19	4205057.55	3.97192	1.62474	1.21E-02	5.10E-06	1.2105E-02	FENCEGRD
609630.17	4204603.89	3.96539	4.12223	1.21E-02	1.29E-05	1.2093E-02	FENCEGRD
609638.49	4204887.23	3.93701	7.05272	1.20E-02	2.21E-05	1.2015E-02	FENCEGRD
609654.35	4204959.37	3.88226	3.63250	1.18E-02	1.14E-05	1.1838E-02	FENCEGRD
610052.81	4204749.60	3.87930	1.87517	1.18E-02	5.88E-06	1.1823E-02	Planned
610124.79	4204838.91	3.86089	1.80572	1.18E-02	5.67E-06	1.1767E-02	Planned
610078.78	4205070.51	3.85038	1.57854	1.17E-02	4.95E-06	1.1734E-02	FENCEGRD
609638.81	4204901.72	3.83549	6.08796	1.17E-02	1.91E-05	1.1703E-02	FENCEGRD
610110.50	4204813.54	3.82405	1.80959	1.16E-02	5.68E-06	1.1655E-02	Planned
610139.09	4204864.28	3.81437	1.77003	1.16E-02	5.55E-06	1.1625E-02	Planned
609847.46	4205124.46	3.76171	1.37519	1.15E-02	4.32E-06	1.1463E-02	Planned
609622.01	4204786.11	3.75964	36.62302	1.15E-02	1.15E-04	1.1568E-02	FENCEGRD
609612.02	4204622.13	3.74660	4.75135	1.14E-02	1.49E-05	1.1428E-02	FENCEGRD
609622.33	4204800.60	3.72376	24.66027	1.13E-02	7.74E-05	1.1421E-02	FENCEGRD
610071.37	4205083.46	3.71166	1.52719	1.13E-02	4.79E-06	1.1311E-02	FENCEGRD
609639.12	4204916.21	3.70751	5.28792	1.13E-02	1.66E-05	1.1311E-02	FENCEGRD
609874.47	4205125.64	3.69538	1.38285	1.13E-02	4.34E-06	1.1261E-02	Planned
609669.89	4205017.01	3.68507	2.33340	1.12E-02	7.32E-06	1.1233E-02	Planned
609622.64	4204815.09	3.67319	18.41100	1.12E-02	5.78E-05	1.1247E-02	FENCEGRD
609812.67	4205124.92	3.67263	1.34058	1.12E-02	4.21E-06	1.1192E-02	Planned
610096.20	4204788.18	3.67238	1.77386	1.12E-02	5.57E-06	1.1193E-02	Planned
609654.66	4204973.86	3.62944	3.22149	1.11E-02	1.01E-05	1.1066E-02	FENCEGRD
609606.82	4204635.12	3.62157	5.37082	1.10E-02	1.69E-05	1.1049E-02	Planned
609622.95	4204829.58	3.61532	14.52697	1.10E-02	4.56E-05	1.1059E-02	FENCEGRD
610149.46	4205024.95	3.60585	1.57282	1.10E-02	4.94E-06	1.0989E-02	FENCEGRD
610156.87	4205011.99	3.60054	1.58392	1.10E-02	4.97E-06	1.0973E-02	FENCEGRD
610142.05	4205037.91	3.58850	1.55441	1.09E-02	4.88E-06	1.0936E-02	FENCEGRD
610164.28	4204999.03	3.57204	1.58702	1.09E-02	4.98E-06	1.0886E-02	FENCEGRD
609606.47	4204728.47	3.57152	22.29113	1.09E-02	7.00E-05	1.0950E-02	Non-res
610063.96	4205096.42	3.56366	1.46931	1.09E-02	4.61E-06	1.0860E-02	FENCEGRD
610134.64	4205050.86	3.54963	1.52979	1.08E-02	4.80E-06	1.0818E-02	FENCEGRD
609623.27	4204844.07	3.54847	11.83596	1.08E-02	3.71E-05	1.0847E-02	FENCEGRD
610027.44	4205109.93	3.54789	1.43973	1.08E-02	4.52E-06	1.0812E-02	FENCEGRD
609639.44	4204930.70	3.54491	4.61980	1.08E-02	1.45E-05	1.0813E-02	FENCEGRD
609635.77	4204576.79	3.54460	3.35115	1.08E-02	1.05E-05	1.0808E-02	FENCEGRD
610074.52	4204760.91	3.53625	1.74978	1.08E-02	5.49E-06	1.0778E-02	Planned
610171.68	4204986.07	3.52073	1.58187	1.07E-02	4.96E-06	1.0730E-02	FENCEGRD
609606.79	4204742.96	3.51252	35.67493	1.07E-02	1.12E-04	1.0812E-02	Non-res
610146.50	4204851.32	3.50223	1.66811	1.07E-02	5.23E-06	1.0674E-02	Planned
610127.23	4205063.82	3.48981	1.49931	1.06E-02	4.70E-06	1.0636E-02	FENCEGRD
609699.71	4205074.35	3.47907	1.59685	1.06E-02	5.01E-06	1.0603E-02	Planned
609659.96	4204566.97	3.47891	3.15293	1.06E-02	9.89E-06	1.0608E-02	FENCEGRD
610132.20	4204825.95	3.47574	1.67639	1.06E-02	5.26E-06	1.0593E-02	Planned
609601.63	4204648.10	3.47212	6.12117	1.06E-02	1.92E-05	1.0596E-02	Planned
610160.79	4204876.68	3.46069	1.63649	1.05E-02	5.14E-06	1.0547E-02	Planned
610179.09	4204973.12	3.44572	1.56746	1.05E-02	4.92E-06	1.0501E-02	FENCEGRD
610119.83	4205076.78	3.41061	1.46392	1.04E-02	4.59E-06	1.0394E-02	FENCEGRD
609610.69	4204687.37	3.39559	9.40807	1.03E-02	2.95E-05	1.0373E-02	Non-res

610056.55	4205109.38	3.39349	1.41414	1.03E-02	4.44E-06	1.0342E-02	FENCEGRD
609606.16	4204713.98	3.39109	15.55494	1.03E-02	4.88E-05	1.0379E-02	Non-res
610117.91	4204800.59	3.36092	1.65212	1.02E-02	5.18E-06	1.0243E-02	Planned
609684.15	4204557.16	3.34729	2.85818	1.02E-02	8.97E-06	1.0206E-02	Planned
609639.75	4204945.19	3.34413	4.06066	1.02E-02	1.27E-05	1.0200E-02	FENCEGRD
609654.98	4204988.34	3.33990	2.86878	1.02E-02	9.00E-06	1.0183E-02	FENCEGRD
610020.03	4205122.89	3.33179	1.37582	1.01E-02	4.32E-06	1.0154E-02	FENCEGRD
610112.42	4205089.74	3.31204	1.42651	1.01E-02	4.48E-06	1.0094E-02	FENCEGRD
609611.59	4204586.61	3.31144	3.55391	1.01E-02	1.12E-05	1.0099E-02	FENCEGRD
610096.22	4204773.73	3.28413	1.64771	1.00E-02	5.17E-06	1.0009E-02	Planned
610052.82	4204735.84	3.26417	1.68806	9.94E-03	5.30E-06	9.9488E-03	Planned
609685.11	4205060.17	3.23126	1.72697	9.84E-03	5.42E-06	9.8487E-03	Planned
609596.43	4204661.08	3.21496	7.04204	9.79E-03	2.21E-05	9.8157E-03	Planned
609670.20	4205031.50	3.20674	2.10045	9.77E-03	6.59E-06	9.7752E-03	Planned
610049.14	4205122.34	3.20629	1.35950	9.77E-03	4.27E-06	9.7715E-03	FENCEGRD
610105.01	4205102.70	3.19750	1.38464	9.74E-03	4.35E-06	9.7448E-03	FENCEGRD
610168.20	4204863.73	3.19644	1.54801	9.74E-03	4.86E-06	9.7420E-03	Planned
610153.91	4204838.36	3.17872	1.55849	9.68E-03	4.89E-06	9.6881E-03	Planned
609834.38	4205137.33	3.15792	1.27646	9.62E-03	4.01E-06	9.6238E-03	Planned
609640.07	4204959.68	3.14349	3.57831	9.58E-03	1.12E-05	9.5871E-03	FENCEGRD
610183.10	4205044.18	3.11363	1.40948	9.48E-03	4.42E-06	9.4893E-03	FENCEGRD
609866.91	4205140.92	3.11212	1.27936	9.48E-03	4.01E-06	9.4843E-03	Planned
610012.62	4205135.85	3.11140	1.31098	9.48E-03	4.11E-06	9.4822E-03	FENCEGRD
610190.51	4205031.22	3.10851	1.41706	9.47E-03	4.45E-06	9.4738E-03	FENCEGRD
610175.69	4205057.14	3.10356	1.39713	9.45E-03	4.38E-06	9.4586E-03	FENCEGRD
610139.61	4204812.99	3.08980	1.54294	9.41E-03	4.84E-06	9.4172E-03	Planned
610197.92	4205018.27	3.08757	1.41885	9.41E-03	4.45E-06	9.4100E-03	FENCEGRD
609589.80	4204615.75	3.07836	4.43660	9.38E-03	1.39E-05	9.3914E-03	Planned
610168.28	4205070.10	3.07329	1.37897	9.36E-03	4.33E-06	9.3664E-03	FENCEGRD
610097.60	4205115.65	3.06906	1.33993	9.35E-03	4.20E-06	9.3534E-03	FENCEGRD
610117.92	4204786.43	3.05336	1.54981	9.30E-03	4.86E-06	9.3062E-03	Planned
610205.33	4205005.31	3.04807	1.41377	9.29E-03	4.44E-06	9.2896E-03	FENCEGRD
609655.29	4205002.83	3.03543	2.56089	9.25E-03	8.04E-06	9.2547E-03	FENCEGRD
610160.87	4205083.06	3.02438	1.35610	9.21E-03	4.26E-06	9.2173E-03	FENCEGRD
610074.53	4204746.04	3.02059	1.58235	9.20E-03	4.97E-06	9.2065E-03	Planned
610041.74	4205135.30	3.02030	1.30012	9.20E-03	4.08E-06	9.2047E-03	FENCEGRD
610212.73	4204992.35	2.98920	1.40122	9.11E-03	4.40E-06	9.1103E-03	FENCEGRD
610153.47	4205096.01	2.95855	1.32812	9.01E-03	4.17E-06	9.0167E-03	FENCEGRD
609805.26	4205137.88	2.94909	1.24227	8.98E-03	3.90E-06	8.9876E-03	Planned
609640.38	4204974.17	2.93283	3.16300	8.93E-03	9.93E-06	8.9441E-03	FENCEGRD
610090.19	4205128.61	2.93008	1.29236	8.93E-03	4.06E-06	8.9298E-03	FENCEGRD
610175.61	4204850.77	2.92364	1.45293	8.91E-03	4.56E-06	8.9107E-03	Planned
610220.14	4204979.39	2.91201	1.38138	8.87E-03	4.33E-06	8.8751E-03	FENCEGRD
609645.26	4204548.11	2.90448	2.75163	8.85E-03	8.63E-06	8.8564E-03	Planned
609632.57	4204553.27	2.89853	2.86720	8.83E-03	9.00E-06	8.8387E-03	Planned
609657.96	4204542.96	2.89526	2.62398	8.82E-03	8.23E-06	8.8279E-03	Planned
610005.22	4205148.80	2.88858	1.24639	8.80E-03	3.91E-06	8.8033E-03	FENCEGRD
609591.24	4204674.06	2.88819	7.80392	8.80E-03	2.45E-05	8.8227E-03	Planned
609619.87	4204558.42	2.88324	2.96063	8.78E-03	9.29E-06	8.7924E-03	Planned
609580.10	4204639.99	2.88126	5.50562	8.78E-03	1.73E-05	8.7943E-03	Planned
610096.23	4204759.28	2.87971	1.51316	8.77E-03	4.75E-06	8.7771E-03	Planned
610146.06	4205108.97	2.87609	1.29767	8.76E-03	4.07E-06	8.7654E-03	FENCEGRD
609670.66	4204537.81	2.85435	2.48516	8.70E-03	7.80E-06	8.7029E-03	Planned
610161.31	4204825.40	2.85378	1.44431	8.69E-03	4.53E-06	8.6979E-03	Planned
610034.33	4205148.25	2.83382	1.23903	8.63E-03	3.89E-06	8.6364E-03	FENCEGRD
609607.17	4204563.57	2.82627	3.04879	8.61E-03	9.57E-06	8.6191E-03	FENCEGRD
610139.63	4204798.13	2.82387	1.45249	8.60E-03	4.56E-06	8.6068E-03	Planned
609609.93	4204887.85	2.82239	7.02967	8.60E-03	2.21E-05	8.6198E-03	FENCEGRD
610227.55	4204966.43	2.81710	1.35396	8.58E-03	4.25E-06	8.5859E-03	FENCEGRD
609683.36	4204532.65	2.78823	2.33631	8.49E-03	7.33E-06	8.5010E-03	Planned
610082.78	4205141.57	2.78381	1.24241	8.48E-03	3.90E-06	8.4841E-03	FENCEGRD
610138.65	4205121.93	2.78171	1.26223	8.47E-03	3.96E-06	8.4778E-03	FENCEGRD
609856.08	4205149.74	2.78133	1.21605	8.47E-03	3.82E-06	8.4765E-03	Planned
610117.94	4204772.27	2.72857	1.43985	8.31E-03	4.52E-06	8.3164E-03	Planned
609594.47	4204568.73	2.72827	3.13983	8.31E-03	9.85E-06	8.3209E-03	Planned
609670.52	4205045.99	2.72622	1.89547	8.30E-03	5.95E-06	8.3107E-03	FENCEGRD
610216.74	4205063.41	2.72525	1.27627	8.30E-03	4.00E-06	8.3058E-03	FENCEGRD
610224.15	4205050.46	2.72187	1.28134	8.29E-03	4.02E-06	8.2955E-03	FENCEGRD
610209.33	4205076.37	2.71391	1.26704	8.27E-03	3.98E-06	8.2712E-03	FENCEGRD
609610.24	4204902.34	2.71062	6.02265	8.26E-03	1.89E-05	8.2761E-03	FENCEGRD
609655.60	4205017.32	2.70981	2.29388	8.25E-03	7.20E-06	8.2620E-03	FENCEGRD
610234.96	4204953.47	2.70636	1.31925	8.24E-03	4.14E-06	8.2484E-03	FENCEGRD
609581.79	4204743.50	2.70502	30.74557	8.24E-03	9.65E-05	8.3367E-03	Non-res
610231.56	4205037.50	2.70378	1.28148	8.24E-03	4.02E-06	8.2404E-03	FENCEGRD
609640.69	4204988.65	2.69408	2.80941	8.21E-03	8.82E-06	8.2157E-03	FENCEGRD
609581.48	4204729.01	2.69147	19.98145	8.20E-03	6.27E-05	8.2616E-03	Non-res
609829.06	4205148.56	2.69078	1.19859	8.20E-03	3.76E-06	8.2006E-03	Planned
610201.92	4205089.33	2.68658	1.25339	8.18E-03	3.93E-06	8.1880E-03	FENCEGRD
610131.24	4205134.89	2.67379	1.22519	8.15E-03	3.84E-06	8.1489E-03	FENCEGRD
610052.84	4204722.07	2.67187	1.50290	8.14E-03	4.72E-06	8.1439E-03	Planned
610238.97	4205024.54	2.67006	1.27559	8.13E-03	4.00E-06	8.1377E-03	FENCEGRD
609997.81	4205161.76	2.66769	1.18223	8.13E-03	3.71E-06	8.1302E-03	FENCEGRD

609968.70	4205162.31	2.66671	1.18155	8.12E-03	3.71E-06	8.1272E-03	FENCEGRD
610183.02	4204837.81	2.64923	1.35378	8.07E-03	4.25E-06	8.0745E-03	Planned
610194.51	4205102.29	2.64239	1.23632	8.05E-03	3.88E-06	8.0533E-03	FENCEGRD
610026.92	4205161.21	2.63896	1.18009	8.04E-03	3.70E-06	8.0427E-03	FENCEGRD
610161.33	4204810.83	2.63495	1.36959	8.03E-03	4.30E-06	8.0310E-03	Planned
610075.38	4205154.53	2.62951	1.19196	8.01E-03	3.74E-06	8.0139E-03	FENCEGRD
610246.37	4205011.58	2.62107	1.26361	7.98E-03	3.97E-06	7.9884E-03	FENCEGRD
609586.04	4204687.05	2.61432	7.99109	7.96E-03	2.51E-05	7.9890E-03	Non-res
609581.16	4204714.52	2.60990	13.57834	7.95E-03	4.26E-05	7.9930E-03	Non-res
609582.74	4204786.97	2.60100	42.68416	7.92E-03	1.34E-04	8.0573E-03	FENCEGRD
609610.56	4204916.83	2.59011	5.19349	7.89E-03	1.63E-05	7.9064E-03	FENCEGRD
610187.11	4205115.25	2.58454	1.21412	7.87E-03	3.81E-06	7.8770E-03	FENCEGRD
609583.05	4204801.46	2.58228	27.32602	7.87E-03	8.58E-05	7.9520E-03	FENCEGRD
610242.37	4204940.52	2.58227	1.27843	7.87E-03	4.01E-06	7.8703E-03	FENCEGRD
610123.83	4205147.85	2.55847	1.18474	7.79E-03	3.72E-06	7.7975E-03	FENCEGRD
610253.78	4204998.62	2.55736	1.24553	7.79E-03	3.91E-06	7.7943E-03	FENCEGRD
609576.68	4204586.60	2.54903	3.55723	7.77E-03	1.12E-05	7.7762E-03	Planned
610139.64	4204783.27	2.54222	1.35462	7.74E-03	4.25E-06	7.7485E-03	Planned
610179.70	4205128.20	2.52169	1.18728	7.68E-03	3.73E-06	7.6854E-03	FENCEGRD
610074.55	4204731.18	2.51298	1.41446	7.66E-03	4.44E-06	7.6596E-03	Planned
609685.43	4205074.66	2.50515	1.57201	7.63E-03	4.93E-06	7.6363E-03	Planned
609566.50	4204612.05	2.50466	4.27651	7.63E-03	1.34E-05	7.6433E-03	Planned
609580.85	4204700.03	2.50320	9.37733	7.63E-03	2.94E-05	7.6548E-03	Non-res
609583.36	4204815.95	2.49510	20.05193	7.60E-03	6.29E-05	7.6636E-03	FENCEGRD
609561.41	4204624.77	2.48275	4.70894	7.56E-03	1.48E-05	7.5779E-03	Planned
610261.19	4204985.67	2.47752	1.22008	7.55E-03	3.83E-06	7.5510E-03	FENCEGRD
610096.25	4204744.83	2.47400	1.37510	7.54E-03	4.32E-06	7.5408E-03	Planned
610183.03	4204823.47	2.46843	1.29135	7.52E-03	4.05E-06	7.5235E-03	Planned
610067.97	4205167.49	2.46834	1.14175	7.52E-03	3.58E-06	7.5228E-03	FENCEGRD
609655.92	4205031.81	2.46561	2.05919	7.51E-03	6.46E-06	7.5173E-03	FENCEGRD
609630.02	4204529.47	2.46523	2.42430	7.51E-03	7.61E-06	7.5173E-03	Planned
609643.21	4204524.12	2.46382	2.31029	7.51E-03	7.25E-06	7.5127E-03	Planned
609570.40	4204664.22	2.45659	6.83665	7.48E-03	2.15E-05	7.5049E-03	Planned
609610.87	4204931.32	2.45658	4.50653	7.48E-03	1.41E-05	7.4975E-03	FENCEGRD
609700.02	4205088.84	2.45646	1.46043	7.48E-03	4.58E-06	7.4876E-03	Planned
609656.40	4204518.77	2.45100	2.19337	7.47E-03	6.88E-06	7.4733E-03	Planned
610019.51	4205174.17	2.44834	1.12101	7.46E-03	3.52E-06	7.4618E-03	FENCEGRD
609641.01	4205003.14	2.44791	2.50263	7.46E-03	7.85E-06	7.4648E-03	FENCEGRD
610249.78	4204927.56	2.44683	1.23109	7.45E-03	3.86E-06	7.4575E-03	FENCEGRD
609616.82	4204534.83	2.44614	2.53170	7.45E-03	7.94E-06	7.4595E-03	Planned
609990.40	4205174.72	2.44479	1.12059	7.45E-03	3.52E-06	7.4510E-03	FENCEGRD
610172.29	4205141.16	2.43789	1.15713	7.43E-03	3.63E-06	7.4301E-03	FENCEGRD
610116.42	4205160.80	2.43519	1.14283	7.42E-03	3.59E-06	7.4218E-03	FENCEGRD
609583.68	4204830.43	2.42857	15.43495	7.40E-03	4.84E-05	7.4465E-03	FENCEGRD
609961.29	4205175.27	2.42059	1.11522	7.37E-03	3.50E-06	7.3772E-03	FENCEGRD
609669.60	4204513.41	2.41230	2.06904	7.35E-03	6.49E-06	7.3550E-03	Planned
610250.38	4205082.65	2.40594	1.16552	7.33E-03	3.66E-06	7.3328E-03	FENCEGRD
609603.63	4204540.18	2.40443	2.62919	7.32E-03	8.25E-06	7.3328E-03	Planned
610257.79	4205069.69	2.40416	1.16928	7.32E-03	3.67E-06	7.3274E-03	FENCEGRD
610161.34	4204796.26	2.40325	1.28811	7.32E-03	4.04E-06	7.3250E-03	Planned
610117.95	4204758.12	2.39647	1.32585	7.30E-03	4.16E-06	7.3044E-03	Planned
610242.97	4205095.60	2.39410	1.15773	7.29E-03	3.63E-06	7.2967E-03	FENCEGRD
610265.20	4205056.73	2.38931	1.16823	7.28E-03	3.67E-06	7.2821E-03	FENCEGRD
610268.60	4204972.71	2.38854	1.19079	7.28E-03	3.74E-06	7.2798E-03	FENCEGRD
609787.98	4205146.62	2.38200	1.16395	7.26E-03	3.65E-06	7.2598E-03	Planned
610235.56	4205108.56	2.37050	1.14522	7.22E-03	3.59E-06	7.2247E-03	FENCEGRD
610272.61	4205043.77	2.35726	1.16107	7.18E-03	3.64E-06	7.1845E-03	FENCEGRD
610164.88	4205154.12	2.34902	1.12490	7.16E-03	3.53E-06	7.1593E-03	FENCEGRD
609682.79	4204508.06	2.34166	1.93170	7.13E-03	6.06E-06	7.1394E-03	Planned
609590.44	4204545.54	2.34096	2.72122	7.13E-03	8.54E-06	7.1397E-03	Planned
609583.99	4204844.92	2.33771	12.37642	7.12E-03	3.88E-05	7.1601E-03	FENCEGRD
610228.16	4205121.92	2.33523	1.12873	7.11E-03	3.54E-06	7.1173E-03	FENCEGRD
610280.01	4205030.81	2.31768	1.14772	7.06E-03	3.60E-06	7.0639E-03	FENCEGRD
610060.56	4205180.45	2.30962	1.08985	7.04E-03	3.42E-06	7.0391E-03	FENCEGRD
609611.19	4204945.81	2.30615	3.93588	7.03E-03	1.24E-05	7.0375E-03	FENCEGRD
610257.18	4204914.60	2.30310	1.17933	7.02E-03	3.70E-06	7.0195E-03	FENCEGRD
610109.02	4205173.76	2.30130	1.10132	7.01E-03	3.46E-06	7.0138E-03	FENCEGRD
609848.51	4205165.02	2.29159	1.11863	6.98E-03	3.51E-06	6.9843E-03	Planned
610276.01	4204959.75	2.28924	1.15662	6.97E-03	3.63E-06	6.9772E-03	FENCEGRD
610220.75	4205134.48	2.28364	1.10789	6.96E-03	3.48E-06	6.9600E-03	FENCEGRD
610183.05	4204809.13	2.27185	1.22359	6.92E-03	3.84E-06	6.9245E-03	Planned
609641.32	4205017.63	2.27043	2.23596	6.92E-03	7.02E-06	6.9233E-03	FENCEGRD
609577.24	4204550.89	2.26537	2.80767	6.90E-03	8.81E-06	6.9097E-03	Planned
610287.42	4205017.86	2.26221	1.12879	6.89E-03	3.54E-06	6.8948E-03	FENCEGRD
609670.83	4205060.48	2.25959	1.71691	6.88E-03	5.39E-06	6.8887E-03	FENCEGRD
610157.47	4205167.08	2.25460	1.08956	6.87E-03	3.42E-06	6.8715E-03	FENCEGRD
610139.66	4204768.40	2.25151	1.25196	6.86E-03	3.93E-06	6.8626E-03	Planned
610012.10	4205187.13	2.24976	1.06385	6.85E-03	3.34E-06	6.8567E-03	FENCEGRD
609584.31	4204859.41	2.23769	10.15261	6.82E-03	3.19E-05	6.8484E-03	FENCEGRD
610213.34	4205147.44	2.22769	1.08484	6.79E-03	3.40E-06	6.7895E-03	FENCEGRD
609982.99	4205187.68	2.22658	1.06003	6.78E-03	3.33E-06	6.7861E-03	FENCEGRD
609558.76	4204569.47	2.19850	3.13773	6.70E-03	9.85E-06	6.7070E-03	Planned

609551.23	4204650.22	2.19847	5.90590	6.70E-03	1.85E-05	6.7156E-03	Planned
610294.83	4205004.90	2.19840	1.10789	6.70E-03	3.48E-06	6.7004E-03	FENCEGRD
609553.47	4204582.68	2.19608	3.41663	6.69E-03	1.07E-05	6.7005E-03	Planned
609809.68	4205159.03	2.18688	1.11411	6.66E-03	3.50E-06	6.6653E-03	Planned
609584.62	4204873.90	2.18108	8.37025	6.64E-03	2.63E-05	6.6704E-03	FENCEGRD
609548.18	4204595.90	2.18061	3.73229	6.64E-03	1.17E-05	6.6544E-03	Planned
609953.88	4205188.23	2.17999	1.05144	6.64E-03	3.30E-06	6.6441E-03	FENCEGRD
610283.42	4204946.79	2.17985	1.11708	6.64E-03	3.51E-06	6.6439E-03	FENCEGRD
610161.36	4204781.69	2.16477	1.20167	6.59E-03	3.77E-06	6.5982E-03	Planned
610101.61	4205186.72	2.16455	1.05838	6.59E-03	3.32E-06	6.5971E-03	FENCEGRD
610205.93	4205160.40	2.16161	1.05981	6.58E-03	3.33E-06	6.5881E-03	FENCEGRD
610150.06	4205180.04	2.15581	1.05171	6.57E-03	3.30E-06	6.5705E-03	FENCEGRD
610264.59	4204901.64	2.15302	1.12400	6.56E-03	3.53E-06	6.5622E-03	FENCEGRD
609542.89	4204609.12	2.15161	4.09366	6.55E-03	1.28E-05	6.5672E-03	Planned
609611.50	4204960.30	2.15129	3.45257	6.55E-03	1.08E-05	6.5642E-03	FENCEGRD
610053.15	4205193.40	2.14486	1.04006	6.53E-03	3.26E-06	6.5371E-03	FENCEGRD
610052.85	4204708.31	2.14334	1.32737	6.53E-03	4.17E-06	6.5333E-03	Planned
609634.24	4204502.93	2.13684	2.02054	6.51E-03	6.34E-06	6.5157E-03	Planned
610284.02	4205101.88	2.13337	1.06419	6.50E-03	3.34E-06	6.5021E-03	FENCEGRD
610204.75	4204820.49	2.13189	1.15599	6.49E-03	3.63E-06	6.4979E-03	Planned
610291.43	4205088.92	2.13153	1.06735	6.49E-03	3.35E-06	6.4965E-03	FENCEGRD
609656.23	4205046.30	2.13001	1.85372	6.49E-03	5.82E-06	6.4944E-03	FENCEGRD
609621.68	4204508.03	2.12959	2.11147	6.49E-03	6.63E-06	6.4939E-03	Planned
609646.80	4204497.84	2.12931	1.92622	6.49E-03	6.04E-06	6.4925E-03	Planned
610302.24	4204991.94	2.12793	1.08422	6.48E-03	3.40E-06	6.4856E-03	FENCEGRD
610276.61	4205114.84	2.12497	1.05693	6.47E-03	3.32E-06	6.4765E-03	FENCEGRD
609584.94	4204888.39	2.12072	6.99335	6.46E-03	2.19E-05	6.4822E-03	FENCEGRD
610298.84	4205075.96	2.11955	1.06606	6.46E-03	3.35E-06	6.4600E-03	FENCEGRD
609609.12	4204513.13	2.11131	2.20092	6.43E-03	6.91E-06	6.4385E-03	Planned
609557.11	4204758.53	2.10861	44.96908	6.42E-03	1.41E-04	6.5645E-03	Non-res
610269.20	4205127.80	2.10570	1.04632	6.41E-03	3.28E-06	6.4178E-03	FENCEGRD
609659.36	4204492.74	2.09949	1.82463	6.40E-03	5.73E-06	6.4013E-03	Planned
610306.25	4205063.01	2.09784	1.05976	6.39E-03	3.33E-06	6.3939E-03	FENCEGRD
609537.60	4204622.34	2.09316	4.52353	6.38E-03	1.42E-05	6.3905E-03	Planned
609556.80	4204744.04	2.09089	26.10356	6.37E-03	8.19E-05	6.4513E-03	Non-res
610198.52	4205173.35	2.08816	1.03214	6.36E-03	3.24E-06	6.3643E-03	FENCEGRD
610096.26	4204730.38	2.08322	1.23862	6.35E-03	3.89E-06	6.3499E-03	Planned
609560.70	4204688.46	2.07847	7.20409	6.33E-03	2.26E-05	6.3542E-03	Non-res
610261.80	4205140.75	2.07604	1.03271	6.32E-03	3.24E-06	6.3274E-03	FENCEGRD
609596.57	4204518.22	2.07592	2.28406	6.32E-03	7.17E-06	6.3310E-03	Planned
610117.96	4204743.96	2.07275	1.21034	6.31E-03	3.80E-06	6.3179E-03	Planned
610183.06	4204794.79	2.06968	1.15081	6.30E-03	3.61E-06	6.3084E-03	Planned
609556.48	4204729.55	2.06523	16.54877	6.29E-03	5.19E-05	6.3432E-03	Non-res
610290.82	4204933.83	2.06403	1.07381	6.29E-03	3.37E-06	6.2909E-03	FENCEGRD
610313.65	4205050.05	2.06240	1.04802	6.28E-03	3.29E-06	6.2859E-03	FENCEGRD
610004.69	4205200.09	2.05423	1.00827	6.26E-03	3.16E-06	6.2609E-03	FENCEGRD
609558.06	4204802.00	2.05346	29.90282	6.26E-03	9.38E-05	6.3492E-03	FENCEGRD
610142.66	4205192.99	2.04643	1.01512	6.23E-03	3.19E-06	6.2371E-03	FENCEGRD
610309.65	4204978.98	2.04637	1.05526	6.23E-03	3.31E-06	6.2371E-03	FENCEGRD
609556.17	4204715.06	2.04070	11.39342	6.22E-03	3.58E-05	6.2523E-03	Non-res
610074.56	4204716.32	2.03874	1.25316	6.21E-03	3.93E-06	6.2145E-03	Planned
609585.25	4204902.88	2.03670	5.92838	6.20E-03	1.86E-05	6.2229E-03	FENCEGRD
609671.92	4204487.64	2.03635	1.70434	6.20E-03	5.35E-06	6.2086E-03	Planned
610254.39	4205153.71	2.03037	1.01580	6.19E-03	3.19E-06	6.1882E-03	FENCEGRD
609584.01	4204523.32	2.02953	2.36512	6.18E-03	7.42E-06	6.1899E-03	Planned
609831.39	4205171.44	2.02587	1.06591	6.17E-03	3.34E-06	6.1747E-03	Planned
610094.20	4205199.68	2.02466	1.01516	6.17E-03	3.19E-06	6.1708E-03	FENCEGRD
610321.06	4205037.09	2.01511	1.02887	6.14E-03	3.23E-06	6.1418E-03	FENCEGRD
609975.58	4205200.64	2.01152	1.00230	6.13E-03	3.15E-06	6.1308E-03	FENCEGRD
610191.11	4205186.31	2.00854	1.00213	6.12E-03	3.14E-06	6.1217E-03	FENCEGRD
610272.00	4204888.68	1.99947	1.06571	6.09E-03	3.34E-06	6.0942E-03	FENCEGRD
609558.37	4204816.49	1.98719	21.06085	6.05E-03	6.61E-05	6.1196E-03	FENCEGRD
610045.74	4205206.36	1.98695	0.98962	6.05E-03	3.11E-06	6.0559E-03	FENCEGRD
610246.98	4205166.67	1.98279	0.99673	6.04E-03	3.13E-06	6.0432E-03	FENCEGRD
609571.45	4204528.42	1.97868	2.44298	6.03E-03	7.67E-06	6.0352E-03	Planned
610328.47	4205024.13	1.96426	1.01153	5.98E-03	3.17E-06	5.9868E-03	FENCEGRD
610139.67	4204753.54	1.96272	1.14752	5.98E-03	3.60E-06	5.9826E-03	Planned
609684.48	4204482.55	1.96153	1.57658	5.98E-03	4.95E-06	5.9803E-03	Planned
610317.06	4204966.02	1.95685	1.02204	5.96E-03	3.21E-06	5.9643E-03	FENCEGRD
609532.31	4204635.56	1.95572	5.06975	5.96E-03	1.59E-05	5.9735E-03	Planned
610204.77	4204805.63	1.95081	1.09041	5.94E-03	3.42E-06	5.9461E-03	Planned
609946.47	4205201.19	1.94517	0.99069	5.93E-03	3.11E-06	5.9286E-03	FENCEGRD
610298.23	4204920.88	1.94327	1.02779	5.92E-03	3.23E-06	5.9229E-03	FENCEGRD
609685.74	4205089.15	1.93924	1.43334	5.91E-03	4.50E-06	5.9119E-03	Planned
610135.25	4205205.95	1.93211	0.97796	5.89E-03	3.07E-06	5.8888E-03	FENCEGRD
609585.56	4204917.37	1.92913	5.08707	5.88E-03	1.60E-05	5.8926E-03	FENCEGRD
610239.57	4205179.63	1.92839	0.97463	5.87E-03	3.06E-06	5.8774E-03	FENCEGRD
610161.37	4204767.11	1.92257	1.11290	5.86E-03	3.49E-06	5.8601E-03	Planned
609558.89	4204533.52	1.92205	2.51775	5.86E-03	7.90E-06	5.8630E-03	Planned
609531.22	4204576.36	1.92145	3.23387	5.85E-03	1.01E-05	5.8634E-03	Planned
610183.70	4205199.27	1.91937	0.97241	5.85E-03	3.05E-06	5.8499E-03	FENCEGRD
609558.68	4204830.98	1.91814	15.89457	5.84E-03	4.99E-05	5.8930E-03	FENCEGRD

609541.30	4204551.20	1.90691	2.78340	5.81E-03	8.73E-06	5.8177E-03	Planned
610335.88	4205011.17	1.90631	0.99110	5.81E-03	3.11E-06	5.8102E-03	FENCEGRD
610317.66	4205121.11	1.90077	0.96999	5.79E-03	3.04E-06	5.7933E-03	Planned
610325.07	4205108.15	1.90004	0.97164	5.79E-03	3.05E-06	5.7911E-03	Planned
610310.25	4205134.07	1.89268	0.96514	5.77E-03	3.03E-06	5.7686E-03	Planned
609700.34	4205103.33	1.89098	1.33601	5.76E-03	4.19E-06	5.7646E-03	Planned
610332.48	4205095.20	1.88849	0.96856	5.75E-03	3.04E-06	5.7559E-03	FENCEGRD
610086.79	4205212.64	1.88498	0.97158	5.74E-03	3.05E-06	5.7452E-03	FENCEGRD
610302.84	4205147.03	1.87592	0.95733	5.71E-03	3.00E-06	5.7175E-03	Planned
610339.89	4205082.24	1.86979	0.96340	5.70E-03	3.02E-06	5.6989E-03	FENCEGRD
609606.35	4204489.43	1.86879	1.90714	5.69E-03	5.98E-06	5.6988E-03	Planned
610183.08	4204780.44	1.86759	1.07447	5.69E-03	3.37E-06	5.6925E-03	Planned
609619.31	4204484.17	1.86743	1.82135	5.69E-03	5.72E-06	5.6944E-03	Planned
610232.16	4205192.59	1.86594	0.95133	5.68E-03	2.99E-06	5.6871E-03	FENCEGRD
609997.29	4205213.04	1.86548	0.95502	5.68E-03	3.00E-06	5.6857E-03	FENCEGRD
609521.15	4204601.53	1.86341	3.81623	5.68E-03	1.20E-05	5.6884E-03	Planned
610324.46	4204953.07	1.86145	0.98583	5.67E-03	3.09E-06	5.6736E-03	FENCEGRD
609671.14	4205074.97	1.85983	1.55781	5.67E-03	4.89E-06	5.6704E-03	FENCEGRD
609780.57	4205159.58	1.85685	1.07555	5.66E-03	3.38E-06	5.6598E-03	Planned
609632.27	4204478.91	1.85373	1.73065	5.65E-03	5.43E-06	5.6524E-03	Planned
610295.44	4205159.99	1.85072	0.94667	5.64E-03	2.97E-06	5.6407E-03	Planned
609593.40	4204494.68	1.84613	1.98484	5.62E-03	6.23E-06	5.6300E-03	Planned
610347.29	4205069.28	1.84292	0.95495	5.61E-03	3.00E-06	5.6170E-03	FENCEGRD
610343.29	4204998.22	1.83938	0.96645	5.60E-03	3.03E-06	5.6063E-03	FENCEGRD
609612.13	4204989.27	1.83878	2.68795	5.60E-03	8.43E-06	5.6098E-03	FENCEGRD
609804.37	4205170.26	1.83345	1.04393	5.59E-03	3.28E-06	5.5884E-03	Planned
609541.04	4204675.67	1.82832	6.39123	5.57E-03	2.01E-05	5.5896E-03	FENCEGRD
609559.00	4204845.47	1.82774	12.57855	5.57E-03	3.95E-05	5.6072E-03	FENCEGRD
610038.33	4205219.32	1.82724	0.94127	5.57E-03	2.95E-06	5.5692E-03	FENCEGRD
610176.30	4205212.23	1.82654	0.94086	5.56E-03	2.95E-06	5.5671E-03	FENCEGRD
609645.23	4204473.65	1.82108	1.62994	5.55E-03	5.11E-06	5.5526E-03	Planned
610305.64	4204907.92	1.81816	0.97962	5.54E-03	3.07E-06	5.5417E-03	FENCEGRD
610288.03	4205172.94	1.81750	0.93356	5.54E-03	2.93E-06	5.5395E-03	Planned
609580.44	4204499.94	1.81593	2.06122	5.53E-03	6.47E-06	5.5383E-03	Planned
610127.84	4205218.91	1.81504	0.94032	5.53E-03	2.95E-06	5.5320E-03	FENCEGRD
609656.55	4205060.79	1.81285	1.67634	5.52E-03	5.26E-06	5.5277E-03	FENCEGRD
609527.03	4204648.78	1.80795	5.63657	5.51E-03	1.77E-05	5.5252E-03	Planned
609968.17	4205213.59	1.80686	0.94632	5.50E-03	2.97E-06	5.5071E-03	FENCEGRD
610354.70	4205056.32	1.80542	0.94223	5.50E-03	2.96E-06	5.5027E-03	FENCEGRD
609585.88	4204931.86	1.80455	4.40666	5.50E-03	1.38E-05	5.5110E-03	FENCEGRD
610224.75	4205205.54	1.79648	0.92682	5.47E-03	2.91E-06	5.4755E-03	FENCEGRD
609658.18	4204468.39	1.77822	1.52483	5.42E-03	4.78E-06	5.4217E-03	Planned
610280.62	4205185.90	1.77713	0.91765	5.41E-03	2.88E-06	5.4165E-03	FENCEGRD
609567.48	4204505.20	1.77452	2.13316	5.41E-03	6.69E-06	5.4123E-03	Planned
610117.98	4204729.81	1.76738	1.09692	5.38E-03	3.44E-06	5.3873E-03	Planned
610350.70	4204985.26	1.76621	0.93997	5.38E-03	2.95E-06	5.3833E-03	FENCEGRD
610204.78	4204790.77	1.76570	1.02175	5.38E-03	3.21E-06	5.3820E-03	Planned
610331.87	4204940.11	1.76078	0.94733	5.36E-03	2.97E-06	5.3668E-03	FENCEGRD
610362.11	4205043.36	1.76071	0.92645	5.36E-03	2.91E-06	5.3665E-03	FENCEGRD
610079.38	4205225.59	1.74474	0.92867	5.31E-03	2.91E-06	5.3178E-03	FENCEGRD
610305.66	4204893.19	1.73546	0.95142	5.29E-03	2.99E-06	5.2896E-03	FENCEGRD
610168.89	4205225.19	1.73096	0.90813	5.27E-03	2.85E-06	5.2758E-03	FENCEGRD
610273.21	4205198.86	1.73081	0.89898	5.27E-03	2.82E-06	5.2753E-03	FENCEGRD
609939.06	4205214.14	1.72594	0.93298	5.26E-03	2.93E-06	5.2606E-03	FENCEGRD
610096.28	4204715.93	1.72495	1.10771	5.25E-03	3.48E-06	5.2581E-03	Planned
609554.52	4204510.46	1.72456	2.20343	5.25E-03	6.91E-06	5.2604E-03	Planned
609671.14	4204463.13	1.72354	1.41412	5.25E-03	4.44E-06	5.2548E-03	Planned
610217.35	4205218.50	1.72197	0.90064	5.25E-03	2.83E-06	5.2484E-03	FENCEGRD
609535.95	4204688.39	1.71686	6.80466	5.23E-03	2.14E-05	5.2514E-03	Non-res
609586.19	4204946.35	1.71629	3.80896	5.23E-03	1.20E-05	5.2402E-03	FENCEGRD
610369.52	4205030.41	1.71522	0.90919	5.23E-03	2.85E-06	5.2279E-03	FENCEGRD
609559.31	4204859.96	1.70628	10.29585	5.20E-03	3.23E-05	5.2301E-03	FENCEGRD
610351.30	4205140.35	1.70451	0.89039	5.19E-03	2.79E-06	5.1952E-03	Planned
610358.71	4205127.39	1.70343	0.89135	5.19E-03	2.80E-06	5.1919E-03	Planned
609511.08	4204626.70	1.69833	4.63654	5.17E-03	1.45E-05	5.1881E-03	Planned
610120.43	4205231.87	1.69833	0.90201	5.17E-03	2.83E-06	5.1764E-03	FENCEGRD
610343.89	4205153.30	1.69814	0.88671	5.17E-03	2.78E-06	5.1758E-03	Planned
610366.12	4205114.43	1.69523	0.88964	5.16E-03	2.79E-06	5.1669E-03	Planned
609532.12	4204759.07	1.69035	39.59735	5.15E-03	1.24E-04	5.2735E-03	Non-res
609513.02	4204559.93	1.68911	2.90114	5.15E-03	9.10E-06	5.1546E-03	Planned
610139.69	4204738.68	1.68720	1.04376	5.14E-03	3.28E-06	5.1429E-03	Planned
610358.10	4204972.30	1.68644	0.90963	5.14E-03	2.85E-06	5.1402E-03	FENCEGRD
609989.88	4205226.00	1.68543	0.90392	5.13E-03	2.84E-06	5.1371E-03	FENCEGRD
610161.39	4204752.54	1.68521	1.02362	5.13E-03	3.21E-06	5.1368E-03	Planned
610336.48	4205166.26	1.68431	0.88032	5.13E-03	2.76E-06	5.1336E-03	Planned
609507.83	4204572.91	1.68256	3.13083	5.13E-03	9.82E-06	5.1353E-03	Planned
609531.18	4204715.60	1.68070	11.04267	5.12E-03	3.47E-05	5.1545E-03	Non-res
610373.53	4205101.47	1.67972	0.88501	5.12E-03	2.78E-06	5.1196E-03	FENCEGRD
609612.44	4205003.76	1.67933	2.38665	5.12E-03	7.49E-06	5.1232E-03	FENCEGRD
610265.80	4205211.82	1.67819	0.87888	5.11E-03	2.76E-06	5.1150E-03	FENCEGRD
610030.93	4205232.28	1.67345	0.89389	5.10E-03	2.81E-06	5.1006E-03	FENCEGRD
609518.22	4204546.94	1.67091	2.69835	5.09E-03	8.47E-06	5.0985E-03	Planned

609541.57	4204515.72	1.66705	2.27259	5.08E-03	7.13E-06	5.0854E-03	Planned
610183.09	4204766.10	1.66640	0.99711	5.08E-03	3.13E-06	5.0794E-03	Planned
610329.08	4205179.22	1.66332	0.87136	5.07E-03	2.73E-06	5.0696E-03	Planned
610376.93	4205017.45	1.66047	0.88815	5.06E-03	2.79E-06	5.0610E-03	FENCEGRD
609684.10	4204457.87	1.65964	1.30395	5.06E-03	4.09E-06	5.0598E-03	Planned
609521.74	4204662.00	1.65857	5.98184	5.05E-03	1.88E-05	5.0712E-03	Planned
610380.93	4205088.51	1.65700	0.87742	5.05E-03	2.75E-06	5.0504E-03	FENCEGRD
609502.63	4204585.89	1.65684	3.39372	5.05E-03	1.06E-05	5.0578E-03	Planned
610339.28	4204927.15	1.65671	0.90611	5.05E-03	2.84E-06	5.0496E-03	FENCEGRD
609531.80	4204744.58	1.65410	22.11971	5.04E-03	6.94E-05	5.1082E-03	Non-res
609823.82	4205186.72	1.64923	0.97657	5.02E-03	3.06E-06	5.0270E-03	Planned
609531.49	4204730.09	1.64865	13.99403	5.02E-03	4.39E-05	5.0661E-03	Non-res
610305.67	4204878.46	1.64611	0.91908	5.01E-03	2.88E-06	5.0174E-03	FENCEGRD
610209.94	4205231.46	1.64290	0.87341	5.00E-03	2.74E-06	5.0074E-03	FENCEGRD
609533.06	4204802.54	1.64188	32.59414	5.00E-03	1.02E-04	5.1039E-03	FENCEGRD
609523.41	4204533.96	1.63853	2.51307	4.99E-03	7.89E-06	4.9993E-03	Planned
610161.48	4205238.14	1.63851	0.87310	4.99E-03	2.74E-06	4.9941E-03	FENCEGRD
610321.67	4205192.18	1.63562	0.86067	4.98E-03	2.70E-06	4.9852E-03	FENCEGRD
610388.34	4205075.55	1.62821	0.86713	4.96E-03	2.72E-06	4.9627E-03	FENCEGRD
610258.39	4205224.78	1.62002	0.85741	4.93E-03	2.69E-06	4.9377E-03	FENCEGRD
609533.38	4204817.03	1.61618	21.53977	4.92E-03	6.76E-05	4.9909E-03	FENCEGRD
609960.77	4205226.55	1.61411	0.89172	4.92E-03	2.80E-06	4.9198E-03	FENCEGRD
609497.44	4204598.88	1.61361	3.70106	4.92E-03	1.16E-05	4.9271E-03	Planned
610071.97	4205238.55	1.61152	0.88509	4.91E-03	2.78E-06	4.9119E-03	FENCEGRD
609559.63	4204874.44	1.60557	8.50335	4.89E-03	2.67E-05	4.9177E-03	FENCEGRD
610365.51	4204959.34	1.60243	0.87624	4.88E-03	2.75E-06	4.8842E-03	FENCEGRD
610314.26	4205205.14	1.60114	0.84773	4.88E-03	2.66E-06	4.8801E-03	FENCEGRD
609604.01	4204465.55	1.60082	1.62090	4.88E-03	5.09E-06	4.8816E-03	Planned
610384.34	4205004.49	1.59994	0.86426	4.87E-03	2.71E-06	4.8765E-03	FENCEGRD
609617.31	4204460.15	1.59944	1.54104	4.87E-03	4.84E-06	4.8771E-03	Planned
609586.51	4204960.84	1.59780	3.32980	4.87E-03	1.04E-05	4.8778E-03	FENCEGRD
609590.71	4204470.95	1.59319	1.69861	4.85E-03	5.33E-06	4.8586E-03	Planned
610339.30	4204912.61	1.59258	0.88174	4.85E-03	2.77E-06	4.8542E-03	FENCEGRD
610395.75	4205062.60	1.59225	0.85377	4.85E-03	2.68E-06	4.8531E-03	FENCEGRD
610204.80	4204775.90	1.58473	0.95079	4.83E-03	2.98E-06	4.8305E-03	Planned
609630.61	4204454.75	1.58284	1.45372	4.82E-03	4.56E-06	4.8263E-03	Planned
609506.05	4204639.28	1.58219	5.12072	4.82E-03	1.61E-05	4.8358E-03	Planned
610113.02	4205244.83	1.58195	0.86378	4.82E-03	2.71E-06	4.8217E-03	FENCEGRD
609516.45	4204675.22	1.57845	6.68348	4.81E-03	2.10E-05	4.8293E-03	Non-res
609577.40	4204476.35	1.56812	1.76716	4.78E-03	5.55E-06	4.7824E-03	Planned
610202.53	4205244.42	1.56267	0.84452	4.76E-03	2.65E-06	4.7629E-03	FENCEGRD
610306.85	4205218.09	1.56114	0.83235	4.76E-03	2.61E-06	4.7582E-03	FENCEGRD
609686.06	4205103.64	1.55920	1.30902	4.75E-03	4.11E-06	4.7538E-03	Planned
610250.99	4205237.73	1.55919	0.83360	4.75E-03	2.62E-06	4.7523E-03	FENCEGRD
609643.92	4204449.35	1.55466	1.36146	4.74E-03	4.27E-06	4.7402E-03	Planned
609533.69	4204831.52	1.55213	15.90374	4.73E-03	4.99E-05	4.7781E-03	FENCEGRD
610305.69	4204863.73	1.55132	0.88339	4.73E-03	2.77E-06	4.7285E-03	FENCEGRD
610403.16	4205049.64	1.55029	0.83740	4.72E-03	2.63E-06	4.7252E-03	FENCEGRD
609492.24	4204611.86	1.54877	4.06949	4.72E-03	1.28E-05	4.7307E-03	Planned
609671.46	4205089.46	1.54464	1.41658	4.71E-03	4.45E-06	4.7098E-03	FENCEGRD
609656.86	4205075.28	1.54344	1.51911	4.70E-03	4.77E-06	4.7065E-03	FENCEGRD
610154.07	4205251.10	1.54290	0.83857	4.70E-03	2.63E-06	4.7027E-03	FENCEGRD
609564.10	4204481.75	1.54246	1.84051	4.70E-03	5.78E-06	4.7045E-03	Planned
610392.35	4205146.62	1.53675	0.82218	4.68E-03	2.58E-06	4.6839E-03	Planned
610384.94	4205159.58	1.53625	0.82102	4.68E-03	2.58E-06	4.6824E-03	Planned
610391.74	4204991.53	1.53570	0.83990	4.68E-03	2.64E-06	4.6808E-03	FENCEGRD
610399.76	4205133.66	1.53078	0.82076	4.66E-03	2.58E-06	4.6657E-03	Planned
609559.94	4204888.93	1.52995	7.06895	4.66E-03	2.22E-05	4.6828E-03	FENCEGRD
610377.53	4205172.54	1.52973	0.81748	4.66E-03	2.57E-06	4.6625E-03	Planned
609931.65	4205227.10	1.52443	0.87791	4.64E-03	2.75E-06	4.6466E-03	FENCEGRD
609612.76	4205018.25	1.52434	2.12689	4.64E-03	6.67E-06	4.6502E-03	FENCEGRD
610339.31	4204898.06	1.52342	0.85431	4.64E-03	2.68E-06	4.6434E-03	FENCEGRD
610023.52	4205245.24	1.52138	0.84848	4.63E-03	2.66E-06	4.6372E-03	FENCEGRD
610407.17	4205120.70	1.51870	0.81682	4.63E-03	2.56E-06	4.6289E-03	Planned
610370.12	4205185.49	1.51830	0.81202	4.63E-03	2.55E-06	4.6277E-03	FENCEGRD
609550.80	4204487.15	1.51744	1.91742	4.62E-03	6.02E-06	4.6285E-03	Planned
610299.44	4205231.05	1.51716	0.81420	4.62E-03	2.55E-06	4.6242E-03	FENCEGRD
609982.47	4205238.96	1.51575	0.85446	4.62E-03	2.68E-06	4.6200E-03	FENCEGRD
610372.92	4204946.38	1.51538	0.84085	4.62E-03	2.64E-06	4.6189E-03	FENCEGRD
609511.16	4204688.44	1.51492	7.82603	4.61E-03	2.46E-05	4.6394E-03	Non-res
609657.22	4204443.95	1.51453	1.26464	4.61E-03	3.97E-06	4.6176E-03	Planned
610410.57	4205036.68	1.50616	0.81984	4.59E-03	2.57E-06	4.5907E-03	FENCEGRD
610362.72	4205198.45	1.50222	0.80538	4.58E-03	2.53E-06	4.5787E-03	FENCEGRD
609537.49	4204492.55	1.50176	1.99820	4.57E-03	6.27E-06	4.5810E-03	Planned
610414.57	4205107.75	1.49998	0.81015	4.57E-03	2.54E-06	4.5719E-03	Planned
610243.58	4205250.69	1.49380	0.80932	4.55E-03	2.54E-06	4.5530E-03	FENCEGRD
609524.19	4204497.95	1.49194	2.06894	4.54E-03	6.49E-06	4.5513E-03	Planned
609560.26	4204903.42	1.49146	5.89246	4.54E-03	1.85E-05	4.5619E-03	FENCEGRD
610195.12	4205257.38	1.48985	0.81168	4.54E-03	2.55E-06	4.5410E-03	FENCEGRD
610117.99	4204715.65	1.48569	0.98877	4.53E-03	3.10E-06	4.5289E-03	Planned
609489.55	4204556.66	1.48484	2.82781	4.52E-03	8.87E-06	4.5321E-03	Planned
610064.57	4205251.51	1.48287	0.84220	4.52E-03	2.64E-06	4.5198E-03	FENCEGRD

609534.00	4204846.01	1.48007	12.36496	4.51E-03	3.88E-05	4.5475E-03	FENCEGRD
610355.31	4205211.41	1.47901	0.79675	4.51E-03	2.50E-06	4.5079E-03	FENCEGRD
609494.89	4204543.33	1.47765	2.63085	4.50E-03	8.26E-06	4.5096E-03	Planned
610421.98	4205094.79	1.47582	0.80109	4.50E-03	2.51E-06	4.4982E-03	FENCEGRD
609484.22	4204569.99	1.47502	3.05105	4.49E-03	9.57E-06	4.5029E-03	Planned
610292.03	4205244.01	1.46856	0.79492	4.47E-03	2.49E-06	4.4761E-03	FENCEGRD
610105.61	4205257.79	1.46826	0.82560	4.47E-03	2.59E-06	4.4753E-03	FENCEGRD
610183.10	4204751.76	1.46796	0.92036	4.47E-03	2.89E-06	4.4747E-03	Planned
610399.15	4204978.57	1.46548	0.81177	4.46E-03	2.55E-06	4.4668E-03	FENCEGRD
609670.52	4204438.56	1.46398	1.16727	4.46E-03	3.66E-06	4.4633E-03	Planned
610161.40	4204737.97	1.46176	0.93563	4.45E-03	2.94E-06	4.4558E-03	Planned
610372.94	4204931.56	1.46174	0.81990	4.45E-03	2.57E-06	4.4554E-03	FENCEGRD
609787.24	4205180.73	1.46041	0.96820	4.45E-03	3.04E-06	4.4518E-03	Planned
609500.22	4204530.00	1.45903	2.45111	4.44E-03	7.69E-06	4.4523E-03	Planned
610417.98	4205023.72	1.45707	0.79980	4.44E-03	2.51E-06	4.4411E-03	FENCEGRD
610305.70	4204848.99	1.45244	0.84507	4.42E-03	2.65E-06	4.4272E-03	FENCEGRD
610347.90	4205224.37	1.44990	0.78493	4.42E-03	2.46E-06	4.4192E-03	FENCEGRD
609765.53	4205168.32	1.44986	1.00859	4.42E-03	3.16E-06	4.4198E-03	Planned
610339.33	4204883.52	1.44783	0.82491	4.41E-03	2.59E-06	4.4131E-03	FENCEGRD
610146.66	4205264.06	1.44715	0.80416	4.41E-03	2.52E-06	4.4109E-03	FENCEGRD
610429.39	4205081.83	1.44699	0.78981	4.41E-03	2.48E-06	4.4104E-03	FENCEGRD
609505.87	4204701.66	1.44668	9.34747	4.41E-03	2.93E-05	4.4363E-03	Non-res
609487.05	4204624.84	1.44573	4.52565	4.40E-03	1.42E-05	4.4183E-03	Planned
609478.89	4204583.32	1.44544	3.31301	4.40E-03	1.04E-05	4.4136E-03	Planned
609505.55	4204516.67	1.44486	2.28393	4.40E-03	7.17E-06	4.4086E-03	Planned
609953.36	4205239.51	1.43648	0.84034	4.38E-03	2.64E-06	4.3785E-03	FENCEGRD
610139.70	4204723.81	1.43133	0.94357	4.36E-03	2.96E-06	4.3632E-03	Planned
610236.17	4205263.65	1.42757	0.78332	4.35E-03	2.46E-06	4.3512E-03	FENCEGRD
609808.94	4205193.14	1.42217	0.92918	4.33E-03	2.92E-06	4.3352E-03	Planned
609506.18	4204716.15	1.42178	11.60443	4.33E-03	3.64E-05	4.3675E-03	Non-res
609613.07	4205032.74	1.41914	1.90272	4.32E-03	5.97E-06	4.3290E-03	FENCEGRD
610284.63	4205256.97	1.41721	0.77370	4.32E-03	2.43E-06	4.3196E-03	FENCEGRD
610340.49	4205237.33	1.41612	0.76975	4.31E-03	2.42E-06	4.3163E-03	FENCEGRD
610436.80	4205068.87	1.41290	0.77613	4.30E-03	2.44E-06	4.3065E-03	FENCEGRD
609918.39	4205232.73	1.40927	0.84880	4.29E-03	2.66E-06	4.2957E-03	FENCEGRD
610187.71	4205270.33	1.40878	0.78137	4.29E-03	2.45E-06	4.2940E-03	FENCEGRD
609683.83	4204433.16	1.40619	1.07117	4.28E-03	3.36E-06	4.2870E-03	Planned
610204.81	4204761.04	1.40490	0.88013	4.28E-03	2.76E-06	4.2825E-03	Planned
610425.38	4205010.76	1.40270	0.77727	4.27E-03	2.44E-06	4.2754E-03	FENCEGRD
610372.95	4204916.73	1.40236	0.79672	4.27E-03	2.50E-06	4.2745E-03	FENCEGRD
609560.57	4204917.91	1.40178	5.02462	4.27E-03	1.58E-05	4.2860E-03	FENCEGRD
609495.98	4204664.45	1.39983	6.09479	4.26E-03	1.91E-05	4.2834E-03	Non-res
610406.56	4204965.62	1.39349	0.78048	4.24E-03	2.45E-06	4.2474E-03	FENCEGRD
609506.50	4204730.64	1.39109	14.98334	4.24E-03	4.70E-05	4.2846E-03	Non-res
609534.32	4204860.50	1.39101	9.96942	4.24E-03	3.13E-05	4.2687E-03	FENCEGRD
609473.55	4204596.65	1.38864	3.63213	4.23E-03	1.14E-05	4.2416E-03	Planned
610238.45	4204781.89	1.37932	0.84686	4.20E-03	2.66E-06	4.2044E-03	Planned
610333.08	4205250.28	1.37832	0.75438	4.20E-03	2.37E-06	4.2011E-03	FENCEGRD
609507.12	4204759.61	1.37829	37.59602	4.20E-03	1.18E-04	4.3166E-03	Non-res
610016.11	4205258.19	1.37597	0.80462	4.19E-03	2.52E-06	4.1941E-03	FENCEGRD
610444.21	4205055.91	1.37294	0.75983	4.18E-03	2.38E-06	4.1847E-03	FENCEGRD
609608.41	4204438.94	1.37154	1.30741	4.18E-03	4.10E-06	4.1822E-03	Planned
609595.61	4204444.13	1.36664	1.36420	4.16E-03	4.28E-06	4.1674E-03	Planned
610339.34	4204868.98	1.36409	0.79431	4.16E-03	2.49E-06	4.1579E-03	FENCEGRD
609506.81	4204745.13	1.36361	21.42468	4.15E-03	6.72E-05	4.2211E-03	Non-res
610277.22	4205269.93	1.36266	0.75179	4.15E-03	2.36E-06	4.1534E-03	FENCEGRD
609621.22	4204433.74	1.36119	1.23725	4.15E-03	3.88E-06	4.1504E-03	Planned
610098.21	4205270.74	1.35976	0.78748	4.14E-03	2.47E-06	4.1447E-03	FENCEGRD
609560.88	4204932.40	1.35917	4.26745	4.14E-03	1.34E-05	4.1538E-03	FENCEGRD
610228.76	4205276.61	1.35866	0.75717	4.14E-03	2.38E-06	4.1412E-03	FENCEGRD
609975.06	4205251.92	1.35808	0.80696	4.14E-03	2.53E-06	4.1396E-03	FENCEGRD
610057.16	4205264.47	1.35751	0.80076	4.14E-03	2.51E-06	4.1378E-03	FENCEGRD
609582.80	4204449.33	1.35705	1.42296	4.13E-03	4.47E-06	4.1384E-03	Planned
610305.72	4204834.26	1.35333	0.80423	4.12E-03	2.52E-06	4.1251E-03	FENCEGRD
610139.25	4205277.02	1.35214	0.77008	4.12E-03	2.42E-06	4.1214E-03	FENCEGRD
609587.14	4204989.82	1.35016	2.59088	4.11E-03	8.13E-06	4.1211E-03	FENCEGRD
610406.58	4204950.96	1.34975	0.76350	4.11E-03	2.40E-06	4.1141E-03	FENCEGRD
609634.02	4204428.54	1.34899	1.17498	4.11E-03	3.69E-06	4.1131E-03	Planned
610432.79	4204997.81	1.34482	0.75294	4.10E-03	2.36E-06	4.0990E-03	FENCEGRD
609508.38	4204817.57	1.34226	21.06119	4.09E-03	6.61E-05	4.1550E-03	FENCEGRD
609481.85	4204637.83	1.34018	4.98603	4.08E-03	1.56E-05	4.0982E-03	Planned
610372.97	4204901.91	1.33822	0.77127	4.08E-03	2.42E-06	4.0790E-03	FENCEGRD
610325.67	4205263.24	1.33678	0.73891	4.07E-03	2.32E-06	4.0745E-03	FENCEGRD
609570.00	4204454.53	1.33634	1.47047	4.07E-03	4.61E-06	4.0755E-03	Planned
609940.03	4205245.16	1.33504	0.81469	4.07E-03	2.56E-06	4.0694E-03	FENCEGRD
609508.07	4204803.08	1.33385	33.46708	4.06E-03	1.05E-04	4.1683E-03	FENCEGRD
610451.62	4205042.96	1.33044	0.74172	4.05E-03	2.33E-06	4.0552E-03	FENCEGRD
610180.30	4205283.29	1.32797	0.75085	4.05E-03	2.36E-06	4.0477E-03	FENCEGRD
609657.18	4205089.77	1.32375	1.38106	4.03E-03	4.33E-06	4.0368E-03	FENCEGRD
609468.22	4204609.98	1.32065	4.01439	4.02E-03	1.26E-05	4.0356E-03	Planned
609646.83	4204423.35	1.31977	1.09796	4.02E-03	3.45E-06	4.0238E-03	Planned
609557.19	4204459.73	1.31780	1.53371	4.01E-03	4.81E-06	4.0192E-03	Planned

609467.50	4204549.86	1.31503	2.71215	4.01E-03	8.51E-06	4.0144E-03	Planned
609472.63	4204537.03	1.31114	2.53485	3.99E-03	7.95E-06	4.0020E-03	Planned
609671.77	4205103.95	1.31076	1.29106	3.99E-03	4.05E-06	3.9970E-03	FENCEGRD
609477.77	4204524.20	1.30812	2.37106	3.98E-03	7.44E-06	3.9923E-03	Planned
609462.36	4204562.69	1.30763	2.90988	3.98E-03	9.13E-06	3.9925E-03	Planned
609482.90	4204511.37	1.30614	2.21966	3.98E-03	6.97E-06	3.9858E-03	Planned
609505.97	4204480.51	1.30601	1.89476	3.98E-03	5.95E-06	3.9844E-03	Planned
610269.81	4205282.88	1.30510	0.72978	3.98E-03	2.29E-06	3.9780E-03	FENCEGRD
609488.03	4204498.54	1.30230	2.08006	3.97E-03	6.53E-06	3.9737E-03	Planned
610406.59	4204936.30	1.30124	0.74444	3.96E-03	2.34E-06	3.9662E-03	FENCEGRD
609544.39	4204464.92	1.30099	1.60932	3.96E-03	5.05E-06	3.9682E-03	Planned
609905.12	4205238.36	1.29568	0.81988	3.95E-03	2.57E-06	3.9495E-03	FENCEGRD
609485.91	4204689.62	1.29421	8.20846	3.94E-03	2.58E-05	3.9683E-03	Non-res
609518.78	4204475.32	1.29339	1.80974	3.94E-03	5.68E-06	3.9457E-03	Planned
610318.27	4205276.20	1.29157	0.72161	3.93E-03	2.26E-06	3.9367E-03	FENCEGRD
609531.58	4204470.12	1.29121	1.70498	3.93E-03	5.35E-06	3.9387E-03	Planned
609457.23	4204575.52	1.28964	3.13789	3.93E-03	9.85E-06	3.9384E-03	Planned
609561.20	4204946.89	1.28894	3.67655	3.93E-03	1.15E-05	3.9380E-03	FENCEGRD
610221.35	4205289.57	1.28781	0.73093	3.92E-03	2.29E-06	3.9253E-03	FENCEGRD
610459.03	4205030.00	1.28488	0.72210	3.91E-03	2.27E-06	3.9163E-03	FENCEGRD
610440.20	4204984.85	1.28399	0.72675	3.91E-03	2.28E-06	3.9136E-03	FENCEGRD
609659.63	4204418.15	1.28260	1.01982	3.91E-03	3.20E-06	3.9103E-03	Planned
610183.12	4204737.42	1.28227	0.84502	3.91E-03	2.65E-06	3.9088E-03	Planned
610339.36	4204854.43	1.27916	0.76111	3.90E-03	2.39E-06	3.8990E-03	FENCEGRD
609534.63	4204874.99	1.27902	8.26142	3.90E-03	2.59E-05	3.9222E-03	FENCEGRD
609508.70	4204832.06	1.27358	15.44259	3.88E-03	4.85E-05	3.9281E-03	FENCEGRD
609613.39	4205047.23	1.27151	1.70917	3.87E-03	5.36E-06	3.8787E-03	FENCEGRD
610372.98	4204887.08	1.27135	0.74347	3.87E-03	2.33E-06	3.8752E-03	FENCEGRD
609961.69	4205257.59	1.26643	0.78095	3.86E-03	2.45E-06	3.8603E-03	FENCEGRD
609476.66	4204650.81	1.25776	5.43648	3.83E-03	1.71E-05	3.8485E-03	Non-res
610090.80	4205283.70	1.25576	0.74997	3.83E-03	2.35E-06	3.8277E-03	FENCEGRD
610131.85	4205289.98	1.25394	0.73756	3.82E-03	2.31E-06	3.8221E-03	FENCEGRD
610161.42	4204723.40	1.25314	0.85111	3.82E-03	2.67E-06	3.8201E-03	Planned
610172.89	4205296.25	1.25076	0.71979	3.81E-03	2.26E-06	3.8124E-03	FENCEGRD
610406.61	4204921.64	1.24864	0.72327	3.80E-03	2.27E-06	3.8059E-03	FENCEGRD
610440.22	4204969.95	1.24777	0.71225	3.80E-03	2.24E-06	3.8033E-03	FENCEGRD
610049.75	4205277.43	1.24525	0.75914	3.79E-03	2.38E-06	3.7957E-03	FENCEGRD
610262.40	4205295.84	1.24503	0.70741	3.79E-03	2.22E-06	3.7949E-03	FENCEGRD
610008.70	4205271.15	1.24479	0.76156	3.79E-03	2.39E-06	3.7943E-03	FENCEGRD
610310.86	4205289.16	1.24374	0.70310	3.79E-03	2.21E-06	3.7910E-03	FENCEGRD
609587.45	4205004.31	1.24118	2.29570	3.78E-03	7.20E-06	3.7882E-03	FENCEGRD
609462.89	4204623.31	1.23756	4.46214	3.77E-03	1.40E-05	3.7839E-03	Planned
609781.92	4205191.96	1.23721	0.90659	3.77E-03	2.84E-06	3.7717E-03	Planned
610466.43	4205017.04	1.23668	0.70127	3.77E-03	2.20E-06	3.7694E-03	FENCEGRD
609672.44	4204412.95	1.23646	0.93935	3.77E-03	2.95E-06	3.7695E-03	Planned
610238.46	4204767.29	1.23571	0.78882	3.76E-03	2.48E-06	3.7668E-03	Planned
609452.10	4204588.35	1.23552	3.42732	3.76E-03	1.08E-05	3.7745E-03	Planned
609926.71	4205250.82	1.23429	0.78804	3.76E-03	2.47E-06	3.7624E-03	FENCEGRD
610204.83	4204746.18	1.23427	0.81039	3.76E-03	2.54E-06	3.7624E-03	Planned
610213.94	4205302.53	1.21630	0.70447	3.71E-03	2.21E-06	3.7074E-03	FENCEGRD
609534.95	4204889.48	1.21611	6.81521	3.70E-03	2.14E-05	3.7260E-03	FENCEGRD
609481.19	4204716.69	1.21308	12.38530	3.70E-03	3.89E-05	3.7342E-03	Non-res
609471.46	4204663.79	1.21221	6.20665	3.69E-03	1.95E-05	3.7122E-03	Non-res
610440.23	4204955.06	1.20727	0.69581	3.68E-03	2.18E-06	3.6798E-03	FENCEGRD
610139.72	4204708.95	1.20171	0.84921	3.66E-03	2.66E-06	3.6634E-03	Planned
610373.00	4204872.25	1.20066	0.71419	3.66E-03	2.24E-06	3.6598E-03	FENCEGRD
610303.45	4205302.12	1.19408	0.68350	3.64E-03	2.14E-06	3.6396E-03	FENCEGRD
610339.37	4204839.89	1.19341	0.72628	3.64E-03	2.28E-06	3.6377E-03	FENCEGRD
610406.62	4204906.99	1.19164	0.70062	3.63E-03	2.20E-06	3.6322E-03	FENCEGRD
609685.24	4204407.76	1.18809	0.86564	3.62E-03	2.72E-06	3.6219E-03	Planned
609758.12	4205181.28	1.18589	0.93031	3.61E-03	2.92E-06	3.6154E-03	Planned
610473.84	4205004.08	1.18586	0.67914	3.61E-03	2.13E-06	3.6146E-03	FENCEGRD
609891.85	4205243.99	1.18556	0.79138	3.61E-03	2.48E-06	3.6140E-03	FENCEGRD
609481.50	4204731.18	1.18452	16.37091	3.61E-03	5.14E-05	3.6597E-03	Non-res
610254.99	4205308.80	1.18346	0.68454	3.61E-03	2.15E-06	3.6073E-03	FENCEGRD
609446.96	4204601.18	1.17674	3.76805	3.58E-03	1.18E-05	3.5965E-03	Planned
609948.31	4205263.27	1.17626	0.75603	3.58E-03	2.37E-06	3.5856E-03	FENCEGRD
609995.22	4205276.87	1.17372	0.73741	3.58E-03	2.31E-06	3.5778E-03	FENCEGRD
609509.01	4204846.55	1.16863	12.22548	3.56E-03	3.84E-05	3.5983E-03	FENCEGRD
610165.49	4205309.21	1.16837	0.69059	3.56E-03	2.17E-06	3.5613E-03	FENCEGRD
609466.27	4204676.78	1.16629	7.22711	3.55E-03	2.27E-05	3.5755E-03	Non-res
609642.89	4205090.08	1.16559	1.33889	3.55E-03	4.20E-06	3.5549E-03	FENCEGRD
610440.25	4204940.16	1.16268	0.67755	3.54E-03	2.13E-06	3.5440E-03	FENCEGRD
609535.26	4204903.97	1.16239	5.68030	3.54E-03	1.78E-05	3.5588E-03	FENCEGRD
610124.44	4205302.93	1.16075	0.70499	3.54E-03	2.21E-06	3.5382E-03	FENCEGRD
610083.39	4205296.66	1.15878	0.71299	3.53E-03	2.24E-06	3.5322E-03	FENCEGRD
609457.55	4204636.64	1.15810	4.95161	3.53E-03	1.55E-05	3.5434E-03	Planned
610473.86	4204989.34	1.15632	0.66703	3.52E-03	2.09E-06	3.5245E-03	FENCEGRD
609801.37	4205208.42	1.15488	0.85010	3.52E-03	2.67E-06	3.5207E-03	Planned
609481.82	4204745.67	1.15350	23.32866	3.51E-03	7.32E-05	3.5871E-03	Non-res
609657.49	4205104.26	1.15211	1.25838	3.51E-03	3.95E-06	3.5136E-03	FENCEGRD
609482.13	4204760.16	1.14565	39.83790	3.49E-03	1.25E-04	3.6150E-03	Non-res

610206.53	4205315.48	1.14543	0.67785	3.49E-03	2.13E-06	3.4914E-03	FENCEGRD
609460.51	4204471.34	1.14339	1.82252	3.48E-03	5.72E-06	3.4888E-03	FENCEGRD
610296.04	4205315.07	1.14247	0.66347	3.48E-03	2.08E-06	3.4823E-03	FENCEGRD
609613.70	4205061.72	1.13984	1.54018	3.47E-03	4.83E-06	3.4771E-03	FENCEGRD
609913.38	4205256.47	1.13617	0.76114	3.46E-03	2.39E-06	3.4635E-03	FENCEGRD
610042.34	4205290.38	1.13571	0.71981	3.46E-03	2.26E-06	3.4619E-03	FENCEGRD
609455.33	4204484.30	1.13466	1.94058	3.46E-03	6.09E-06	3.4626E-03	FENCEGRD
610406.64	4204892.33	1.13154	0.67630	3.45E-03	2.12E-06	3.4491E-03	FENCEGRD
609478.64	4204453.13	1.12958	1.67676	3.44E-03	5.26E-06	3.4463E-03	FENCEGRD
609450.14	4204497.26	1.12854	2.06728	3.44E-03	6.49E-06	3.4443E-03	Planned
609587.76	4205018.80	1.12594	2.04969	3.43E-03	6.43E-06	3.4363E-03	FENCEGRD
610373.01	4204857.43	1.12485	0.68425	3.43E-03	2.15E-06	3.4287E-03	FENCEGRD
610473.87	4204974.60	1.12314	0.65312	3.42E-03	2.05E-06	3.4234E-03	FENCEGRD
610247.58	4205321.76	1.12175	0.66110	3.42E-03	2.07E-06	3.4192E-03	FENCEGRD
609444.95	4204510.23	1.12075	2.20496	3.41E-03	6.92E-06	3.4210E-03	Planned
609535.58	4204918.45	1.12028	4.77271	3.41E-03	1.50E-05	3.4276E-03	FENCEGRD
609461.07	4204689.76	1.11702	8.58958	3.40E-03	2.70E-05	3.4297E-03	Non-res
610440.26	4204925.26	1.11470	0.65764	3.40E-03	2.06E-06	3.3977E-03	FENCEGRD
609439.77	4204523.19	1.11122	2.35526	3.39E-03	7.39E-06	3.3925E-03	Planned
610183.13	4204723.08	1.11000	0.77279	3.38E-03	2.43E-06	3.3838E-03	Planned
610339.38	4204825.34	1.10797	0.69025	3.38E-03	2.17E-06	3.3773E-03	FENCEGRD
609441.83	4204614.01	1.10779	4.16667	3.37E-03	1.31E-05	3.3877E-03	Planned
609429.39	4204549.12	1.10444	2.69079	3.36E-03	8.44E-06	3.3729E-03	Planned
609434.58	4204536.15	1.10425	2.51867	3.36E-03	7.90E-06	3.3717E-03	Planned
609424.20	4204562.08	1.10170	2.88375	3.36E-03	9.05E-06	3.3651E-03	Planned
609452.22	4204649.97	1.09746	5.52900	3.34E-03	1.74E-05	3.3605E-03	Non-res
610238.48	4204752.70	1.09685	0.73178	3.34E-03	2.30E-06	3.3436E-03	Planned
609491.57	4204447.88	1.09658	1.59891	3.34E-03	5.02E-06	3.3455E-03	FENCEGRD
609981.74	4205282.59	1.09654	0.71449	3.34E-03	2.24E-06	3.3426E-03	FENCEGRD
609582.13	4204411.12	1.09077	1.02610	3.32E-03	3.22E-06	3.3260E-03	Planned
610288.63	4205328.03	1.09069	0.64250	3.32E-03	2.02E-06	3.3245E-03	FENCEGRD
609595.07	4204405.87	1.09042	0.98222	3.32E-03	3.08E-06	3.3248E-03	Planned
609569.20	4204416.37	1.09000	1.07594	3.32E-03	3.38E-06	3.3238E-03	Planned
609934.94	4205268.94	1.08900	0.73241	3.32E-03	2.30E-06	3.3197E-03	FENCEGRD
609556.26	4204421.62	1.08869	1.13445	3.32E-03	3.56E-06	3.3200E-03	Planned
609608.01	4204400.62	1.08837	0.94274	3.32E-03	2.96E-06	3.3184E-03	Planned
609543.32	4204426.87	1.08663	1.20300	3.31E-03	3.78E-06	3.3139E-03	Planned
610473.89	4204959.85	1.08619	0.63780	3.31E-03	2.00E-06	3.3108E-03	FENCEGRD
609509.32	4204861.04	1.08585	9.79745	3.31E-03	3.07E-05	3.3385E-03	FENCEGRD
610158.08	4205322.17	1.08273	0.66252	3.30E-03	2.08E-06	3.3004E-03	FENCEGRD
609530.38	4204432.12	1.08182	1.27746	3.30E-03	4.01E-06	3.2995E-03	Planned
609504.51	4204442.63	1.08103	1.48363	3.29E-03	4.66E-06	3.2978E-03	FENCEGRD
609620.94	4204395.37	1.08098	0.90124	3.29E-03	2.83E-06	3.2958E-03	Planned
609878.59	4205249.62	1.08097	0.76122	3.29E-03	2.39E-06	3.2953E-03	FENCEGRD
609517.45	4204437.37	1.07946	1.37179	3.29E-03	4.30E-06	3.2926E-03	Planned
610199.13	4205328.44	1.07570	0.65119	3.28E-03	2.04E-06	3.2789E-03	FENCEGRD
610204.84	4204731.31	1.07486	0.74295	3.27E-03	2.33E-06	3.2766E-03	Planned
610028.77	4205296.14	1.07429	0.69866	3.27E-03	2.19E-06	3.2748E-03	FENCEGRD
610075.98	4205309.62	1.07361	0.67635	3.27E-03	2.12E-06	3.2726E-03	FENCEGRD
609419.02	4204575.04	1.07253	3.12411	3.27E-03	9.80E-06	3.2770E-03	Planned
610117.03	4205315.89	1.07180	0.67284	3.26E-03	2.11E-06	3.2671E-03	FENCEGRD
610406.65	4204877.67	1.06961	0.65056	3.26E-03	2.04E-06	3.2604E-03	FENCEGRD
609483.07	4204803.62	1.06685	33.49068	3.25E-03	1.05E-04	3.3550E-03	FENCEGRD
609633.88	4204390.12	1.06632	0.85583	3.25E-03	2.69E-06	3.2510E-03	Planned
609455.88	4204702.74	1.06603	10.50004	3.25E-03	3.29E-05	3.2804E-03	Non-res
610161.43	4204708.83	1.06564	0.77144	3.25E-03	2.42E-06	3.2486E-03	Planned
610440.28	4204910.37	1.06418	0.63613	3.24E-03	2.00E-06	3.2438E-03	FENCEGRD
610240.18	4205334.72	1.06008	0.63745	3.23E-03	2.00E-06	3.2313E-03	FENCEGRD
609483.39	4204818.11	1.05685	20.96405	3.22E-03	6.58E-05	3.2852E-03	FENCEGRD
609446.89	4204663.30	1.05671	6.38427	3.22E-03	2.00E-05	3.2390E-03	Non-res
610373.03	4204842.60	1.04817	0.65304	3.19E-03	2.05E-06	3.1950E-03	FENCEGRD
610473.90	4204945.11	1.04676	0.62076	3.19E-03	1.95E-06	3.1906E-03	FENCEGRD
609646.82	4204384.87	1.04489	0.80699	3.18E-03	2.53E-06	3.1855E-03	Planned
609456.19	4204717.23	1.04361	13.46616	3.18E-03	4.23E-05	3.2214E-03	Non-res
609900.06	4205262.13	1.04217	0.73447	3.17E-03	2.30E-06	3.1770E-03	FENCEGRD
610281.22	4205340.99	1.03920	0.62098	3.17E-03	1.95E-06	3.1676E-03	FENCEGRD
609588.08	4205033.28	1.03745	1.82784	3.16E-03	5.74E-06	3.1661E-03	FENCEGRD
609562.14	4204990.36	1.03517	2.47158	3.15E-03	7.76E-06	3.1612E-03	FENCEGRD
609436.69	4204626.84	1.03502	4.60728	3.15E-03	1.45E-05	3.1674E-03	Planned
609643.21	4205104.57	1.03014	1.22083	3.14E-03	3.83E-06	3.1419E-03	FENCEGRD
609509.64	4204875.53	1.02957	7.90201	3.14E-03	2.48E-05	3.1611E-03	FENCEGRD
609614.01	4205076.21	1.02519	1.39202	3.12E-03	4.37E-06	3.1274E-03	FENCEGRD
610339.40	4204810.80	1.02461	0.65343	3.12E-03	2.05E-06	3.1233E-03	Planned
609968.25	4205288.31	1.02074	0.69166	3.11E-03	2.17E-06	3.1116E-03	FENCEGRD
610062.34	4205315.41	1.01866	0.65786	3.10E-03	2.06E-06	3.1052E-03	FENCEGRD
609659.75	4204379.62	1.01742	0.75708	3.10E-03	2.38E-06	3.1017E-03	Planned
609456.51	4204731.72	1.01737	18.17128	3.10E-03	5.70E-05	3.1562E-03	Non-res
609441.55	4204676.62	1.01438	7.52118	3.09E-03	2.36E-05	3.1137E-03	Non-res
610015.20	4205301.90	1.01291	0.67741	3.09E-03	2.13E-06	3.0877E-03	FENCEGRD
610440.29	4204895.47	1.01050	0.61361	3.08E-03	1.93E-06	3.0802E-03	FENCEGRD
610406.67	4204863.02	1.00604	0.62381	3.06E-03	1.96E-06	3.0666E-03	FENCEGRD
610191.72	4205341.40	1.00521	0.62520	3.06E-03	1.96E-06	3.0641E-03	FENCEGRD

610473.92	4204930.37	1.00498	0.60233	3.06E-03	1.89E-06	3.0633E-03	FENCEGRD
609921.57	4205274.62	1.00428	0.70788	3.06E-03	2.22E-06	3.0615E-03	FENCEGRD
610150.67	4205335.12	1.00386	0.63405	3.06E-03	1.99E-06	3.0600E-03	FENCEGRD
609413.83	4204588.00	1.00372	3.45662	3.06E-03	1.08E-05	3.0684E-03	Planned
610232.77	4205347.67	0.99906	0.61374	3.04E-03	1.93E-06	3.0453E-03	FENCEGRD
609509.95	4204890.02	0.99347	6.43322	3.03E-03	2.02E-05	3.0466E-03	FENCEGRD
610109.62	4205328.85	0.99198	0.64053	3.02E-03	2.01E-06	3.0238E-03	FENCEGRD
609456.82	4204746.21	0.98868	26.58051	3.01E-03	8.34E-05	3.0952E-03	Non-res
609672.69	4204374.37	0.98832	0.71057	3.01E-03	2.23E-06	3.0129E-03	Planned
609483.70	4204832.60	0.98801	15.49545	3.01E-03	4.86E-05	3.0584E-03	FENCEGRD
609788.74	4205217.83	0.98670	0.79726	3.01E-03	2.50E-06	3.0082E-03	Planned
610273.82	4205353.95	0.98635	0.59953	3.00E-03	1.88E-06	3.0066E-03	FENCEGRD
609865.32	4205255.25	0.98344	0.73228	3.00E-03	2.30E-06	2.9981E-03	FENCEGRD
609431.56	4204639.67	0.98181	5.10843	2.99E-03	1.60E-05	3.0069E-03	FENCEGRD
609464.32	4204420.46	0.98082	1.45295	2.99E-03	4.56E-06	2.9924E-03	FENCEGRD
609767.78	4205206.92	0.97807	0.82284	2.98E-03	2.58E-06	2.9820E-03	Planned
609536.52	4204961.92	0.97594	3.00062	2.97E-03	9.42E-06	2.9824E-03	FENCEGRD
610373.04	4204827.78	0.97374	0.62076	2.97E-03	1.95E-06	2.9682E-03	FENCEGRD
609661.15	4205127.13	0.97067	1.09840	2.96E-03	3.45E-06	2.9604E-03	FENCEGRD
609436.22	4204689.95	0.97053	9.09140	2.96E-03	2.85E-05	2.9850E-03	Non-res
609477.36	4204415.16	0.97040	1.39158	2.96E-03	4.37E-06	2.9605E-03	FENCEGRD
609457.14	4204760.70	0.97024	45.16886	2.96E-03	1.42E-04	3.0973E-03	Non-res
610238.49	4204738.10	0.96650	0.67634	2.94E-03	2.12E-06	2.9463E-03	Planned
609412.08	4204496.39	0.96360	2.06580	2.94E-03	6.48E-06	2.9419E-03	Planned
610048.69	4205321.20	0.96077	0.63916	2.93E-03	2.01E-06	2.9288E-03	FENCEGRD
609746.08	4205194.51	0.96061	0.85255	2.93E-03	2.68E-06	2.9289E-03	Planned
610473.93	4204915.63	0.95971	0.58319	2.92E-03	1.83E-06	2.9254E-03	FENCEGRD
609417.31	4204483.32	0.95899	1.94514	2.92E-03	6.10E-06	2.9274E-03	FENCEGRD
609588.39	4205047.77	0.95830	1.63491	2.92E-03	5.13E-06	2.9244E-03	FENCEGRD
609685.63	4204369.12	0.95677	0.66656	2.91E-03	2.09E-06	2.9167E-03	Planned
610183.15	4204708.73	0.95411	0.70456	2.91E-03	2.21E-06	2.9087E-03	Planned
610440.31	4204880.58	0.95384	0.59033	2.91E-03	1.85E-06	2.9075E-03	FENCEGRD
609886.73	4205267.78	0.95378	0.70736	2.91E-03	2.22E-06	2.9077E-03	FENCEGRD
609490.41	4204409.87	0.95295	1.29415	2.90E-03	4.06E-06	2.9070E-03	FENCEGRD
609406.85	4204509.46	0.95093	2.20486	2.90E-03	6.92E-06	2.9037E-03	Planned
609408.64	4204600.97	0.94970	3.82505	2.89E-03	1.20E-05	2.9050E-03	Planned
610095.92	4205334.67	0.94948	0.62294	2.89E-03	1.95E-06	2.8943E-03	FENCEGRD
609422.54	4204470.25	0.94910	1.83139	2.89E-03	5.75E-06	2.8970E-03	FENCEGRD
610001.63	4205307.66	0.94892	0.65653	2.89E-03	2.06E-06	2.8927E-03	FENCEGRD
609562.46	4205004.85	0.94821	2.19332	2.89E-03	6.88E-06	2.8954E-03	FENCEGRD
609391.16	4204548.67	0.94725	2.67803	2.89E-03	8.40E-06	2.8940E-03	Planned
609954.77	4205294.04	0.94695	0.66817	2.88E-03	2.10E-06	2.8868E-03	FENCEGRD
609396.39	4204535.60	0.94550	2.50920	2.88E-03	7.87E-06	2.8881E-03	Planned
609426.43	4204652.50	0.94408	5.80560	2.88E-03	1.82E-05	2.8941E-03	FENCEGRD
609401.62	4204522.53	0.94300	2.35462	2.87E-03	7.39E-06	2.8800E-03	Planned
610406.68	4204848.36	0.94182	0.59627	2.87E-03	1.87E-06	2.8709E-03	FENCEGRD
609427.77	4204457.18	0.94118	1.72508	2.87E-03	5.41E-06	2.8725E-03	FENCEGRD
610339.41	4204796.26	0.93883	0.61714	2.86E-03	1.94E-06	2.8619E-03	Planned
610225.36	4205360.63	0.93845	0.59021	2.86E-03	1.85E-06	2.8606E-03	FENCEGRD
609503.45	4204404.57	0.93639	1.16431	2.85E-03	3.65E-06	2.8561E-03	Planned
610184.31	4205354.36	0.93505	0.59982	2.85E-03	1.88E-06	2.8503E-03	FENCEGRD
610266.41	4205366.91	0.93308	0.57848	2.84E-03	1.82E-06	2.8442E-03	FENCEGRD
609484.02	4204847.09	0.93107	11.82991	2.84E-03	3.71E-05	2.8734E-03	FENCEGRD
610204.86	4204716.45	0.93027	0.67874	2.83E-03	2.13E-06	2.8360E-03	Planned
609529.54	4204393.99	0.93007	1.00207	2.83E-03	3.14E-06	2.8364E-03	Planned
609516.49	4204399.28	0.93005	1.06780	2.83E-03	3.35E-06	2.8365E-03	Planned
609542.58	4204388.69	0.92954	0.94679	2.83E-03	2.97E-06	2.8346E-03	Planned
609555.63	4204383.40	0.92826	0.89966	2.83E-03	2.82E-06	2.8305E-03	Planned
609568.67	4204378.11	0.92737	0.85964	2.83E-03	2.70E-06	2.8277E-03	Planned
610143.26	4205348.08	0.92583	0.60653	2.82E-03	1.90E-06	2.8222E-03	FENCEGRD
609614.33	4205090.70	0.92580	1.26265	2.82E-03	3.96E-06	2.8242E-03	FENCEGRD
609581.71	4204372.81	0.92515	0.82281	2.82E-03	2.58E-06	2.8208E-03	Planned
609430.88	4204703.28	0.92507	11.35886	2.82E-03	3.56E-05	2.8536E-03	Non-res
609908.20	4205280.29	0.92386	0.68284	2.81E-03	2.14E-06	2.8165E-03	FENCEGRD
609594.76	4204367.52	0.92111	0.78809	2.81E-03	2.47E-06	2.8084E-03	Planned
609385.94	4204561.74	0.91922	2.90301	2.80E-03	9.11E-06	2.8093E-03	Planned
610473.95	4204900.88	0.91297	0.56291	2.78E-03	1.77E-06	2.7829E-03	FENCEGRD
609607.80	4204362.22	0.91269	0.75189	2.78E-03	2.36E-06	2.7826E-03	Planned
609536.83	4204976.41	0.90924	2.62595	2.77E-03	8.24E-06	2.7780E-03	FENCEGRD
609421.29	4204665.33	0.90641	6.72202	2.76E-03	2.11E-05	2.7823E-03	FENCEGRD
609431.20	4204717.77	0.90346	14.84067	2.75E-03	4.66E-05	2.7987E-03	Non-res
610373.06	4204812.95	0.90192	0.58784	2.75E-03	1.84E-06	2.7493E-03	Planned
609620.84	4204356.93	0.90089	0.71580	2.74E-03	2.25E-06	2.7466E-03	Planned
610035.05	4205326.98	0.90038	0.62104	2.74E-03	1.95E-06	2.7447E-03	FENCEGRD
610082.21	4205340.48	0.89936	0.60617	2.74E-03	1.90E-06	2.7416E-03	FENCEGRD
609484.33	4204861.58	0.89786	9.17006	2.74E-03	2.88E-05	2.7639E-03	FENCEGRD
609458.08	4204804.17	0.89729	30.17157	2.73E-03	9.47E-05	2.8281E-03	FENCEGRD
609852.05	4205260.88	0.89407	0.70315	2.72E-03	2.21E-06	2.7258E-03	FENCEGRD
609988.06	4205313.42	0.89211	0.63494	2.72E-03	1.99E-06	2.7196E-03	FENCEGRD
610440.32	4204865.68	0.88842	0.56776	2.71E-03	1.78E-06	2.7081E-03	Planned
609588.71	4205062.26	0.88519	1.46854	2.70E-03	4.61E-06	2.7011E-03	FENCEGRD
609633.89	4204351.64	0.88407	0.67780	2.69E-03	2.13E-06	2.6952E-03	Planned

610129.84	4205353.78	0.88392	0.59192	2.69E-03	1.86E-06	2.6945E-03	FENCEGRD
609403.46	4204613.93	0.88296	4.26462	2.69E-03	1.34E-05	2.7031E-03	Planned
609647.38	4205128.08	0.88097	1.06403	2.68E-03	3.34E-06	2.6870E-03	FENCEGRD
610272.15	4204744.81	0.88053	0.61780	2.68E-03	1.94E-06	2.6843E-03	Planned
609431.51	4204732.26	0.87948	20.55317	2.68E-03	6.45E-05	2.7436E-03	Non-res
610259.00	4205379.87	0.87909	0.55766	2.68E-03	1.75E-06	2.6797E-03	FENCEGRD
610406.70	4204833.70	0.87848	0.56809	2.68E-03	1.78E-06	2.6779E-03	FENCEGRD
610217.95	4205373.59	0.87828	0.56706	2.68E-03	1.78E-06	2.6772E-03	FENCEGRD
609941.29	4205299.76	0.87669	0.64545	2.67E-03	2.03E-06	2.6726E-03	FENCEGRD
610176.90	4205367.32	0.87164	0.57394	2.66E-03	1.80E-06	2.6570E-03	FENCEGRD
609873.41	4205273.43	0.87113	0.68130	2.65E-03	2.14E-06	2.6558E-03	FENCEGRD
609416.16	4204678.17	0.87105	8.00024	2.65E-03	2.51E-05	2.6785E-03	Non-res
609463.29	4204382.39	0.86987	1.22804	2.65E-03	3.85E-06	2.6537E-03	FENCEGRD
609484.64	4204876.07	0.86538	7.30580	2.64E-03	2.29E-05	2.6591E-03	FENCEGRD
610473.96	4204886.14	0.86438	0.54201	2.63E-03	1.70E-06	2.6348E-03	FENCEGRD
609646.93	4204346.34	0.86427	0.64067	2.63E-03	2.01E-06	2.6348E-03	Planned
609562.77	4205019.34	0.86356	1.95771	2.63E-03	6.14E-06	2.6368E-03	FENCEGRD
609458.39	4204818.66	0.85972	19.90636	2.62E-03	6.25E-05	2.6814E-03	FENCEGRD
609380.71	4204574.81	0.85681	3.21650	2.61E-03	1.01E-05	2.6202E-03	Planned
610339.43	4204781.71	0.85470	0.58115	2.60E-03	1.82E-06	2.6055E-03	Planned
609476.42	4204377.06	0.85459	1.15656	2.60E-03	3.63E-06	2.6069E-03	FENCEGRD
609431.83	4204746.75	0.85420	31.19582	2.60E-03	9.79E-05	2.7000E-03	Non-res
610068.51	4205346.30	0.85262	0.58857	2.60E-03	1.85E-06	2.5991E-03	FENCEGRD
609510.90	4204933.49	0.85171	3.82631	2.59E-03	1.20E-05	2.6065E-03	FENCEGRD
610238.51	4204723.51	0.84875	0.62297	2.59E-03	1.95E-06	2.5875E-03	Planned
609894.82	4205285.97	0.84869	0.65838	2.59E-03	2.07E-06	2.5874E-03	FENCEGRD
609537.15	4204990.90	0.84618	2.31122	2.58E-03	7.25E-06	2.5849E-03	FENCEGRD
609589.02	4205076.75	0.84489	1.32080	2.57E-03	4.14E-06	2.5779E-03	FENCEGRD
610021.41	4205332.77	0.84273	0.60233	2.57E-03	1.89E-06	2.5691E-03	FENCEGRD
610116.42	4205359.47	0.84199	0.57692	2.56E-03	1.81E-06	2.5667E-03	FENCEGRD
609659.98	4204341.05	0.84157	0.60436	2.56E-03	1.90E-06	2.5655E-03	Planned
609614.64	4205105.19	0.84117	1.14823	2.56E-03	3.60E-06	2.5660E-03	FENCEGRD
609398.27	4204626.89	0.83625	4.76041	2.55E-03	1.49E-05	2.5624E-03	Planned
609423.90	4204398.38	0.83526	1.34591	2.54E-03	4.22E-06	2.5486E-03	FENCEGRD
609489.56	4204371.73	0.83504	1.04502	2.54E-03	3.28E-06	2.5470E-03	Planned
610163.41	4205373.04	0.83459	0.56090	2.54E-03	1.76E-06	2.5441E-03	FENCEGRD
609411.02	4204691.00	0.83333	9.77746	2.54E-03	3.07E-05	2.5692E-03	Non-res
610440.34	4204850.78	0.83062	0.54286	2.53E-03	1.70E-06	2.5320E-03	Planned
609432.14	4204761.24	0.82974	54.85480	2.53E-03	1.72E-04	2.6997E-03	Non-res
609373.91	4204495.82	0.82944	2.06970	2.53E-03	6.49E-06	2.5332E-03	Planned
609974.49	4205319.18	0.82922	0.61432	2.53E-03	1.93E-06	2.5279E-03	FENCEGRD
610251.59	4205392.82	0.82734	0.53659	2.52E-03	1.68E-06	2.5220E-03	FENCEGRD
610373.07	4204798.12	0.82680	0.55576	2.52E-03	1.74E-06	2.5204E-03	Planned
609358.11	4204535.29	0.82553	2.49740	2.51E-03	7.84E-06	2.5226E-03	Planned
609511.21	4204947.98	0.82457	3.25977	2.51E-03	1.02E-05	2.5221E-03	FENCEGRD
609363.38	4204522.13	0.82356	2.34560	2.51E-03	7.36E-06	2.5161E-03	Planned
610210.54	4205386.55	0.82085	0.54400	2.50E-03	1.71E-06	2.5022E-03	FENCEGRD
609502.69	4204366.40	0.82017	0.93731	2.50E-03	2.94E-06	2.5014E-03	Planned
609673.02	4204335.75	0.81945	0.57258	2.50E-03	1.80E-06	2.4981E-03	Planned
609379.17	4204482.66	0.81819	1.95291	2.49E-03	6.13E-06	2.4985E-03	FENCEGRD
609368.64	4204508.98	0.81815	2.20942	2.49E-03	6.93E-06	2.4992E-03	Planned
609458.71	4204833.15	0.81670	14.37959	2.49E-03	4.51E-05	2.5330E-03	FENCEGRD
609838.79	4205266.51	0.81380	0.67430	2.48E-03	2.12E-06	2.4812E-03	FENCEGRD
610406.71	4204819.05	0.81379	0.54012	2.48E-03	1.69E-06	2.4807E-03	Planned
609631.39	4205126.24	0.81190	1.03973	2.47E-03	3.26E-06	2.4765E-03	FENCEGRD
609927.81	4205305.48	0.81066	0.62431	2.47E-03	1.96E-06	2.4714E-03	FENCEGRD
609375.48	4204587.88	0.81037	3.55916	2.47E-03	1.12E-05	2.4798E-03	Planned
609515.82	4204361.07	0.80873	0.85948	2.46E-03	2.70E-06	2.4663E-03	Planned
609393.08	4204639.85	0.80782	5.42122	2.46E-03	1.70E-05	2.4778E-03	FENCEGRD
609752.74	4205220.39	0.80593	0.75151	2.46E-03	2.36E-06	2.4574E-03	Planned
610473.98	4204871.40	0.80577	0.52236	2.45E-03	1.64E-06	2.4562E-03	Planned
609528.95	4204355.74	0.80327	0.80838	2.45E-03	2.54E-06	2.4495E-03	Planned
610054.80	4205352.11	0.80259	0.57040	2.44E-03	1.79E-06	2.4467E-03	FENCEGRD
609542.08	4204350.41	0.79915	0.76666	2.43E-03	2.41E-06	2.4368E-03	Planned
609860.09	4205279.09	0.79768	0.65646	2.43E-03	2.05E-06	2.4320E-03	FENCEGRD
610149.93	4205378.76	0.79680	0.54751	2.43E-03	1.72E-06	2.4290E-03	FENCEGRD
609555.22	4204345.08	0.79540	0.73060	2.42E-03	2.29E-06	2.4253E-03	Planned
609686.06	4204330.46	0.79536	0.54191	2.42E-03	1.70E-06	2.4246E-03	Planned
610103.00	4205365.17	0.79516	0.56243	2.42E-03	1.76E-06	2.4240E-03	FENCEGRD
609405.89	4204703.83	0.79343	12.39011	2.42E-03	3.89E-05	2.4559E-03	Non-res
609734.18	4205209.72	0.79275	0.77316	2.41E-03	2.43E-06	2.4173E-03	Planned
609563.08	4205033.83	0.79247	1.75150	2.41E-03	5.50E-06	2.4196E-03	FENCEGRD
609768.45	4205232.36	0.79125	0.72156	2.41E-03	2.26E-06	2.4126E-03	Planned
609568.35	4204339.75	0.79109	0.69797	2.41E-03	2.19E-06	2.4121E-03	Planned
609511.52	4204962.46	0.79021	2.80800	2.41E-03	8.81E-06	2.4160E-03	FENCEGRD
610007.76	4205338.56	0.78910	0.58330	2.40E-03	1.83E-06	2.4056E-03	FENCEGRD
609352.85	4204548.45	0.78839	2.72293	2.40E-03	8.54E-06	2.4102E-03	Planned
610197.00	4205392.30	0.78752	0.53242	2.40E-03	1.67E-06	2.4007E-03	FENCEGRD
609581.48	4204334.43	0.78623	0.66827	2.40E-03	2.10E-06	2.3972E-03	Planned
609459.02	4204847.63	0.78474	10.78570	2.39E-03	3.38E-05	2.4244E-03	FENCEGRD
609449.33	4204349.58	0.78276	1.09171	2.38E-03	3.43E-06	2.3879E-03	FENCEGRD
610272.16	4204730.43	0.78190	0.57300	2.38E-03	1.80E-06	2.3837E-03	Planned

609594.61	4204329.10	0.78070	0.64096	2.38E-03	2.01E-06	2.3802E-03	Planned
609432.77	4204790.22	0.77880	46.44143	2.37E-03	1.46E-04	2.5182E-03	FENCEGRD
609384.44	4204469.50	0.77879	1.82551	2.37E-03	5.73E-06	2.3781E-03	FENCEGRD
609589.34	4205091.24	0.77874	1.19387	2.37E-03	3.75E-06	2.3760E-03	FENCEGRD
609387.90	4204652.82	0.77827	6.27753	2.37E-03	1.97E-05	2.3905E-03	FENCEGRD
609881.45	4205291.64	0.77757	0.63396	2.37E-03	1.99E-06	2.3707E-03	FENCEGRD
610244.18	4205405.78	0.77710	0.51566	2.37E-03	1.62E-06	2.3689E-03	FENCEGRD
609406.20	4204718.32	0.77637	16.70360	2.37E-03	5.24E-05	2.4174E-03	Non-res
609422.92	4204360.30	0.77452	1.16098	2.36E-03	3.64E-06	2.3630E-03	FENCEGRD
610440.35	4204835.89	0.77441	0.51746	2.36E-03	1.62E-06	2.3607E-03	Planned
609960.92	4205324.93	0.77394	0.59294	2.36E-03	1.86E-06	2.3595E-03	FENCEGRD
609462.53	4204344.22	0.77352	1.04213	2.36E-03	3.27E-06	2.3596E-03	FENCEGRD
609607.75	4204323.77	0.77341	0.61442	2.36E-03	1.93E-06	2.3579E-03	Planned
609648.13	4205147.30	0.77097	0.94988	2.35E-03	2.98E-06	2.3516E-03	FENCEGRD
609485.27	4204905.05	0.76389	5.00583	2.33E-03	1.57E-05	2.3427E-03	FENCEGRD
609389.70	4204456.34	0.76378	1.69131	2.33E-03	5.31E-06	2.3320E-03	FENCEGRD
609620.88	4204318.44	0.76248	0.58645	2.32E-03	1.84E-06	2.3246E-03	Planned
609405.50	4204416.87	0.76215	1.41463	2.32E-03	4.44E-06	2.3261E-03	FENCEGRD
609475.74	4204338.86	0.75994	0.97154	2.31E-03	3.05E-06	2.3180E-03	FENCEGRD
610136.44	4205384.48	0.75855	0.53385	2.31E-03	1.68E-06	2.3124E-03	FENCEGRD
609400.23	4204430.03	0.75700	1.48233	2.31E-03	4.65E-06	2.3107E-03	FENCEGRD
609370.25	4204600.95	0.75663	3.97311	2.30E-03	1.25E-05	2.3174E-03	Planned
609433.08	4204804.71	0.75607	26.34434	2.30E-03	8.27E-05	2.3859E-03	FENCEGRD
609406.52	4204732.80	0.75566	24.09417	2.30E-03	7.56E-05	2.3775E-03	Non-res
610183.45	4205398.04	0.75556	0.52012	2.30E-03	1.63E-06	2.3033E-03	FENCEGRD
610373.09	4204783.30	0.75403	0.52400	2.30E-03	1.64E-06	2.2986E-03	Planned
610089.58	4205370.86	0.75389	0.54685	2.30E-03	1.72E-06	2.2983E-03	FENCEGRD
610041.10	4205357.93	0.75383	0.55374	2.30E-03	1.74E-06	2.2981E-03	FENCEGRD
610473.99	4204856.66	0.74966	0.50093	2.28E-03	1.57E-06	2.2852E-03	Planned
610406.73	4204804.39	0.74965	0.51227	2.28E-03	1.61E-06	2.2852E-03	Planned
609634.01	4204313.11	0.74932	0.55900	2.28E-03	1.75E-06	2.2844E-03	Planned
609914.32	4205311.20	0.74884	0.60222	2.28E-03	1.89E-06	2.2831E-03	FENCEGRD
610230.59	4205411.55	0.74812	0.50523	2.28E-03	1.59E-06	2.2806E-03	FENCEGRD
609511.84	4204976.95	0.74787	2.44539	2.28E-03	7.67E-06	2.2859E-03	FENCEGRD
609488.95	4204333.50	0.74763	0.88687	2.28E-03	2.78E-06	2.2803E-03	Planned
609382.71	4204665.78	0.74438	7.41923	2.27E-03	2.33E-05	2.2909E-03	FENCEGRD
610238.52	4204708.92	0.74385	0.57236	2.27E-03	1.80E-06	2.2678E-03	Planned
609409.71	4204365.66	0.74250	1.18633	2.26E-03	3.72E-06	2.2656E-03	FENCEGRD
609502.15	4204328.14	0.73609	0.80744	2.24E-03	2.53E-06	2.2449E-03	Planned
609406.83	4204747.29	0.73578	39.01726	2.24E-03	1.22E-04	2.3638E-03	Non-res
609647.14	4204307.78	0.73566	0.53413	2.24E-03	1.68E-06	2.2427E-03	Planned
609994.12	4205344.35	0.73436	0.56469	2.24E-03	1.77E-06	2.2388E-03	FENCEGRD
609846.76	4205284.74	0.73108	0.62803	2.23E-03	1.97E-06	2.2290E-03	FENCEGRD
609459.65	4204876.61	0.72993	6.66069	2.22E-03	2.09E-05	2.2445E-03	FENCEGRD
609563.40	4205048.32	0.72926	1.57342	2.22E-03	4.94E-06	2.2265E-03	FENCEGRD
609347.58	4204561.61	0.72886	3.02395	2.22E-03	9.49E-06	2.2298E-03	Planned
610169.91	4205403.79	0.72636	0.50706	2.21E-03	1.59E-06	2.2143E-03	FENCEGRD
609660.27	4204302.45	0.72282	0.51316	2.20E-03	1.61E-06	2.2035E-03	Planned
609433.40	4204819.20	0.72264	17.71554	2.20E-03	5.56E-05	2.2569E-03	FENCEGRD
609515.36	4204322.78	0.72218	0.73950	2.20E-03	2.32E-06	2.2023E-03	Planned
610122.95	4205390.21	0.71949	0.52005	2.19E-03	1.63E-06	2.1934E-03	FENCEGRD
610076.16	4205376.56	0.71929	0.53032	2.19E-03	1.66E-06	2.1928E-03	FENCEGRD
610440.37	4204820.99	0.71877	0.49202	2.19E-03	1.54E-06	2.1911E-03	Planned
609947.35	4205330.69	0.71827	0.57159	2.19E-03	1.79E-06	2.1898E-03	FENCEGRD
609589.65	4205105.73	0.71780	1.08563	2.19E-03	3.41E-06	2.1900E-03	FENCEGRD
610216.99	4205417.32	0.71753	0.49454	2.19E-03	1.55E-06	2.1873E-03	FENCEGRD
609365.02	4204614.02	0.71743	4.44973	2.19E-03	1.40E-05	2.1994E-03	FENCEGRD
609377.52	4204678.74	0.71248	9.02873	2.17E-03	2.83E-05	2.1987E-03	FENCEGRD
609528.56	4204317.42	0.71180	0.69058	2.17E-03	2.17E-06	2.1705E-03	Planned
609448.71	4204311.35	0.71088	0.94687	2.17E-03	2.97E-06	2.1685E-03	FENCEGRD
609598.21	4205116.50	0.70913	1.03311	2.16E-03	3.24E-06	2.1634E-03	FENCEGRD
609868.08	4205297.31	0.70814	0.61044	2.16E-03	1.92E-06	2.1591E-03	FENCEGRD
610027.40	4205363.74	0.70651	0.53713	2.15E-03	1.69E-06	2.1539E-03	FENCEGRD
609461.98	4204305.96	0.70649	0.90984	2.15E-03	2.86E-06	2.1550E-03	FENCEGRD
609435.45	4204316.73	0.70587	0.97620	2.15E-03	3.06E-06	2.1533E-03	FENCEGRD
609541.77	4204312.06	0.70511	0.65419	2.15E-03	2.05E-06	2.1500E-03	Planned
609673.41	4204297.12	0.70458	0.48886	2.15E-03	1.53E-06	2.1479E-03	Planned
609396.50	4204371.02	0.70381	1.20370	2.14E-03	3.78E-06	2.1478E-03	FENCEGRD
609554.98	4204306.70	0.70338	0.62921	2.14E-03	1.97E-06	2.1447E-03	Planned
609568.18	4204301.34	0.70222	0.60769	2.14E-03	1.91E-06	2.1411E-03	Planned
609485.59	4204919.54	0.70149	4.24706	2.14E-03	1.33E-05	2.1502E-03	FENCEGRD
609512.15	4204991.44	0.70126	2.14961	2.14E-03	6.75E-06	2.1430E-03	FENCEGRD
610474.01	4204841.91	0.70055	0.47854	2.13E-03	1.50E-06	2.1356E-03	Planned
609606.77	4205127.27	0.70002	0.98298	2.13E-03	3.08E-06	2.1355E-03	FENCEGRD
609581.39	4204295.98	0.69810	0.58441	2.13E-03	1.83E-06	2.1284E-03	Planned
609475.25	4204300.58	0.69802	0.86382	2.13E-03	2.71E-06	2.1291E-03	FENCEGRD
609459.96	4204891.10	0.69465	5.44801	2.12E-03	1.71E-05	2.1332E-03	FENCEGRD
609359.79	4204627.09	0.69417	5.05602	2.11E-03	1.59E-05	2.1305E-03	FENCEGRD
609335.64	4204495.47	0.69318	2.09511	2.11E-03	6.57E-06	2.1182E-03	Planned
610156.36	4205409.54	0.69223	0.49445	2.11E-03	1.55E-06	2.1103E-03	FENCEGRD
610272.18	4204716.04	0.69209	0.53021	2.11E-03	1.66E-06	2.1099E-03	Planned
609900.84	4205316.92	0.69206	0.58000	2.11E-03	1.82E-06	2.1100E-03	FENCEGRD

609594.60	4204290.62	0.69151	0.56028	2.11E-03	1.76E-06	2.1083E-03	Planned
609433.71	4204833.69	0.68980	12.82165	2.10E-03	4.02E-05	2.1415E-03	FENCEGRD
610203.39	4205423.09	0.68881	0.48315	2.10E-03	1.52E-06	2.0998E-03	FENCEGRD
609340.94	4204482.24	0.68827	1.96766	2.10E-03	6.17E-06	2.1028E-03	FENCEGRD
609488.52	4204295.19	0.68799	0.80705	2.10E-03	2.53E-06	2.0983E-03	FENCEGRD
610406.74	4204789.73	0.68761	0.48470	2.09E-03	1.52E-06	2.0962E-03	Planned
609686.54	4204291.79	0.68729	0.46781	2.09E-03	1.47E-06	2.0951E-03	Planned
610373.10	4204768.47	0.68651	0.49251	2.09E-03	1.55E-06	2.0928E-03	Planned
609330.35	4204508.70	0.68570	2.23932	2.09E-03	7.03E-06	2.0958E-03	Planned
609342.32	4204574.77	0.68554	3.34661	2.09E-03	1.05E-05	2.0988E-03	Planned
609607.80	4204285.26	0.68388	0.53743	2.08E-03	1.69E-06	2.0850E-03	Planned
609980.48	4205350.14	0.68337	0.54607	2.08E-03	1.71E-06	2.0834E-03	FENCEGRD
610062.74	4205382.25	0.68212	0.51396	2.08E-03	1.61E-06	2.0795E-03	FENCEGRD
609501.79	4204289.81	0.67872	0.74791	2.07E-03	2.35E-06	2.0699E-03	Planned
609372.34	4204691.70	0.67867	11.40621	2.07E-03	3.58E-05	2.1032E-03	Non-res
610109.47	4205395.93	0.67569	0.50698	2.06E-03	1.59E-06	2.0599E-03	FENCEGRD
609621.01	4204279.90	0.67493	0.51563	2.06E-03	1.62E-06	2.0576E-03	Planned
609623.90	4205148.80	0.67472	0.89545	2.06E-03	2.81E-06	2.0582E-03	FENCEGRD
609563.71	4205062.81	0.67437	1.41854	2.05E-03	4.45E-06	2.0588E-03	FENCEGRD
609325.05	4204521.93	0.66961	2.40795	2.04E-03	7.56E-06	2.0474E-03	Planned
609833.44	4205290.40	0.66856	0.60351	2.04E-03	1.89E-06	2.0385E-03	FENCEGRD
609515.06	4204284.42	0.66816	0.69021	2.04E-03	2.17E-06	2.0376E-03	Planned
609346.23	4204469.00	0.66682	1.83309	2.03E-03	5.75E-06	2.0371E-03	FENCEGRD
609933.78	4205336.45	0.66669	0.55213	2.03E-03	1.73E-06	2.0326E-03	FENCEGRD
609634.21	4204274.54	0.66593	0.49665	2.03E-03	1.56E-06	2.0302E-03	Planned
609407.78	4204790.76	0.66454	36.95521	2.02E-03	1.16E-04	2.1403E-03	FENCEGRD
609378.00	4204389.61	0.66425	1.26370	2.02E-03	3.97E-06	2.0274E-03	FENCEGRD
610440.38	4204806.10	0.66392	0.46688	2.02E-03	1.47E-06	2.0239E-03	Planned
610013.69	4205369.56	0.66110	0.51996	2.01E-03	1.63E-06	2.0155E-03	FENCEGRD
609528.33	4204279.03	0.65872	0.64343	2.01E-03	2.02E-06	2.0087E-03	Planned
609632.46	4205159.57	0.65818	0.85796	2.00E-03	2.69E-06	2.0077E-03	FENCEGRD
610189.80	4205428.86	0.65811	0.47173	2.00E-03	1.48E-06	2.0063E-03	FENCEGRD
609723.47	4205228.73	0.65806	0.68873	2.00E-03	2.16E-06	2.0068E-03	Planned
609372.71	4204402.84	0.65693	1.30680	2.00E-03	4.10E-06	2.0053E-03	FENCEGRD
609647.42	4204269.18	0.65654	0.47996	2.00E-03	1.51E-06	2.0015E-03	Planned
609485.90	4204934.03	0.65528	3.61599	2.00E-03	1.13E-05	2.0075E-03	FENCEGRD
609742.92	4205242.94	0.65491	0.66053	2.00E-03	2.07E-06	1.9971E-03	Planned
610142.82	4205415.29	0.65327	0.48230	1.99E-03	1.51E-06	1.9915E-03	FENCEGRD
609351.53	4204455.77	0.65279	1.67752	1.99E-03	5.26E-06	1.9938E-03	FENCEGRD
609541.60	4204273.65	0.65270	0.61085	1.99E-03	1.92E-06	1.9902E-03	Planned
609512.47	4205005.93	0.65257	1.90514	1.99E-03	5.98E-06	1.9939E-03	FENCEGRD
610474.02	4204827.17	0.65244	0.45615	1.99E-03	1.43E-06	1.9889E-03	Planned
609367.41	4204416.08	0.65134	1.35789	1.98E-03	4.26E-06	1.9884E-03	FENCEGRD
609854.70	4205302.99	0.64863	0.58714	1.98E-03	1.84E-06	1.9777E-03	FENCEGRD
609554.87	4204268.26	0.64712	0.58276	1.97E-03	1.83E-06	1.9731E-03	Planned
609367.15	4204704.67	0.64552	15.17339	1.97E-03	4.76E-05	2.0140E-03	Non-res
609461.60	4204267.64	0.64515	0.80023	1.97E-03	2.51E-06	1.9678E-03	FENCEGRD
609448.28	4204273.04	0.64462	0.82718	1.96E-03	2.60E-06	1.9663E-03	FENCEGRD
609474.92	4204262.23	0.64433	0.77230	1.96E-03	2.42E-06	1.9652E-03	FENCEGRD
609660.63	4204263.82	0.64410	0.46202	1.96E-03	1.45E-06	1.9635E-03	Planned
609408.09	4204805.25	0.64328	22.17542	1.96E-03	6.96E-05	2.0292E-03	FENCEGRD
609337.05	4204587.92	0.64323	3.71893	1.96E-03	1.17E-05	1.9711E-03	Planned
609319.76	4204535.17	0.64305	2.61438	1.96E-03	8.20E-06	1.9671E-03	Planned
610049.32	4205387.95	0.64174	0.49843	1.95E-03	1.56E-06	1.9565E-03	FENCEGRD
609568.14	4204262.88	0.64151	0.55759	1.95E-03	1.75E-06	1.9560E-03	Planned
609641.02	4205170.33	0.64096	0.82122	1.95E-03	2.58E-06	1.9551E-03	FENCEGRD
609488.25	4204256.82	0.64094	0.74189	1.95E-03	2.33E-06	1.9548E-03	FENCEGRD
609434.34	4204862.67	0.63953	7.51877	1.95E-03	2.36E-05	1.9718E-03	FENCEGRD
609966.83	4205355.93	0.63909	0.52720	1.95E-03	1.65E-06	1.9485E-03	FENCEGRD
609434.95	4204278.45	0.63881	0.85078	1.95E-03	2.67E-06	1.9487E-03	FENCEGRD
609887.36	4205322.64	0.63739	0.55853	1.94E-03	1.75E-06	1.9434E-03	FENCEGRD
609501.57	4204251.41	0.63677	0.71047	1.94E-03	2.23E-06	1.9420E-03	FENCEGRD
609581.41	4204257.49	0.63537	0.53426	1.94E-03	1.68E-06	1.9372E-03	Planned
610095.98	4205401.65	0.63493	0.49347	1.93E-03	1.55E-06	1.9357E-03	FENCEGRD
609564.03	4205077.29	0.63318	1.28080	1.93E-03	4.02E-06	1.9328E-03	FENCEGRD
609514.89	4204246.01	0.63183	0.67866	1.92E-03	2.13E-06	1.9268E-03	FENCEGRD
609673.83	4204258.46	0.62956	0.44363	1.92E-03	1.39E-06	1.9192E-03	Planned
609594.68	4204252.11	0.62921	0.51362	1.92E-03	1.61E-06	1.9183E-03	Planned
610406.76	4204775.08	0.62913	0.45747	1.92E-03	1.44E-06	1.9179E-03	Planned
610176.20	4205434.63	0.62854	0.45993	1.91E-03	1.44E-06	1.9161E-03	FENCEGRD
609367.46	4204719.16	0.62812	21.72986	1.91E-03	6.82E-05	1.9816E-03	Non-res
609382.37	4204338.27	0.62675	1.05578	1.91E-03	3.31E-06	1.9126E-03	FENCEGRD
609421.63	4204283.86	0.62608	0.86990	1.91E-03	2.73E-06	1.9099E-03	FENCEGRD
609528.22	4204240.60	0.62574	0.64556	1.91E-03	2.03E-06	1.9082E-03	FENCEGRD
609538.40	4205048.86	0.62219	1.46726	1.90E-03	4.60E-06	1.9000E-03	FENCEGRD
609434.66	4204877.16	0.62205	5.97564	1.89E-03	1.88E-05	1.9137E-03	FENCEGRD
609607.95	4204246.72	0.62143	0.49337	1.89E-03	1.55E-06	1.8946E-03	Planned
610373.12	4204753.65	0.62105	0.46212	1.89E-03	1.45E-06	1.8933E-03	Planned
609331.79	4204601.08	0.62029	4.16213	1.89E-03	1.31E-05	1.9026E-03	FENCEGRD
610129.27	4205421.03	0.61884	0.46947	1.89E-03	1.47E-06	1.8866E-03	FENCEGRD
609541.54	4204235.19	0.61841	0.61247	1.88E-03	1.92E-06	1.8858E-03	FENCEGRD
609920.20	4205342.21	0.61713	0.53283	1.88E-03	1.67E-06	1.8816E-03	FENCEGRD

609344.10	4204666.30	0.61683	8.31531	1.88E-03	2.61E-05	1.9051E-03	FENCEGRD
609408.40	4204819.74	0.61625	15.23166	1.88E-03	4.78E-05	1.9251E-03	FENCEGRD
609820.11	4205296.05	0.61598	0.57874	1.88E-03	1.82E-06	1.8783E-03	FENCEGRD
609687.04	4204253.10	0.61542	0.42733	1.87E-03	1.34E-06	1.8761E-03	Planned
609573.35	4205117.21	0.61405	0.97693	1.87E-03	3.07E-06	1.8736E-03	FENCEGRD
609999.99	4205375.37	0.61402	0.50342	1.87E-03	1.58E-06	1.8720E-03	FENCEGRD
609621.22	4204241.34	0.61373	0.47617	1.87E-03	1.49E-06	1.8711E-03	Planned
609486.22	4204948.52	0.61257	3.10586	1.87E-03	9.75E-06	1.8758E-03	FENCEGRD
609367.78	4204733.64	0.61107	34.58162	1.86E-03	1.09E-04	1.9700E-03	Non-res
609554.87	4204229.78	0.61073	0.58098	1.86E-03	1.82E-06	1.8623E-03	FENCEGRD
609582.04	4205128.14	0.61015	0.92831	1.86E-03	2.91E-06	1.8616E-03	FENCEGRD
610440.40	4204791.20	0.61002	0.44218	1.86E-03	1.39E-06	1.8597E-03	Planned
609408.30	4204289.27	0.60988	0.88587	1.86E-03	2.78E-06	1.8606E-03	FENCEGRD
610474.04	4204812.43	0.60927	0.43391	1.86E-03	1.36E-06	1.8574E-03	Planned
609512.78	4205020.42	0.60752	1.69748	1.85E-03	5.33E-06	1.8560E-03	FENCEGRD
609314.46	4204548.40	0.60713	2.86132	1.85E-03	8.98E-06	1.8585E-03	Planned
609564.34	4205091.78	0.60678	1.15606	1.85E-03	3.63E-06	1.8520E-03	FENCEGRD
609568.19	4204224.38	0.60431	0.55504	1.84E-03	1.74E-06	1.8426E-03	FENCEGRD
609634.49	4204235.95	0.60350	0.45814	1.84E-03	1.44E-06	1.8399E-03	FENCEGRD
610082.49	4205407.38	0.60299	0.47843	1.84E-03	1.50E-06	1.8384E-03	FENCEGRD
609590.74	4205139.07	0.60268	0.88638	1.84E-03	2.78E-06	1.8387E-03	FENCEGRD
609369.10	4204343.66	0.60212	1.06411	1.83E-03	3.34E-06	1.8376E-03	FENCEGRD
609326.52	4204614.24	0.60020	4.71524	1.83E-03	1.48E-05	1.8432E-03	FENCEGRD
609581.51	4204218.97	0.59836	0.53325	1.82E-03	1.67E-06	1.8244E-03	FENCEGRD
610162.61	4205440.40	0.59824	0.44776	1.82E-03	1.41E-06	1.8238E-03	FENCEGRD
609953.19	4205361.72	0.59804	0.50823	1.82E-03	1.59E-06	1.8234E-03	FENCEGRD
609841.33	4205308.66	0.59604	0.56466	1.82E-03	1.77E-06	1.8175E-03	FENCEGRD
610035.90	4205393.64	0.59580	0.48459	1.81E-03	1.52E-06	1.8165E-03	FENCEGRD
609514.83	4204207.55	0.59570	0.63014	1.81E-03	1.98E-06	1.8166E-03	FENCEGRD
609528.20	4204202.12	0.59433	0.61020	1.81E-03	1.91E-06	1.8124E-03	FENCEGRD
609434.97	4204891.64	0.59394	4.89301	1.81E-03	1.54E-05	1.8246E-03	FENCEGRD
609594.84	4204213.56	0.59316	0.51636	1.81E-03	1.62E-06	1.8085E-03	FENCEGRD
609501.46	4204212.98	0.59271	0.64756	1.81E-03	2.03E-06	1.8076E-03	FENCEGRD
609408.72	4204834.23	0.59123	11.13001	1.80E-03	3.49E-05	1.8360E-03	FENCEGRD
609647.75	4204230.57	0.58986	0.43777	1.80E-03	1.37E-06	1.7982E-03	FENCEGRD
609394.98	4204294.67	0.58979	0.89487	1.80E-03	2.81E-06	1.7995E-03	FENCEGRD
609338.87	4204679.37	0.58959	10.43856	1.80E-03	3.28E-05	1.8288E-03	FENCEGRD
609541.58	4204196.70	0.58922	0.58825	1.79E-03	1.85E-06	1.7968E-03	FENCEGRD
609564.66	4205106.27	0.58683	1.04300	1.79E-03	3.27E-06	1.7909E-03	FENCEGRD
610115.73	4205426.78	0.58465	0.45660	1.78E-03	1.43E-06	1.7824E-03	FENCEGRD
609873.88	4205328.36	0.58420	0.53823	1.78E-03	1.69E-06	1.7813E-03	FENCEGRD
609554.95	4204191.27	0.58385	0.56692	1.78E-03	1.78E-06	1.7803E-03	FENCEGRD
609350.51	4204362.34	0.58062	1.11965	1.77E-03	3.51E-06	1.7722E-03	FENCEGRD
609345.19	4204375.64	0.58013	1.17042	1.77E-03	3.67E-06	1.7709E-03	FENCEGRD
609321.26	4204627.40	0.57961	5.42025	1.77E-03	1.70E-05	1.7827E-03	FENCEGRD
609309.17	4204561.63	0.57781	3.14030	1.76E-03	9.85E-06	1.7700E-03	Planned
609339.87	4204388.93	0.57754	1.22013	1.76E-03	3.83E-06	1.7632E-03	FENCEGRD
609568.32	4204185.84	0.57688	0.54515	1.76E-03	1.71E-06	1.7590E-03	FENCEGRD
609661.02	4204225.18	0.57589	0.41921	1.75E-03	1.32E-06	1.7556E-03	FENCEGRD
609986.28	4205381.19	0.57482	0.48643	1.75E-03	1.53E-06	1.7526E-03	FENCEGRD
609538.72	4205063.35	0.57459	1.32697	1.75E-03	4.16E-06	1.7545E-03	FENCEGRD
610406.77	4204760.42	0.57455	0.43076	1.75E-03	1.35E-06	1.7516E-03	Planned
609486.53	4204963.01	0.57358	2.68835	1.75E-03	8.44E-06	1.7557E-03	FENCEGRD
609302.63	4204482.00	0.57345	1.97354	1.75E-03	6.19E-06	1.7531E-03	FENCEGRD
610069.01	4205413.10	0.57316	0.46341	1.75E-03	1.45E-06	1.7474E-03	FENCEGRD
609806.79	4205301.70	0.57199	0.55423	1.74E-03	1.74E-06	1.7442E-03	FENCEGRD
609334.55	4204402.23	0.57190	1.26282	1.74E-03	3.96E-06	1.7461E-03	FENCEGRD
609616.82	4205171.87	0.57176	0.77632	1.74E-03	2.44E-06	1.7442E-03	FENCEGRD
609307.95	4204468.71	0.57139	1.83404	1.74E-03	5.76E-06	1.7464E-03	FENCEGRD
609906.63	4205347.97	0.57128	0.51359	1.74E-03	1.61E-06	1.7419E-03	FENCEGRD
609381.66	4204300.08	0.57009	0.89939	1.74E-03	2.82E-06	1.7395E-03	FENCEGRD
609513.10	4205034.91	0.56775	1.51915	1.73E-03	4.77E-06	1.7343E-03	FENCEGRD
609621.48	4204202.75	0.56757	0.46322	1.73E-03	1.45E-06	1.7304E-03	FENCEGRD
609407.86	4204250.97	0.56714	0.78595	1.73E-03	2.47E-06	1.7301E-03	FENCEGRD
610149.01	4205446.16	0.56555	0.43649	1.72E-03	1.37E-06	1.7242E-03	FENCEGRD
609329.23	4204415.52	0.56506	1.30588	1.72E-03	4.10E-06	1.7254E-03	FENCEGRD
609313.27	4204455.41	0.56496	1.67813	1.72E-03	5.27E-06	1.7263E-03	FENCEGRD
609297.31	4204495.30	0.56391	2.11431	1.72E-03	6.63E-06	1.7245E-03	Planned
609333.64	4204692.44	0.56211	13.77978	1.71E-03	4.32E-05	1.7556E-03	Non-res
609674.29	4204219.80	0.56206	0.40257	1.71E-03	1.26E-06	1.7134E-03	FENCEGRD
609315.99	4204640.56	0.56114	6.33426	1.71E-03	1.99E-05	1.7293E-03	FENCEGRD
609435.28	4204906.13	0.55959	4.08815	1.70E-03	1.28E-05	1.7175E-03	FENCEGRD
610440.41	4204776.31	0.55897	0.41792	1.70E-03	1.31E-06	1.7041E-03	Planned
609368.72	4204777.11	0.55859	41.04571	1.70E-03	1.29E-04	1.8304E-03	FENCEGRD
610474.05	4204797.69	0.55842	0.41216	1.70E-03	1.29E-06	1.7024E-03	Planned
609625.51	4205182.80	0.55811	0.74472	1.70E-03	2.34E-06	1.7025E-03	FENCEGRD
609939.55	4205367.51	0.55774	0.49008	1.70E-03	1.54E-06	1.7006E-03	FENCEGRD
610022.48	4205399.33	0.55732	0.46969	1.70E-03	1.47E-06	1.6992E-03	FENCEGRD
609827.96	4205314.34	0.55313	0.54203	1.68E-03	1.70E-06	1.6867E-03	FENCEGRD
609394.49	4204256.39	0.55174	0.79729	1.68E-03	2.50E-06	1.6832E-03	FENCEGRD
609368.33	4204305.49	0.55004	0.89445	1.68E-03	2.81E-06	1.6784E-03	FENCEGRD
609541.68	4204158.17	0.54978	0.53372	1.67E-03	1.67E-06	1.6764E-03	FENCEGRD

609721.96	4205257.10	0.54878	0.59627	1.67E-03	1.87E-06	1.6736E-03	Planned
609291.99	4204508.59	0.54866	2.27190	1.67E-03	7.13E-06	1.6785E-03	Planned
609702.51	4205242.88	0.54858	0.62090	1.67E-03	1.95E-06	1.6731E-03	Planned
609687.56	4204214.41	0.54851	0.38820	1.67E-03	1.22E-06	1.6721E-03	FENCEGRD
609303.87	4204574.86	0.54798	3.44819	1.67E-03	1.08E-05	1.6801E-03	FENCEGRD
609634.81	4204197.34	0.54702	0.42753	1.67E-03	1.34E-06	1.6677E-03	FENCEGRD
610102.18	4205432.53	0.54630	0.44461	1.66E-03	1.40E-06	1.6656E-03	FENCEGRD
609595.06	4204174.99	0.54322	0.48219	1.65E-03	1.51E-06	1.6563E-03	FENCEGRD
610055.52	4205418.82	0.54304	0.44885	1.65E-03	1.41E-06	1.6556E-03	FENCEGRD
609486.84	4204977.50	0.54274	2.34108	1.65E-03	7.35E-06	1.6607E-03	FENCEGRD
609860.39	4205334.08	0.54241	0.51758	1.65E-03	1.62E-06	1.6539E-03	FENCEGRD
609369.04	4204791.60	0.53821	24.11221	1.64E-03	7.57E-05	1.7152E-03	FENCEGRD
609972.58	4205387.00	0.53794	0.46979	1.64E-03	1.47E-06	1.6402E-03	FENCEGRD
610135.42	4205451.93	0.53519	0.42461	1.63E-03	1.33E-06	1.6317E-03	FENCEGRD
609539.03	4205077.84	0.53471	1.20393	1.63E-03	3.78E-06	1.6326E-03	FENCEGRD
609461.22	4204949.06	0.53399	2.82085	1.63E-03	8.85E-06	1.6355E-03	FENCEGRD
609328.41	4204705.51	0.53298	19.66368	1.62E-03	6.17E-05	1.6853E-03	Non-res
609355.01	4204310.90	0.53296	0.89340	1.62E-03	2.80E-06	1.6263E-03	FENCEGRD
609793.46	4205307.36	0.53279	0.53019	1.62E-03	1.66E-06	1.6247E-03	FENCEGRD
609286.67	4204521.89	0.53272	2.45205	1.62E-03	7.69E-06	1.6305E-03	Planned
609381.12	4204261.82	0.53246	0.79965	1.62E-03	2.51E-06	1.6245E-03	FENCEGRD
609566.03	4205139.98	0.53202	0.83630	1.62E-03	2.62E-06	1.6233E-03	FENCEGRD
609513.41	4205049.40	0.53170	1.36612	1.62E-03	4.29E-06	1.6240E-03	FENCEGRD
609298.58	4204588.10	0.53170	3.85437	1.62E-03	1.21E-05	1.6318E-03	FENCEGRD
609893.06	4205353.73	0.53106	0.49465	1.62E-03	1.55E-06	1.6193E-03	FENCEGRD
609488.03	4204179.95	0.53087	0.58803	1.62E-03	1.85E-06	1.6190E-03	FENCEGRD
609568.51	4204147.29	0.52742	0.49231	1.61E-03	1.54E-06	1.6082E-03	FENCEGRD
609648.13	4204191.93	0.52667	0.39497	1.60E-03	1.24E-06	1.6056E-03	FENCEGRD
609574.82	4205151.03	0.52647	0.80031	1.60E-03	2.51E-06	1.6063E-03	FENCEGRD
609420.97	4204207.17	0.52600	0.67942	1.60E-03	2.13E-06	1.6045E-03	FENCEGRD
609407.55	4204212.61	0.52530	0.69969	1.60E-03	2.20E-06	1.6024E-03	FENCEGRD
609557.24	4205128.92	0.52448	0.88336	1.60E-03	2.77E-06	1.6005E-03	FENCEGRD
609435.60	4204920.62	0.52414	3.46190	1.60E-03	1.09E-05	1.6075E-03	FENCEGRD
610009.06	4205405.03	0.52362	0.45456	1.60E-03	1.43E-06	1.5965E-03	FENCEGRD
609608.43	4204169.56	0.52305	0.44459	1.59E-03	1.40E-06	1.5947E-03	FENCEGRD
609474.62	4204185.39	0.52175	0.59519	1.59E-03	1.87E-06	1.5913E-03	FENCEGRD
609409.35	4204863.21	0.52150	6.76577	1.59E-03	2.12E-05	1.6099E-03	FENCEGRD
609434.38	4204201.72	0.52104	0.65352	1.59E-03	2.05E-06	1.5893E-03	FENCEGRD
609394.14	4204218.05	0.52065	0.71716	1.59E-03	2.25E-06	1.5883E-03	FENCEGRD
609925.90	4205373.30	0.52046	0.47299	1.59E-03	1.48E-06	1.5869E-03	FENCEGRD
609583.61	4205162.09	0.52041	0.76547	1.59E-03	2.40E-06	1.5877E-03	FENCEGRD
609487.16	4204991.99	0.51901	2.05006	1.58E-03	6.43E-06	1.5875E-03	FENCEGRD
609293.29	4204601.33	0.51800	4.36337	1.58E-03	1.37E-05	1.5917E-03	FENCEGRD
609328.72	4204720.00	0.51710	31.33980	1.58E-03	9.83E-05	1.6736E-03	Non-res
609814.58	4205320.01	0.51635	0.51968	1.57E-03	1.63E-06	1.5746E-03	FENCEGRD
609305.46	4204666.87	0.51588	9.40959	1.57E-03	2.95E-05	1.6010E-03	FENCEGRD
609367.75	4204267.25	0.51460	0.79566	1.57E-03	2.50E-06	1.5701E-03	FENCEGRD
610088.64	4205438.27	0.51440	0.43181	1.57E-03	1.36E-06	1.5684E-03	FENCEGRD
609369.35	4204806.09	0.51432	16.16590	1.57E-03	5.07E-05	1.6175E-03	FENCEGRD
609447.79	4204196.28	0.51427	0.62267	1.57E-03	1.95E-06	1.5686E-03	FENCEGRD
609380.73	4204223.50	0.51376	0.73340	1.57E-03	2.30E-06	1.5673E-03	FENCEGRD
609461.21	4204190.84	0.51317	0.59995	1.56E-03	1.88E-06	1.5651E-03	FENCEGRD
609661.46	4204186.52	0.51292	0.37711	1.56E-03	1.18E-06	1.5637E-03	FENCEGRD
610474.07	4204782.94	0.51279	0.39083	1.56E-03	1.23E-06	1.5633E-03	Planned
610440.43	4204761.41	0.51144	0.39411	1.56E-03	1.24E-06	1.5592E-03	Planned
609581.92	4204141.84	0.51061	0.46722	1.56E-03	1.47E-06	1.5569E-03	FENCEGRD
609281.35	4204535.18	0.50944	2.64567	1.55E-03	8.30E-06	1.5602E-03	Planned
610042.03	4205424.54	0.50912	0.43519	1.55E-03	1.37E-06	1.5523E-03	FENCEGRD
609312.34	4204361.76	0.50815	1.05500	1.55E-03	3.31E-06	1.5513E-03	FENCEGRD
609317.68	4204348.41	0.50740	1.00228	1.55E-03	3.15E-06	1.5488E-03	FENCEGRD
610121.82	4205457.70	0.50675	0.41258	1.54E-03	1.29E-06	1.5450E-03	FENCEGRD
609621.80	4204164.14	0.50633	0.41406	1.54E-03	1.30E-06	1.5437E-03	FENCEGRD
609306.99	4204375.11	0.50618	1.10288	1.54E-03	3.46E-06	1.5454E-03	FENCEGRD
609958.87	4205392.82	0.50540	0.45317	1.54E-03	1.42E-06	1.5410E-03	FENCEGRD
609323.02	4204335.06	0.50463	0.94878	1.54E-03	2.98E-06	1.5402E-03	FENCEGRD
609601.20	4205184.20	0.50334	0.70391	1.53E-03	2.21E-06	1.5355E-03	FENCEGRD
609674.78	4204181.12	0.50305	0.36770	1.53E-03	1.15E-06	1.5336E-03	FENCEGRD
609539.35	4205092.33	0.50293	1.09489	1.53E-03	3.44E-06	1.5355E-03	FENCEGRD
609846.91	4205339.80	0.50257	0.49835	1.53E-03	1.56E-06	1.5325E-03	FENCEGRD
609301.65	4204388.46	0.50195	1.14757	1.53E-03	3.60E-06	1.5327E-03	FENCEGRD
609487.47	4205006.47	0.50112	1.80386	1.53E-03	5.66E-06	1.5322E-03	FENCEGRD
609354.38	4204272.67	0.49914	0.79078	1.52E-03	2.48E-06	1.5230E-03	FENCEGRD
609461.54	4204963.55	0.49886	2.44866	1.52E-03	7.68E-06	1.5273E-03	FENCEGRD
609548.45	4205117.87	0.49869	0.94332	1.52E-03	2.96E-06	1.5221E-03	FENCEGRD
609296.31	4204401.81	0.49679	1.19715	1.51E-03	3.76E-06	1.5171E-03	FENCEGRD
609879.49	4205359.48	0.49619	0.47601	1.51E-03	1.49E-06	1.5130E-03	FENCEGRD
609780.14	4205313.01	0.49591	0.50692	1.51E-03	1.59E-06	1.5123E-03	FENCEGRD
609369.66	4204820.58	0.49569	11.52251	1.51E-03	3.62E-05	1.5462E-03	FENCEGRD
609688.10	4204175.71	0.49388	0.35998	1.50E-03	1.13E-06	1.5056E-03	FENCEGRD
609995.64	4205410.72	0.49316	0.43954	1.50E-03	1.38E-06	1.5037E-03	FENCEGRD
609274.94	4204455.21	0.49289	1.67752	1.50E-03	5.26E-06	1.5067E-03	FENCEGRD
609300.20	4204680.03	0.49252	12.22310	1.50E-03	3.84E-05	1.5387E-03	FENCEGRD

609609.99	4205195.25	0.49241	0.67681	1.50E-03	2.12E-06	1.5021E-03	FENCEGRD
609269.60	4204468.56	0.49234	1.81893	1.50E-03	5.71E-06	1.5055E-03	FENCEGRD
609290.97	4204415.16	0.49226	1.26408	1.50E-03	3.97E-06	1.5035E-03	FENCEGRD
609435.91	4204935.11	0.49219	2.95807	1.50E-03	9.28E-06	1.5086E-03	FENCEGRD
609280.28	4204441.86	0.49176	1.52292	1.50E-03	4.78E-06	1.5028E-03	FENCEGRD
609409.66	4204877.70	0.49112	5.44671	1.50E-03	1.71E-05	1.5132E-03	FENCEGRD
609635.17	4204158.71	0.49040	0.38772	1.49E-03	1.22E-06	1.4951E-03	FENCEGRD
609276.03	4204548.48	0.48967	2.86019	1.49E-03	8.98E-06	1.5006E-03	Planned
609595.34	4204136.40	0.48959	0.43472	1.49E-03	1.36E-06	1.4928E-03	FENCEGRD
609264.26	4204481.91	0.48685	1.95234	1.48E-03	6.13E-06	1.4892E-03	Planned
609912.26	4205379.09	0.48674	0.45581	1.48E-03	1.43E-06	1.4842E-03	FENCEGRD
609487.79	4205020.96	0.48650	1.59505	1.48E-03	5.01E-06	1.4870E-03	FENCEGRD
610075.09	4205444.02	0.48631	0.41859	1.48E-03	1.31E-06	1.4827E-03	FENCEGRD
609801.21	4205325.69	0.48455	0.49756	1.48E-03	1.56E-06	1.4776E-03	FENCEGRD
609539.66	4205106.82	0.47798	0.99810	1.46E-03	3.13E-06	1.4592E-03	FENCEGRD
609270.71	4204561.78	0.47797	3.16375	1.46E-03	9.93E-06	1.4659E-03	FENCEGRD
609648.54	4204153.28	0.47778	0.36950	1.46E-03	1.16E-06	1.4566E-03	FENCEGRD
609329.67	4204763.46	0.47730	42.18515	1.45E-03	1.32E-04	1.5864E-03	FENCEGRD
610028.55	4205430.27	0.47606	0.42190	1.45E-03	1.32E-06	1.4515E-03	FENCEGRD
609258.92	4204495.26	0.47401	2.08723	1.44E-03	6.55E-06	1.4505E-03	Planned
609945.17	4205398.63	0.47382	0.43708	1.44E-03	1.37E-06	1.4447E-03	FENCEGRD
609608.75	4204130.95	0.47318	0.40587	1.44E-03	1.27E-06	1.4427E-03	FENCEGRD
610108.22	4205463.47	0.47263	0.40168	1.44E-03	1.26E-06	1.4410E-03	FENCEGRD
609833.43	4205345.52	0.47106	0.47863	1.43E-03	1.50E-06	1.4365E-03	FENCEGRD
610474.08	4204768.20	0.47044	0.36991	1.43E-03	1.16E-06	1.4342E-03	Planned
609409.98	4204892.19	0.46923	4.46628	1.43E-03	1.40E-05	1.4434E-03	FENCEGRD
609294.93	4204693.19	0.46897	17.01403	1.43E-03	5.34E-05	1.4820E-03	Non-res
609550.13	4205151.95	0.46829	0.75715	1.43E-03	2.38E-06	1.4289E-03	FENCEGRD
609265.39	4204575.07	0.46778	3.53487	1.42E-03	1.11E-05	1.4361E-03	FENCEGRD
609461.85	4204978.04	0.46758	2.14017	1.42E-03	6.72E-06	1.4311E-03	FENCEGRD
610440.44	4204746.51	0.46733	0.37098	1.42E-03	1.16E-06	1.4248E-03	Planned
609488.10	4205035.45	0.46680	1.42307	1.42E-03	4.47E-06	1.4265E-03	FENCEGRD
609558.99	4205163.09	0.46462	0.72551	1.42E-03	2.28E-06	1.4176E-03	FENCEGRD
609982.21	4205416.42	0.46359	0.42499	1.41E-03	1.33E-06	1.4135E-03	FENCEGRD
609436.23	4204949.60	0.46354	2.54900	1.41E-03	8.00E-06	1.4201E-03	FENCEGRD
609329.98	4204777.95	0.46286	24.33307	1.41E-03	7.64E-05	1.4863E-03	FENCEGRD
609865.92	4205365.24	0.46264	0.45844	1.41E-03	1.44E-06	1.4108E-03	FENCEGRD
609766.81	4205318.66	0.46222	0.48490	1.41E-03	1.52E-06	1.4096E-03	FENCEGRD
609706.11	4205277.35	0.46166	0.52817	1.41E-03	1.66E-06	1.4080E-03	Planned
609622.16	4204125.51	0.46146	0.38603	1.41E-03	1.21E-06	1.4069E-03	FENCEGRD
609686.66	4205263.13	0.46120	0.54780	1.40E-03	1.72E-06	1.4067E-03	Planned
609567.85	4205174.24	0.46004	0.69557	1.40E-03	2.18E-06	1.4036E-03	FENCEGRD
609327.08	4204245.27	0.45731	0.75624	1.39E-03	2.37E-06	1.3955E-03	FENCEGRD
609541.26	4205140.80	0.45701	0.80063	1.39E-03	2.51E-06	1.3947E-03	FENCEGRD
610061.55	4205449.77	0.45690	0.40610	1.39E-03	1.27E-06	1.3931E-03	FENCEGRD
609787.84	4205331.36	0.45599	0.47605	1.39E-03	1.49E-06	1.3906E-03	FENCEGRD
609260.07	4204588.37	0.45544	3.96883	1.39E-03	1.25E-05	1.3998E-03	FENCEGRD
609253.57	4204508.61	0.45519	2.21349	1.39E-03	6.95E-06	1.3936E-03	Planned
609898.62	4205384.88	0.45348	0.43957	1.38E-03	1.38E-06	1.3828E-03	FENCEGRD
609410.29	4204906.68	0.45156	3.71289	1.38E-03	1.17E-05	1.3872E-03	FENCEGRD
609688.66	4204137.00	0.44934	0.33854	1.37E-03	1.06E-06	1.3699E-03	Planned
609279.45	4204347.97	0.44883	0.95483	1.37E-03	3.00E-06	1.3702E-03	FENCEGRD
610015.06	4205435.99	0.44872	0.40828	1.37E-03	1.28E-06	1.3682E-03	FENCEGRD
609295.53	4204307.78	0.44787	0.83516	1.36E-03	2.62E-06	1.3669E-03	FENCEGRD
609585.58	4205196.53	0.44739	0.64100	1.36E-03	2.01E-06	1.3649E-03	FENCEGRD
609274.09	4204361.37	0.44730	1.00096	1.36E-03	3.14E-06	1.3657E-03	FENCEGRD
609289.67	4204706.35	0.44473	26.51322	1.35E-03	8.32E-05	1.4380E-03	Non-res
609313.66	4204250.72	0.44448	0.75611	1.35E-03	2.37E-06	1.3564E-03	FENCEGRD
609268.73	4204374.77	0.44407	1.04603	1.35E-03	3.28E-06	1.3560E-03	FENCEGRD
609330.29	4204792.44	0.44389	16.20613	1.35E-03	5.09E-05	1.4031E-03	FENCEGRD
609819.95	4205351.24	0.44374	0.45916	1.35E-03	1.44E-06	1.3532E-03	FENCEGRD
609488.42	4205049.94	0.44282	1.27938	1.35E-03	4.01E-06	1.3530E-03	FENCEGRD
609931.47	4205404.45	0.44271	0.42209	1.35E-03	1.32E-06	1.3499E-03	FENCEGRD
609248.23	4204521.96	0.44224	2.37722	1.35E-03	7.46E-06	1.3546E-03	Planned
610094.63	4205469.24	0.44150	0.39084	1.34E-03	1.23E-06	1.3461E-03	FENCEGRD
609514.35	4205092.87	0.44077	1.02280	1.34E-03	3.21E-06	1.3459E-03	FENCEGRD
609254.75	4204601.66	0.44051	4.49771	1.34E-03	1.41E-05	1.3560E-03	FENCEGRD
609263.37	4204388.16	0.44033	1.09804	1.34E-03	3.45E-06	1.3448E-03	FENCEGRD
609462.16	4204992.53	0.43942	1.88325	1.34E-03	5.91E-06	1.3445E-03	FENCEGRD
609968.79	4205422.11	0.43925	0.41034	1.34E-03	1.29E-06	1.3394E-03	FENCEGRD
609594.45	4205207.68	0.43870	0.61732	1.34E-03	1.94E-06	1.3383E-03	FENCEGRD
609258.01	4204401.56	0.43798	1.17373	1.33E-03	3.68E-06	1.3379E-03	FENCEGRD
609252.65	4204414.96	0.43773	1.28360	1.33E-03	4.03E-06	1.3375E-03	FENCEGRD
609436.54	4204964.09	0.43707	2.21531	1.33E-03	6.95E-06	1.3384E-03	FENCEGRD
609410.60	4204921.17	0.43604	3.12345	1.33E-03	9.80E-06	1.3381E-03	FENCEGRD
609266.81	4204667.49	0.43343	10.60066	1.32E-03	3.33E-05	1.3536E-03	FENCEGRD
609241.92	4204441.75	0.43335	1.51773	1.32E-03	4.76E-06	1.3249E-03	FENCEGRD
609532.40	4205129.65	0.43281	0.85069	1.32E-03	2.67E-06	1.3211E-03	FENCEGRD
609662.40	4204109.18	0.43257	0.34502	1.32E-03	1.08E-06	1.3188E-03	Planned
609852.35	4205371.00	0.43243	0.44172	1.32E-03	1.39E-06	1.3187E-03	FENCEGRD
609242.89	4204535.32	0.43234	2.59427	1.32E-03	8.14E-06	1.3252E-03	FENCEGRD
610048.00	4205455.52	0.43198	0.39321	1.32E-03	1.23E-06	1.3172E-03	FENCEGRD

610474.10	4204753.46	0.43177	0.34943	1.32E-03	1.10E-06	1.3164E-03	Planned
609300.25	4204256.16	0.43163	0.75290	1.31E-03	2.36E-06	1.3172E-03	FENCEGRD
609753.49	4205324.32	0.43133	0.46434	1.31E-03	1.46E-06	1.3154E-03	FENCEGRD
609289.98	4204720.84	0.43078	49.21472	1.31E-03	1.54E-04	1.4667E-03	Non-res
609236.56	4204455.15	0.42970	1.63918	1.31E-03	5.14E-06	1.3141E-03	FENCEGRD
609603.31	4205218.83	0.42969	0.59328	1.31E-03	1.86E-06	1.3108E-03	FENCEGRD
609774.47	4205337.04	0.42903	0.45550	1.31E-03	1.43E-06	1.3084E-03	FENCEGRD
609249.43	4204614.96	0.42777	5.16840	1.30E-03	1.62E-05	1.3193E-03	FENCEGRD
609330.61	4204806.93	0.42670	11.45168	1.30E-03	3.59E-05	1.3358E-03	FENCEGRD
609675.81	4204103.74	0.42670	0.33825	1.30E-03	1.06E-06	1.3009E-03	Planned
609231.20	4204468.55	0.42477	1.76246	1.29E-03	5.53E-06	1.2995E-03	Planned
610001.57	4205441.71	0.42413	0.39481	1.29E-03	1.24E-06	1.2932E-03	FENCEGRD
609884.97	4205390.67	0.42354	0.42403	1.29E-03	1.33E-06	1.2915E-03	FENCEGRD
609237.55	4204548.67	0.42352	2.85529	1.29E-03	8.96E-06	1.2991E-03	FENCEGRD
609689.23	4204098.29	0.42201	0.33192	1.29E-03	1.04E-06	1.2866E-03	Planned
609523.53	4205118.50	0.42152	0.89377	1.28E-03	2.80E-06	1.2869E-03	FENCEGRD
609410.92	4204935.65	0.42091	2.65861	1.28E-03	8.34E-06	1.2905E-03	FENCEGRD
609286.84	4204261.60	0.42019	0.75560	1.28E-03	2.37E-06	1.2824E-03	FENCEGRD
609806.46	4205356.96	0.41945	0.44005	1.28E-03	1.38E-06	1.2791E-03	FENCEGRD
609514.67	4205107.36	0.41771	0.93585	1.27E-03	2.94E-06	1.2754E-03	FENCEGRD
610081.03	4205475.01	0.41723	0.37899	1.27E-03	1.19E-06	1.2722E-03	FENCEGRD
609917.76	4205410.26	0.41618	0.40708	1.27E-03	1.28E-06	1.2691E-03	FENCEGRD
609955.37	4205427.81	0.41502	0.39633	1.26E-03	1.24E-06	1.2655E-03	FENCEGRD
609462.48	4205007.02	0.41498	1.66774	1.26E-03	5.23E-06	1.2694E-03	FENCEGRD
609488.73	4205064.43	0.41481	1.15945	1.26E-03	3.64E-06	1.2673E-03	FENCEGRD
609552.13	4205186.44	0.41450	0.63540	1.26E-03	1.99E-06	1.2647E-03	FENCEGRD
609225.84	4204481.95	0.41421	1.86904	1.26E-03	5.87E-06	1.2677E-03	Planned
609261.52	4204680.72	0.41403	14.23335	1.26E-03	4.47E-05	1.3059E-03	FENCEGRD
609244.11	4204628.25	0.41380	6.02852	1.26E-03	1.89E-05	1.2795E-03	FENCEGRD
609543.21	4205175.22	0.41244	0.66451	1.26E-03	2.09E-06	1.2585E-03	FENCEGRD
609232.21	4204562.02	0.41194	3.14088	1.25E-03	9.86E-06	1.2647E-03	FENCEGRD
609290.61	4204749.81	0.41061	45.45200	1.25E-03	1.43E-04	1.3935E-03	FENCEGRD
609534.29	4205164.00	0.40944	0.69385	1.25E-03	2.18E-06	1.2494E-03	FENCEGRD
609268.05	4204280.49	0.40879	0.77929	1.25E-03	2.45E-06	1.2477E-03	FENCEGRD
609838.78	4205376.76	0.40833	0.42460	1.24E-03	1.33E-06	1.2452E-03	FENCEGRD
610034.46	4205461.26	0.40733	0.38088	1.24E-03	1.20E-06	1.2420E-03	FENCEGRD
609262.67	4204293.93	0.40658	0.79344	1.24E-03	2.49E-06	1.2410E-03	FENCEGRD
609257.29	4204307.36	0.40543	0.81789	1.24E-03	2.57E-06	1.2376E-03	FENCEGRD
609251.92	4204320.80	0.40489	0.85153	1.23E-03	2.67E-06	1.2361E-03	FENCEGRD
609290.93	4204764.30	0.40473	24.07104	1.23E-03	7.55E-05	1.3084E-03	FENCEGRD
609411.23	4204950.14	0.40426	2.28935	1.23E-03	7.18E-06	1.2387E-03	FENCEGRD
609246.54	4204334.24	0.40423	0.89174	1.23E-03	2.80E-06	1.2342E-03	FENCEGRD
609761.09	4205342.71	0.40396	0.43577	1.23E-03	1.37E-06	1.2319E-03	FENCEGRD
609689.39	4205292.31	0.40391	0.48085	1.23E-03	1.51E-06	1.2319E-03	Planned
609669.93	4205278.09	0.40390	0.49706	1.23E-03	1.56E-06	1.2319E-03	Planned
609241.16	4204347.68	0.40285	0.93585	1.23E-03	2.94E-06	1.2301E-03	FENCEGRD
609740.16	4205329.97	0.40262	0.44397	1.23E-03	1.39E-06	1.2279E-03	FENCEGRD
609220.48	4204495.34	0.40261	1.98018	1.23E-03	6.21E-06	1.2327E-03	Planned
609871.33	4205396.45	0.40211	0.40767	1.22E-03	1.28E-06	1.2262E-03	FENCEGRD
609569.98	4205208.88	0.40068	0.58642	1.22E-03	1.84E-06	1.2224E-03	FENCEGRD
609235.78	4204361.12	0.40039	0.98197	1.22E-03	3.08E-06	1.2228E-03	FENCEGRD
609525.36	4205152.78	0.40038	0.72845	1.22E-03	2.29E-06	1.2219E-03	FENCEGRD
609226.86	4204575.37	0.39842	3.46829	1.21E-03	1.09E-05	1.2246E-03	FENCEGRD
609792.98	4205362.69	0.39747	0.42138	1.21E-03	1.32E-06	1.2121E-03	FENCEGRD
609988.08	4205447.43	0.39742	0.38240	1.21E-03	1.20E-06	1.2118E-03	FENCEGRD
609462.79	4205021.51	0.39445	1.48535	1.20E-03	4.66E-06	1.2063E-03	FENCEGRD
609256.22	4204693.95	0.39413	21.06234	1.20E-03	6.61E-05	1.2667E-03	Non-res
609578.90	4205220.10	0.39378	0.56559	1.20E-03	1.77E-06	1.2013E-03	FENCEGRD
609215.12	4204508.74	0.39338	2.12415	1.20E-03	6.67E-06	1.2050E-03	FENCEGRD
609904.06	4205416.08	0.39336	0.39231	1.20E-03	1.23E-06	1.1995E-03	FENCEGRD
610067.44	4205480.78	0.39311	0.36764	1.20E-03	1.15E-06	1.1987E-03	FENCEGRD
609489.04	4205078.92	0.39272	1.05387	1.20E-03	3.31E-06	1.1996E-03	FENCEGRD
609941.95	4205433.50	0.39067	0.38310	1.19E-03	1.20E-06	1.1913E-03	FENCEGRD
609291.24	4204778.79	0.39013	15.66787	1.19E-03	4.92E-05	1.2376E-03	FENCEGRD
609214.27	4204414.88	0.38960	1.27388	1.19E-03	4.00E-06	1.1908E-03	FENCEGRD
609331.24	4204835.91	0.38888	6.51901	1.18E-03	2.05E-05	1.2051E-03	FENCEGRD
609825.21	4205382.52	0.38851	0.40720	1.18E-03	1.28E-06	1.1848E-03	FENCEGRD
609371.24	4204893.03	0.38794	3.60544	1.18E-03	1.13E-05	1.1931E-03	FENCEGRD
609516.44	4205141.56	0.38731	0.76521	1.18E-03	2.40E-06	1.1822E-03	FENCEGRD
609587.82	4205231.33	0.38696	0.54349	1.18E-03	1.71E-06	1.1805E-03	FENCEGRD
609208.89	4204428.32	0.38627	1.37093	1.18E-03	4.30E-06	1.1810E-03	FENCEGRD
609221.52	4204588.72	0.38557	3.86706	1.17E-03	1.21E-05	1.1867E-03	FENCEGRD
609209.76	4204522.14	0.38533	2.29807	1.17E-03	7.21E-06	1.1810E-03	FENCEGRD
609411.55	4204964.63	0.38481	1.99422	1.17E-03	6.26E-06	1.1785E-03	FENCEGRD
610020.91	4205467.01	0.38197	0.36938	1.16E-03	1.16E-06	1.1647E-03	FENCEGRD
609203.52	4204441.76	0.38157	1.46560	1.16E-03	4.60E-06	1.1670E-03	FENCEGRD
609857.69	4205402.24	0.38134	0.39218	1.16E-03	1.23E-06	1.1629E-03	FENCEGRD
609507.52	4205130.34	0.37985	0.80046	1.16E-03	2.51E-06	1.1596E-03	FENCEGRD
609747.72	4205348.38	0.37892	0.41710	1.15E-03	1.31E-06	1.1556E-03	FENCEGRD
609204.40	4204535.54	0.37721	2.49506	1.15E-03	7.83E-06	1.1569E-03	FENCEGRD
609463.11	4205036.00	0.37651	1.33005	1.15E-03	4.17E-06	1.1511E-03	FENCEGRD
609489.36	4205093.41	0.37636	0.96065	1.15E-03	3.01E-06	1.1495E-03	FENCEGRD

609726.84	4205335.63	0.37607	0.42442	1.15E-03	1.33E-06	1.1469E-03	FENCEGRD
609291.55	4204793.28	0.37575	10.92453	1.14E-03	3.43E-05	1.1789E-03	FENCEGRD
609779.50	4205368.41	0.37566	0.40395	1.14E-03	1.27E-06	1.1456E-03	FENCEGRD
609198.14	4204455.20	0.37482	1.55354	1.14E-03	4.88E-06	1.1467E-03	FENCEGRD
609216.18	4204602.07	0.37411	4.36900	1.14E-03	1.37E-05	1.1533E-03	FENCEGRD
609250.93	4204707.19	0.37408	36.89414	1.14E-03	1.16E-04	1.2553E-03	Non-res
609974.60	4205453.16	0.37302	0.37043	1.14E-03	1.16E-06	1.1375E-03	FENCEGRD
609498.60	4205119.12	0.37284	0.83755	1.14E-03	2.63E-06	1.1384E-03	FENCEGRD
609536.44	4205198.68	0.37139	0.58271	1.13E-03	1.83E-06	1.1332E-03	FENCEGRD
610053.84	4205486.55	0.37036	0.35657	1.13E-03	1.12E-06	1.1293E-03	FENCEGRD
609928.53	4205439.20	0.36958	0.37009	1.13E-03	1.16E-06	1.1270E-03	FENCEGRD
609554.38	4205221.24	0.36953	0.53887	1.13E-03	1.69E-06	1.1274E-03	FENCEGRD
609811.64	4205388.28	0.36947	0.39067	1.13E-03	1.23E-06	1.1267E-03	FENCEGRD
609890.35	4205421.89	0.36910	0.37897	1.12E-03	1.19E-06	1.1256E-03	FENCEGRD
609331.55	4204850.40	0.36898	5.13691	1.12E-03	1.61E-05	1.1401E-03	FENCEGRD
609199.04	4204548.94	0.36804	2.70820	1.12E-03	8.50E-06	1.1296E-03	FENCEGRD
609228.15	4204668.14	0.36748	11.39102	1.12E-03	3.57E-05	1.1552E-03	FENCEGRD
609192.76	4204468.64	0.36709	1.64337	1.12E-03	5.16E-06	1.1234E-03	Planned
609527.47	4205187.40	0.36695	0.60903	1.12E-03	1.91E-06	1.1197E-03	FENCEGRD
609371.55	4204907.52	0.36668	3.02786	1.12E-03	9.50E-06	1.1265E-03	FENCEGRD
609563.35	4205232.52	0.36540	0.52026	1.11E-03	1.63E-06	1.1147E-03	FENCEGRD
609210.84	4204615.42	0.36500	4.99160	1.11E-03	1.57E-05	1.1275E-03	FENCEGRD
609411.86	4204979.12	0.36456	1.75295	1.11E-03	5.50E-06	1.1160E-03	FENCEGRD
609518.50	4205176.12	0.36430	0.63350	1.11E-03	1.99E-06	1.1117E-03	FENCEGRD
609489.67	4205107.90	0.36415	0.87796	1.11E-03	2.76E-06	1.1121E-03	FENCEGRD
609844.04	4205408.03	0.36223	0.37726	1.10E-03	1.18E-06	1.1046E-03	FENCEGRD
609463.42	4205050.48	0.36122	1.19738	1.10E-03	3.76E-06	1.1041E-03	FENCEGRD
609509.53	4205164.84	0.35980	0.66008	1.10E-03	2.07E-06	1.0981E-03	FENCEGRD
610007.37	4205472.76	0.35977	0.35795	1.10E-03	1.12E-06	1.0971E-03	FENCEGRD
609187.38	4204482.08	0.35887	1.73840	1.09E-03	5.46E-06	1.0987E-03	FENCEGRD
609193.67	4204562.33	0.35805	2.94492	1.09E-03	9.24E-06	1.1000E-03	FENCEGRD
609961.11	4205458.88	0.35602	0.35750	1.08E-03	1.12E-06	1.0857E-03	FENCEGRD
609734.35	4205354.06	0.35527	0.40020	1.08E-03	1.26E-06	1.0835E-03	FENCEGRD
609766.02	4205374.13	0.35523	0.38718	1.08E-03	1.21E-06	1.0833E-03	FENCEGRD
609331.87	4204864.89	0.35519	4.13867	1.08E-03	1.30E-05	1.0950E-03	FENCEGRD
610406.85	4204687.13	0.35349	0.31237	1.08E-03	9.80E-07	1.0778E-03	FENCEGRD
609251.87	4204750.65	0.35343	25.05721	1.08E-03	7.86E-05	1.1553E-03	FENCEGRD
609205.50	4204628.77	0.35313	5.75029	1.08E-03	1.80E-05	1.0938E-03	FENCEGRD
609876.65	4205427.71	0.35265	0.36459	1.07E-03	1.14E-06	1.0754E-03	FENCEGRD
609500.56	4205153.56	0.35186	0.68964	1.07E-03	2.16E-06	1.0740E-03	FENCEGRD
609222.83	4204681.44	0.35185	15.64557	1.07E-03	4.91E-05	1.1209E-03	FENCEGRD
609713.52	4205341.28	0.35171	0.40607	1.07E-03	1.27E-06	1.0727E-03	FENCEGRD
609798.07	4205394.03	0.35156	0.37480	1.07E-03	1.18E-06	1.0721E-03	FENCEGRD
609182.01	4204495.52	0.35144	1.85058	1.07E-03	5.81E-06	1.0764E-03	FENCEGRD
609915.11	4205444.89	0.35134	0.35732	1.07E-03	1.12E-06	1.0714E-03	FENCEGRD
610040.24	4205492.32	0.35091	0.34530	1.07E-03	1.08E-06	1.0700E-03	FENCEGRD
609463.74	4205064.97	0.35067	1.08202	1.07E-03	3.40E-06	1.0716E-03	FENCEGRD
609652.33	4205298.34	0.34928	0.44196	1.06E-03	1.39E-06	1.0654E-03	Planned
609671.78	4205312.56	0.34838	0.42851	1.06E-03	1.34E-06	1.0626E-03	Planned
609252.18	4204765.14	0.34721	14.69272	1.06E-03	4.61E-05	1.1038E-03	FENCEGRD
609188.31	4204575.73	0.34707	3.20796	1.06E-03	1.01E-05	1.0673E-03	FENCEGRD
609412.18	4204993.61	0.34635	1.55238	1.06E-03	4.87E-06	1.0599E-03	FENCEGRD
609371.86	4204922.01	0.34587	2.57487	1.05E-03	8.08E-06	1.0617E-03	FENCEGRD
609491.59	4205142.28	0.34546	0.71934	1.05E-03	2.26E-06	1.0546E-03	FENCEGRD
609830.40	4205413.82	0.34455	0.36291	1.05E-03	1.14E-06	1.0507E-03	FENCEGRD
609292.18	4204822.26	0.34447	6.06575	1.05E-03	1.90E-05	1.0684E-03	FENCEGRD
609176.63	4204508.96	0.34358	1.96976	1.05E-03	6.18E-06	1.0528E-03	FENCEGRD
609332.18	4204879.38	0.34249	3.39840	1.04E-03	1.07E-05	1.0540E-03	FENCEGRD
609993.82	4205478.51	0.34073	0.34647	1.04E-03	1.09E-06	1.0390E-03	FENCEGRD
609464.05	4205079.46	0.34002	0.98271	1.04E-03	3.08E-06	1.0389E-03	FENCEGRD
609947.62	4205464.60	0.33844	0.34552	1.03E-03	1.08E-06	1.0321E-03	FENCEGRD
609482.62	4205131.00	0.33710	0.75178	1.03E-03	2.36E-06	1.0293E-03	FENCEGRD
609182.95	4204589.13	0.33648	3.50598	1.03E-03	1.10E-05	1.0360E-03	FENCEGRD
609862.94	4205433.52	0.33645	0.35107	1.02E-03	1.10E-06	1.0260E-03	FENCEGRD
609217.51	4204694.73	0.33552	24.29835	1.02E-03	7.62E-05	1.0983E-03	Non-res
609752.53	4205379.85	0.33551	0.37113	1.02E-03	1.16E-06	1.0232E-03	FENCEGRD
609252.50	4204779.63	0.33529	9.88391	1.02E-03	3.10E-05	1.0524E-03	FENCEGRD
609538.78	4205233.60	0.33525	0.49731	1.02E-03	1.56E-06	1.0228E-03	FENCEGRD
609784.50	4205399.79	0.33449	0.35959	1.02E-03	1.13E-06	1.0201E-03	FENCEGRD
609901.69	4205450.59	0.33420	0.34510	1.02E-03	1.08E-06	1.0191E-03	FENCEGRD
609171.25	4204522.40	0.33379	2.08015	1.02E-03	6.53E-06	1.0233E-03	FENCEGRD
609720.97	4205359.73	0.33326	0.38268	1.02E-03	1.20E-06	1.0164E-03	FENCEGRD
610026.65	4205498.09	0.33275	0.33439	1.01E-03	1.05E-06	1.0147E-03	FENCEGRD
609547.79	4205244.93	0.33272	0.48026	1.01E-03	1.51E-06	1.0151E-03	FENCEGRD
609464.36	4205093.95	0.33083	0.89644	1.01E-03	2.81E-06	1.0106E-03	FENCEGRD
609473.65	4205119.72	0.32997	0.78550	1.01E-03	2.46E-06	1.0076E-03	FENCEGRD
609412.49	4205008.10	0.32976	1.38440	1.00E-03	4.34E-06	1.0089E-03	FENCEGRD
609700.19	4205346.93	0.32951	0.38891	1.00E-03	1.22E-06	1.0050E-03	FENCEGRD
609816.76	4205419.61	0.32786	0.34917	9.99E-04	1.10E-06	9.9984E-04	FENCEGRD
609292.50	4204836.75	0.32739	4.74249	9.97E-04	1.49E-05	1.0122E-03	FENCEGRD
609332.49	4204893.87	0.32724	2.84395	9.97E-04	8.92E-06	1.0058E-03	FENCEGRD
609372.18	4204936.49	0.32700	2.21474	9.96E-04	6.95E-06	1.0031E-03	FENCEGRD

609177.59	4204602.53	0.32594	3.83800	9.93E-04	1.20E-05	1.0049E-03	FENCEGRD
609165.87	4204535.84	0.32494	2.21150	9.90E-04	6.94E-06	9.9679E-04	FENCEGRD
609464.68	4205108.44	0.32439	0.82054	9.88E-04	2.57E-06	9.9075E-04	FENCEGRD
609980.28	4205484.25	0.32326	0.33541	9.85E-04	1.05E-06	9.8579E-04	FENCEGRD
609934.14	4205470.33	0.32234	0.33397	9.82E-04	1.05E-06	9.8298E-04	FENCEGRD
609849.24	4205439.34	0.32175	0.33795	9.80E-04	1.06E-06	9.8119E-04	FENCEGRD
609888.27	4205456.28	0.31809	0.33351	9.69E-04	1.05E-06	9.7003E-04	FENCEGRD
609770.93	4205405.55	0.31668	0.34548	9.65E-04	1.08E-06	9.6577E-04	FENCEGRD
609739.05	4205385.57	0.31611	0.35623	9.63E-04	1.12E-06	9.6407E-04	FENCEGRD
609160.50	4204549.27	0.31559	2.34455	9.61E-04	7.36E-06	9.6873E-04	FENCEGRD
610013.05	4205503.85	0.31558	0.32394	9.61E-04	1.02E-06	9.6235E-04	FENCEGRD
609189.47	4204668.82	0.31539	9.73746	9.61E-04	3.06E-05	9.9132E-04	FENCEGRD
609172.23	4204615.92	0.31531	4.19792	9.61E-04	1.32E-05	9.7369E-04	FENCEGRD
609412.80	4205022.59	0.31434	1.24238	9.58E-04	3.90E-06	9.6146E-04	FENCEGRD
609292.81	4204851.24	0.31367	3.79688	9.56E-04	1.19E-05	9.6743E-04	FENCEGRD
609707.60	4205365.41	0.31285	0.36631	9.53E-04	1.15E-06	9.5417E-04	FENCEGRD
609803.11	4205425.40	0.31191	0.33606	9.50E-04	1.05E-06	9.5121E-04	FENCEGRD
609920.65	4205476.05	0.31019	0.32211	9.45E-04	1.01E-06	9.4593E-04	FENCEGRD
609633.84	4205315.07	0.31002	0.40017	9.44E-04	1.26E-06	9.4566E-04	Planned
609686.87	4205352.59	0.30947	0.37303	9.43E-04	1.17E-06	9.4390E-04	FENCEGRD
609372.49	4204950.98	0.30941	1.92442	9.43E-04	6.04E-06	9.4858E-04	FENCEGRD
609835.54	4205445.15	0.30850	0.32516	9.40E-04	1.02E-06	9.4079E-04	FENCEGRD
609653.30	4205329.28	0.30834	0.38889	9.39E-04	1.22E-06	9.4050E-04	Planned
609966.73	4205490.00	0.30795	0.32450	9.38E-04	1.02E-06	9.3911E-04	FENCEGRD
609213.13	4204751.50	0.30696	13.01804	9.35E-04	4.09E-05	9.7593E-04	FENCEGRD
609155.12	4204562.71	0.30661	2.49026	9.34E-04	7.81E-06	9.4183E-04	FENCEGRD
609212.81	4204737.01	0.30641	27.77288	9.33E-04	8.72E-05	1.0206E-03	FENCEGRD
609514.15	4205234.60	0.30615	0.47543	9.33E-04	1.49E-06	9.3410E-04	FENCEGRD
609523.19	4205245.97	0.30526	0.46044	9.30E-04	1.44E-06	9.3135E-04	FENCEGRD
609874.85	4205461.98	0.30526	0.32171	9.30E-04	1.01E-06	9.3091E-04	FENCEGRD
609166.87	4204629.32	0.30523	4.57483	9.30E-04	1.44E-05	9.4417E-04	FENCEGRD
609532.23	4205257.34	0.30410	0.44500	9.26E-04	1.40E-06	9.2776E-04	FENCEGRD
609184.13	4204682.17	0.30278	12.02581	9.22E-04	3.77E-05	9.6008E-04	Non-res
609496.07	4205211.86	0.30266	0.51028	9.22E-04	1.60E-06	9.2358E-04	FENCEGRD
609293.13	4204865.73	0.30117	3.11291	9.17E-04	9.77E-06	9.2721E-04	FENCEGRD
609213.44	4204765.98	0.30092	8.04135	9.17E-04	2.52E-05	9.4191E-04	FENCEGRD
609999.46	4205509.62	0.30039	0.31364	9.15E-04	9.84E-07	9.1605E-04	FENCEGRD
609413.12	4205037.08	0.29973	1.12165	9.13E-04	3.52E-06	9.1657E-04	FENCEGRD
609757.36	4205411.31	0.29969	0.33238	9.13E-04	1.04E-06	9.1398E-04	FENCEGRD
609487.03	4205200.49	0.29889	0.52950	9.10E-04	1.66E-06	9.1216E-04	FENCEGRD
609907.16	4205481.77	0.29779	0.31105	9.07E-04	9.76E-07	9.0812E-04	FENCEGRD
609953.19	4205495.75	0.29765	0.31269	9.07E-04	9.81E-07	9.0770E-04	FENCEGRD
609149.74	4204576.15	0.29737	2.63385	9.06E-04	8.27E-06	9.1413E-04	FENCEGRD
609789.47	4205431.19	0.29714	0.32331	9.05E-04	1.01E-06	9.0618E-04	FENCEGRD
609725.57	4205391.29	0.29709	0.34300	9.05E-04	1.08E-06	9.0609E-04	FENCEGRD
609477.98	4205189.12	0.29557	0.54875	9.00E-04	1.72E-06	9.0210E-04	FENCEGRD
609333.12	4204922.85	0.29538	2.08149	9.00E-04	6.53E-06	9.0634E-04	FENCEGRD
609253.44	4204823.10	0.29505	4.16905	8.99E-04	1.31E-05	9.1188E-04	FENCEGRD
609694.23	4205371.08	0.29433	0.35166	8.97E-04	1.10E-06	8.9771E-04	FENCEGRD
610440.52	4204672.03	0.29397	0.26990	8.96E-04	8.47E-07	8.9636E-04	FENCEGRD
609821.83	4205450.97	0.29367	0.31365	8.95E-04	9.84E-07	8.9558E-04	FENCEGRD
609372.81	4204965.47	0.29292	1.68796	8.92E-04	5.30E-06	8.9761E-04	FENCEGRD
609861.43	4205467.67	0.29252	0.31064	8.91E-04	9.75E-07	8.9207E-04	FENCEGRD
609213.76	4204780.47	0.29098	5.70427	8.86E-04	1.79E-05	9.0430E-04	FENCEGRD
609468.94	4205177.75	0.29062	0.56972	8.85E-04	1.79E-06	8.8709E-04	FENCEGRD
609178.79	4204695.52	0.28971	14.45436	8.83E-04	4.54E-05	9.2789E-04	Non-res
609939.64	4205501.50	0.28912	0.30121	8.81E-04	9.45E-07	8.8168E-04	FENCEGRD
609144.36	4204589.59	0.28858	2.77821	8.79E-04	8.72E-06	8.8781E-04	FENCEGRD
609293.44	4204880.22	0.28853	2.60427	8.79E-04	8.17E-06	8.8711E-04	FENCEGRD
609413.43	4205051.57	0.28798	1.01751	8.77E-04	3.19E-06	8.8045E-04	FENCEGRD
609985.86	4205515.39	0.28762	0.30331	8.76E-04	9.52E-07	8.7712E-04	FENCEGRD
609439.68	4205108.98	0.28752	0.76852	8.76E-04	2.41E-06	8.7827E-04	FENCEGRD
609893.68	4205487.49	0.28664	0.30031	8.73E-04	9.42E-07	8.7412E-04	FENCEGRD
609459.90	4205166.38	0.28492	0.59170	8.68E-04	1.86E-06	8.6980E-04	FENCEGRD
609156.15	4204656.12	0.28488	5.19079	8.68E-04	1.63E-05	8.8411E-04	FENCEGRD
610474.17	4204679.75	0.28370	0.25874	8.64E-04	8.12E-07	8.6504E-04	FENCEGRD
609743.79	4205417.07	0.28320	0.31991	8.63E-04	1.00E-06	8.6370E-04	FENCEGRD
609775.83	4205436.98	0.28242	0.31137	8.60E-04	9.77E-07	8.6130E-04	FENCEGRD
609253.76	4204837.59	0.28177	3.34466	8.58E-04	1.05E-05	8.6884E-04	FENCEGRD
609848.01	4205473.36	0.28089	0.29987	8.56E-04	9.41E-07	8.5660E-04	FENCEGRD
609138.98	4204603.03	0.28061	2.91748	8.55E-04	9.16E-06	8.6397E-04	FENCEGRD
609712.09	4205397.01	0.28048	0.32955	8.54E-04	1.03E-06	8.5545E-04	FENCEGRD
609333.44	4204937.33	0.28032	1.81231	8.54E-04	5.69E-06	8.5961E-04	FENCEGRD
609808.13	4205456.78	0.27917	0.30293	8.50E-04	9.51E-07	8.5137E-04	FENCEGRD
609450.86	4205155.01	0.27908	0.61480	8.50E-04	1.93E-06	8.5208E-04	FENCEGRD
609613.59	4205330.03	0.27890	0.36600	8.50E-04	1.15E-06	8.5075E-04	Planned
609926.10	4205507.24	0.27872	0.29100	8.49E-04	9.13E-07	8.4997E-04	FENCEGRD
609373.12	4204979.96	0.27760	1.49310	8.46E-04	4.69E-06	8.5033E-04	FENCEGRD
609680.86	4205376.76	0.27753	0.33810	8.45E-04	1.06E-06	8.4649E-04	FENCEGRD
609972.26	4205521.16	0.27742	0.29285	8.45E-04	9.19E-07	8.4601E-04	FENCEGRD
609413.75	4205066.06	0.27698	0.92773	8.44E-04	2.91E-06	8.4666E-04	FENCEGRD
609633.05	4205344.25	0.27660	0.35628	8.43E-04	1.12E-06	8.4371E-04	Planned

609150.79	4204669.51	0.27435	5.23950	8.36E-04	1.64E-05	8.5218E-04	FENCEGRD
609880.19	4205493.22	0.27405	0.29061	8.35E-04	9.12E-07	8.3574E-04	FENCEGRD
609133.61	4204616.47	0.27365	3.03508	8.34E-04	9.52E-06	8.4313E-04	FENCEGRD
609441.82	4205143.64	0.27250	0.63953	8.30E-04	2.01E-06	8.3211E-04	FENCEGRD
609834.59	4205479.06	0.26952	0.28964	8.21E-04	9.09E-07	8.2194E-04	FENCEGRD
609254.07	4204852.08	0.26923	2.75166	8.20E-04	8.63E-06	8.2878E-04	FENCEGRD
609414.06	4205080.55	0.26905	0.84901	8.20E-04	2.66E-06	8.2226E-04	FENCEGRD
609174.39	4204752.34	0.26822	5.35275	8.17E-04	1.68E-05	8.3386E-04	FENCEGRD
609958.67	4205526.93	0.26792	0.28288	8.16E-04	8.88E-07	8.1704E-04	FENCEGRD
609762.18	4205442.77	0.26779	0.30027	8.16E-04	9.42E-07	8.1670E-04	FENCEGRD
609912.55	4205512.99	0.26772	0.28109	8.16E-04	8.82E-07	8.1643E-04	FENCEGRD
609174.07	4204737.85	0.26753	7.86828	8.15E-04	2.47E-05	8.3966E-04	FENCEGRD
610440.54	4204657.14	0.26724	0.25331	8.14E-04	7.95E-07	8.1488E-04	FENCEGRD
609730.22	4205422.83	0.26717	0.30833	8.14E-04	9.68E-07	8.1484E-04	FENCEGRD
609333.75	4204951.82	0.26685	1.59387	8.13E-04	5.00E-06	8.1790E-04	FENCEGRD
609432.77	4205132.27	0.26660	0.66517	8.12E-04	2.09E-06	8.1422E-04	FENCEGRD
609794.42	4205462.60	0.26644	0.29218	8.12E-04	9.17E-07	8.1256E-04	FENCEGRD
609503.57	4205270.85	0.26623	0.40409	8.11E-04	1.27E-06	8.1227E-04	FENCEGRD
609494.46	4205259.39	0.26584	0.41702	8.10E-04	1.31E-06	8.1113E-04	FENCEGRD
609485.34	4205247.92	0.26518	0.43007	8.08E-04	1.35E-06	8.0916E-04	FENCEGRD
609698.61	4205402.73	0.26496	0.31690	8.07E-04	9.94E-07	8.0813E-04	FENCEGRD
609866.70	4205498.94	0.26479	0.28052	8.07E-04	8.80E-07	8.0750E-04	FENCEGRD
609373.44	4204994.45	0.26417	1.33184	8.05E-04	4.18E-06	8.0891E-04	FENCEGRD
609145.43	4204682.91	0.26402	4.91479	8.04E-04	1.54E-05	8.1970E-04	Non-res
609174.70	4204766.82	0.26260	4.08306	8.00E-04	1.28E-05	8.1276E-04	FENCEGRD
609667.48	4205382.43	0.26231	0.32514	7.99E-04	1.02E-06	8.0008E-04	FENCEGRD
609414.38	4205095.04	0.26175	0.78018	7.97E-04	2.45E-06	7.9981E-04	FENCEGRD
609294.07	4204909.20	0.26076	1.91227	7.94E-04	6.00E-06	8.0034E-04	FENCEGRD
609423.73	4205120.90	0.26059	0.69213	7.94E-04	2.17E-06	7.9600E-04	FENCEGRD
610474.19	4204665.00	0.26021	0.24338	7.93E-04	7.64E-07	7.9343E-04	FENCEGRD
609945.07	4205532.70	0.25956	0.27326	7.91E-04	8.58E-07	7.9154E-04	FENCEGRD
609467.11	4205225.00	0.25906	0.45963	7.89E-04	1.44E-06	7.9061E-04	FENCEGRD
609821.17	4205484.75	0.25876	0.27978	7.88E-04	8.78E-07	7.8913E-04	FENCEGRD
609254.38	4204866.57	0.25816	2.31408	7.86E-04	7.26E-06	7.9368E-04	FENCEGRD
609899.01	4205518.74	0.25750	0.27154	7.84E-04	8.52E-07	7.8526E-04	FENCEGRD
609457.99	4205213.54	0.25505	0.47538	7.77E-04	1.49E-06	7.7844E-04	FENCEGRD
609596.87	4205345.00	0.25484	0.33736	7.76E-04	1.06E-06	7.7737E-04	Planned
609853.22	4205504.66	0.25479	0.27082	7.76E-04	8.50E-07	7.7701E-04	FENCEGRD
609414.69	4205109.53	0.25425	0.72017	7.75E-04	2.26E-06	7.7677E-04	FENCEGRD
609780.72	4205468.41	0.25421	0.28186	7.74E-04	8.84E-07	7.7527E-04	FENCEGRD
609748.54	4205448.56	0.25394	0.28966	7.74E-04	9.09E-07	7.7448E-04	FENCEGRD
609175.02	4204781.31	0.25375	3.28283	7.73E-04	1.03E-05	7.8329E-04	FENCEGRD
609140.07	4204696.31	0.25339	4.22983	7.72E-04	1.33E-05	7.8516E-04	Non-res
609373.75	4205008.94	0.25239	1.19654	7.69E-04	3.75E-06	7.7260E-04	FENCEGRD
609616.32	4205359.22	0.25232	0.32905	7.69E-04	1.03E-06	7.6966E-04	Planned
609716.64	4205428.58	0.25218	0.29740	7.68E-04	9.33E-07	7.6914E-04	FENCEGRD
609448.88	4205202.07	0.25200	0.49117	7.68E-04	1.54E-06	7.6920E-04	FENCEGRD
609685.12	4205408.45	0.25071	0.30451	7.64E-04	9.56E-07	7.6468E-04	FENCEGRD
609931.48	4205538.47	0.25029	0.26428	7.62E-04	8.29E-07	7.6328E-04	FENCEGRD
609439.76	4205190.61	0.24976	0.50711	7.61E-04	1.59E-06	7.6242E-04	FENCEGRD
609117.47	4204656.79	0.24949	2.86917	7.60E-04	9.00E-06	7.6901E-04	FENCEGRD
609654.11	4205388.11	0.24859	0.31286	7.57E-04	9.82E-07	7.5825E-04	FENCEGRD
609885.46	4205524.49	0.24807	0.26263	7.56E-04	8.24E-07	7.5651E-04	FENCEGRD
609807.75	4205490.45	0.24764	0.27070	7.54E-04	8.49E-07	7.5522E-04	FENCEGRD
609215.01	4204838.43	0.24644	2.35393	7.51E-04	7.39E-06	7.5811E-04	FENCEGRD
609294.38	4204923.69	0.24532	1.66643	7.47E-04	5.23E-06	7.5254E-04	FENCEGRD
609175.33	4204795.80	0.24532	2.70354	7.47E-04	8.48E-06	7.5579E-04	FENCEGRD
609839.73	4205510.39	0.24515	0.26156	7.47E-04	8.21E-07	7.4761E-04	FENCEGRD
609430.64	4205179.15	0.24344	0.52583	7.42E-04	1.65E-06	7.4323E-04	FENCEGRD
609374.06	4205023.43	0.24244	1.08218	7.39E-04	3.40E-06	7.4193E-04	FENCEGRD
609767.01	4205474.23	0.24199	0.27227	7.37E-04	8.54E-07	7.3802E-04	FENCEGRD
609112.10	4204670.20	0.24116	2.62929	7.35E-04	8.25E-06	7.4289E-04	FENCEGRD
609917.88	4205544.24	0.24111	0.25526	7.34E-04	8.01E-07	7.3528E-04	FENCEGRD
609734.90	4205454.35	0.24097	0.27942	7.34E-04	8.77E-07	7.3493E-04	FENCEGRD
609703.07	4205434.34	0.23942	0.28621	7.29E-04	8.98E-07	7.3023E-04	FENCEGRD
609871.92	4205530.23	0.23927	0.25425	7.29E-04	7.98E-07	7.2968E-04	FENCEGRD
610474.20	4204650.26	0.23801	0.22925	7.25E-04	7.19E-07	7.2576E-04	FENCEGRD
609794.33	4205496.14	0.23796	0.26140	7.25E-04	8.20E-07	7.2571E-04	FENCEGRD
609671.64	4205414.17	0.23750	0.29302	7.23E-04	9.20E-07	7.2441E-04	FENCEGRD
609826.24	4205516.11	0.23580	0.25254	7.18E-04	7.92E-07	7.1910E-04	FENCEGRD
609135.65	4204753.18	0.23548	2.62113	7.17E-04	8.23E-06	7.2556E-04	FENCEGRD
609255.01	4204895.55	0.23543	1.72075	7.17E-04	5.40E-06	7.2258E-04	FENCEGRD
609135.33	4204738.69	0.23521	2.97772	7.17E-04	9.34E-06	7.2585E-04	FENCEGRD
609215.33	4204852.92	0.23500	2.00260	7.16E-04	6.28E-06	7.2216E-04	FENCEGRD
609421.53	4205167.68	0.23441	0.54648	7.14E-04	1.71E-06	7.1579E-04	FENCEGRD
609474.84	4205284.28	0.23368	0.36828	7.12E-04	1.16E-06	7.1301E-04	FENCEGRD
609294.70	4204938.18	0.23352	1.47037	7.11E-04	4.61E-06	7.1598E-04	FENCEGRD
609374.38	4205037.92	0.23325	0.98396	7.11E-04	3.09E-06	7.1363E-04	FENCEGRD
609106.72	4204683.67	0.23281	2.34112	7.09E-04	7.35E-06	7.1655E-04	Non-res
609904.29	4205550.01	0.23268	0.24707	7.09E-04	7.75E-07	7.0958E-04	FENCEGRD
609465.67	4205272.74	0.23141	0.37977	7.05E-04	1.19E-06	7.0613E-04	FENCEGRD
609135.96	4204767.67	0.23087	2.28278	7.03E-04	7.16E-06	7.1045E-04	FENCEGRD

609858.38	4205535.98	0.23087	0.24607	7.03E-04	7.72E-07	7.0406E-04	FENCEGRD
609753.31	4205480.04	0.23066	0.26283	7.03E-04	8.25E-07	7.0347E-04	FENCEGRD
609456.49	4205261.20	0.22950	0.39114	6.99E-04	1.23E-06	7.0034E-04	FENCEGRD
609721.25	4205460.14	0.22887	0.26954	6.97E-04	8.46E-07	6.9804E-04	FENCEGRD
609573.98	4205363.49	0.22887	0.30605	6.97E-04	9.60E-07	6.9816E-04	Planned
609780.91	4205501.84	0.22860	0.25244	6.96E-04	7.92E-07	6.9717E-04	FENCEGRD
609689.50	4205440.10	0.22711	0.27595	6.92E-04	8.66E-07	6.9270E-04	FENCEGRD
609812.75	4205521.83	0.22665	0.24382	6.90E-04	7.65E-07	6.9120E-04	FENCEGRD
609593.43	4205377.70	0.22634	0.29894	6.89E-04	9.38E-07	6.9043E-04	Planned
609658.16	4205419.89	0.22552	0.28234	6.87E-04	8.86E-07	6.8788E-04	FENCEGRD
609374.69	4205052.41	0.22503	0.89912	6.85E-04	2.82E-06	6.8832E-04	FENCEGRD
609890.69	4205555.78	0.22491	0.23959	6.85E-04	7.52E-07	6.8589E-04	FENCEGRD
609175.96	4204824.78	0.22482	1.94848	6.85E-04	6.11E-06	6.9097E-04	FENCEGRD
609101.34	4204697.11	0.22452	2.05068	6.84E-04	6.44E-06	6.9038E-04	Non-res
609255.33	4204910.04	0.22442	1.51336	6.84E-04	4.75E-06	6.8839E-04	FENCEGRD
609438.14	4205238.13	0.22361	0.41561	6.81E-04	1.30E-06	6.8248E-04	FENCEGRD
609136.28	4204782.15	0.22345	2.00174	6.81E-04	6.28E-06	6.8697E-04	FENCEGRD
609412.41	4205156.22	0.22339	0.56752	6.81E-04	1.78E-06	6.8228E-04	FENCEGRD
609295.01	4204952.66	0.22333	1.31103	6.80E-04	4.11E-06	6.8443E-04	FENCEGRD
609844.83	4205541.73	0.22258	0.23749	6.78E-04	7.45E-07	6.7878E-04	FENCEGRD
609739.61	4205485.86	0.21972	0.25386	6.69E-04	7.97E-07	6.7012E-04	FENCEGRD
609767.49	4205507.53	0.21880	0.24424	6.67E-04	7.66E-07	6.6729E-04	FENCEGRD
609428.96	4205226.59	0.21860	0.42927	6.66E-04	1.35E-06	6.6726E-04	FENCEGRD
609799.27	4205527.55	0.21807	0.23679	6.64E-04	7.43E-07	6.6504E-04	FENCEGRD
610474.22	4204635.52	0.21791	0.21615	6.64E-04	6.78E-07	6.6449E-04	FENCEGRD
609877.09	4205561.54	0.21751	0.23213	6.63E-04	7.28E-07	6.6332E-04	FENCEGRD
609707.61	4205465.92	0.21739	0.26026	6.62E-04	8.17E-07	6.6304E-04	FENCEGRD
609375.01	4205066.90	0.21658	0.82527	6.60E-04	2.59E-06	6.6235E-04	FENCEGRD
609675.93	4205445.86	0.21580	0.26625	6.57E-04	8.36E-07	6.5822E-04	FENCEGRD
609136.59	4204796.64	0.21560	1.75983	6.57E-04	5.52E-06	6.6230E-04	FENCEGRD
609176.27	4204839.27	0.21503	1.68570	6.55E-04	5.29E-06	6.6033E-04	FENCEGRD
609644.68	4205425.62	0.21472	0.27268	6.54E-04	8.56E-07	6.5495E-04	FENCEGRD
609295.33	4204967.15	0.21457	1.17941	6.54E-04	3.70E-06	6.5734E-04	FENCEGRD
609831.29	4205547.47	0.21441	0.22919	6.53E-04	7.19E-07	6.5387E-04	FENCEGRD
609215.96	4204881.90	0.21393	1.51552	6.52E-04	4.76E-06	6.5644E-04	FENCEGRD
609403.30	4205144.76	0.21324	0.58881	6.50E-04	1.85E-06	6.5143E-04	FENCEGRD
609419.79	4205215.05	0.21180	0.44382	6.45E-04	1.39E-06	6.4659E-04	FENCEGRD
609863.50	4205567.31	0.21043	0.22499	6.41E-04	7.06E-07	6.4173E-04	FENCEGRD
609785.78	4205533.28	0.20949	0.22976	6.38E-04	7.21E-07	6.3888E-04	FENCEGRD
609754.07	4205513.23	0.20933	0.23638	6.38E-04	7.42E-07	6.3842E-04	FENCEGRD
609725.90	4205491.67	0.20932	0.24528	6.38E-04	7.70E-07	6.3841E-04	FENCEGRD
609622.08	4205419.87	0.20863	0.27034	6.36E-04	8.48E-07	6.3639E-04	FENCEGRD
609335.32	4205024.27	0.20861	0.93846	6.35E-04	2.94E-06	6.3842E-04	FENCEGRD
609551.97	4205381.09	0.20807	0.28064	6.34E-04	8.81E-07	6.3472E-04	Planned
609375.32	4205081.39	0.20777	0.76036	6.33E-04	2.39E-06	6.3531E-04	FENCEGRD
609817.74	4205553.22	0.20691	0.22243	6.30E-04	6.98E-07	6.3100E-04	FENCEGRD
609295.64	4204981.64	0.20685	1.06813	6.30E-04	3.35E-06	6.3347E-04	FENCEGRD
609176.59	4204853.76	0.20650	1.47873	6.29E-04	4.64E-06	6.3369E-04	FENCEGRD
609693.97	4205471.71	0.20650	0.25159	6.29E-04	7.89E-07	6.2984E-04	FENCEGRD
609571.43	4205395.31	0.20570	0.27426	6.27E-04	8.61E-07	6.2748E-04	Planned
609662.36	4205451.62	0.20548	0.25706	6.26E-04	8.07E-07	6.2675E-04	FENCEGRD
609096.59	4204739.53	0.20509	1.50839	6.25E-04	4.73E-06	6.2949E-04	FENCEGRD
609394.18	4205133.29	0.20366	0.60983	6.20E-04	1.91E-06	6.2231E-04	FENCEGRD
609849.90	4205573.08	0.20359	0.21819	6.20E-04	6.85E-07	6.2087E-04	FENCEGRD
609216.27	4204896.39	0.20313	1.33848	6.19E-04	4.20E-06	6.2299E-04	FENCEGRD
609436.84	4205286.05	0.20213	0.34722	6.16E-04	1.09E-06	6.1683E-04	FENCEGRD
609772.29	4205539.00	0.20103	0.22286	6.12E-04	6.99E-07	6.1309E-04	FENCEGRD
609740.65	4205518.92	0.20023	0.22885	6.10E-04	7.18E-07	6.1067E-04	FENCEGRD
609096.91	4204754.02	0.20020	1.40680	6.10E-04	4.41E-06	6.1428E-04	FENCEGRD
610474.23	4204620.78	0.19996	0.20406	6.09E-04	6.40E-07	6.0977E-04	FENCEGRD
609427.61	4205274.45	0.19974	0.35697	6.08E-04	1.12E-06	6.0958E-04	FENCEGRD
609804.20	4205558.97	0.19968	0.21656	6.08E-04	6.80E-07	6.0896E-04	FENCEGRD
609712.20	4205497.49	0.19947	0.23711	6.08E-04	7.44E-07	6.0838E-04	FENCEGRD
609137.22	4204825.62	0.19939	1.38008	6.07E-04	4.33E-06	6.1172E-04	FENCEGRD
609335.64	4205038.76	0.19890	0.85880	6.06E-04	2.69E-06	6.0860E-04	FENCEGRD
609295.95	4204996.13	0.19880	0.97197	6.06E-04	3.05E-06	6.0865E-04	FENCEGRD
609375.64	4205095.88	0.19871	0.70289	6.05E-04	2.21E-06	6.0753E-04	FENCEGRD
609410.61	4205203.51	0.19840	0.45980	6.04E-04	1.44E-06	6.0582E-04	FENCEGRD
609176.90	4204868.25	0.19754	1.31048	6.02E-04	4.11E-06	6.0587E-04	FENCEGRD
609097.22	4204768.51	0.19720	1.38001	6.01E-04	4.33E-06	6.0505E-04	FENCEGRD
609836.31	4205578.85	0.19688	0.21161	6.00E-04	6.64E-07	6.0041E-04	FENCEGRD
609680.32	4205477.50	0.19645	0.24336	5.98E-04	7.64E-07	5.9920E-04	FENCEGRD
609385.07	4205121.83	0.19600	0.63067	5.97E-04	1.98E-06	5.9905E-04	FENCEGRD
609648.79	4205457.38	0.19600	0.24844	5.97E-04	7.80E-07	5.9785E-04	FENCEGRD
609097.53	4204782.99	0.19506	1.30213	5.94E-04	4.09E-06	5.9829E-04	FENCEGRD
609216.59	4204910.88	0.19400	1.19805	5.91E-04	3.76E-06	5.9473E-04	FENCEGRD
609409.16	4205251.25	0.19370	0.37768	5.90E-04	1.19E-06	5.9125E-04	FENCEGRD
609758.81	4205544.72	0.19272	0.21628	5.87E-04	6.79E-07	5.8775E-04	FENCEGRD
609790.65	4205564.72	0.19230	0.21034	5.86E-04	6.60E-07	5.8646E-04	FENCEGRD
609727.22	4205524.62	0.19112	0.22188	5.82E-04	6.96E-07	5.8290E-04	FENCEGRD
609097.85	4204797.48	0.19101	1.19899	5.82E-04	3.76E-06	5.8563E-04	FENCEGRD
609401.44	4205191.97	0.19091	0.47435	5.82E-04	1.49E-06	5.8305E-04	FENCEGRD

609335.95	4205053.25	0.19040	0.78958	5.80E-04	2.48E-06	5.8249E-04	FENCEGRD
609375.95	4205110.37	0.19038	0.65177	5.80E-04	2.05E-06	5.8199E-04	FENCEGRD
609822.71	4205584.62	0.19029	0.20531	5.80E-04	6.44E-07	5.8032E-04	FENCEGRD
609296.27	4205010.62	0.19027	0.88859	5.80E-04	2.79E-06	5.8240E-04	FENCEGRD
609137.53	4204840.11	0.18998	1.22755	5.79E-04	3.85E-06	5.8258E-04	FENCEGRD
609698.49	4205503.30	0.18959	0.22986	5.78E-04	7.21E-07	5.7826E-04	FENCEGRD
609399.94	4205239.65	0.18933	0.38883	5.77E-04	1.22E-06	5.7797E-04	FENCEGRD
609177.22	4204882.74	0.18917	1.17303	5.76E-04	3.68E-06	5.7994E-04	FENCEGRD
609527.32	4205399.58	0.18890	0.25670	5.75E-04	8.06E-07	5.7624E-04	Planned
609666.68	4205483.29	0.18714	0.23565	5.70E-04	7.39E-07	5.7082E-04	FENCEGRD
609546.78	4205413.79	0.18690	0.25128	5.69E-04	7.89E-07	5.7013E-04	Planned
609635.22	4205463.13	0.18688	0.24081	5.69E-04	7.56E-07	5.7004E-04	FENCEGRD
609603.30	4205445.82	0.18608	0.24401	5.67E-04	7.66E-07	5.6761E-04	FENCEGRD
609216.90	4204925.37	0.18595	1.08293	5.66E-04	3.40E-06	5.6985E-04	FENCEGRD
609777.11	4205570.46	0.18496	0.20416	5.63E-04	6.41E-07	5.6408E-04	FENCEGRD
609392.26	4205180.44	0.18473	0.48904	5.63E-04	1.53E-06	5.6427E-04	FENCEGRD
609745.32	4205550.44	0.18458	0.20983	5.62E-04	6.58E-07	5.6294E-04	FENCEGRD
609098.16	4204811.97	0.18447	1.09592	5.62E-04	3.44E-06	5.6538E-04	FENCEGRD
609390.71	4205228.05	0.18419	0.40036	5.61E-04	1.26E-06	5.6235E-04	FENCEGRD
610474.25	4204606.03	0.18408	0.19293	5.61E-04	6.05E-07	5.6136E-04	FENCEGRD
609809.11	4205590.39	0.18376	0.19933	5.60E-04	6.26E-07	5.6041E-04	FENCEGRD
609336.27	4205067.74	0.18284	0.72901	5.57E-04	2.29E-06	5.5927E-04	FENCEGRD
609713.80	4205530.31	0.18252	0.21522	5.56E-04	6.75E-07	5.5668E-04	FENCEGRD
609612.47	4205457.35	0.18232	0.23873	5.55E-04	7.49E-07	5.5614E-04	FENCEGRD
609296.58	4205025.11	0.18182	0.81555	5.54E-04	2.56E-06	5.5643E-04	FENCEGRD
609177.53	4204897.23	0.18122	1.05981	5.52E-04	3.33E-06	5.5537E-04	FENCEGRD
609137.85	4204854.60	0.18092	1.09633	5.51E-04	3.44E-06	5.5457E-04	FENCEGRD
609684.79	4205509.12	0.18049	0.22292	5.50E-04	7.00E-07	5.5052E-04	FENCEGRD
609383.09	4205168.90	0.17967	0.50403	5.47E-04	1.58E-06	5.4890E-04	FENCEGRD
609217.21	4204939.86	0.17930	0.98787	5.46E-04	3.10E-06	5.4929E-04	FENCEGRD
609256.90	4204982.48	0.17911	0.90333	5.46E-04	2.83E-06	5.4845E-04	FENCEGRD
609653.04	4205489.08	0.17850	0.22851	5.44E-04	7.17E-07	5.4447E-04	FENCEGRD
609763.56	4205576.21	0.17774	0.19835	5.41E-04	6.22E-07	5.4206E-04	FENCEGRD
609795.52	4205596.16	0.17733	0.19376	5.40E-04	6.08E-07	5.4080E-04	FENCEGRD
609098.48	4204826.46	0.17730	1.00115	5.40E-04	3.14E-06	5.4324E-04	FENCEGRD
609731.83	4205556.17	0.17679	0.20349	5.39E-04	6.39E-07	5.3919E-04	FENCEGRD
609407.98	4205299.32	0.17654	0.31848	5.38E-04	9.99E-07	5.3879E-04	FENCEGRD
609336.58	4205082.23	0.17607	0.67574	5.36E-04	2.12E-06	5.3848E-04	FENCEGRD
609373.91	4205157.36	0.17539	0.51943	5.34E-04	1.63E-06	5.3591E-04	FENCEGRD
609505.32	4205413.66	0.17522	0.23969	5.34E-04	7.52E-07	5.3452E-04	Planned
609381.49	4205216.45	0.17477	0.41295	5.32E-04	1.30E-06	5.3369E-04	FENCEGRD
609296.90	4205039.60	0.17417	0.75179	5.31E-04	2.36E-06	5.3293E-04	FENCEGRD
609700.38	4205536.01	0.17415	0.20902	5.31E-04	6.56E-07	5.3116E-04	FENCEGRD
609524.77	4205427.88	0.17359	0.23486	5.29E-04	7.37E-07	5.2954E-04	Planned
609398.71	4205287.66	0.17347	0.32692	5.28E-04	1.03E-06	5.2946E-04	FENCEGRD
609138.16	4204869.09	0.17326	0.99197	5.28E-04	3.11E-06	5.3091E-04	FENCEGRD
609671.08	4205514.93	0.17237	0.21605	5.25E-04	6.78E-07	5.2576E-04	FENCEGRD
609217.53	4204954.35	0.17234	0.90471	5.25E-04	2.84E-06	5.2783E-04	FENCEGRD
609364.74	4205145.82	0.17204	0.53540	5.24E-04	1.68E-06	5.2576E-04	FENCEGRD
609781.92	4205601.93	0.17092	0.18836	5.21E-04	5.91E-07	5.2126E-04	FENCEGRD
609257.21	4204996.97	0.17091	0.82794	5.21E-04	2.60E-06	5.2323E-04	FENCEGRD
609372.27	4205204.85	0.17082	0.42483	5.20E-04	1.33E-06	5.2170E-04	FENCEGRD
609750.02	4205581.96	0.17068	0.19289	5.20E-04	6.05E-07	5.2054E-04	FENCEGRD
609575.21	4205460.05	0.17066	0.22645	5.20E-04	7.11E-07	5.2059E-04	FENCEGRD
609639.39	4205494.87	0.17054	0.22188	5.20E-04	6.96E-07	5.2021E-04	FENCEGRD
609098.79	4204840.95	0.17045	0.91759	5.19E-04	2.88E-06	5.2211E-04	FENCEGRD
609336.89	4205096.72	0.17035	0.62850	5.19E-04	1.97E-06	5.2090E-04	FENCEGRD
609718.35	4205561.89	0.16926	0.19759	5.16E-04	6.20E-07	5.1623E-04	FENCEGRD
609355.56	4205134.28	0.16854	0.55164	5.13E-04	1.73E-06	5.1515E-04	FENCEGRD
609138.48	4204883.58	0.16749	0.91332	5.10E-04	2.87E-06	5.1308E-04	FENCEGRD
609297.21	4205054.09	0.16728	0.69597	5.10E-04	2.18E-06	5.1176E-04	FENCEGRD
609584.43	4205471.65	0.16720	0.22201	5.09E-04	6.97E-07	5.1003E-04	FENCEGRD
609346.38	4205122.74	0.16675	0.56875	5.08E-04	1.78E-06	5.0975E-04	FENCEGRD
609686.96	4205541.70	0.16607	0.20337	5.06E-04	6.38E-07	5.0653E-04	FENCEGRD
609337.21	4205111.21	0.16566	0.58661	5.05E-04	1.84E-06	5.0648E-04	FENCEGRD
609217.84	4204968.83	0.16563	0.83186	5.05E-04	2.61E-06	5.0716E-04	FENCEGRD
609657.38	4205520.75	0.16494	0.20950	5.02E-04	6.57E-07	5.0311E-04	FENCEGRD
609768.33	4205607.70	0.16456	0.18302	5.01E-04	5.74E-07	5.0187E-04	FENCEGRD
609370.92	4205252.71	0.16436	0.35340	5.01E-04	1.11E-06	5.0179E-04	FENCEGRD
609625.75	4205500.66	0.16378	0.21507	4.99E-04	6.75E-07	4.9959E-04	FENCEGRD
609593.66	4205483.25	0.16377	0.21754	4.99E-04	6.83E-07	4.9957E-04	FENCEGRD
609736.47	4205587.71	0.16377	0.18759	4.99E-04	5.89E-07	4.9947E-04	FENCEGRD
609257.53	4205011.46	0.16332	0.76208	4.98E-04	2.39E-06	4.9991E-04	FENCEGRD
609484.19	4205429.51	0.16241	0.22307	4.95E-04	7.00E-07	4.9544E-04	Planned
609704.86	4205567.61	0.16207	0.19204	4.94E-04	6.03E-07	4.9431E-04	FENCEGRD
609138.79	4204898.07	0.16182	0.84369	4.93E-04	2.65E-06	4.9559E-04	FENCEGRD
609503.64	4205443.73	0.16120	0.21927	4.91E-04	6.88E-07	4.9174E-04	Planned
609297.53	4205068.58	0.16098	0.64635	4.90E-04	2.03E-06	4.9241E-04	FENCEGRD
609602.88	4205494.85	0.16052	0.21314	4.89E-04	6.69E-07	4.8965E-04	FENCEGRD
609361.65	4205241.06	0.16014	0.36285	4.88E-04	1.14E-06	4.8897E-04	FENCEGRD
609673.54	4205547.39	0.15882	0.19777	4.84E-04	6.21E-07	4.8443E-04	FENCEGRD
609218.16	4204983.32	0.15857	0.76675	4.83E-04	2.41E-06	4.8545E-04	FENCEGRD

609754.73	4205613.47	0.15834	0.17821	4.82E-04	5.59E-07	4.8290E-04	FENCEGRD
609643.68	4205526.56	0.15810	0.20333	4.82E-04	6.38E-07	4.8225E-04	FENCEGRD
609546.97	4205474.09	0.15764	0.21058	4.80E-04	6.61E-07	4.8087E-04	FENCEGRD
609722.93	4205593.45	0.15709	0.18241	4.79E-04	5.72E-07	4.7911E-04	FENCEGRD
609257.84	4205025.95	0.15624	0.70406	4.76E-04	2.21E-06	4.7816E-04	FENCEGRD
609099.42	4204869.93	0.15575	0.77210	4.74E-04	2.42E-06	4.7688E-04	FENCEGRD
609139.10	4204912.56	0.15572	0.78044	4.74E-04	2.45E-06	4.7681E-04	FENCEGRD
609297.84	4205083.07	0.15514	0.60212	4.73E-04	1.89E-06	4.7449E-04	FENCEGRD
609691.37	4205573.34	0.15497	0.18696	4.72E-04	5.87E-07	4.7267E-04	FENCEGRD
609352.39	4205229.41	0.15485	0.37258	4.72E-04	1.17E-06	4.7288E-04	FENCEGRD
609556.23	4205485.75	0.15470	0.20613	4.71E-04	6.47E-07	4.7190E-04	FENCEGRD
609375.24	4205307.71	0.15370	0.29557	4.68E-04	9.28E-07	4.6914E-04	FENCEGRD
609178.79	4204955.19	0.15349	0.75370	4.68E-04	2.37E-06	4.6994E-04	FENCEGRD
609335.37	4205158.45	0.15332	0.47397	4.67E-04	1.49E-06	4.6854E-04	FENCEGRD
609660.12	4205553.09	0.15232	0.19222	4.64E-04	6.03E-07	4.6461E-04	FENCEGRD
609741.14	4205619.23	0.15223	0.17347	4.64E-04	5.44E-07	4.6428E-04	FENCEGRD
609218.47	4204997.81	0.15199	0.70931	4.63E-04	2.23E-06	4.6523E-04	FENCEGRD
609463.06	4205442.71	0.15193	0.20971	4.63E-04	6.58E-07	4.6348E-04	Planned
609565.50	4205497.40	0.15186	0.20211	4.63E-04	6.34E-07	4.6324E-04	FENCEGRD
609629.97	4205532.38	0.15183	0.19747	4.63E-04	6.20E-07	4.6313E-04	FENCEGRD
609366.17	4205296.30	0.15128	0.30247	4.61E-04	9.49E-07	4.6179E-04	FENCEGRD
609482.52	4205456.93	0.15107	0.20626	4.60E-04	6.47E-07	4.6085E-04	Planned
609709.38	4205599.20	0.15067	0.17736	4.59E-04	5.57E-07	4.5954E-04	FENCEGRD
609343.12	4205217.75	0.15050	0.38222	4.58E-04	1.20E-06	4.5966E-04	FENCEGRD
609258.16	4205040.44	0.14995	0.65308	4.57E-04	2.05E-06	4.5884E-04	FENCEGRD
609326.14	4205146.85	0.14986	0.48656	4.57E-04	1.53E-06	4.5804E-04	FENCEGRD
609298.15	4205097.56	0.14976	0.56250	4.56E-04	1.77E-06	4.5797E-04	FENCEGRD
609139.42	4204927.05	0.14953	0.72477	4.56E-04	2.27E-06	4.5778E-04	FENCEGRD
609574.77	4205509.05	0.14886	0.19831	4.53E-04	6.22E-07	4.5409E-04	FENCEGRD
609099.73	4204884.42	0.14855	0.71074	4.53E-04	2.23E-06	4.5475E-04	FENCEGRD
609677.88	4205579.06	0.14813	0.18222	4.51E-04	5.72E-07	4.5181E-04	FENCEGRD
609179.10	4204969.67	0.14730	0.69927	4.49E-04	2.19E-06	4.5091E-04	FENCEGRD
609316.92	4205135.25	0.14728	0.49941	4.49E-04	1.57E-06	4.5022E-04	FENCEGRD
609727.54	4205625.00	0.14627	0.16883	4.46E-04	5.30E-07	4.4611E-04	FENCEGRD
609646.70	4205558.78	0.14624	0.18703	4.45E-04	5.87E-07	4.4607E-04	FENCEGRD
609348.02	4205273.48	0.14624	0.31675	4.45E-04	9.94E-07	4.4648E-04	FENCEGRD
609616.27	4205538.19	0.14611	0.19193	4.45E-04	6.02E-07	4.4569E-04	FENCEGRD
609584.03	4205520.70	0.14596	0.19447	4.45E-04	6.10E-07	4.4524E-04	FENCEGRD
609218.79	4205012.30	0.14583	0.65869	4.44E-04	2.07E-06	4.4630E-04	FENCEGRD
609307.69	4205123.65	0.14571	0.51283	4.44E-04	1.61E-06	4.4548E-04	FENCEGRD
609333.85	4205206.10	0.14560	0.39174	4.44E-04	1.23E-06	4.4476E-04	FENCEGRD
609298.47	4205112.05	0.14508	0.52702	4.42E-04	1.65E-06	4.4361E-04	FENCEGRD
609695.84	4205604.95	0.14456	0.17276	4.40E-04	5.42E-07	4.4091E-04	FENCEGRD
609258.47	4205054.93	0.14432	0.60801	4.40E-04	1.91E-06	4.4154E-04	FENCEGRD
609139.73	4204941.54	0.14380	0.67560	4.38E-04	2.12E-06	4.4017E-04	FENCEGRD
609593.30	4205532.35	0.14329	0.19059	4.36E-04	5.98E-07	4.3710E-04	FENCEGRD
609529.50	4205501.69	0.14329	0.19192	4.36E-04	6.02E-07	4.3710E-04	FENCEGRD
609338.95	4205262.07	0.14229	0.32423	4.33E-04	1.02E-06	4.3447E-04	FENCEGRD
609324.59	4205194.45	0.14221	0.40147	4.33E-04	1.26E-06	4.3447E-04	FENCEGRD
609664.40	4205584.78	0.14199	0.17754	4.33E-04	5.57E-07	4.3310E-04	FENCEGRD
609100.05	4204898.91	0.14189	0.65898	4.32E-04	2.07E-06	4.3430E-04	FENCEGRD
609179.42	4204984.16	0.14127	0.65094	4.30E-04	2.04E-06	4.3239E-04	FENCEGRD
609538.58	4205513.10	0.14078	0.18832	4.29E-04	5.91E-07	4.2944E-04	FENCEGRD
609633.28	4205564.48	0.14060	0.18215	4.28E-04	5.72E-07	4.2888E-04	FENCEGRD
609713.94	4205630.77	0.14052	0.16441	4.28E-04	5.16E-07	4.2858E-04	FENCEGRD
609219.10	4205026.79	0.14026	0.61338	4.27E-04	1.92E-06	4.2919E-04	FENCEGRD
609424.92	4205453.76	0.13943	0.19646	4.25E-04	6.16E-07	4.2536E-04	Planned
609258.78	4205069.42	0.13910	0.56791	4.24E-04	1.78E-06	4.2552E-04	FENCEGRD
609329.87	4205250.65	0.13900	0.33170	4.23E-04	1.04E-06	4.2447E-04	FENCEGRD
609315.32	4205182.80	0.13895	0.41123	4.23E-04	1.29E-06	4.2457E-04	FENCEGRD
609682.29	4205610.70	0.13877	0.16851	4.23E-04	5.29E-07	4.2326E-04	FENCEGRD
609443.99	4205468.81	0.13870	0.19159	4.23E-04	6.01E-07	4.2312E-04	Planned
609140.05	4204956.03	0.13837	0.63184	4.22E-04	1.98E-06	4.2349E-04	FENCEGRD
609547.65	4205524.51	0.13829	0.18482	4.21E-04	5.80E-07	4.2185E-04	FENCEGRD
609461.27	4205483.14	0.13750	0.18784	4.19E-04	5.89E-07	4.1945E-04	Planned
609650.91	4205590.50	0.13630	0.17309	4.15E-04	5.43E-07	4.1575E-04	FENCEGRD
609556.72	4205535.92	0.13588	0.18142	4.14E-04	5.69E-07	4.1449E-04	FENCEGRD
609100.36	4204913.40	0.13577	0.61559	4.14E-04	1.93E-06	4.1552E-04	FENCEGRD
609179.73	4204998.65	0.13571	0.60738	4.13E-04	1.91E-06	4.1531E-04	FENCEGRD
609619.86	4205570.17	0.13557	0.17733	4.13E-04	5.56E-07	4.1354E-04	FENCEGRD
609219.41	4205041.28	0.13506	0.57302	4.11E-04	1.80E-06	4.1323E-04	FENCEGRD
609700.35	4205636.54	0.13502	0.16024	4.11E-04	5.03E-07	4.1181E-04	FENCEGRD
609346.39	4205320.97	0.13501	0.27154	4.11E-04	8.52E-07	4.1213E-04	FENCEGRD
609259.10	4205083.91	0.13440	0.53182	4.09E-04	1.67E-06	4.1109E-04	FENCEGRD
609306.06	4205171.15	0.13422	0.42030	4.09E-04	1.32E-06	4.1019E-04	FENCEGRD
609565.80	4205547.33	0.13353	0.17779	4.07E-04	5.58E-07	4.0732E-04	FENCEGRD
609140.36	4204970.52	0.13303	0.59224	4.05E-04	1.86E-06	4.0710E-04	FENCEGRD
609668.75	4205616.44	0.13300	0.16446	4.05E-04	5.16E-07	4.0567E-04	FENCEGRD
609337.27	4205309.51	0.13246	0.27732	4.04E-04	8.70E-07	4.0438E-04	FENCEGRD
609328.15	4205298.04	0.13157	0.28322	4.01E-04	8.89E-07	4.0168E-04	FENCEGRD
609510.53	4205527.38	0.13137	0.17637	4.00E-04	5.53E-07	4.0074E-04	FENCEGRD
609320.80	4205239.24	0.13126	0.33855	4.00E-04	1.06E-06	4.0091E-04	FENCEGRD

609606.44	4205575.87	0.13109	0.17252	3.99E-04	5.41E-07	3.9988E-04	FENCEGRD
609574.87	4205558.74	0.13104	0.17470	3.99E-04	5.48E-07	3.9973E-04	FENCEGRD
609637.42	4205596.23	0.13102	0.16887	3.99E-04	5.30E-07	3.9965E-04	FENCEGRD
609180.05	4205013.14	0.13037	0.56829	3.97E-04	1.78E-06	3.9892E-04	FENCEGRD
609219.73	4205055.77	0.13027	0.53648	3.97E-04	1.68E-06	3.9852E-04	FENCEGRD
609259.41	4205098.40	0.13024	0.49943	3.97E-04	1.57E-06	3.9831E-04	FENCEGRD
609100.68	4204927.89	0.13014	0.57768	3.96E-04	1.81E-06	3.9825E-04	FENCEGRD
609296.79	4205159.49	0.13012	0.42884	3.96E-04	1.35E-06	3.9772E-04	FENCEGRD
609686.75	4205642.31	0.12979	0.15635	3.95E-04	4.91E-07	3.9586E-04	FENCEGRD
609400.39	4205469.61	0.12947	0.18377	3.94E-04	5.77E-07	3.9498E-04	Planned
609419.45	4205484.66	0.12915	0.18002	3.93E-04	5.65E-07	3.9399E-04	Planned
609519.64	4205538.85	0.12913	0.17342	3.93E-04	5.44E-07	3.9391E-04	FENCEGRD
609583.95	4205570.15	0.12882	0.17146	3.92E-04	5.38E-07	3.9296E-04	FENCEGRD
609436.74	4205499.00	0.12827	0.17658	3.91E-04	5.54E-07	3.9130E-04	Planned
609140.68	4204985.00	0.12818	0.55672	3.90E-04	1.75E-06	3.9222E-04	FENCEGRD
609287.52	4205147.84	0.12802	0.43832	3.90E-04	1.38E-06	3.9136E-04	FENCEGRD
609655.20	4205622.19	0.12768	0.16056	3.89E-04	5.04E-07	3.8945E-04	FENCEGRD
609278.26	4205136.19	0.12710	0.44859	3.87E-04	1.41E-06	3.8859E-04	FENCEGRD
609528.76	4205550.32	0.12690	0.17052	3.87E-04	5.35E-07	3.8711E-04	FENCEGRD
609259.73	4205112.89	0.12655	0.47035	3.86E-04	1.48E-06	3.8698E-04	FENCEGRD
609268.99	4205124.54	0.12654	0.45920	3.85E-04	1.44E-06	3.8691E-04	FENCEGRD
609623.94	4205601.95	0.12635	0.16465	3.85E-04	5.17E-07	3.8541E-04	FENCEGRD
609309.91	4205275.11	0.12579	0.29518	3.83E-04	9.26E-07	3.8412E-04	FENCEGRD
609311.73	4205227.83	0.12571	0.34491	3.83E-04	1.08E-06	3.8403E-04	FENCEGRD
609220.04	4205070.26	0.12561	0.50323	3.83E-04	1.58E-06	3.8422E-04	FENCEGRD
609180.36	4205027.63	0.12537	0.53253	3.82E-04	1.67E-06	3.8358E-04	FENCEGRD
609100.99	4204942.38	0.12532	0.54707	3.82E-04	1.72E-06	3.8347E-04	FENCEGRD
609673.16	4205648.08	0.12485	0.15265	3.80E-04	4.79E-07	3.8080E-04	FENCEGRD
609537.88	4205561.78	0.12469	0.16740	3.80E-04	5.25E-07	3.8036E-04	FENCEGRD
609140.99	4204999.49	0.12329	0.52395	3.76E-04	1.64E-06	3.7722E-04	FENCEGRD
609482.35	4205541.51	0.12300	0.16566	3.75E-04	5.20E-07	3.7521E-04	FENCEGRD
609641.66	4205627.94	0.12265	0.15698	3.74E-04	4.93E-07	3.7412E-04	FENCEGRD
609300.79	4205263.64	0.12255	0.30113	3.73E-04	9.45E-07	3.7426E-04	FENCEGRD
609547.00	4205573.25	0.12245	0.16438	3.73E-04	5.16E-07	3.7353E-04	FENCEGRD
609302.65	4205216.42	0.12237	0.35164	3.73E-04	1.10E-06	3.7387E-04	FENCEGRD
609610.45	4205607.67	0.12205	0.16063	3.72E-04	5.04E-07	3.7230E-04	FENCEGRD
609220.36	4205084.75	0.12146	0.47331	3.70E-04	1.49E-06	3.7148E-04	FENCEGRD
609491.51	4205553.03	0.12105	0.16313	3.69E-04	5.12E-07	3.6926E-04	FENCEGRD
609180.67	4205042.12	0.12088	0.50026	3.68E-04	1.57E-06	3.6980E-04	FENCEGRD
609101.31	4204956.87	0.12088	0.51934	3.68E-04	1.63E-06	3.6986E-04	FENCEGRD
609293.58	4205205.01	0.12068	0.35915	3.68E-04	1.13E-06	3.6875E-04	FENCEGRD
609378.13	4205487.42	0.12046	0.17156	3.67E-04	5.38E-07	3.6749E-04	Planned
609397.19	4205502.47	0.12034	0.16837	3.67E-04	5.28E-07	3.6712E-04	Planned
609556.12	4205584.72	0.12029	0.16145	3.66E-04	5.07E-07	3.6694E-04	FENCEGRD
609659.56	4205653.85	0.12019	0.14906	3.66E-04	4.68E-07	3.6660E-04	FENCEGRD
609414.48	4205516.81	0.11972	0.16545	3.65E-04	5.19E-07	3.6522E-04	Planned
609317.51	4205334.22	0.11958	0.24948	3.64E-04	7.83E-07	3.6505E-04	FENCEGRD
609284.50	4205193.60	0.11925	0.36671	3.63E-04	1.15E-06	3.6442E-04	FENCEGRD
609500.67	4205564.54	0.11905	0.16077	3.63E-04	5.05E-07	3.6316E-04	FENCEGRD
609141.30	4205013.98	0.11857	0.49354	3.61E-04	1.55E-06	3.6274E-04	FENCEGRD
609565.24	4205596.18	0.11837	0.15835	3.61E-04	4.97E-07	3.6108E-04	FENCEGRD
609628.11	4205633.69	0.11828	0.15328	3.60E-04	4.81E-07	3.6079E-04	FENCEGRD
609596.96	4205613.40	0.11821	0.15659	3.60E-04	4.91E-07	3.6059E-04	FENCEGRD
609275.43	4205182.19	0.11768	0.37420	3.58E-04	1.17E-06	3.5966E-04	FENCEGRD
609220.67	4205099.24	0.11759	0.44609	3.58E-04	1.40E-06	3.5961E-04	FENCEGRD
609308.35	4205322.70	0.11747	0.25428	3.58E-04	7.98E-07	3.5864E-04	FENCEGRD
609266.36	4205170.78	0.11702	0.38224	3.56E-04	1.20E-06	3.5767E-04	FENCEGRD
609509.83	4205576.06	0.11698	0.15810	3.56E-04	4.96E-07	3.5685E-04	FENCEGRD
609180.99	4205056.61	0.11674	0.47091	3.56E-04	1.48E-06	3.5710E-04	FENCEGRD
609101.62	4204971.36	0.11651	0.49298	3.55E-04	1.55E-06	3.5647E-04	FENCEGRD
609574.36	4205607.65	0.11644	0.15555	3.55E-04	4.88E-07	3.5519E-04	FENCEGRD
609299.19	4205311.19	0.11601	0.25919	3.53E-04	8.13E-07	3.5421E-04	FENCEGRD
609645.96	4205659.62	0.11585	0.14566	3.53E-04	4.57E-07	3.5337E-04	FENCEGRD
609454.08	4205555.52	0.11540	0.15572	3.52E-04	4.89E-07	3.5203E-04	FENCEGRD
609239.13	4205136.55	0.11524	0.40610	3.51E-04	1.27E-06	3.5233E-04	FENCEGRD
609518.98	4205587.58	0.11493	0.15524	3.50E-04	4.87E-07	3.5059E-04	FENCEGRD
609230.06	4205125.14	0.11481	0.41409	3.50E-04	1.30E-06	3.5104E-04	FENCEGRD
609220.99	4205113.73	0.11434	0.42181	3.48E-04	1.32E-06	3.4963E-04	FENCEGRD
609141.62	4205028.47	0.11433	0.46583	3.48E-04	1.46E-06	3.4974E-04	FENCEGRD
609614.57	4205639.43	0.11411	0.14992	3.48E-04	4.70E-07	3.4808E-04	FENCEGRD
609463.27	4205567.08	0.11374	0.15359	3.46E-04	4.82E-07	3.4696E-04	FENCEGRD
609181.30	4205071.10	0.11297	0.44445	3.44E-04	1.39E-06	3.4553E-04	FENCEGRD
609528.14	4205599.09	0.11293	0.15248	3.44E-04	4.78E-07	3.4449E-04	FENCEGRD
609101.93	4204985.84	0.11242	0.46823	3.42E-04	1.47E-06	3.4393E-04	FENCEGRD
609472.46	4205578.63	0.11202	0.15154	3.41E-04	4.76E-07	3.4172E-04	FENCEGRD
609632.37	4205665.39	0.11174	0.14249	3.40E-04	4.47E-07	3.4084E-04	FENCEGRD
609280.88	4205288.15	0.11137	0.26886	3.39E-04	8.44E-07	3.4011E-04	FENCEGRD
609537.30	4205610.61	0.11065	0.15064	3.37E-04	4.73E-07	3.3754E-04	FENCEGRD
609141.93	4205042.96	0.11044	0.44062	3.36E-04	1.38E-06	3.3781E-04	FENCEGRD
609264.32	4205217.77	0.11041	0.32365	3.36E-04	1.02E-06	3.3735E-04	FENCEGRD
609601.02	4205645.18	0.11019	0.14682	3.36E-04	4.61E-07	3.3613E-04	FENCEGRD
609481.66	4205590.19	0.11019	0.14932	3.36E-04	4.69E-07	3.3614E-04	FENCEGRD

609181.62	4205085.59	0.10945	0.42000	3.33E-04	1.32E-06	3.3473E-04	FENCEGRD
609102.25	4205000.33	0.10884	0.44598	3.32E-04	1.40E-06	3.3295E-04	FENCEGRD
609546.46	4205622.13	0.10877	0.14795	3.31E-04	4.64E-07	3.3181E-04	FENCEGRD
609490.85	4205601.75	0.10837	0.14666	3.30E-04	4.60E-07	3.3058E-04	FENCEGRD
609271.72	4205276.64	0.10835	0.27346	3.30E-04	8.58E-07	3.3092E-04	FENCEGRD
609255.20	4205206.30	0.10831	0.32918	3.30E-04	1.03E-06	3.3097E-04	FENCEGRD
609618.77	4205671.16	0.10772	0.13952	3.28E-04	4.38E-07	3.2858E-04	FENCEGRD
609555.62	4205633.64	0.10702	0.14529	3.26E-04	4.56E-07	3.2647E-04	FENCEGRD
609142.25	4205057.45	0.10682	0.41710	3.25E-04	1.31E-06	3.2671E-04	FENCEGRD
609246.08	4205194.84	0.10661	0.33467	3.25E-04	1.05E-06	3.2581E-04	FENCEGRD
609500.04	4205613.31	0.10654	0.14406	3.25E-04	4.52E-07	3.2500E-04	FENCEGRD
609288.61	4205347.44	0.10636	0.22928	3.24E-04	7.19E-07	3.2472E-04	FENCEGRD
609181.93	4205100.08	0.10623	0.39763	3.24E-04	1.25E-06	3.2485E-04	FENCEGRD
609236.96	4205183.37	0.10556	0.34061	3.22E-04	1.07E-06	3.2263E-04	FENCEGRD
609102.56	4205014.82	0.10554	0.42481	3.22E-04	1.33E-06	3.2284E-04	FENCEGRD
609564.78	4205645.16	0.10525	0.14290	3.21E-04	4.48E-07	3.2107E-04	FENCEGRD
609587.48	4205650.93	0.10491	0.14374	3.20E-04	4.51E-07	3.2003E-04	FENCEGRD
609227.84	4205171.90	0.10478	0.34664	3.19E-04	1.09E-06	3.2027E-04	FENCEGRD
609209.60	4205148.97	0.10453	0.35962	3.18E-04	1.13E-06	3.1955E-04	FENCEGRD
609509.23	4205624.87	0.10451	0.14230	3.18E-04	4.47E-07	3.1881E-04	FENCEGRD
609279.42	4205335.88	0.10423	0.23316	3.18E-04	7.32E-07	3.1824E-04	FENCEGRD
609262.56	4205265.12	0.10412	0.27732	3.17E-04	8.70E-07	3.1805E-04	FENCEGRD
609200.48	4205137.50	0.10406	0.36554	3.17E-04	1.15E-06	3.1814E-04	FENCEGRD
609605.18	4205676.92	0.10397	0.13677	3.17E-04	4.29E-07	3.1715E-04	FENCEGRD
609191.36	4205126.03	0.10362	0.37137	3.16E-04	1.17E-06	3.1682E-04	FENCEGRD
609142.56	4205071.94	0.10345	0.39532	3.15E-04	1.24E-06	3.1638E-04	FENCEGRD
609182.25	4205114.57	0.10339	0.37749	3.15E-04	1.18E-06	3.1614E-04	FENCEGRD
609270.23	4205324.32	0.10302	0.23726	3.14E-04	7.45E-07	3.1457E-04	FENCEGRD
609253.40	4205253.60	0.10274	0.28216	3.13E-04	8.85E-07	3.1386E-04	FENCEGRD
609518.43	4205636.43	0.10256	0.14030	3.12E-04	4.40E-07	3.1286E-04	FENCEGRD
609102.88	4205029.31	0.10236	0.40467	3.12E-04	1.27E-06	3.1308E-04	FENCEGRD
609244.24	4205242.09	0.10236	0.28749	3.12E-04	9.02E-07	3.1272E-04	FENCEGRD
609235.08	4205230.57	0.10104	0.29227	3.08E-04	9.17E-07	3.0871E-04	FENCEGRD
609527.62	4205647.99	0.10083	0.13790	3.07E-04	4.33E-07	3.0759E-04	FENCEGRD
609591.58	4205682.69	0.10060	0.13408	3.06E-04	4.21E-07	3.0687E-04	FENCEGRD
609142.88	4205086.43	0.10051	0.37564	3.06E-04	1.18E-06	3.0736E-04	FENCEGRD
609251.84	4205301.20	0.09976	0.24522	3.04E-04	7.70E-07	3.0466E-04	FENCEGRD
609225.93	4205219.05	0.09964	0.29690	3.04E-04	9.32E-07	3.0446E-04	FENCEGRD
609103.19	4205043.80	0.09934	0.38563	3.03E-04	1.21E-06	3.0383E-04	FENCEGRD
609536.81	4205659.55	0.09919	0.13553	3.02E-04	4.25E-07	3.0258E-04	FENCEGRD
609216.77	4205207.54	0.09863	0.30172	3.00E-04	9.47E-07	3.0140E-04	FENCEGRD
609242.65	4205289.64	0.09797	0.24913	2.98E-04	7.82E-07	2.9922E-04	FENCEGRD
609546.00	4205671.11	0.09770	0.13309	2.98E-04	4.18E-07	2.9804E-04	FENCEGRD
609577.99	4205688.46	0.09764	0.13128	2.97E-04	4.12E-07	2.9785E-04	FENCEGRD
609103.51	4205058.29	0.09705	0.36865	2.96E-04	1.16E-06	2.9680E-04	FENCEGRD
609555.20	4205682.67	0.09632	0.13070	2.93E-04	4.10E-07	2.9383E-04	FENCEGRD
609207.61	4205196.02	0.09599	0.30480	2.92E-04	9.56E-07	2.9337E-04	FENCEGRD
609189.29	4205172.99	0.09545	0.31502	2.91E-04	9.89E-07	2.9175E-04	FENCEGRD
609233.46	4205278.08	0.09542	0.25253	2.91E-04	7.92E-07	2.9147E-04	FENCEGRD
609198.45	4205184.51	0.09519	0.30939	2.90E-04	9.71E-07	2.9094E-04	FENCEGRD
609143.50	4205115.41	0.09451	0.33908	2.88E-04	1.06E-06	2.8897E-04	FENCEGRD
609152.66	4205126.92	0.09444	0.33420	2.88E-04	1.05E-06	2.8874E-04	FENCEGRD
609103.82	4205072.78	0.09420	0.35126	2.87E-04	1.10E-06	2.8806E-04	FENCEGRD
609224.27	4205266.52	0.09415	0.25645	2.87E-04	8.05E-07	2.8761E-04	FENCEGRD
609215.07	4205254.96	0.09381	0.26083	2.86E-04	8.18E-07	2.8659E-04	FENCEGRD
609205.88	4205243.40	0.09333	0.26507	2.84E-04	8.32E-07	2.8514E-04	FENCEGRD
609196.69	4205231.84	0.09192	0.26872	2.80E-04	8.43E-07	2.8086E-04	FENCEGRD
609104.13	4205087.27	0.09186	0.33555	2.80E-04	1.05E-06	2.8088E-04	FENCEGRD
609187.50	4205220.29	0.09087	0.27244	2.77E-04	8.55E-07	2.7767E-04	FENCEGRD
609178.30	4205208.73	0.08825	0.27458	2.69E-04	8.62E-07	2.6969E-04	FENCEGRD
609159.92	4205185.61	0.08722	0.28209	2.66E-04	8.85E-07	2.6658E-04	FENCEGRD
609169.11	4205197.17	0.08711	0.27762	2.65E-04	8.71E-07	2.6623E-04	FENCEGRD
609104.76	4205116.25	0.08660	0.30539	2.64E-04	9.58E-07	2.6476E-04	FENCEGRD
609141.53	4205162.49	0.08650	0.28950	2.64E-04	9.08E-07	2.6441E-04	FENCEGRD
609113.96	4205127.81	0.08636	0.30124	2.63E-04	9.45E-07	2.6402E-04	FENCEGRD
609132.34	4205150.93	0.08633	0.29322	2.63E-04	9.20E-07	2.6390E-04	FENCEGRD
609123.15	4205139.37	0.08625	0.29714	2.63E-04	9.32E-07	2.6367E-04	FENCEGRD

CONCUNIT ug/m^3
DEPUNIT g/m^2

Wild Horse Multifamily Project

Construction Annual Total PM2.5 Emissions (PM2.5 Total)

Annual Average Onsite Total PM2.5 Emission Rate (grams/sec): 4.16E-03
 Annual Average Offsite Total PM2.5 Emission Rate - Road Segment 1 (grams/sec): 1.04E-04

Maximum
 PM2.5 Total
 (ug/m3)
 5.9978E-02

UTM
 X Y
 609694.68 4204842.52

X	Y	Unit Emissions VALUES AVERAGED SITE AREA	Unit Emissions VALUES AVERAGED ROAD 1	Onsite	Offsite-Road	Total DPM (ug/m3)	GROUP
				Annual PM2.5 Total w/Actual Emissions (ug/m3)	Segment 1 Annual PM2.5 Total w/Actual Emissions (ug/m3)		
609694.68	4204842.52	14.18158	9.33838	5.90E-02	9.70E-04	5.9978E-02	Planned
609694.37	4204828.03	14.12386	11.03786	5.88E-02	1.15E-03	5.9915E-02	Planned
609694.99	4204857.01	14.07222	8.06813	5.86E-02	8.38E-04	5.9391E-02	Planned
609695.31	4204871.50	13.90743	7.04888	5.79E-02	7.32E-04	5.8600E-02	Planned
609695.62	4204885.99	13.67568	6.20896	5.69E-02	6.45E-04	5.7548E-02	Planned
609695.94	4204900.48	13.43714	5.49413	5.59E-02	5.71E-04	5.6481E-02	Planned
609696.25	4204914.97	13.10275	4.88885	5.45E-02	5.08E-04	5.5027E-02	Planned
609694.05	4204813.54	12.85774	13.59849	5.35E-02	1.41E-03	5.4912E-02	Planned
609949.60	4204893.49	12.77556	3.80487	5.32E-02	3.95E-04	5.3553E-02	Planned
609942.19	4204906.45	12.73617	3.66077	5.30E-02	3.80E-04	5.3374E-02	Planned
609957.01	4204880.53	12.71456	3.93081	5.29E-02	4.08E-04	5.3312E-02	Planned
609696.57	4204929.46	12.68365	4.36775	5.28E-02	4.54E-04	5.3229E-02	Planned
609934.78	4204919.41	12.64234	3.49433	5.26E-02	3.63E-04	5.2967E-02	Planned
609964.42	4204867.58	12.54081	4.02761	5.22E-02	4.18E-04	5.2599E-02	Planned
609927.38	4204932.37	12.42795	3.31449	5.17E-02	3.44E-04	5.2056E-02	Planned
609971.83	4204854.62	12.24667	4.07883	5.10E-02	4.24E-04	5.1381E-02	Planned
609696.88	4204943.95	12.18259	3.90871	5.07E-02	4.06E-04	5.1097E-02	Planned
609919.97	4204945.32	12.14696	3.15049	5.05E-02	3.27E-04	5.0870E-02	Planned
609979.23	4204841.66	11.82050	4.07100	4.92E-02	4.23E-04	4.9607E-02	Planned
609912.56	4204958.28	11.80109	2.98926	4.91E-02	3.10E-04	4.9414E-02	Planned
609693.74	4204799.05	11.45759	17.71123	4.77E-02	1.84E-03	4.9514E-02	Planned
609697.19	4204958.44	11.43271	3.49960	4.76E-02	3.63E-04	4.7934E-02	Planned
609905.15	4204971.24	11.40719	2.83394	4.75E-02	2.94E-04	4.7759E-02	Planned
609986.64	4204828.70	11.24903	3.98762	4.68E-02	4.14E-04	4.7220E-02	Planned
609897.74	4204984.20	10.96985	2.68403	4.56E-02	2.79E-04	4.5923E-02	Planned
609971.30	4204905.90	10.61275	3.38805	4.42E-02	3.52E-04	4.4511E-02	Planned
609963.90	4204918.86	10.59683	3.28111	4.41E-02	3.41E-04	4.4433E-02	Planned
609978.71	4204892.94	10.54411	3.48068	4.39E-02	3.62E-04	4.4235E-02	Planned
609890.33	4204997.16	10.52491	2.54617	4.38E-02	2.64E-04	4.4058E-02	Planned
609994.05	4204815.74	10.52408	3.81994	4.38E-02	3.97E-04	4.4186E-02	Planned
609956.49	4204931.82	10.51066	3.15734	4.37E-02	3.28E-04	4.4062E-02	Planned
609691.54	4204697.63	10.48593	15.23127	4.36E-02	1.58E-03	4.5213E-02	Non-res
609697.51	4204972.93	10.40325	3.13485	4.33E-02	3.26E-04	4.3613E-02	Planned
609986.12	4204879.98	10.38651	3.54158	4.32E-02	3.68E-04	4.3585E-02	Planned
609949.08	4204944.77	10.30052	2.99601	4.29E-02	3.11E-04	4.3171E-02	Planned
609693.42	4204784.57	10.13439	24.74027	4.22E-02	2.57E-03	4.4738E-02	Planned
609993.53	4204867.03	10.13073	3.56352	4.22E-02	3.70E-04	4.2523E-02	Planned
609941.67	4204957.73	10.06589	2.85964	4.19E-02	2.97E-04	4.2180E-02	Planned
609882.93	4205010.11	9.99951	2.40404	4.16E-02	2.50E-04	4.1857E-02	Planned
609691.85	4204712.12	9.97057	22.31727	4.15E-02	2.32E-03	4.3805E-02	Non-res
609934.26	4204970.69	9.79509	2.72850	4.08E-02	2.83E-04	4.1040E-02	Planned
610000.94	4204854.07	9.76877	3.53602	4.06E-02	3.67E-04	4.1014E-02	Planned
609680.40	4204842.83	9.68461	9.88435	4.03E-02	1.03E-03	4.1323E-02	Planned
609680.08	4204828.34	9.68128	11.72085	4.03E-02	1.22E-03	4.1500E-02	Planned
610001.46	4204802.79	9.63794	3.57612	4.01E-02	3.71E-04	4.0474E-02	Planned
609692.17	4204726.61	9.63579	36.90912	4.01E-02	3.83E-03	4.3927E-02	Non-res
609681.34	4204886.30	9.61948	6.44137	4.00E-02	6.69E-04	4.0695E-02	Planned
609680.71	4204857.32	9.59960	8.48545	3.99E-02	8.81E-04	4.0824E-02	Planned
609697.82	4204987.42	9.55441	2.82648	3.98E-02	2.94E-04	4.0049E-02	Planned
609681.03	4204871.81	9.50398	7.35490	3.95E-02	7.64E-04	4.0309E-02	Planned
609926.85	4204983.65	9.47612	2.59826	3.94E-02	2.70E-04	3.9699E-02	Planned
609875.52	4205023.07	9.43169	2.26584	3.92E-02	2.35E-04	3.9480E-02	Planned
609681.66	4204900.79	9.36096	5.67323	3.90E-02	5.89E-04	3.9539E-02	Planned
609679.77	4204813.85	9.35335	14.44841	3.89E-02	1.50E-03	4.0419E-02	Planned
610008.35	4204841.11	9.29352	3.45270	3.87E-02	3.59E-04	3.9028E-02	Planned
609919.45	4204996.61	9.11226	2.46951	3.79E-02	2.57E-04	3.8172E-02	Planned
609681.97	4204915.28	9.06030	5.01978	3.77E-02	5.21E-04	3.8220E-02	Planned
609993.01	4204918.31	8.98516	3.04067	3.74E-02	3.16E-04	3.7702E-02	Planned
609681.41	4204687.55	8.98198	11.99309	3.74E-02	1.25E-03	3.8619E-02	Non-res
609985.60	4204931.27	8.98053	2.95332	3.74E-02	3.07E-04	3.7674E-02	Planned
610000.42	4204905.35	8.92114	3.10826	3.71E-02	3.23E-04	3.7443E-02	Planned
609978.19	4204944.22	8.91354	2.86396	3.71E-02	2.97E-04	3.7386E-02	Planned
609698.14	4205001.90	8.82829	2.56222	3.67E-02	2.66E-04	3.7000E-02	Planned

609868.11	4205036.03	8.81002	2.12926	3.67E-02	2.21E-04	3.6879E-02	Planned
610007.82	4204892.39	8.78171	3.14583	3.65E-02	3.27E-04	3.6867E-02	Planned
609970.78	4204957.18	8.77381	2.74667	3.65E-02	2.85E-04	3.6792E-02	Planned
609912.04	4205009.56	8.71024	2.34338	3.62E-02	2.43E-04	3.6486E-02	Planned
610015.75	4204828.15	8.70191	3.31175	3.62E-02	3.44E-04	3.6552E-02	Planned
609682.28	4204929.77	8.69192	4.46347	3.62E-02	4.64E-04	3.6630E-02	Planned
609679.46	4204799.36	8.64607	18.94275	3.60E-02	1.97E-03	3.7943E-02	Planned
610008.87	4204789.83	8.59167	3.27409	3.57E-02	3.40E-04	3.6089E-02	Planned
609963.37	4204970.14	8.56016	2.62242	3.56E-02	2.72E-04	3.5890E-02	Planned
610015.23	4204879.43	8.55980	3.14985	3.56E-02	3.27E-04	3.5944E-02	Planned
609685.81	4204662.88	8.43689	8.23134	3.51E-02	8.55E-04	3.5960E-02	FENCEGRD
609955.97	4204983.10	8.33451	2.51184	3.47E-02	2.61E-04	3.4940E-02	Planned
609682.60	4204944.26	8.30886	3.97553	3.46E-02	4.13E-04	3.4985E-02	Planned
609904.63	4205022.52	8.26830	2.21918	3.44E-02	2.30E-04	3.4634E-02	Planned
610022.64	4204866.48	8.25080	3.11492	3.43E-02	3.24E-04	3.4654E-02	Planned
609860.70	4205048.99	8.20708	2.01226	3.41E-02	2.09E-04	3.4358E-02	Planned
609698.45	4205016.39	8.12001	2.33057	3.38E-02	2.42E-04	3.4029E-02	Planned
609948.56	4204996.06	8.07266	2.40263	3.36E-02	2.50E-04	3.3839E-02	Planned
610023.16	4204815.19	7.99521	3.11666	3.33E-02	3.24E-04	3.3591E-02	Planned
609677.57	4204712.43	7.98829	21.01788	3.32E-02	2.18E-03	3.5422E-02	Non-res
609679.14	4204784.88	7.94655	27.03913	3.31E-02	2.81E-03	3.5873E-02	Planned
609677.88	4204726.92	7.91894	33.29880	3.29E-02	3.46E-03	3.6409E-02	Non-res
609682.91	4204958.75	7.91461	3.54402	3.29E-02	3.68E-04	3.3300E-02	Planned
610030.05	4204853.52	7.85230	3.03818	3.27E-02	3.16E-04	3.2988E-02	Planned
609897.22	4205035.48	7.79462	2.09859	3.24E-02	2.18E-04	3.2651E-02	Planned
609941.15	4205009.01	7.77275	2.29395	3.23E-02	2.38E-04	3.2580E-02	Planned
610007.30	4204943.67	7.72667	2.68344	3.21E-02	2.79E-04	3.2429E-02	Planned
610014.71	4204930.72	7.72400	2.74799	3.21E-02	2.85E-04	3.2424E-02	Planned
609999.89	4204956.63	7.67311	2.60882	3.19E-02	2.71E-04	3.2198E-02	Planned
610022.12	4204917.76	7.66550	2.79419	3.19E-02	2.90E-04	3.2186E-02	Planned
609992.49	4204969.59	7.56807	2.52517	3.15E-02	2.62E-04	3.1752E-02	Planned
610029.53	4204904.80	7.54158	2.81597	3.14E-02	2.92E-04	3.1672E-02	Planned
609853.29	4205061.95	7.48524	1.89122	3.11E-02	1.96E-04	3.1342E-02	Planned
609683.23	4204973.24	7.46853	3.16807	3.11E-02	3.29E-04	3.1405E-02	Planned
609933.74	4205021.97	7.44102	2.18846	3.10E-02	2.27E-04	3.1189E-02	Planned
609985.08	4204982.55	7.41688	2.43288	3.09E-02	2.53E-04	3.1114E-02	Planned
610016.28	4204776.87	7.41446	2.93271	3.09E-02	3.05E-04	3.1155E-02	Planned
610037.46	4204840.56	7.36542	2.91994	3.06E-02	3.03E-04	3.0950E-02	Planned
610036.94	4204891.84	7.34908	2.81014	3.06E-02	2.92E-04	3.0871E-02	Planned
609889.81	4205048.44	7.30109	1.98454	3.04E-02	2.06E-04	3.0585E-02	Planned
609977.67	4204995.51	7.22299	2.33527	3.01E-02	2.43E-04	3.0297E-02	Planned
610030.57	4204802.24	7.18802	2.87965	2.99E-02	2.99E-04	3.0208E-02	Planned
609698.77	4205030.88	7.17554	2.11795	2.99E-02	2.20E-04	3.0077E-02	Planned
609675.68	4204652.81	7.17312	7.08723	2.98E-02	7.36E-04	3.0583E-02	FENCEGRD
609667.13	4204687.86	7.15022	11.72756	2.98E-02	1.22E-03	3.0970E-02	Non-res
610044.34	4204878.88	7.08619	2.77380	2.95E-02	2.88E-04	2.9773E-02	Planned
609926.33	4205034.93	7.07023	2.08280	2.94E-02	2.16E-04	2.9635E-02	Planned
609970.26	4205008.46	6.98876	2.23553	2.91E-02	2.32E-04	2.9312E-02	Planned
609683.54	4204987.73	6.90679	2.84615	2.87E-02	2.96E-04	2.9034E-02	Planned
610044.87	4204827.60	6.79472	2.76244	2.83E-02	2.87E-04	2.8559E-02	Planned
609882.40	4205061.40	6.78826	1.88313	2.82E-02	1.96E-04	2.8441E-02	Planned
610051.75	4204865.93	6.75251	2.70566	2.81E-02	2.81E-04	2.8378E-02	Planned
609845.88	4205074.90	6.74707	1.76823	2.81E-02	1.84E-04	2.8258E-02	Planned
610029.01	4204956.08	6.72656	2.44655	2.80E-02	2.54E-04	2.8243E-02	Planned
609962.85	4205021.42	6.72395	2.13846	2.80E-02	2.22E-04	2.8200E-02	Planned
610036.41	4204943.12	6.72101	2.49517	2.80E-02	2.59E-04	2.8225E-02	Planned
610021.60	4204969.04	6.68283	2.38434	2.78E-02	2.48E-04	2.8054E-02	Planned
609665.80	4204828.65	6.67552	12.85603	2.78E-02	1.34E-03	2.9112E-02	Planned
609665.49	4204814.16	6.67008	15.86596	2.78E-02	1.65E-03	2.9402E-02	Planned
610043.82	4204930.17	6.66596	2.52690	2.77E-02	2.62E-04	2.7999E-02	Planned
609918.92	4205047.89	6.65841	1.97726	2.77E-02	2.05E-04	2.7910E-02	Planned
610014.19	4204982.00	6.59639	2.31640	2.74E-02	2.41E-04	2.7688E-02	Planned
609666.12	4204843.14	6.58464	10.75609	2.74E-02	1.12E-03	2.8515E-02	Planned
609681.10	4204636.42	6.58432	5.93458	2.74E-02	6.16E-04	2.8013E-02	FENCEGRD
609661.16	4204667.40	6.56497	8.36287	2.73E-02	8.69E-04	2.8185E-02	Planned
610051.23	4204917.21	6.55680	2.53852	2.73E-02	2.64E-04	2.7546E-02	Planned
609666.43	4204857.63	6.51133	9.14283	2.71E-02	9.50E-04	2.8043E-02	Planned
609663.60	4204727.23	6.50679	30.07676	2.71E-02	3.12E-03	3.0198E-02	Non-res
609663.29	4204712.74	6.50280	19.61818	2.71E-02	2.04E-03	2.9095E-02	Non-res
609665.17	4204799.67	6.49797	20.75860	2.70E-02	2.16E-03	2.9194E-02	Planned
610006.78	4204994.96	6.46784	2.24011	2.69E-02	2.33E-04	2.7145E-02	Planned
609955.44	4205034.38	6.42484	2.04044	2.67E-02	2.12E-04	2.6945E-02	Planned
609666.74	4204872.12	6.41055	7.86916	2.67E-02	8.17E-04	2.7491E-02	Planned
610058.64	4204904.25	6.39203	2.52824	2.66E-02	2.63E-04	2.6859E-02	Planned
609664.86	4204785.19	6.37912	29.35425	2.65E-02	3.05E-03	2.9592E-02	Planned
610059.16	4204852.97	6.34884	2.60478	2.64E-02	2.71E-04	2.6687E-02	Planned
610037.98	4204789.28	6.30470	2.61362	2.62E-02	2.71E-04	2.6505E-02	Planned
609999.37	4205007.91	6.30208	2.15939	2.62E-02	2.24E-04	2.6447E-02	Planned
609683.86	4205002.21	6.28951	2.56276	2.62E-02	2.66E-04	2.6436E-02	Planned

609667.06	4204886.61	6.28383	6.82936	2.61E-02	7.09E-04	2.6856E-02	Planned
609668.15	4204641.68	6.27122	6.15753	2.61E-02	6.40E-04	2.6734E-02	FENCEGRD
609911.52	4205060.85	6.21514	1.87044	2.59E-02	1.94E-04	2.6055E-02	Planned
609875.00	4205074.35	6.18563	1.77415	2.57E-02	1.84E-04	2.5922E-02	Planned
610066.05	4204891.29	6.16984	2.49380	2.57E-02	2.59E-04	2.5931E-02	Planned
610023.69	4204763.91	6.16330	2.57771	2.56E-02	2.68E-04	2.5913E-02	Planned
610052.27	4204814.64	6.15370	2.57245	2.56E-02	2.67E-04	2.5872E-02	Planned
609667.37	4204901.10	6.12770	5.96565	2.55E-02	6.20E-04	2.6116E-02	Planned
609991.96	4205020.87	6.10176	2.07599	2.54E-02	2.16E-04	2.5604E-02	Planned
609948.04	4205047.34	6.09676	1.94339	2.54E-02	2.02E-04	2.5570E-02	Planned
609699.08	4205045.37	6.03308	1.92497	2.51E-02	2.00E-04	2.5303E-02	Planned
609838.48	4205087.86	5.96686	1.65119	2.48E-02	1.72E-04	2.4999E-02	Planned
609667.69	4204915.59	5.92020	5.24365	2.46E-02	5.45E-04	2.5178E-02	Planned
609682.38	4204621.71	5.91649	5.08640	2.46E-02	5.28E-04	2.5146E-02	FENCEGRD
610050.71	4204968.49	5.91259	2.23661	2.46E-02	2.32E-04	2.4834E-02	Planned
610058.12	4204955.53	5.90620	2.27311	2.46E-02	2.36E-04	2.4811E-02	Planned
610073.46	4204878.33	5.88882	2.43329	2.45E-02	2.53E-04	2.4756E-02	Planned
610066.57	4204840.01	5.88228	2.47417	2.45E-02	2.57E-04	2.4733E-02	Planned
610043.30	4204981.45	5.87916	2.19111	2.45E-02	2.28E-04	2.4690E-02	Planned
609984.56	4205033.83	5.87035	1.98994	2.44E-02	2.07E-04	2.4633E-02	Planned
609652.85	4204688.17	5.86699	11.39075	2.44E-02	1.18E-03	2.5595E-02	Non-res
610065.53	4204942.57	5.85422	2.29610	2.44E-02	2.38E-04	2.4597E-02	Planned
610035.89	4204994.41	5.80534	2.13659	2.42E-02	2.22E-04	2.4377E-02	Planned
610072.93	4204929.62	5.75606	2.30199	2.40E-02	2.39E-04	2.4190E-02	Planned
609904.11	4205073.80	5.74739	1.76610	2.39E-02	1.83E-04	2.4098E-02	Planned
609940.63	4205060.30	5.73935	1.84740	2.39E-02	1.92E-04	2.4073E-02	Planned
609668.00	4204930.08	5.66818	4.63128	2.36E-02	4.81E-04	2.4066E-02	Planned
610080.34	4204916.66	5.61453	2.28910	2.34E-02	2.38E-04	2.3599E-02	Planned
609977.15	4205046.79	5.61137	1.90271	2.33E-02	1.98E-04	2.3546E-02	Planned
609684.17	4205016.70	5.59518	2.31385	2.33E-02	2.40E-04	2.3521E-02	Planned
609649.32	4204727.54	5.58221	27.53027	2.32E-02	2.86E-03	2.6087E-02	Non-res
609649.00	4204713.05	5.57717	18.42873	2.32E-02	1.91E-03	2.5120E-02	Non-res
609867.59	4205087.31	5.57035	1.66538	2.32E-02	1.73E-04	2.3351E-02	Planned
609649.63	4204742.03	5.56686	46.92555	2.31E-02	4.87E-03	2.7996E-02	Non-res
610080.86	4204865.38	5.55308	2.34795	2.31E-02	2.44E-04	2.3350E-02	Planned
609657.50	4204631.81	5.47812	5.46112	2.28E-02	5.67E-04	2.3361E-02	FENCEGRD
610059.68	4204801.69	5.46190	2.36002	2.27E-02	2.45E-04	2.2972E-02	Planned
610087.75	4204903.70	5.42568	2.25617	2.26E-02	2.34E-04	2.2810E-02	Planned
610045.39	4204776.32	5.38621	2.33373	2.24E-02	2.42E-04	2.2654E-02	Planned
609668.32	4204944.57	5.38357	4.10525	2.24E-02	4.26E-04	2.2827E-02	Planned
609644.80	4204672.90	5.36740	8.82004	2.23E-02	9.16E-04	2.3249E-02	Planned
610073.98	4204827.05	5.36425	2.31945	2.23E-02	2.41E-04	2.2561E-02	Planned
609933.22	4205073.26	5.36214	1.75110	2.23E-02	1.82E-04	2.2493E-02	Planned
609969.74	4205059.75	5.32684	1.81551	2.22E-02	1.89E-04	2.2353E-02	Planned
609896.70	4205086.76	5.25312	1.66537	2.19E-02	1.73E-04	2.2031E-02	Planned
609671.22	4204612.06	5.22178	4.57992	2.17E-02	4.76E-04	2.2203E-02	FENCEGRD
610095.16	4204890.74	5.18913	2.20249	2.16E-02	2.29E-04	2.1820E-02	Planned
609650.58	4204785.49	5.17519	31.75086	2.15E-02	3.30E-03	2.4831E-02	Planned
609831.07	4205100.82	5.16699	1.53906	2.15E-02	1.60E-04	2.1659E-02	Planned
610088.27	4204852.42	5.16643	2.23774	2.15E-02	2.32E-04	2.1729E-02	Planned
610094.64	4204942.03	5.10161	2.10171	2.12E-02	2.18E-04	2.1446E-02	Planned
609650.89	4204799.98	5.09597	22.31089	2.12E-02	2.32E-03	2.3521E-02	Planned
609668.63	4204959.06	5.09103	3.64609	2.12E-02	3.79E-04	2.1562E-02	Planned
609651.20	4204814.47	5.01185	17.11732	2.09E-02	1.78E-03	2.2632E-02	FENCEGRD
610102.05	4204929.07	4.97526	2.08494	2.07E-02	2.17E-04	2.0918E-02	Planned
609925.81	4205086.21	4.96392	1.65731	2.07E-02	1.72E-04	2.0827E-02	Planned
609952.96	4205078.06	4.95633	1.69854	2.06E-02	1.76E-04	2.0799E-02	Planned
609860.18	4205100.27	4.93721	1.56049	2.05E-02	1.62E-04	2.0705E-02	Planned
610031.09	4204750.95	4.93580	2.23040	2.05E-02	2.32E-04	2.0769E-02	Planned
609651.52	4204828.96	4.92933	13.78783	2.05E-02	1.43E-03	2.1943E-02	FENCEGRD
610102.57	4204877.78	4.90696	2.12796	2.04E-02	2.21E-04	2.0638E-02	Planned
609651.83	4204843.45	4.86197	11.41106	2.02E-02	1.19E-03	2.1415E-02	FENCEGRD
609635.04	4204727.85	4.83916	25.23765	2.01E-02	2.62E-03	2.2757E-02	Non-res
609647.03	4204621.88	4.83719	4.89670	2.01E-02	5.09E-04	2.0636E-02	FENCEGRD
609652.15	4204857.94	4.83036	9.59412	2.01E-02	9.97E-04	2.1095E-02	FENCEGRD
609684.48	4205031.19	4.81839	2.09605	2.00E-02	2.18E-04	2.0267E-02	Planned
609635.09	4204661.79	4.81610	7.47851	2.00E-02	7.77E-04	2.0816E-02	Planned
610109.45	4204916.11	4.81044	2.05322	2.00E-02	2.13E-04	2.0229E-02	Planned
610081.39	4204814.09	4.80926	2.14635	2.00E-02	2.23E-04	2.0234E-02	Planned
609634.72	4204713.36	4.78110	17.42169	1.99E-02	1.81E-03	2.1703E-02	Non-res
609652.46	4204872.43	4.76897	8.17850	1.98E-02	8.49E-04	2.0693E-02	FENCEGRD
609699.39	4205059.86	4.76357	1.75139	1.98E-02	1.82E-04	2.0003E-02	Planned
609668.94	4204973.55	4.75942	3.24794	1.98E-02	3.37E-04	2.0141E-02	Planned
609635.35	4204742.34	4.75092	42.48421	1.98E-02	4.41E-03	2.4181E-02	Non-res
610067.09	4204788.73	4.74546	2.13541	1.97E-02	2.22E-04	1.9967E-02	Planned
610095.68	4204839.46	4.74086	2.10727	1.97E-02	2.19E-04	1.9945E-02	Planned
609652.78	4204886.92	4.73856	7.02036	1.97E-02	7.29E-04	2.0446E-02	FENCEGRD
609889.29	4205099.72	4.73795	1.56833	1.97E-02	1.63E-04	1.9877E-02	Planned
609653.09	4204901.41	4.65525	6.08529	1.94E-02	6.32E-04	2.0002E-02	FENCEGRD

609634.41	4204698.87	4.61732	13.03806	1.92E-02	1.35E-03	2.0566E-02	Non-res
610116.86	4204903.15	4.61016	2.00553	1.92E-02	2.08E-04	1.9391E-02	Planned
610109.98	4204864.83	4.58615	2.03491	1.91E-02	2.11E-04	1.9294E-02	Planned
609918.40	4205099.17	4.54310	1.56706	1.89E-02	1.63E-04	1.9066E-02	Planned
609653.40	4204915.90	4.49673	5.31756	1.87E-02	5.52E-04	1.9263E-02	FENCEGRD
609630.09	4204638.90	4.48419	5.70787	1.87E-02	5.93E-04	1.9251E-02	FENCEGRD
610052.80	4204763.36	4.47570	2.05668	1.86E-02	2.14E-04	1.8837E-02	Planned
609669.26	4204988.04	4.39364	2.90089	1.83E-02	3.01E-04	1.8583E-02	Planned
610124.27	4204890.19	4.37250	1.94043	1.82E-02	2.02E-04	1.8395E-02	Planned
609823.66	4205113.78	4.35705	1.43307	1.81E-02	1.49E-04	1.8278E-02	Planned
609669.04	4204588.11	4.34444	3.70677	1.81E-02	3.85E-04	1.8462E-02	FENCEGRD
609656.09	4204593.37	4.32015	3.83420	1.80E-02	3.98E-04	1.8374E-02	FENCEGRD
609636.29	4204785.80	4.31990	34.11294	1.80E-02	3.54E-03	2.1518E-02	FENCEGRD
609653.72	4204930.39	4.31641	4.66580	1.80E-02	4.85E-04	1.8445E-02	FENCEGRD
609852.77	4205113.23	4.29932	1.45945	1.79E-02	1.52E-04	1.8041E-02	Planned
610103.09	4204826.50	4.28938	1.96277	1.78E-02	2.04E-04	1.8052E-02	Planned
609636.61	4204800.29	4.27868	23.56269	1.78E-02	2.45E-03	2.0251E-02	FENCEGRD
610088.80	4204801.14	4.23889	1.96159	1.76E-02	2.04E-04	1.7841E-02	Planned
610117.39	4204851.87	4.23444	1.92634	1.76E-02	2.00E-04	1.7819E-02	Planned
609636.92	4204814.78	4.21992	17.85119	1.76E-02	1.85E-03	1.9413E-02	FENCEGRD
609881.88	4205112.68	4.21230	1.47457	1.75E-02	1.53E-04	1.7680E-02	Planned
609682.00	4204582.86	4.17794	3.57574	1.74E-02	3.71E-04	1.7755E-02	FENCEGRD
609643.13	4204598.63	4.16914	3.97957	1.73E-02	4.13E-04	1.7761E-02	FENCEGRD
609637.24	4204829.27	4.15505	14.23906	1.73E-02	1.48E-03	1.8768E-02	FENCEGRD
609620.75	4204728.16	4.15184	23.63038	1.73E-02	2.45E-03	1.9730E-02	Non-res
609910.99	4205112.13	4.11198	1.47894	1.71E-02	1.54E-04	1.7263E-02	Planned
609620.39	4204663.14	4.10847	7.47168	1.71E-02	7.76E-04	1.7871E-02	Planned
610131.68	4204877.23	4.10632	1.86145	1.71E-02	1.93E-04	1.7279E-02	Planned
609654.03	4204944.88	4.09169	4.11449	1.70E-02	4.27E-04	1.7452E-02	FENCEGRD
610031.11	4204736.80	4.08581	1.99671	1.70E-02	2.07E-04	1.7208E-02	Planned
609625.11	4204686.72	4.08571	10.27426	1.70E-02	1.07E-03	1.8067E-02	Non-res
609637.57	4204843.76	4.08508	11.69391	1.70E-02	1.21E-03	1.8212E-02	FENCEGRD
609621.05	4204742.65	4.07096	38.91982	1.69E-02	4.04E-03	2.0981E-02	Non-res
610093.59	4205044.59	4.06954	1.66599	1.69E-02	1.73E-04	1.7106E-02	FENCEGRD
609637.87	4204858.25	4.04667	9.75877	1.68E-02	1.01E-03	1.7851E-02	FENCEGRD
610074.50	4204775.77	4.03697	1.90870	1.68E-02	1.98E-04	1.6996E-02	Planned
609684.80	4205045.68	4.02667	1.90076	1.68E-02	1.97E-04	1.6952E-02	Planned
609669.57	4205002.52	3.99487	2.59758	1.66E-02	2.70E-04	1.6892E-02	Planned
609620.44	4204713.67	3.99258	16.55763	1.66E-02	1.72E-03	1.8333E-02	Non-res
609638.18	4204872.74	3.98254	8.26491	1.66E-02	8.58E-04	1.7429E-02	FENCEGRD
610086.19	4205057.55	3.97192	1.62474	1.65E-02	1.69E-04	1.6696E-02	FENCEGRD
609630.17	4204603.89	3.96539	4.12223	1.65E-02	4.28E-04	1.6928E-02	FENCEGRD
609638.49	4204887.23	3.93701	7.05272	1.64E-02	7.33E-04	1.7114E-02	FENCEGRD
609654.35	4204959.37	3.88226	3.63250	1.62E-02	3.77E-04	1.6531E-02	FENCEGRD
610052.81	4204749.60	3.87930	1.87517	1.61E-02	1.95E-04	1.6336E-02	Planned
610124.79	4204838.91	3.86089	1.80572	1.61E-02	1.88E-04	1.6252E-02	Planned
610078.78	4205070.51	3.85038	1.57854	1.60E-02	1.64E-04	1.6185E-02	FENCEGRD
609638.81	4204901.72	3.83549	6.08796	1.60E-02	6.32E-04	1.6591E-02	FENCEGRD
610110.50	4204813.54	3.82405	1.80959	1.59E-02	1.88E-04	1.6099E-02	Planned
610139.09	4204864.28	3.81437	1.77003	1.59E-02	1.84E-04	1.6055E-02	Planned
609847.46	4205124.46	3.76171	1.37519	1.57E-02	1.43E-04	1.5795E-02	Planned
609622.01	4204786.11	3.75964	36.62302	1.56E-02	3.80E-03	1.9447E-02	FENCEGRD
609612.02	4204622.13	3.74660	4.75135	1.56E-02	4.94E-04	1.6083E-02	FENCEGRD
609622.33	4204800.60	3.72376	24.66027	1.55E-02	2.56E-03	1.8056E-02	FENCEGRD
610071.37	4205083.46	3.71166	1.52719	1.54E-02	1.59E-04	1.5602E-02	FENCEGRD
609639.12	4204916.21	3.70751	5.28792	1.54E-02	5.49E-04	1.5976E-02	FENCEGRD
609874.47	4205125.64	3.69538	1.38285	1.54E-02	1.44E-04	1.5520E-02	Planned
609669.89	4205017.01	3.68507	2.33340	1.53E-02	2.42E-04	1.5576E-02	Planned
609622.64	4204815.09	3.67319	18.41100	1.53E-02	1.91E-03	1.7196E-02	FENCEGRD
609812.67	4205124.92	3.67263	1.34058	1.53E-02	1.39E-04	1.5421E-02	Planned
610096.20	4204788.18	3.67238	1.77386	1.53E-02	1.84E-04	1.5465E-02	Planned
609654.66	4204973.86	3.62944	3.22149	1.51E-02	3.35E-04	1.5436E-02	FENCEGRD
609606.82	4204635.12	3.62157	5.37082	1.51E-02	5.58E-04	1.5627E-02	Planned
609622.95	4204829.58	3.61532	14.52697	1.50E-02	1.51E-03	1.6552E-02	FENCEGRD
610149.46	4205024.95	3.60585	1.57282	1.50E-02	1.63E-04	1.5167E-02	FENCEGRD
610156.87	4205011.99	3.60054	1.58392	1.50E-02	1.65E-04	1.5146E-02	FENCEGRD
610142.05	4205037.91	3.58850	1.55441	1.49E-02	1.61E-04	1.5093E-02	FENCEGRD
610164.28	4204999.03	3.57204	1.58702	1.49E-02	1.65E-04	1.5028E-02	FENCEGRD
609606.47	4204728.47	3.57152	22.29113	1.49E-02	2.32E-03	1.7176E-02	Non-res
610063.96	4205096.42	3.56366	1.46931	1.48E-02	1.53E-04	1.4981E-02	FENCEGRD
610134.64	4205050.86	3.54963	1.52979	1.48E-02	1.59E-04	1.4929E-02	FENCEGRD
609623.27	4204844.07	3.54847	11.83596	1.48E-02	1.23E-03	1.5994E-02	FENCEGRD
610027.44	4205109.93	3.54789	1.43973	1.48E-02	1.50E-04	1.4912E-02	FENCEGRD
609639.44	4204930.70	3.54491	4.61980	1.48E-02	4.80E-04	1.5230E-02	FENCEGRD
609635.77	4204576.79	3.54460	3.35115	1.47E-02	3.48E-04	1.5097E-02	FENCEGRD
610074.52	4204760.91	3.53625	1.74978	1.47E-02	1.82E-04	1.4896E-02	Planned
610171.68	4204986.07	3.52073	1.58187	1.46E-02	1.64E-04	1.4814E-02	FENCEGRD
609606.79	4204742.96	3.51252	35.67493	1.46E-02	3.71E-03	1.8321E-02	Non-res
610146.50	4204851.32	3.50223	1.66811	1.46E-02	1.73E-04	1.4746E-02	Planned

610127.23	4205063.82	3.48981	1.49931	1.45E-02	1.56E-04	1.4676E-02	FENCEGRD
609699.71	4205074.35	3.47907	1.59685	1.45E-02	1.66E-04	1.4642E-02	Planned
609659.96	4204566.97	3.47891	3.15293	1.45E-02	3.27E-04	1.4803E-02	FENCEGRD
610132.20	4204825.95	3.47574	1.67639	1.45E-02	1.74E-04	1.4636E-02	Planned
609601.63	4204648.10	3.47212	6.12117	1.44E-02	6.36E-04	1.5083E-02	Planned
610160.79	4204876.68	3.46069	1.63649	1.44E-02	1.70E-04	1.4570E-02	Planned
610179.09	4204973.12	3.44572	1.56746	1.43E-02	1.63E-04	1.4500E-02	FENCEGRD
610119.83	4205076.78	3.41061	1.46392	1.42E-02	1.52E-04	1.4343E-02	FENCEGRD
609610.69	4204687.37	3.39559	9.40807	1.41E-02	9.77E-04	1.5106E-02	Non-res
610056.55	4205109.38	3.39349	1.41414	1.41E-02	1.47E-04	1.4267E-02	FENCEGRD
609606.16	4204713.98	3.39109	15.55494	1.41E-02	1.62E-03	1.5726E-02	Non-res
610117.91	4204800.59	3.36092	1.65212	1.40E-02	1.72E-04	1.4156E-02	Planned
609684.15	4204557.16	3.34729	2.85818	1.39E-02	2.97E-04	1.4225E-02	Planned
609639.75	4204945.19	3.34413	4.06066	1.39E-02	4.22E-04	1.4336E-02	FENCEGRD
609654.98	4204988.34	3.33990	2.86878	1.39E-02	2.98E-04	1.4195E-02	FENCEGRD
610020.03	4205122.89	3.33179	1.37582	1.39E-02	1.43E-04	1.4006E-02	FENCEGRD
610112.42	4205089.74	3.31204	1.42651	1.38E-02	1.48E-04	1.3929E-02	FENCEGRD
609611.59	4204586.61	3.31144	3.55391	1.38E-02	3.69E-04	1.4148E-02	FENCEGRD
610096.22	4204773.73	3.28413	1.64771	1.37E-02	1.71E-04	1.3836E-02	Planned
610052.82	4204735.84	3.26417	1.68806	1.36E-02	1.75E-04	1.3757E-02	Planned
609685.11	4205060.17	3.23126	1.72697	1.34E-02	1.79E-04	1.3624E-02	Planned
609596.43	4204661.08	3.21496	7.04204	1.34E-02	7.31E-04	1.4109E-02	Planned
609670.20	4205031.50	3.20674	2.10045	1.33E-02	2.18E-04	1.3561E-02	Planned
610049.14	4205122.34	3.20629	1.35950	1.33E-02	1.41E-04	1.3482E-02	FENCEGRD
610105.01	4205102.70	3.19750	1.38464	1.33E-02	1.44E-04	1.3448E-02	FENCEGRD
610168.20	4204863.73	3.19644	1.54801	1.33E-02	1.61E-04	1.3461E-02	Planned
610153.91	4204838.36	3.17872	1.55849	1.32E-02	1.62E-04	1.3388E-02	Planned
609834.38	4205137.33	3.15792	1.27646	1.31E-02	1.33E-04	1.3272E-02	Planned
609640.07	4204959.68	3.14349	3.57831	1.31E-02	3.72E-04	1.3451E-02	FENCEGRD
610183.10	4205044.18	3.11363	1.40948	1.30E-02	1.46E-04	1.3102E-02	FENCEGRD
609866.91	4205140.92	3.11212	1.27936	1.29E-02	1.33E-04	1.3082E-02	Planned
610012.62	4205135.85	3.11140	1.31098	1.29E-02	1.36E-04	1.3082E-02	FENCEGRD
610190.51	4205031.22	3.10851	1.41706	1.29E-02	1.47E-04	1.3081E-02	FENCEGRD
610175.69	4205057.14	3.10356	1.39713	1.29E-02	1.45E-04	1.3059E-02	FENCEGRD
610139.61	4204812.99	3.08980	1.54294	1.29E-02	1.60E-04	1.3017E-02	Planned
610197.92	4205018.27	3.08757	1.41885	1.28E-02	1.47E-04	1.2994E-02	FENCEGRD
609589.80	4204615.75	3.07836	4.43660	1.28E-02	4.61E-04	1.3270E-02	Planned
610168.28	4205070.10	3.07329	1.37897	1.28E-02	1.43E-04	1.2931E-02	FENCEGRD
610097.60	4205115.65	3.06906	1.33993	1.28E-02	1.39E-04	1.2909E-02	FENCEGRD
610117.92	4204786.43	3.05336	1.54981	1.27E-02	1.61E-04	1.2866E-02	Planned
610205.33	4205005.31	3.04807	1.41377	1.27E-02	1.47E-04	1.2830E-02	FENCEGRD
609655.29	4205002.83	3.03543	2.56089	1.26E-02	2.66E-04	1.2896E-02	FENCEGRD
610160.87	4205083.06	3.02438	1.35610	1.26E-02	1.41E-04	1.2725E-02	FENCEGRD
610074.53	4204746.04	3.02059	1.58235	1.26E-02	1.64E-04	1.2733E-02	Planned
610041.74	4205135.30	3.02030	1.30012	1.26E-02	1.35E-04	1.2702E-02	FENCEGRD
610212.73	4204992.35	2.98920	1.40122	1.24E-02	1.46E-04	1.2583E-02	FENCEGRD
610153.47	4205096.01	2.95855	1.32812	1.23E-02	1.38E-04	1.2448E-02	FENCEGRD
609805.26	4205137.88	2.94909	1.24227	1.23E-02	1.29E-04	1.2400E-02	Planned
609640.38	4204974.17	2.93283	3.16300	1.22E-02	3.29E-04	1.2532E-02	FENCEGRD
610090.19	4205128.61	2.93008	1.29236	1.22E-02	1.34E-04	1.2326E-02	FENCEGRD
610175.61	4204850.77	2.92364	1.45293	1.22E-02	1.51E-04	1.2316E-02	Planned
610220.14	4204979.39	2.91201	1.38138	1.21E-02	1.43E-04	1.2260E-02	FENCEGRD
609645.26	4204548.11	2.90448	2.75163	1.21E-02	2.86E-04	1.2371E-02	Planned
609632.57	4204553.27	2.89853	2.86720	1.21E-02	2.98E-04	1.2358E-02	Planned
609657.96	4204542.96	2.89526	2.62398	1.20E-02	2.73E-04	1.2319E-02	Planned
610005.22	4205148.80	2.88858	1.24639	1.20E-02	1.29E-04	1.2149E-02	FENCEGRD
609591.24	4204674.06	2.88819	7.80392	1.20E-02	8.11E-04	1.2828E-02	Planned
609619.87	4204558.42	2.88324	2.96063	1.20E-02	3.08E-04	1.2304E-02	Planned
609580.10	4204639.99	2.88126	5.50562	1.20E-02	5.72E-04	1.2561E-02	Planned
610096.23	4204759.28	2.87971	1.51316	1.20E-02	1.57E-04	1.2139E-02	Planned
610146.06	4205108.97	2.87609	1.29767	1.20E-02	1.35E-04	1.2102E-02	FENCEGRD
609670.66	4204537.81	2.85435	2.48516	1.19E-02	2.58E-04	1.2135E-02	Planned
610161.31	4204825.40	2.85378	1.44431	1.19E-02	1.50E-04	1.2024E-02	Planned
610034.33	4205148.25	2.83382	1.23903	1.18E-02	1.29E-04	1.1920E-02	FENCEGRD
609607.17	4204563.57	2.82627	3.04879	1.18E-02	3.17E-04	1.2077E-02	FENCEGRD
610139.63	4204798.13	2.82387	1.45249	1.17E-02	1.51E-04	1.1901E-02	Planned
609609.93	4204887.85	2.82239	7.02967	1.17E-02	7.30E-04	1.2474E-02	FENCEGRD
610227.55	4204966.43	2.81710	1.35396	1.17E-02	1.41E-04	1.1862E-02	FENCEGRD
609683.36	4204532.65	2.78823	2.33631	1.16E-02	2.43E-04	1.1844E-02	Planned
610082.78	4205141.57	2.78381	1.24241	1.16E-02	1.29E-04	1.1712E-02	FENCEGRD
610138.65	4205121.93	2.78171	1.26223	1.16E-02	1.31E-04	1.1706E-02	FENCEGRD
609856.08	4205149.74	2.78133	1.21605	1.16E-02	1.26E-04	1.1699E-02	Planned
610117.94	4204772.27	2.72857	1.43985	1.14E-02	1.50E-04	1.1503E-02	Planned
609594.47	4204568.73	2.72827	3.13983	1.14E-02	3.26E-04	1.1678E-02	Planned
609670.52	4205045.99	2.72622	1.89547	1.13E-02	1.97E-04	1.1540E-02	FENCEGRD
610216.74	4205063.41	2.72525	1.27627	1.13E-02	1.33E-04	1.1472E-02	FENCEGRD
610224.15	4205050.46	2.72187	1.28134	1.13E-02	1.33E-04	1.1459E-02	FENCEGRD
610209.33	4205076.37	2.71391	1.26704	1.13E-02	1.32E-04	1.1424E-02	FENCEGRD
609610.24	4204902.34	2.71062	6.02265	1.13E-02	6.26E-04	1.1904E-02	FENCEGRD

609655.60	4205017.32	2.70981	2.29388	1.13E-02	2.38E-04	1.1514E-02	FENCEGRD
610234.96	4204953.47	2.70636	1.31925	1.13E-02	1.37E-04	1.1398E-02	FENCEGRD
609581.79	4204743.50	2.70502	30.74557	1.13E-02	3.19E-03	1.4449E-02	Non-res
610231.56	4205037.50	2.70378	1.28148	1.13E-02	1.33E-04	1.1383E-02	FENCEGRD
609640.69	4204988.65	2.69408	2.80941	1.12E-02	2.92E-04	1.1502E-02	FENCEGRD
609581.48	4204729.01	2.69147	19.98145	1.12E-02	2.08E-03	1.3274E-02	Non-res
609829.06	4205148.56	2.69078	1.19859	1.12E-02	1.24E-04	1.1321E-02	Planned
610201.92	4205089.33	2.68658	1.25339	1.12E-02	1.30E-04	1.1309E-02	FENCEGRD
610131.24	4205134.89	2.67379	1.22519	1.11E-02	1.27E-04	1.1253E-02	FENCEGRD
610052.84	4204722.07	2.67187	1.50290	1.11E-02	1.56E-04	1.1274E-02	Planned
610238.97	4205024.54	2.67006	1.27559	1.11E-02	1.32E-04	1.1242E-02	FENCEGRD
609997.81	4205161.76	2.66769	1.18223	1.11E-02	1.23E-04	1.1223E-02	FENCEGRD
609968.70	4205162.31	2.66671	1.18155	1.11E-02	1.23E-04	1.1219E-02	FENCEGRD
610183.02	4204837.81	2.64923	1.35378	1.10E-02	1.41E-04	1.1164E-02	Planned
610194.51	4205102.29	2.64239	1.23632	1.10E-02	1.28E-04	1.1123E-02	FENCEGRD
610026.92	4205161.21	2.63896	1.18009	1.10E-02	1.23E-04	1.1103E-02	FENCEGRD
610161.33	4204810.83	2.63495	1.36959	1.10E-02	1.42E-04	1.1106E-02	Planned
610075.38	4205154.53	2.62951	1.19196	1.09E-02	1.24E-04	1.1065E-02	FENCEGRD
610246.37	4205011.58	2.62107	1.26361	1.09E-02	1.31E-04	1.1037E-02	FENCEGRD
609586.04	4204687.05	2.61432	7.99109	1.09E-02	8.30E-04	1.1708E-02	Non-res
609581.16	4204714.52	2.60990	13.57834	1.09E-02	1.41E-03	1.2270E-02	Non-res
609582.74	4204786.97	2.60100	42.68416	1.08E-02	4.43E-03	1.5256E-02	FENCEGRD
609610.56	4204916.83	2.59011	5.19349	1.08E-02	5.39E-04	1.1317E-02	FENCEGRD
610187.11	4205115.25	2.58454	1.21412	1.08E-02	1.26E-04	1.0880E-02	FENCEGRD
609583.05	4204801.46	2.58228	27.32602	1.07E-02	2.84E-03	1.3583E-02	FENCEGRD
610242.37	4204940.52	2.58227	1.27843	1.07E-02	1.33E-04	1.0877E-02	FENCEGRD
610123.83	4205147.85	2.55847	1.18474	1.06E-02	1.23E-04	1.0769E-02	FENCEGRD
610253.78	4204998.62	2.55736	1.24553	1.06E-02	1.29E-04	1.0770E-02	FENCEGRD
609576.68	4204586.60	2.54903	3.55723	1.06E-02	3.69E-04	1.0976E-02	Planned
610139.64	4204783.27	2.54222	1.35462	1.06E-02	1.41E-04	1.0719E-02	Planned
610179.70	4205128.20	2.52169	1.18728	1.05E-02	1.23E-04	1.0616E-02	FENCEGRD
610074.55	4204731.18	2.51298	1.41446	1.05E-02	1.47E-04	1.0603E-02	Planned
609685.43	4205074.66	2.50515	1.57201	1.04E-02	1.63E-04	1.0587E-02	Planned
609566.50	4204612.05	2.50466	4.27651	1.04E-02	4.44E-04	1.0866E-02	Planned
609580.85	4204700.03	2.50320	9.37733	1.04E-02	9.74E-04	1.1390E-02	Non-res
609583.36	4204815.95	2.49510	20.05193	1.04E-02	2.08E-03	1.2465E-02	FENCEGRD
609561.41	4204624.77	2.48275	4.70894	1.03E-02	4.89E-04	1.0820E-02	Planned
610261.19	4204985.67	2.47752	1.22008	1.03E-02	1.27E-04	1.0435E-02	FENCEGRD
610096.25	4204744.83	2.47400	1.37510	1.03E-02	1.43E-04	1.0437E-02	Planned
610183.03	4204823.47	2.46843	1.29135	1.03E-02	1.34E-04	1.0405E-02	Planned
610067.97	4205167.49	2.46834	1.14175	1.03E-02	1.19E-04	1.0389E-02	FENCEGRD
609655.92	4205031.81	2.46561	2.05919	1.03E-02	2.14E-04	1.0473E-02	FENCEGRD
609630.02	4204529.47	2.46523	2.42430	1.03E-02	2.52E-04	1.0509E-02	Planned
609643.21	4204524.12	2.46382	2.31029	1.03E-02	2.40E-04	1.0492E-02	Planned
609570.40	4204664.22	2.45659	6.83665	1.02E-02	7.10E-04	1.0932E-02	Planned
609610.87	4204931.32	2.45658	4.50653	1.02E-02	4.68E-04	1.0690E-02	FENCEGRD
609700.02	4205088.84	2.45646	1.46043	1.02E-02	1.52E-04	1.0373E-02	Planned
609656.40	4204518.77	2.45100	2.19337	1.02E-02	2.28E-04	1.0426E-02	Planned
610019.51	4205174.17	2.44834	1.12101	1.02E-02	1.16E-04	1.0304E-02	FENCEGRD
609641.01	4205003.14	2.44791	2.50263	1.02E-02	2.60E-04	1.0445E-02	FENCEGRD
610249.78	4204927.56	2.44683	1.23109	1.02E-02	1.28E-04	1.0309E-02	FENCEGRD
609616.82	4204534.83	2.44614	2.53170	1.02E-02	2.63E-04	1.0441E-02	Planned
609990.40	4205174.72	2.44479	1.12059	1.02E-02	1.16E-04	1.0289E-02	FENCEGRD
610172.29	4205141.16	2.43789	1.15713	1.01E-02	1.20E-04	1.0264E-02	FENCEGRD
610116.42	4205160.80	2.43519	1.14283	1.01E-02	1.19E-04	1.0251E-02	FENCEGRD
609583.68	4204830.43	2.42857	15.43495	1.01E-02	1.60E-03	1.1708E-02	FENCEGRD
609961.29	4205175.27	2.42059	1.11522	1.01E-02	1.16E-04	1.0188E-02	FENCEGRD
609669.60	4204513.41	2.41230	2.06904	1.00E-02	2.15E-04	1.0252E-02	Planned
610250.38	4205082.65	2.40594	1.16552	1.00E-02	1.21E-04	1.0132E-02	FENCEGRD
609603.63	4204540.18	2.40443	2.62919	1.00E-02	2.73E-04	1.0278E-02	Planned
610257.79	4205069.69	2.40416	1.16928	1.00E-02	1.21E-04	1.0125E-02	FENCEGRD
610161.34	4204796.26	2.40325	1.28811	1.00E-02	1.34E-04	1.0133E-02	Planned
610117.95	4204758.12	2.39647	1.32585	9.97E-03	1.38E-04	1.0109E-02	Planned
610242.97	4205095.60	2.39410	1.15773	9.96E-03	1.20E-04	1.0082E-02	FENCEGRD
610265.20	4205056.73	2.38931	1.16823	9.94E-03	1.21E-04	1.0063E-02	FENCEGRD
610268.60	4204972.71	2.38854	1.19079	9.94E-03	1.24E-04	1.0062E-02	FENCEGRD
609787.98	4205146.62	2.38200	1.16395	9.91E-03	1.21E-04	1.0032E-02	Planned
610235.56	4205108.56	2.37050	1.14522	9.86E-03	1.19E-04	9.9824E-03	FENCEGRD
610272.61	4205043.77	2.35726	1.16107	9.81E-03	1.21E-04	9.9289E-03	FENCEGRD
610164.88	4205154.12	2.34902	1.12490	9.77E-03	1.17E-04	9.8909E-03	FENCEGRD
609682.79	4204508.06	2.34166	1.93170	9.74E-03	2.01E-04	9.9441E-03	Planned
609590.44	4204545.54	2.34096	2.72122	9.74E-03	2.83E-04	1.0023E-02	Planned
609583.99	4204844.92	2.33771	12.37642	9.73E-03	1.29E-03	1.1012E-02	FENCEGRD
610228.16	4205121.52	2.33523	1.12873	9.72E-03	1.17E-04	9.8339E-03	FENCEGRD
610280.01	4205030.81	2.31768	1.14772	9.64E-03	1.19E-04	9.7629E-03	FENCEGRD
610060.56	4205180.45	2.30962	1.08985	9.61E-03	1.13E-04	9.7233E-03	FENCEGRD
609611.19	4204945.81	2.30615	3.93588	9.60E-03	4.09E-04	1.0004E-02	FENCEGRD
610257.18	4204914.60	2.30310	1.17933	9.58E-03	1.22E-04	9.7055E-03	FENCEGRD
610109.02	4205173.76	2.30130	1.10132	9.58E-03	1.14E-04	9.6899E-03	FENCEGRD

609848.51	4205165.02	2.29159	1.11863	9.54E-03	1.16E-04	9.6513E-03	Planned
610276.01	4204959.75	2.28924	1.15662	9.53E-03	1.20E-04	9.6454E-03	FENCEGRD
610220.75	4205134.48	2.28364	1.10789	9.50E-03	1.15E-04	9.6171E-03	FENCEGRD
610183.05	4204809.13	2.27185	1.22359	9.45E-03	1.27E-04	9.5800E-03	Planned
609641.32	4205017.63	2.27043	2.23596	9.45E-03	2.32E-04	9.6793E-03	FENCEGRD
609577.24	4204550.89	2.26537	2.80767	9.43E-03	2.92E-04	9.7176E-03	Planned
610287.42	4205017.86	2.26221	1.12879	9.41E-03	1.17E-04	9.5301E-03	FENCEGRD
609670.83	4205060.48	2.25959	1.71691	9.40E-03	1.78E-04	9.5803E-03	FENCEGRD
610157.47	4205167.08	2.25460	1.08956	9.38E-03	1.13E-04	9.4943E-03	FENCEGRD
610139.66	4204768.40	2.25151	1.25196	9.37E-03	1.30E-04	9.4984E-03	Planned
610012.10	4205187.13	2.24976	1.06385	9.36E-03	1.10E-04	9.4715E-03	FENCEGRD
609584.31	4204859.41	2.23769	10.15261	9.31E-03	1.05E-03	1.0365E-02	FENCEGRD
610213.34	4205147.44	2.22769	1.08484	9.27E-03	1.13E-04	9.3819E-03	FENCEGRD
609982.99	4205187.68	2.22658	1.06003	9.26E-03	1.10E-04	9.3747E-03	FENCEGRD
609558.76	4204569.47	2.19850	3.13773	9.15E-03	3.26E-04	9.4737E-03	Planned
609551.23	4204650.22	2.19847	5.90590	9.15E-03	6.13E-04	9.7611E-03	Planned
610294.83	4205004.90	2.19840	1.10789	9.15E-03	1.15E-04	9.2624E-03	FENCEGRD
609553.47	4204582.68	2.19608	3.41663	9.14E-03	3.55E-04	9.4926E-03	Planned
609809.68	4205159.03	2.18688	1.11411	9.10E-03	1.16E-04	9.2151E-03	Planned
609584.62	4204873.90	2.18108	8.37025	9.08E-03	8.69E-04	9.9447E-03	FENCEGRD
609548.18	4204595.90	2.18061	3.73229	9.07E-03	3.88E-04	9.4610E-03	Planned
609953.88	4205188.23	2.17999	1.05144	9.07E-03	1.09E-04	9.1799E-03	FENCEGRD
610283.42	4204946.79	2.17985	1.11708	9.07E-03	1.16E-04	9.1862E-03	FENCEGRD
610161.36	4204781.69	2.16477	1.20167	9.01E-03	1.25E-04	9.1322E-03	Planned
610101.61	4205186.72	2.16455	1.05838	9.01E-03	1.10E-04	9.1164E-03	FENCEGRD
610205.93	4205160.40	2.16161	1.05981	8.99E-03	1.10E-04	9.1043E-03	FENCEGRD
610150.06	4205180.04	2.15581	1.05171	8.97E-03	1.09E-04	9.0794E-03	FENCEGRD
610264.59	4204901.64	2.15302	1.12400	8.96E-03	1.17E-04	9.0753E-03	FENCEGRD
609542.89	4204609.12	2.15161	4.09366	8.95E-03	4.25E-04	9.3778E-03	Planned
609611.50	4204960.30	2.15129	3.45257	8.95E-03	3.59E-04	9.3099E-03	FENCEGRD
610053.15	4205193.40	2.14486	1.04006	8.92E-03	1.08E-04	9.0326E-03	FENCEGRD
610052.85	4204708.31	2.14334	1.32737	8.92E-03	1.38E-04	9.0561E-03	Planned
609634.24	4204502.93	2.13684	2.02054	8.89E-03	2.10E-04	9.1011E-03	Planned
610284.02	4205101.88	2.13337	1.06419	8.88E-03	1.11E-04	8.9873E-03	FENCEGRD
610204.75	4204820.49	2.13189	1.15599	8.87E-03	1.20E-04	8.9907E-03	Planned
610291.43	4205088.92	2.13153	1.06735	8.87E-03	1.11E-04	8.9800E-03	FENCEGRD
609656.23	4205046.30	2.13001	1.85372	8.86E-03	1.93E-04	9.0553E-03	FENCEGRD
609621.68	4204508.03	2.12959	2.11147	8.86E-03	2.19E-04	9.0803E-03	Planned
609646.80	4204497.84	2.12931	1.92622	8.86E-03	2.00E-04	9.0599E-03	Planned
610302.24	4204991.94	2.12793	1.08422	8.85E-03	1.13E-04	8.9667E-03	FENCEGRD
610276.61	4205114.84	2.12497	1.05693	8.84E-03	1.10E-04	8.9516E-03	FENCEGRD
609584.94	4204888.39	2.12072	6.99335	8.82E-03	7.26E-04	9.5505E-03	FENCEGRD
610298.84	4205075.96	2.11955	1.06606	8.82E-03	1.11E-04	8.9300E-03	FENCEGRD
609609.12	4204513.13	2.11131	2.20092	8.78E-03	2.29E-04	9.0136E-03	Planned
609557.11	4204758.53	2.10861	44.96908	8.77E-03	4.67E-03	1.3445E-02	Non-res
610269.20	4205127.80	2.10570	1.04632	8.76E-03	1.09E-04	8.8703E-03	FENCEGRD
609659.36	4204492.74	2.09949	1.82463	8.74E-03	1.90E-04	8.9253E-03	Planned
610306.25	4205063.01	2.09784	1.05976	8.73E-03	1.10E-04	8.8390E-03	FENCEGRD
609537.60	4204622.34	2.09316	4.52353	8.71E-03	4.70E-04	9.1793E-03	Planned
609556.80	4204744.04	2.09089	26.10356	8.70E-03	2.71E-03	1.1411E-02	Non-res
610198.52	4205173.35	2.08816	1.03214	8.69E-03	1.07E-04	8.7958E-03	FENCEGRD
610096.26	4204730.38	2.08322	1.23862	8.67E-03	1.29E-04	8.7967E-03	Planned
609560.70	4204688.46	2.07847	7.20409	8.65E-03	7.48E-04	9.3966E-03	Non-res
610261.80	4205140.75	2.07604	1.03271	8.64E-03	1.07E-04	8.7455E-03	FENCEGRD
609596.57	4204518.22	2.07592	2.28406	8.64E-03	2.37E-04	8.8749E-03	Planned
610117.96	4204743.96	2.07275	1.21034	8.62E-03	1.26E-04	8.7502E-03	Planned
610183.06	4204794.79	2.06968	1.15081	8.61E-03	1.20E-04	8.7313E-03	Planned
609556.48	4204729.55	2.06523	16.54877	8.59E-03	1.72E-03	1.0312E-02	Non-res
610290.82	4204933.83	2.06403	1.07381	8.59E-03	1.12E-04	8.6998E-03	FENCEGRD
610313.65	4205050.05	2.06240	1.04802	8.58E-03	1.09E-04	8.6903E-03	FENCEGRD
610004.69	4205200.09	2.05423	1.00827	8.55E-03	1.05E-04	8.6522E-03	FENCEGRD
609558.06	4204802.00	2.05346	29.90282	8.54E-03	3.11E-03	1.1650E-02	FENCEGRD
610142.66	4205192.99	2.04643	1.01512	8.52E-03	1.05E-04	8.6204E-03	FENCEGRD
610309.65	4204978.98	2.04637	1.05526	8.51E-03	1.10E-04	8.6244E-03	FENCEGRD
609556.17	4204715.06	2.04070	11.39342	8.49E-03	1.18E-03	9.6746E-03	Non-res
610074.56	4204716.32	2.03874	1.25316	8.48E-03	1.30E-04	8.6132E-03	Planned
609585.25	4204902.88	2.03670	5.92838	8.47E-03	6.16E-04	9.0903E-03	FENCEGRD
609671.92	4204487.64	2.03635	1.70434	8.47E-03	1.77E-04	8.6501E-03	Planned
610254.39	4205153.71	2.03037	1.01580	8.45E-03	1.06E-04	8.5537E-03	FENCEGRD
609584.01	4204523.32	2.02953	2.36512	8.44E-03	2.46E-04	8.6903E-03	Planned
609831.39	4205171.44	2.02587	1.06591	8.43E-03	1.11E-04	8.5402E-03	Planned
610094.20	4205199.68	2.02466	1.01516	8.42E-03	1.05E-04	8.5299E-03	FENCEGRD
610321.06	4205037.09	2.01511	1.02887	8.38E-03	1.07E-04	8.4915E-03	FENCEGRD
609975.58	4205200.64	2.01152	1.00230	8.37E-03	1.04E-04	8.4739E-03	FENCEGRD
610191.11	4205186.31	2.00854	1.00213	8.36E-03	1.04E-04	8.4614E-03	FENCEGRD
610272.00	4204888.68	1.99947	1.06571	8.32E-03	1.11E-04	8.4303E-03	FENCEGRD
609558.37	4204816.49	1.98719	21.06085	8.27E-03	2.19E-03	1.0456E-02	FENCEGRD
610045.74	4205206.36	1.98695	0.98962	8.27E-03	1.03E-04	8.3703E-03	FENCEGRD
610246.98	4205166.67	1.98279	0.99673	8.25E-03	1.04E-04	8.3537E-03	FENCEGRD

609571.45	4204528.42	1.97868	2.44298	8.23E-03	2.54E-04	8.4868E-03	Planned
610328.47	4205024.13	1.96426	1.01153	8.17E-03	1.05E-04	8.2782E-03	FENCEGRD
610139.67	4204753.54	1.96272	1.14752	8.17E-03	1.19E-04	8.2859E-03	Planned
609684.48	4204482.55	1.96153	1.57658	8.16E-03	1.64E-04	8.3255E-03	Planned
610317.06	4204966.02	1.95685	1.02204	8.14E-03	1.06E-04	8.2484E-03	FENCEGRD
609532.31	4204635.56	1.95572	5.06975	8.14E-03	5.27E-04	8.6641E-03	Planned
610204.77	4204805.63	1.95081	1.09041	8.12E-03	1.13E-04	8.2304E-03	Planned
609946.47	4205201.19	1.94517	0.99069	8.09E-03	1.03E-04	8.1966E-03	FENCEGRD
610298.23	4204920.88	1.94327	1.02779	8.09E-03	1.07E-04	8.1925E-03	FENCEGRD
609685.74	4205089.15	1.93924	1.43334	8.07E-03	1.49E-04	8.2179E-03	Planned
610135.25	4205205.95	1.93211	0.97796	8.04E-03	1.02E-04	8.1409E-03	FENCEGRD
609585.56	4204917.37	1.92913	5.08707	8.03E-03	5.28E-04	8.5553E-03	FENCEGRD
610239.57	4205179.63	1.92839	0.97463	8.02E-03	1.01E-04	8.1251E-03	FENCEGRD
610161.37	4204767.11	1.92257	1.11290	8.00E-03	1.16E-04	8.1152E-03	Planned
609558.89	4204533.52	1.92205	2.51775	8.00E-03	2.62E-04	8.2590E-03	Planned
609531.22	4204576.36	1.92145	3.23387	7.99E-03	3.36E-04	8.3309E-03	Planned
610183.70	4205199.27	1.91937	0.97241	7.99E-03	1.01E-04	8.0873E-03	FENCEGRD
609558.68	4204830.98	1.91814	15.89457	7.98E-03	1.65E-03	9.6321E-03	FENCEGRD
609541.30	4204551.20	1.90691	2.78340	7.93E-03	2.89E-04	8.2236E-03	Planned
610335.88	4205011.17	1.90631	0.99110	7.93E-03	1.03E-04	8.0349E-03	FENCEGRD
610317.66	4205121.11	1.90077	0.96999	7.91E-03	1.01E-04	8.0097E-03	Planned
610325.07	4205108.15	1.90004	0.97164	7.91E-03	1.01E-04	8.0068E-03	Planned
610310.25	4205134.07	1.89268	0.96514	7.88E-03	1.00E-04	7.9755E-03	Planned
609700.34	4205103.33	1.89098	1.33601	7.87E-03	1.39E-04	8.0070E-03	Planned
610332.48	4205095.20	1.88849	0.96856	7.86E-03	1.01E-04	7.9584E-03	FENCEGRD
610086.79	4205212.64	1.88498	0.97158	7.84E-03	1.01E-04	7.9441E-03	FENCEGRD
610302.84	4205147.03	1.87592	0.95733	7.81E-03	9.94E-05	7.9050E-03	Planned
610339.89	4205082.24	1.86979	0.96340	7.78E-03	1.00E-04	7.8801E-03	FENCEGRD
609606.35	4204489.43	1.86879	1.90714	7.78E-03	1.98E-04	7.9739E-03	Planned
610183.08	4204780.44	1.86759	1.07447	7.77E-03	1.12E-04	7.8825E-03	Planned
609619.31	4204484.17	1.86743	1.82135	7.77E-03	1.89E-04	7.9594E-03	Planned
610232.16	4205192.59	1.86594	0.95133	7.76E-03	9.88E-05	7.8628E-03	FENCEGRD
609997.29	4205213.04	1.86548	0.95502	7.76E-03	9.92E-05	7.8613E-03	FENCEGRD
609521.15	4204601.53	1.86341	3.81623	7.75E-03	3.96E-04	8.1499E-03	Planned
610324.46	4204953.07	1.86145	0.98583	7.75E-03	1.02E-04	7.8477E-03	FENCEGRD
609671.14	4205074.97	1.85983	1.55781	7.74E-03	1.62E-04	7.9004E-03	FENCEGRD
609780.57	4205159.58	1.85685	1.07555	7.73E-03	1.12E-04	7.8379E-03	Planned
609632.27	4204478.91	1.85373	1.73065	7.71E-03	1.80E-04	7.8930E-03	Planned
610295.44	4205159.99	1.85072	0.94667	7.70E-03	9.83E-05	7.7990E-03	Planned
609593.40	4204494.68	1.84613	1.98484	7.68E-03	2.06E-04	7.8877E-03	Planned
610347.29	4205069.28	1.84292	0.95495	7.67E-03	9.92E-05	7.7674E-03	FENCEGRD
610343.29	4204998.22	1.83938	0.96645	7.65E-03	1.00E-04	7.7539E-03	FENCEGRD
609612.13	4204989.27	1.83878	2.68795	7.65E-03	2.79E-04	7.9302E-03	FENCEGRD
609804.37	4205170.26	1.83345	1.04393	7.63E-03	1.08E-04	7.7372E-03	Planned
609541.04	4204675.67	1.82832	6.39123	7.61E-03	6.64E-04	8.2713E-03	FENCEGRD
609559.00	4204845.47	1.82774	12.57855	7.61E-03	1.31E-03	8.9116E-03	FENCEGRD
610038.33	4205219.32	1.82724	0.94127	7.60E-03	9.78E-05	7.7007E-03	FENCEGRD
610176.30	4205212.23	1.82654	0.94086	7.60E-03	9.77E-05	7.6978E-03	FENCEGRD
609645.23	4204473.65	1.82108	1.62994	7.58E-03	1.69E-04	7.7466E-03	Planned
610305.64	4204907.92	1.81816	0.97962	7.57E-03	1.02E-04	7.6669E-03	FENCEGRD
610288.03	4205172.94	1.81750	0.93356	7.56E-03	9.70E-05	7.6594E-03	Planned
609580.44	4204499.94	1.81593	2.06122	7.56E-03	2.14E-04	7.7700E-03	Planned
610127.84	4205218.91	1.81504	0.94032	7.55E-03	9.77E-05	7.6499E-03	FENCEGRD
609656.55	4205060.79	1.81285	1.67634	7.54E-03	1.74E-04	7.7172E-03	FENCEGRD
609527.03	4204648.78	1.80795	5.63657	7.52E-03	5.85E-04	8.1082E-03	Planned
609968.17	4205213.59	1.80686	0.94632	7.52E-03	9.83E-05	7.6165E-03	FENCEGRD
610354.70	4205056.32	1.80542	0.94223	7.51E-03	9.79E-05	7.6100E-03	FENCEGRD
609585.88	4204931.86	1.80455	4.40666	7.51E-03	4.58E-04	7.9663E-03	FENCEGRD
610224.75	4205205.54	1.79648	0.92682	7.47E-03	9.63E-05	7.5713E-03	FENCEGRD
609658.18	4204468.39	1.77822	1.52483	7.40E-03	1.58E-04	7.5574E-03	Planned
610280.62	4205185.90	1.77713	0.91765	7.39E-03	9.53E-05	7.4898E-03	FENCEGRD
609567.48	4204505.20	1.77452	2.13316	7.38E-03	2.22E-04	7.6052E-03	Planned
610117.98	4204729.81	1.76738	1.09692	7.35E-03	1.14E-04	7.4678E-03	Planned
610350.70	4204985.26	1.76621	0.93997	7.35E-03	9.76E-05	7.4467E-03	FENCEGRD
610204.78	4204790.77	1.76570	1.02175	7.35E-03	1.06E-04	7.4530E-03	Planned
610331.87	4204940.11	1.76078	0.94733	7.33E-03	9.84E-05	7.4248E-03	FENCEGRD
610362.11	4205043.36	1.76071	0.92645	7.33E-03	9.62E-05	7.4224E-03	FENCEGRD
610079.38	4205225.59	1.74474	0.92867	7.26E-03	9.65E-05	7.3562E-03	FENCEGRD
610305.66	4204893.19	1.73546	0.95142	7.22E-03	9.88E-05	7.3199E-03	FENCEGRD
610168.89	4205225.19	1.73096	0.90813	7.20E-03	9.43E-05	7.2967E-03	FENCEGRD
610273.21	4205198.86	1.73081	0.89898	7.20E-03	9.34E-05	7.2951E-03	FENCEGRD
609939.06	4205214.14	1.72594	0.93298	7.18E-03	9.69E-05	7.2784E-03	FENCEGRD
610096.28	4204715.93	1.72495	1.10771	7.18E-03	1.15E-04	7.2924E-03	Planned
609554.52	4204510.46	1.72456	2.20343	7.18E-03	2.29E-04	7.4046E-03	Planned
609671.14	4204463.13	1.72354	1.41412	7.17E-03	1.47E-04	7.3184E-03	Planned
610217.35	4205218.50	1.72197	0.90064	7.16E-03	9.35E-05	7.2585E-03	FENCEGRD
609535.95	4204688.39	1.71686	6.80466	7.14E-03	7.07E-04	7.8505E-03	Non-res
609586.19	4204946.35	1.71629	3.80896	7.14E-03	3.96E-04	7.5369E-03	FENCEGRD
610369.52	4205030.41	1.71522	0.90919	7.14E-03	9.44E-05	7.2313E-03	FENCEGRD

609559.31	4204859.96	1.70628	10.29585	7.10E-03	1.07E-03	8.1691E-03	FENCEGRD
610351.30	4205140.35	1.70451	0.89039	7.09E-03	9.25E-05	7.1848E-03	Planned
610358.71	4205127.39	1.70343	0.89135	7.09E-03	9.26E-05	7.1804E-03	Planned
609511.08	4204626.70	1.69833	4.63654	7.07E-03	4.82E-04	7.5482E-03	Planned
610120.43	4205231.87	1.69833	0.90201	7.07E-03	9.37E-05	7.1603E-03	FENCEGRD
610343.89	4205153.30	1.69814	0.88671	7.07E-03	9.21E-05	7.1579E-03	Planned
610366.12	4205114.43	1.69523	0.88964	7.05E-03	9.24E-05	7.1461E-03	Planned
609532.12	4204759.07	1.69035	39.59735	7.03E-03	4.11E-03	1.1146E-02	Non-res
609513.02	4204559.93	1.68911	2.90114	7.03E-03	3.01E-04	7.3296E-03	Planned
610139.69	4204738.68	1.68720	1.04376	7.02E-03	1.08E-04	7.1287E-03	Planned
610358.10	4204972.30	1.68644	0.90963	7.02E-03	9.45E-05	7.1116E-03	FENCEGRD
609989.88	4205226.00	1.68543	0.90392	7.01E-03	9.39E-05	7.1068E-03	FENCEGRD
610161.39	4204752.54	1.68521	1.02362	7.01E-03	1.06E-04	7.1183E-03	Planned
610336.48	4205166.26	1.68431	0.88032	7.01E-03	9.14E-05	7.0997E-03	Planned
609507.83	4204572.91	1.68256	3.13083	7.00E-03	3.25E-04	7.3262E-03	Planned
609531.18	4204715.60	1.68070	11.04267	6.99E-03	1.15E-03	8.1402E-03	Non-res
610373.53	4205101.47	1.67972	0.88501	6.99E-03	9.19E-05	7.0811E-03	FENCEGRD
609612.44	4205003.76	1.67933	2.38665	6.99E-03	2.48E-04	7.2354E-03	FENCEGRD
610265.80	4205211.82	1.67819	0.87888	6.98E-03	9.13E-05	7.0741E-03	FENCEGRD
610030.93	4205232.28	1.67345	0.89389	6.96E-03	9.28E-05	7.0559E-03	FENCEGRD
609518.22	4204546.94	1.67091	2.69835	6.95E-03	2.80E-04	7.2328E-03	Planned
609541.57	4204515.72	1.66705	2.27259	6.94E-03	2.36E-04	7.1725E-03	Planned
610183.09	4204766.10	1.66640	0.99711	6.93E-03	1.04E-04	7.0373E-03	Planned
610329.08	4205179.22	1.66332	0.87136	6.92E-03	9.05E-05	7.0114E-03	Planned
610376.93	4205017.45	1.66047	0.88815	6.91E-03	9.22E-05	7.0013E-03	FENCEGRD
609684.10	4204457.87	1.65964	1.30395	6.91E-03	1.35E-04	7.0410E-03	Planned
609521.74	4204662.00	1.65857	5.98184	6.90E-03	6.21E-04	7.5225E-03	Planned
610380.93	4205088.51	1.65700	0.87742	6.89E-03	9.11E-05	6.9858E-03	FENCEGRD
609502.63	4204585.89	1.65684	3.39372	6.89E-03	3.52E-04	7.2465E-03	Planned
610339.28	4204927.15	1.65671	0.90611	6.89E-03	9.41E-05	6.9875E-03	FENCEGRD
609531.80	4204744.58	1.65410	22.11971	6.88E-03	2.30E-03	9.1801E-03	Non-res
609823.82	4205186.72	1.64923	0.97657	6.86E-03	1.01E-04	6.9637E-03	Planned
609531.49	4204730.09	1.64865	13.99403	6.86E-03	1.45E-03	8.3134E-03	Non-res
610305.67	4204878.46	1.64611	0.91908	6.85E-03	9.55E-05	6.9448E-03	FENCEGRD
610209.94	4205231.46	1.64290	0.87341	6.84E-03	9.07E-05	6.9267E-03	FENCEGRD
609533.06	4204802.54	1.64188	32.59414	6.83E-03	3.39E-03	1.0217E-02	FENCEGRD
609523.41	4204533.96	1.63853	2.51307	6.82E-03	2.61E-04	7.0788E-03	Planned
610161.48	4205238.14	1.63851	0.87310	6.82E-03	9.07E-05	6.9084E-03	FENCEGRD
610321.67	4205192.18	1.63562	0.86067	6.81E-03	8.94E-05	6.8951E-03	FENCEGRD
610388.34	4205075.55	1.62821	0.86713	6.77E-03	9.01E-05	6.8649E-03	FENCEGRD
610258.39	4205224.78	1.62002	0.85741	6.74E-03	8.91E-05	6.8298E-03	FENCEGRD
609533.38	4204817.03	1.61618	21.53977	6.72E-03	2.24E-03	8.9620E-03	FENCEGRD
609960.77	4205226.55	1.61411	0.89172	6.72E-03	9.26E-05	6.8088E-03	FENCEGRD
609497.44	4204598.88	1.61361	3.70106	6.71E-03	3.84E-04	7.0985E-03	Planned
610071.97	4205238.55	1.61152	0.88509	6.71E-03	9.19E-05	6.7973E-03	FENCEGRD
609559.63	4204874.44	1.60557	8.50335	6.68E-03	8.83E-04	7.5638E-03	FENCEGRD
610365.51	4204959.34	1.60243	0.87624	6.67E-03	9.10E-05	6.7586E-03	FENCEGRD
610314.26	4205205.14	1.60114	0.84773	6.66E-03	8.81E-05	6.7502E-03	FENCEGRD
609604.01	4204465.55	1.60082	1.62090	6.66E-03	1.68E-04	6.8292E-03	Planned
610384.34	4205004.49	1.59994	0.86426	6.66E-03	8.98E-05	6.7470E-03	FENCEGRD
609617.31	4204460.15	1.59944	1.54104	6.66E-03	1.60E-04	6.8152E-03	Planned
609586.51	4204960.84	1.59780	3.32980	6.65E-03	3.46E-04	6.9942E-03	FENCEGRD
609590.71	4204470.95	1.59319	1.69861	6.63E-03	1.76E-04	6.8055E-03	Planned
610339.30	4204912.61	1.59258	0.88174	6.63E-03	9.16E-05	6.7182E-03	FENCEGRD
610395.75	4205062.60	1.59225	0.85377	6.63E-03	8.87E-05	6.7139E-03	FENCEGRD
610204.80	4204775.90	1.58473	0.95079	6.59E-03	9.88E-05	6.6927E-03	Planned
609630.61	4204454.75	1.58284	1.45372	6.59E-03	1.51E-04	6.7370E-03	Planned
609506.05	4204639.28	1.58219	5.12072	6.58E-03	5.32E-04	7.1152E-03	Planned
610113.02	4205244.83	1.58195	0.86378	6.58E-03	8.97E-05	6.6721E-03	FENCEGRD
609516.45	4204675.22	1.57845	6.68348	6.57E-03	6.94E-04	7.2620E-03	Non-res
609577.40	4204476.35	1.56812	1.76716	6.52E-03	1.84E-04	6.7083E-03	Planned
610202.53	4205244.42	1.56267	0.84452	6.50E-03	8.77E-05	6.5898E-03	FENCEGRD
610306.85	4205218.09	1.56114	0.83235	6.50E-03	8.65E-05	6.5822E-03	FENCEGRD
609686.06	4205103.64	1.55920	1.30902	6.49E-03	1.36E-04	6.6236E-03	Planned
610250.99	4205237.73	1.55919	0.83360	6.49E-03	8.66E-05	6.5742E-03	FENCEGRD
609643.92	4204449.35	1.55466	1.36146	6.47E-03	1.41E-04	6.6102E-03	Planned
609533.69	4204831.52	1.55213	15.90374	6.46E-03	1.65E-03	8.1101E-03	FENCEGRD
610305.69	4204863.73	1.55132	0.88339	6.45E-03	9.18E-05	6.5467E-03	FENCEGRD
610403.16	4205049.64	1.55029	0.83740	6.45E-03	8.70E-05	6.5376E-03	FENCEGRD
609492.24	4204611.86	1.54877	4.06949	6.44E-03	4.23E-04	6.8670E-03	Planned
609671.46	4205089.46	1.54464	1.41658	6.43E-03	1.47E-04	6.5742E-03	FENCEGRD
609656.86	4205075.28	1.54344	1.51911	6.42E-03	1.58E-04	6.5799E-03	FENCEGRD
610154.07	4205251.10	1.54290	0.83857	6.42E-03	8.71E-05	6.5070E-03	FENCEGRD
609564.10	4204481.75	1.54246	1.84051	6.42E-03	1.91E-04	6.6092E-03	Planned
610392.35	4205146.62	1.53675	0.82218	6.39E-03	8.54E-05	6.4797E-03	Planned
610384.94	4205159.58	1.53625	0.82102	6.39E-03	8.53E-05	6.4775E-03	Planned
610391.74	4204991.53	1.53570	0.83990	6.39E-03	8.72E-05	6.4771E-03	FENCEGRD
610399.76	4205133.66	1.53078	0.82076	6.37E-03	8.52E-05	6.4547E-03	Planned
609559.94	4204888.93	1.52995	7.06895	6.37E-03	7.34E-04	7.1002E-03	FENCEGRD

610377.53	4205172.54	1.52973	0.81748	6.37E-03	8.49E-05	6.4500E-03	Planned
609931.65	4205227.10	1.52443	0.87791	6.34E-03	9.12E-05	6.4342E-03	FENCEGRD
609612.76	4205018.25	1.52434	2.12689	6.34E-03	2.21E-04	6.5635E-03	FENCEGRD
610339.31	4204898.06	1.52342	0.85431	6.34E-03	8.87E-05	6.4275E-03	FENCEGRD
610023.52	4205245.24	1.52138	0.84848	6.33E-03	8.81E-05	6.4184E-03	FENCEGRD
610407.17	4205120.70	1.51870	0.81682	6.32E-03	8.48E-05	6.4040E-03	Planned
610370.12	4205185.49	1.51830	0.81202	6.32E-03	8.43E-05	6.4018E-03	FENCEGRD
609550.80	4204487.15	1.51744	1.91742	6.31E-03	1.99E-04	6.5131E-03	Planned
610299.44	4205231.05	1.51716	0.81420	6.31E-03	8.46E-05	6.3973E-03	FENCEGRD
609982.47	4205238.96	1.51575	0.85446	6.31E-03	8.88E-05	6.3956E-03	FENCEGRD
610372.92	4204946.38	1.51538	0.84085	6.31E-03	8.73E-05	6.3927E-03	FENCEGRD
609511.16	4204688.44	1.51492	7.82603	6.30E-03	8.13E-04	7.1163E-03	Non-res
609657.22	4204443.95	1.51453	1.26464	6.30E-03	1.31E-04	6.4332E-03	Planned
610410.57	4205036.68	1.50616	0.81984	6.27E-03	8.52E-05	6.3521E-03	FENCEGRD
610362.72	4205198.45	1.50222	0.80538	6.25E-03	8.37E-05	6.3342E-03	FENCEGRD
609537.49	4204492.55	1.50176	1.99820	6.25E-03	2.08E-04	6.4562E-03	Planned
610414.57	4205107.75	1.49998	0.81015	6.24E-03	8.41E-05	6.3254E-03	Planned
610243.58	4205250.69	1.49380	0.80932	6.22E-03	8.41E-05	6.2996E-03	FENCEGRD
609524.19	4204497.95	1.49194	2.06894	6.21E-03	2.15E-04	6.4227E-03	Planned
609560.26	4204903.42	1.49146	5.89246	6.21E-03	6.12E-04	6.8179E-03	FENCEGRD
610195.12	4205257.38	1.48985	0.81168	6.20E-03	8.43E-05	6.2834E-03	FENCEGRD
610117.99	4204715.65	1.48569	0.98877	6.18E-03	1.03E-04	6.2845E-03	Planned
609489.55	4204556.66	1.48484	2.82781	6.18E-03	2.94E-04	6.4720E-03	Planned
610064.57	4205251.51	1.48287	0.84220	6.17E-03	8.75E-05	6.2576E-03	FENCEGRD
609534.00	4204846.01	1.48007	12.36496	6.16E-03	1.28E-03	7.4427E-03	FENCEGRD
610355.31	4205211.41	1.47901	0.79675	6.15E-03	8.28E-05	6.2368E-03	FENCEGRD
609494.89	4204543.33	1.47765	2.63085	6.15E-03	2.73E-04	6.4216E-03	Planned
610421.98	4205094.79	1.47582	0.80109	6.14E-03	8.32E-05	6.2240E-03	FENCEGRD
609484.22	4204569.99	1.47502	3.05105	6.14E-03	3.17E-04	6.4543E-03	Planned
610292.03	4205244.01	1.46856	0.79492	6.11E-03	8.26E-05	6.1931E-03	FENCEGRD
610105.61	4205257.79	1.46826	0.82560	6.11E-03	8.58E-05	6.1950E-03	FENCEGRD
610183.10	4204751.76	1.46796	0.92036	6.11E-03	9.56E-05	6.2036E-03	Planned
610399.15	4204978.57	1.46548	0.81177	6.10E-03	8.43E-05	6.1820E-03	FENCEGRD
609670.52	4204438.56	1.46398	1.16727	6.09E-03	1.21E-04	6.2127E-03	Planned
610161.40	4204737.97	1.46176	0.93563	6.08E-03	9.72E-05	6.1794E-03	Planned
610372.94	4204931.56	1.46174	0.81990	6.08E-03	8.52E-05	6.1673E-03	FENCEGRD
609787.24	4205180.73	1.46041	0.96820	6.08E-03	1.01E-04	6.1772E-03	Planned
609500.22	4204530.00	1.45903	2.45111	6.07E-03	2.55E-04	6.3255E-03	Planned
610417.98	4205023.72	1.45707	0.79980	6.06E-03	8.31E-05	6.1458E-03	FENCEGRD
610305.70	4204848.99	1.45244	0.84507	6.04E-03	8.78E-05	6.1312E-03	FENCEGRD
610347.90	4205224.37	1.44990	0.78493	6.03E-03	8.15E-05	6.1144E-03	FENCEGRD
609765.53	4205168.32	1.44986	1.00859	6.03E-03	1.05E-04	6.1375E-03	Planned
610339.33	4204883.52	1.44783	0.82491	6.02E-03	8.57E-05	6.1100E-03	FENCEGRD
610146.66	4205264.06	1.44715	0.80416	6.02E-03	8.35E-05	6.1050E-03	FENCEGRD
610429.39	4205081.83	1.44699	0.78981	6.02E-03	8.20E-05	6.1028E-03	FENCEGRD
609505.87	4204701.66	1.44668	9.34747	6.02E-03	9.71E-04	6.9904E-03	Non-res
609487.05	4204624.84	1.44573	4.52565	6.02E-03	4.70E-04	6.4856E-03	Planned
609478.89	4204583.32	1.44544	3.31301	6.01E-03	3.44E-04	6.3585E-03	Planned
609505.55	4204516.67	1.44486	2.28393	6.01E-03	2.37E-04	6.2492E-03	Planned
609953.76	4205239.51	1.43648	0.84034	5.98E-03	8.73E-05	6.0643E-03	FENCEGRD
610139.70	4204723.81	1.43133	0.94357	5.96E-03	9.80E-05	6.0536E-03	Planned
610236.17	4205263.65	1.42757	0.78332	5.94E-03	8.14E-05	6.0213E-03	FENCEGRD
609808.94	4205193.14	1.42217	0.92918	5.92E-03	9.65E-05	6.0140E-03	Planned
609506.18	4204716.15	1.42178	11.60443	5.92E-03	1.21E-03	7.1212E-03	Non-res
609613.07	4205032.74	1.41914	1.90272	5.90E-03	1.98E-04	6.1025E-03	FENCEGRD
610284.63	4205256.97	1.41721	0.77370	5.90E-03	8.04E-05	5.9772E-03	FENCEGRD
610340.49	4205237.33	1.41612	0.76975	5.89E-03	8.00E-05	5.9723E-03	FENCEGRD
610436.80	4205068.87	1.41290	0.77613	5.88E-03	8.06E-05	5.9596E-03	FENCEGRD
609918.39	4205232.73	1.40927	0.84880	5.86E-03	8.82E-05	5.9520E-03	FENCEGRD
610187.71	4205270.33	1.40878	0.78137	5.86E-03	8.12E-05	5.9430E-03	FENCEGRD
609683.83	4204433.16	1.40619	1.07117	5.85E-03	1.11E-04	5.9623E-03	Planned
610204.81	4204761.04	1.40490	0.88013	5.85E-03	9.14E-05	5.9371E-03	Planned
610425.38	4205010.76	1.40270	0.77727	5.84E-03	8.07E-05	5.9172E-03	FENCEGRD
610372.95	4204916.73	1.40236	0.79672	5.84E-03	8.28E-05	5.9178E-03	FENCEGRD
609560.57	4204917.91	1.40178	5.02622	5.83E-03	5.22E-04	6.3546E-03	FENCEGRD
609495.98	4204664.45	1.39983	6.09479	5.82E-03	6.33E-04	6.4576E-03	Non-res
610406.56	4204965.62	1.39349	0.78048	5.80E-03	8.11E-05	5.8792E-03	FENCEGRD
609506.50	4204730.64	1.39109	14.98334	5.79E-03	1.56E-03	7.3445E-03	Non-res
609534.32	4204860.50	1.39101	9.96942	5.79E-03	1.04E-03	6.8234E-03	FENCEGRD
609473.55	4204596.65	1.38864	3.63213	5.78E-03	3.77E-04	6.1553E-03	Planned
610238.45	4204781.89	1.37932	0.84686	5.74E-03	8.80E-05	5.8272E-03	Planned
610333.08	4205250.28	1.37832	0.75438	5.74E-03	7.84E-05	5.8134E-03	FENCEGRD
609507.12	4204759.61	1.37829	37.59602	5.73E-03	3.90E-03	9.6399E-03	Non-res
610016.11	4205258.19	1.37597	0.80462	5.73E-03	8.36E-05	5.8089E-03	FENCEGRD
610444.21	4205055.91	1.37294	0.75983	5.71E-03	7.89E-05	5.7916E-03	FENCEGRD
609608.41	4204438.94	1.37154	1.30741	5.71E-03	1.36E-04	5.8426E-03	Planned
609595.61	4204444.13	1.36664	1.36420	5.69E-03	1.42E-04	5.8282E-03	Planned
610339.34	4204868.98	1.36409	0.79431	5.68E-03	8.25E-05	5.7584E-03	FENCEGRD
609506.81	4204745.13	1.36361	21.42468	5.67E-03	2.23E-03	7.8992E-03	Non-res

610277.22	4205269.93	1.36266	0.75179	5.67E-03	7.81E-05	5.7480E-03	FENCEGRD
609621.22	4204433.74	1.36119	1.23725	5.66E-03	1.29E-04	5.7923E-03	Planned
610098.21	4205270.74	1.35976	0.78748	5.66E-03	8.18E-05	5.7396E-03	FENCEGRD
609560.88	4204932.40	1.35917	4.26745	5.66E-03	4.43E-04	6.0986E-03	FENCEGRD
610228.76	4205276.61	1.35866	0.75717	5.65E-03	7.86E-05	5.7319E-03	FENCEGRD
609975.06	4205251.92	1.35808	0.80696	5.65E-03	8.38E-05	5.7347E-03	FENCEGRD
610057.16	4205264.47	1.35751	0.80076	5.65E-03	8.32E-05	5.7316E-03	FENCEGRD
609582.80	4204449.33	1.35705	1.42296	5.65E-03	1.48E-04	5.7944E-03	Planned
610305.72	4204834.26	1.35333	0.80423	5.63E-03	8.35E-05	5.7146E-03	FENCEGRD
610139.25	4205277.02	1.35214	0.77008	5.63E-03	8.00E-05	5.7061E-03	FENCEGRD
609587.14	4204989.82	1.35016	2.59088	5.62E-03	2.69E-04	5.8870E-03	FENCEGRD
610406.58	4204950.96	1.34975	0.76350	5.62E-03	7.93E-05	5.6955E-03	FENCEGRD
609634.02	4204428.54	1.34899	1.17498	5.61E-03	1.22E-04	5.7351E-03	Planned
610432.79	4204997.81	1.34482	0.75294	5.60E-03	7.82E-05	5.6739E-03	FENCEGRD
609508.38	4204817.57	1.34226	21.06119	5.59E-03	2.19E-03	7.7726E-03	FENCEGRD
609481.85	4204637.83	1.34018	4.98603	5.58E-03	5.18E-04	6.0942E-03	Planned
610372.97	4204901.91	1.33822	0.77127	5.57E-03	8.01E-05	5.6483E-03	FENCEGRD
610325.67	4205263.24	1.33678	0.73891	5.56E-03	7.67E-05	5.6390E-03	FENCEGRD
609570.00	4204454.53	1.33634	1.47047	5.56E-03	1.53E-04	5.7131E-03	Planned
609940.03	4205245.16	1.33504	0.81469	5.55E-03	8.46E-05	5.6396E-03	FENCEGRD
609508.07	4204803.08	1.33385	33.46708	5.55E-03	3.48E-03	9.0262E-03	FENCEGRD
610451.62	4205042.96	1.33044	0.74172	5.54E-03	7.70E-05	5.6129E-03	FENCEGRD
610180.30	4205283.29	1.32797	0.75085	5.53E-03	7.80E-05	5.6035E-03	FENCEGRD
609657.18	4205089.77	1.32375	1.38106	5.51E-03	1.43E-04	5.6514E-03	FENCEGRD
609468.22	4204609.98	1.32065	4.01439	5.50E-03	4.17E-04	5.9121E-03	Planned
609646.83	4204423.35	1.31977	1.09796	5.49E-03	1.14E-04	5.6055E-03	Planned
609557.19	4204459.73	1.31780	1.53371	5.48E-03	1.59E-04	5.6425E-03	Planned
609467.50	4204549.86	1.31503	2.71215	5.47E-03	2.82E-04	5.7534E-03	Planned
609472.63	4204537.03	1.31114	2.53485	5.46E-03	2.63E-04	5.7188E-03	Planned
609671.77	4205103.95	1.31076	2.29106	5.45E-03	1.34E-04	5.5880E-03	FENCEGRD
609477.77	4204524.20	1.30812	2.37106	5.44E-03	2.46E-04	5.6892E-03	Planned
609462.36	4204562.69	1.30763	2.90988	5.44E-03	3.02E-04	5.7432E-03	Planned
609482.90	4204511.37	1.30614	2.21966	5.43E-03	2.31E-04	5.6653E-03	Planned
609505.97	4204480.51	1.30601	1.89476	5.43E-03	1.97E-04	5.6310E-03	Planned
610269.81	4205282.88	1.30510	0.72978	5.43E-03	7.58E-05	5.5062E-03	FENCEGRD
609488.03	4204498.54	1.30230	2.08006	5.42E-03	2.16E-04	5.6348E-03	Planned
610406.59	4204936.30	1.30124	0.74444	5.41E-03	7.73E-05	5.4917E-03	FENCEGRD
609544.39	4204464.92	1.30099	1.60932	5.41E-03	1.67E-04	5.5805E-03	Planned
609905.12	4205238.36	1.29568	0.81988	5.39E-03	8.52E-05	5.4764E-03	FENCEGRD
609485.91	4204689.62	1.29421	8.20846	5.39E-03	8.53E-04	6.2377E-03	Non-res
609518.78	4204475.32	1.29339	1.80974	5.38E-03	1.88E-04	5.5696E-03	Planned
610318.27	4205276.20	1.29157	0.72161	5.37E-03	7.50E-05	5.4491E-03	FENCEGRD
609531.58	4204470.12	1.29121	1.70498	5.37E-03	1.77E-04	5.5497E-03	Planned
609457.23	4204575.52	1.28964	3.13789	5.37E-03	3.26E-04	5.6920E-03	Planned
609561.20	4204946.89	1.28894	3.67655	5.36E-03	3.82E-04	5.7450E-03	FENCEGRD
610221.35	4205289.57	1.28781	0.73093	5.36E-03	7.59E-05	5.4344E-03	FENCEGRD
610459.03	4205030.00	1.28488	0.72210	5.35E-03	7.50E-05	5.4213E-03	FENCEGRD
610440.20	4204984.85	1.28399	0.72675	5.34E-03	7.55E-05	5.4180E-03	FENCEGRD
609659.63	4204418.15	1.28260	1.01982	5.34E-03	1.06E-04	5.4427E-03	Planned
610183.12	4204737.42	1.28227	0.84502	5.34E-03	8.78E-05	5.4232E-03	Planned
610339.36	4204854.43	1.27916	0.76111	5.32E-03	7.91E-05	5.4015E-03	FENCEGRD
609534.63	4204874.99	1.27902	8.26142	5.32E-03	8.58E-04	6.1800E-03	FENCEGRD
609508.70	4204832.06	1.27358	15.44259	5.30E-03	1.60E-03	6.9032E-03	FENCEGRD
609613.39	4205047.23	1.27151	1.70917	5.29E-03	1.78E-04	5.4682E-03	FENCEGRD
610372.98	4204887.08	1.27135	0.74347	5.29E-03	7.72E-05	5.3672E-03	FENCEGRD
609961.69	4205257.59	1.26643	0.78095	5.27E-03	8.11E-05	5.3506E-03	FENCEGRD
609476.66	4204650.81	1.25776	5.43648	5.23E-03	5.65E-04	5.7981E-03	Non-res
610090.80	4205283.70	1.25576	0.74997	5.23E-03	7.79E-05	5.3030E-03	FENCEGRD
610131.85	4205289.98	1.25394	0.73756	5.22E-03	7.66E-05	5.2941E-03	FENCEGRD
610161.42	4204723.40	1.25314	0.85111	5.21E-03	8.84E-05	5.3026E-03	Planned
610172.89	4205296.25	1.25076	0.71979	5.20E-03	7.48E-05	5.2791E-03	FENCEGRD
610406.61	4204921.64	1.24864	0.72327	5.20E-03	7.51E-05	5.2706E-03	FENCEGRD
610440.22	4204969.95	1.24777	0.71225	5.19E-03	7.40E-05	5.2658E-03	FENCEGRD
610049.75	4205277.43	1.24525	0.75914	5.18E-03	7.88E-05	5.2602E-03	FENCEGRD
610262.40	4205295.84	1.24503	0.70741	5.18E-03	7.35E-05	5.2539E-03	FENCEGRD
610008.70	4205271.15	1.24479	0.76156	5.18E-03	7.91E-05	5.2586E-03	FENCEGRD
610310.86	4205289.16	1.24374	0.70310	5.18E-03	7.30E-05	5.2481E-03	FENCEGRD
609587.45	4205004.31	1.24118	2.29570	5.16E-03	2.38E-04	5.4029E-03	FENCEGRD
609462.89	4204623.31	1.23756	4.46214	5.15E-03	4.63E-04	5.6128E-03	Planned
609781.92	4205191.96	1.23721	0.90659	5.15E-03	9.42E-05	5.2421E-03	Planned
610466.43	4205017.04	1.23668	0.70127	5.15E-03	7.28E-05	5.2185E-03	FENCEGRD
609672.44	4204412.95	1.23646	0.93935	5.14E-03	9.76E-05	5.2424E-03	Planned
610238.46	4204767.29	1.23571	0.78882	5.14E-03	8.19E-05	5.2236E-03	Planned
609452.10	4204588.35	1.23552	3.42732	5.14E-03	3.56E-04	5.4969E-03	Planned
609926.71	4205250.82	1.23429	0.78804	5.14E-03	8.19E-05	5.2176E-03	FENCEGRD
610204.83	4204746.18	1.23427	0.81039	5.14E-03	8.42E-05	5.2199E-03	Planned
610213.94	4205302.53	1.21630	0.70447	5.06E-03	7.32E-05	5.1341E-03	FENCEGRD
609534.95	4204889.48	1.21611	6.81521	5.06E-03	7.08E-04	5.7680E-03	FENCEGRD
609481.19	4204716.69	1.21308	12.38530	5.05E-03	1.29E-03	6.3339E-03	Non-res

609471.46	4204663.79	1.21221	6.20665	5.04E-03	6.45E-04	5.6886E-03	Non-res
610440.23	4204955.06	1.20727	0.69581	5.02E-03	7.23E-05	5.0956E-03	FENCEGRD
610139.72	4204708.95	1.20171	0.84921	5.00E-03	8.82E-05	5.0884E-03	Planned
610373.00	4204872.25	1.20066	0.71419	5.00E-03	7.42E-05	5.0700E-03	FENCEGRD
610303.45	4205302.12	1.19408	0.68350	4.97E-03	7.10E-05	5.0394E-03	FENCEGRD
610339.37	4204839.89	1.19341	0.72628	4.97E-03	7.54E-05	5.0411E-03	FENCEGRD
610406.62	4204906.99	1.19164	0.70062	4.96E-03	7.28E-05	5.0311E-03	FENCEGRD
609685.24	4204407.76	1.18809	0.86564	4.94E-03	8.99E-05	5.0334E-03	Planned
609758.12	4205181.28	1.18589	0.93031	4.93E-03	9.66E-05	5.0310E-03	Planned
610473.84	4205004.08	1.18586	0.67914	4.93E-03	7.05E-05	5.0048E-03	FENCEGRD
609891.85	4205243.99	1.18556	0.79138	4.93E-03	8.22E-05	5.0152E-03	FENCEGRD
609481.50	4204731.18	1.18452	16.37091	4.93E-03	1.70E-03	6.6291E-03	Non-res
610254.99	4205308.80	1.18346	0.68454	4.92E-03	7.11E-05	4.9954E-03	FENCEGRD
609446.96	4204601.18	1.17674	3.76805	4.90E-03	3.91E-04	5.2877E-03	Planned
609948.31	4205263.27	1.17626	0.75603	4.89E-03	7.85E-05	4.9728E-03	FENCEGRD
609995.22	4205276.87	1.17372	0.73741	4.88E-03	7.66E-05	4.9603E-03	FENCEGRD
609509.01	4204846.55	1.16863	12.22548	4.86E-03	1.27E-03	6.1324E-03	FENCEGRD
610165.49	4205309.21	1.16837	0.69059	4.86E-03	7.17E-05	4.9332E-03	FENCEGRD
609466.27	4204676.78	1.16629	7.22711	4.85E-03	7.51E-04	5.6035E-03	Non-res
609642.89	4205090.08	1.16559	1.33889	4.85E-03	1.39E-04	4.9890E-03	FENCEGRD
610440.25	4204940.16	1.16268	0.67755	4.84E-03	7.04E-05	4.9082E-03	FENCEGRD
609535.26	4204903.97	1.16239	5.68030	4.84E-03	5.90E-04	5.4266E-03	FENCEGRD
610124.44	4205302.93	1.16075	0.70499	4.83E-03	7.32E-05	4.9030E-03	FENCEGRD
610083.39	4205296.66	1.15878	0.71299	4.82E-03	7.41E-05	4.8956E-03	FENCEGRD
609457.55	4204636.64	1.15810	4.95161	4.82E-03	5.14E-04	5.3331E-03	Planned
610473.86	4204989.34	1.15632	0.66703	4.81E-03	6.93E-05	4.8806E-03	FENCEGRD
609801.37	4205208.42	1.15488	0.85010	4.81E-03	8.83E-05	4.8936E-03	Planned
609481.82	4204745.67	1.15350	23.32866	4.80E-03	2.42E-03	7.2227E-03	Non-res
609657.49	4205104.26	1.15211	1.25838	4.79E-03	1.31E-04	4.9245E-03	FENCEGRD
609482.13	4204760.16	1.14565	39.83790	4.77E-03	4.14E-03	8.9048E-03	Non-res
610206.53	4205315.48	1.14543	0.67785	4.77E-03	7.04E-05	4.8364E-03	FENCEGRD
609460.51	4204471.34	1.14339	1.82252	4.76E-03	1.89E-04	4.9468E-03	FENCEGRD
610296.04	4205315.07	1.14247	0.66347	4.75E-03	6.89E-05	4.8226E-03	FENCEGRD
609613.70	4205061.72	1.13984	1.54018	4.74E-03	1.60E-04	4.9027E-03	FENCEGRD
609913.38	4205256.47	1.13617	0.76114	4.73E-03	7.91E-05	4.8066E-03	FENCEGRD
610042.34	4205290.38	1.13571	0.71981	4.73E-03	7.48E-05	4.8003E-03	FENCEGRD
609455.33	4204484.30	1.13466	1.94058	4.72E-03	2.02E-04	4.9228E-03	FENCEGRD
610406.64	4204892.33	1.13154	0.67630	4.71E-03	7.02E-05	4.7785E-03	FENCEGRD
609478.64	4204453.13	1.12958	1.67676	4.70E-03	1.74E-04	4.8742E-03	FENCEGRD
609450.14	4204497.26	1.12854	2.06728	4.70E-03	2.15E-04	4.9105E-03	Planned
609587.76	4205018.80	1.12594	2.04969	4.68E-03	2.13E-04	4.8978E-03	FENCEGRD
610373.01	4204857.43	1.12485	0.68425	4.68E-03	7.11E-05	4.7515E-03	FENCEGRD
610473.87	4204974.60	1.12314	0.65312	4.67E-03	6.78E-05	4.7411E-03	FENCEGRD
610247.58	4205321.76	1.12175	0.66110	4.67E-03	6.87E-05	4.7362E-03	FENCEGRD
609444.95	4204510.23	1.12075	2.20496	4.66E-03	2.29E-04	4.8924E-03	Planned
609535.58	4204918.45	1.12028	4.77271	4.66E-03	4.96E-04	5.1571E-03	FENCEGRD
609461.07	4204689.76	1.11702	8.58958	4.65E-03	8.92E-04	5.5400E-03	Non-res
610440.26	4204925.26	1.11470	0.65764	4.64E-03	6.83E-05	4.7065E-03	FENCEGRD
609439.77	4204523.19	1.11122	2.35526	4.62E-03	2.45E-04	4.8683E-03	Planned
610183.13	4204723.08	1.11000	0.77279	4.62E-03	8.03E-05	4.6989E-03	Planned
610339.38	4204825.34	1.10797	0.69025	4.61E-03	7.17E-05	4.6819E-03	FENCEGRD
609441.83	4204614.01	1.10779	4.16667	4.61E-03	4.33E-04	5.0422E-03	Planned
609429.39	4204549.12	1.10444	2.69079	4.60E-03	2.79E-04	4.8750E-03	Planned
609434.58	4204536.15	1.10425	2.51867	4.59E-03	2.62E-04	4.8563E-03	Planned
609424.20	4204562.08	1.10170	2.88375	4.58E-03	3.00E-04	4.8836E-03	Planned
609452.22	4204649.97	1.09746	5.52900	4.57E-03	5.74E-04	5.1407E-03	Non-res
610238.48	4204752.70	1.09685	0.73178	4.56E-03	7.60E-05	4.6399E-03	Planned
609491.57	4204447.88	1.09658	1.59891	4.56E-03	1.66E-04	4.7288E-03	FENCEGRD
609981.74	4205282.59	1.09654	0.71449	4.56E-03	7.42E-05	4.6368E-03	FENCEGRD
609582.13	4204411.12	1.09077	1.02610	4.54E-03	1.07E-04	4.6452E-03	Planned
610288.63	4205328.03	1.09069	0.64250	4.54E-03	6.67E-05	4.6050E-03	FENCEGRD
609595.07	4204405.87	1.09042	0.98222	4.54E-03	1.02E-04	4.6392E-03	Planned
609569.20	4204416.37	1.09000	1.07594	4.54E-03	1.12E-04	4.6471E-03	Planned
609934.94	4205268.94	1.08900	0.73241	4.53E-03	7.61E-05	4.6073E-03	FENCEGRD
609556.26	4204421.62	1.08869	1.13445	4.53E-03	1.18E-04	4.6478E-03	Planned
609608.01	4204400.62	1.08837	0.94274	4.53E-03	9.79E-05	4.6265E-03	Planned
609543.32	4204426.87	1.08663	1.20300	4.52E-03	1.25E-04	4.6463E-03	Planned
610473.89	4204959.85	1.08619	0.63780	4.52E-03	6.62E-05	4.5858E-03	FENCEGRD
609509.32	4204861.04	1.08585	9.79745	4.52E-03	1.02E-03	5.5358E-03	FENCEGRD
610158.08	4205322.17	1.08273	0.66252	4.51E-03	6.88E-05	4.5740E-03	FENCEGRD
609530.38	4204432.12	1.08182	1.27746	4.50E-03	1.33E-04	4.6340E-03	Planned
609504.51	4204442.63	1.08103	1.48363	4.50E-03	1.54E-04	4.6522E-03	FENCEGRD
609620.94	4204395.37	1.08098	0.90124	4.50E-03	9.36E-05	4.5915E-03	Planned
609878.59	4205249.62	1.08097	0.76122	4.50E-03	7.91E-05	4.5769E-03	FENCEGRD
609517.45	4204437.37	1.07946	1.37179	4.49E-03	1.42E-04	4.6340E-03	Planned
610199.13	4205328.44	1.07570	0.65119	4.48E-03	6.76E-05	4.5435E-03	FENCEGRD
610204.84	4204731.31	1.07486	0.74295	4.47E-03	7.72E-05	4.5496E-03	Planned
610028.77	4205296.14	1.07429	0.69866	4.47E-03	7.26E-05	4.5426E-03	FENCEGRD
610075.98	4205309.62	1.07361	0.67635	4.47E-03	7.03E-05	4.5374E-03	FENCEGRD

609419.02	4204575.04	1.07253	3.12411	4.46E-03	3.24E-04	4.7872E-03	Planned
610117.03	4205315.89	1.07180	0.67284	4.46E-03	6.99E-05	4.5295E-03	FENCEGRD
610406.65	4204877.67	1.06961	0.65056	4.45E-03	6.76E-05	4.5181E-03	FENCEGRD
609483.07	4204803.62	1.06685	33.49068	4.44E-03	3.48E-03	7.9176E-03	FENCEGRD
609633.88	4204390.12	1.06632	0.85583	4.44E-03	8.89E-05	4.5257E-03	Planned
609455.88	4204702.74	1.06603	10.50004	4.44E-03	1.09E-03	5.5263E-03	Non-res
610161.43	4204708.83	1.06564	0.77144	4.43E-03	8.01E-05	4.5142E-03	Planned
610440.28	4204910.37	1.06418	0.63613	4.43E-03	6.61E-05	4.4940E-03	FENCEGRD
610240.18	4205334.72	1.06008	0.63745	4.41E-03	6.62E-05	4.4771E-03	FENCEGRD
609483.39	4204818.11	1.05685	20.96405	4.40E-03	2.18E-03	6.5749E-03	FENCEGRD
609446.89	4204663.30	1.05671	6.38427	4.40E-03	6.63E-04	5.0600E-03	Non-res
610373.03	4204842.60	1.04817	0.65304	4.36E-03	6.78E-05	4.4292E-03	FENCEGRD
610473.90	4204945.11	1.04676	0.62076	4.36E-03	6.45E-05	4.4199E-03	FENCEGRD
609646.82	4204384.87	1.04489	0.80699	4.35E-03	8.38E-05	4.4315E-03	Planned
609456.19	4204717.23	1.04361	13.46616	4.34E-03	1.40E-03	5.7411E-03	Non-res
609900.06	4205262.13	1.04217	0.73447	4.34E-03	7.63E-05	4.4127E-03	FENCEGRD
610281.22	4205340.99	1.03920	0.62098	4.32E-03	6.45E-05	4.3885E-03	FENCEGRD
609588.08	4205033.28	1.03745	1.82784	4.32E-03	1.90E-04	4.5066E-03	FENCEGRD
609562.14	4204990.36	1.03517	2.47158	4.31E-03	2.57E-04	4.5640E-03	FENCEGRD
609436.69	4204626.84	1.03502	4.60728	4.31E-03	4.79E-04	4.7852E-03	Planned
609643.21	4205104.57	1.03014	1.22083	4.29E-03	1.27E-04	4.4131E-03	FENCEGRD
609509.64	4204875.53	1.02957	7.90201	4.28E-03	8.21E-04	5.1047E-03	FENCEGRD
609614.01	4205076.21	1.02519	1.39202	4.27E-03	1.45E-04	4.4103E-03	FENCEGRD
610339.40	4204810.80	1.02461	0.65343	4.26E-03	6.79E-05	4.3312E-03	Planned
609968.25	4205288.31	1.02074	0.69166	4.25E-03	7.18E-05	4.3190E-03	FENCEGRD
610062.34	4205315.41	1.01866	0.65786	4.24E-03	6.83E-05	4.3069E-03	FENCEGRD
609659.75	4204379.62	1.01742	0.75708	4.23E-03	7.86E-05	4.3120E-03	Planned
609456.51	4204731.72	1.01737	18.17128	4.23E-03	1.89E-03	6.1206E-03	Non-res
609441.55	4204676.62	1.01438	7.52118	4.22E-03	7.81E-04	5.0019E-03	Non-res
610015.20	4205301.90	1.01291	0.67741	4.21E-03	7.04E-05	4.2850E-03	FENCEGRD
610440.29	4204895.47	1.01050	0.61361	4.20E-03	6.37E-05	4.2683E-03	FENCEGRD
610406.67	4204863.02	1.00604	0.62381	4.19E-03	6.48E-05	4.2508E-03	FENCEGRD
610191.72	4205341.40	1.00521	0.62520	4.18E-03	6.49E-05	4.2475E-03	FENCEGRD
610473.92	4204930.37	1.00498	0.60233	4.18E-03	6.26E-05	4.2442E-03	FENCEGRD
609921.57	4205274.62	1.00428	0.70788	4.18E-03	7.35E-05	4.2522E-03	FENCEGRD
610150.67	4205335.12	1.00386	0.63405	4.18E-03	6.59E-05	4.2428E-03	FENCEGRD
609413.83	4204588.00	1.00372	3.45662	4.18E-03	3.59E-04	4.5354E-03	Planned
610232.77	4205347.67	0.99906	0.61374	4.16E-03	6.37E-05	4.2207E-03	FENCEGRD
609509.95	4204890.02	0.99347	6.43322	4.13E-03	6.68E-04	4.8019E-03	FENCEGRD
610109.62	4205328.85	0.99198	0.64053	4.13E-03	6.65E-05	4.1941E-03	FENCEGRD
609456.82	4204746.21	0.98868	26.58051	4.11E-03	2.76E-03	6.8746E-03	Non-res
609672.69	4204374.37	0.98832	0.71057	4.11E-03	7.38E-05	4.1861E-03	Planned
609483.70	4204832.60	0.98801	15.49545	4.11E-03	1.61E-03	5.7205E-03	FENCEGRD
609788.74	4205217.83	0.98670	0.79726	4.11E-03	8.28E-05	4.1884E-03	Planned
610273.82	4205353.95	0.98635	0.59953	4.10E-03	6.23E-05	4.1664E-03	FENCEGRD
609865.32	4205255.25	0.98344	0.73228	4.09E-03	7.61E-05	4.1681E-03	FENCEGRD
609431.56	4204639.67	0.98181	5.10843	4.09E-03	5.31E-04	4.6158E-03	FENCEGRD
609464.32	4204420.46	0.98082	1.45295	4.08E-03	1.51E-04	4.2320E-03	FENCEGRD
609767.78	4205206.92	0.97807	0.82284	4.07E-03	8.55E-05	4.1551E-03	Planned
609536.52	4204961.92	0.97594	3.00062	4.06E-03	3.12E-04	4.3725E-03	FENCEGRD
610373.04	4204827.78	0.97374	0.62076	4.05E-03	6.45E-05	4.1161E-03	FENCEGRD
609661.15	4205127.13	0.97067	1.09840	4.04E-03	1.14E-04	4.1530E-03	FENCEGRD
609436.22	4204689.95	0.97053	9.09140	4.04E-03	9.44E-04	4.9826E-03	Non-res
609477.36	4204415.16	0.97040	1.39158	4.04E-03	1.45E-04	4.1823E-03	FENCEGRD
609457.14	4204760.70	0.97024	45.16886	4.04E-03	4.69E-03	8.7286E-03	Non-res
610238.49	4204738.10	0.96650	0.67634	4.02E-03	7.02E-05	4.0918E-03	Planned
609412.08	4204496.39	0.96360	2.06580	4.01E-03	2.15E-04	4.2240E-03	Planned
610048.69	4205321.20	0.96077	0.63916	4.00E-03	6.64E-05	4.0641E-03	FENCEGRD
609746.08	4205194.51	0.96061	0.85255	4.00E-03	8.86E-05	4.0856E-03	Planned
610473.93	4204915.63	0.95971	0.58319	3.99E-03	6.06E-05	4.0538E-03	FENCEGRD
609417.31	4204483.32	0.95899	1.94514	3.99E-03	2.02E-04	4.1923E-03	FENCEGRD
609588.39	4205047.77	0.95830	1.63491	3.99E-03	1.70E-04	4.1572E-03	FENCEGRD
609685.63	4204369.12	0.95677	0.66656	3.98E-03	6.92E-05	4.0503E-03	Planned
610183.15	4204708.73	0.95411	0.70456	3.97E-03	7.32E-05	4.0431E-03	Planned
610440.31	4204880.58	0.95384	0.59033	3.97E-03	6.13E-05	4.0302E-03	FENCEGRD
609886.73	4205267.78	0.95378	0.70736	3.97E-03	7.35E-05	4.0421E-03	FENCEGRD
609490.41	4204409.87	0.95295	1.29415	3.97E-03	1.34E-04	4.0996E-03	FENCEGRD
609406.85	4204509.46	0.95093	2.20486	3.96E-03	2.29E-04	4.1857E-03	Planned
609408.64	4204600.97	0.94970	3.82505	3.95E-03	3.97E-04	4.3489E-03	Planned
610095.92	4205334.67	0.94948	0.62294	3.95E-03	6.47E-05	4.0154E-03	FENCEGRD
609422.54	4204470.25	0.94910	1.83139	3.95E-03	1.90E-04	4.1393E-03	FENCEGRD
610001.63	4205307.66	0.94892	0.65653	3.95E-03	6.82E-05	4.0166E-03	FENCEGRD
609562.46	4205004.85	0.94821	2.19332	3.95E-03	2.28E-04	4.1732E-03	FENCEGRD
609391.16	4204548.67	0.94725	2.67803	3.94E-03	2.78E-04	4.2196E-03	Planned
609954.77	4205294.04	0.94695	0.66817	3.94E-03	6.94E-05	4.0096E-03	FENCEGRD
609396.39	4204535.60	0.94550	2.50920	3.93E-03	2.61E-04	4.1948E-03	Planned
609426.43	4204652.50	0.94408	5.80560	3.93E-03	6.03E-04	4.5312E-03	FENCEGRD
609401.62	4204522.53	0.94300	2.35462	3.92E-03	2.45E-04	4.1683E-03	Planned
610406.68	4204848.36	0.94182	0.59627	3.92E-03	6.19E-05	3.9808E-03	FENCEGRD

609427.77	4204457.18	0.94118	1.72508	3.92E-03	1.79E-04	4.0953E-03	FENCEGRD
610339.41	4204796.26	0.93883	0.61714	3.91E-03	6.41E-05	3.9705E-03	Planned
610225.36	4205360.63	0.93845	0.59021	3.90E-03	6.13E-05	3.9661E-03	FENCEGRD
609503.45	4204404.57	0.93639	1.16431	3.90E-03	1.21E-04	4.0172E-03	Planned
610184.31	4205354.36	0.93505	0.59982	3.89E-03	6.23E-05	3.9530E-03	FENCEGRD
610266.41	4205366.91	0.93308	0.57848	3.88E-03	6.01E-05	3.9425E-03	FENCEGRD
609484.02	4204847.09	0.93107	11.82991	3.87E-03	1.23E-03	5.1028E-03	FENCEGRD
610204.86	4204716.45	0.93027	0.67874	3.87E-03	7.05E-05	3.9413E-03	Planned
609529.54	4204393.99	0.93007	1.00207	3.87E-03	1.04E-04	3.9740E-03	Planned
609516.49	4204399.28	0.93005	1.06780	3.87E-03	1.11E-04	3.9808E-03	Planned
609542.58	4204388.69	0.92954	0.94679	3.87E-03	9.83E-05	3.9661E-03	Planned
609555.63	4204383.40	0.92826	0.89966	3.86E-03	9.34E-05	3.9558E-03	Planned
609568.67	4204378.11	0.92737	0.85964	3.86E-03	8.93E-05	3.9480E-03	Planned
610143.26	4205348.08	0.92583	0.60653	3.85E-03	6.30E-05	3.9153E-03	FENCEGRD
609614.33	4205090.70	0.92580	1.26265	3.85E-03	1.31E-04	3.9833E-03	FENCEGRD
609581.71	4204372.81	0.92515	0.82281	3.85E-03	8.55E-05	3.9349E-03	Planned
609430.88	4204703.28	0.92507	11.35886	3.85E-03	1.18E-03	5.0289E-03	Non-res
609908.20	4205280.29	0.92386	0.68284	3.84E-03	7.09E-05	3.9150E-03	FENCEGRD
609594.76	4204367.52	0.92111	0.78809	3.83E-03	8.19E-05	3.9145E-03	Planned
609385.94	4204561.74	0.91922	2.90301	3.82E-03	3.02E-04	4.1263E-03	Planned
610473.95	4204900.88	0.91297	0.56291	3.80E-03	5.85E-05	3.8573E-03	FENCEGRD
609607.80	4204362.22	0.91269	0.75189	3.80E-03	7.81E-05	3.8757E-03	Planned
609536.83	4204976.41	0.90924	2.62595	3.78E-03	2.73E-04	4.0560E-03	FENCEGRD
609421.29	4204665.33	0.90641	6.72202	3.77E-03	6.98E-04	4.4697E-03	FENCEGRD
609431.20	4204717.77	0.90346	14.84067	3.76E-03	1.54E-03	5.3007E-03	Non-res
610373.06	4204812.95	0.90192	0.58784	3.75E-03	6.11E-05	3.8139E-03	Planned
609620.84	4204356.93	0.90089	0.71580	3.75E-03	7.43E-05	3.8229E-03	Planned
610035.05	4205326.98	0.90038	0.62104	3.75E-03	6.45E-05	3.8109E-03	FENCEGRD
610082.21	4205340.48	0.89936	0.60617	3.74E-03	6.30E-05	3.8051E-03	FENCEGRD
609484.33	4204861.58	0.89786	9.17006	3.74E-03	9.52E-04	4.6884E-03	FENCEGRD
609458.08	4204804.17	0.89729	30.17157	3.73E-03	3.13E-03	6.8674E-03	FENCEGRD
609852.05	4205260.88	0.89407	0.70315	3.72E-03	7.30E-05	3.7932E-03	FENCEGRD
609988.06	4205313.42	0.89211	0.63494	3.71E-03	6.59E-05	3.7779E-03	FENCEGRD
610440.32	4204865.68	0.88842	0.56776	3.70E-03	5.90E-05	3.7556E-03	Planned
609588.71	4205062.26	0.88519	1.46854	3.68E-03	1.53E-04	3.8357E-03	FENCEGRD
609633.89	4204351.64	0.88407	0.67780	3.68E-03	7.04E-05	3.7489E-03	Planned
610129.84	4205353.78	0.88392	0.59192	3.68E-03	6.15E-05	3.7394E-03	FENCEGRD
609403.46	4204613.93	0.88296	4.26462	3.67E-03	4.43E-04	4.1169E-03	Planned
609647.38	4205128.08	0.88097	1.06403	3.67E-03	1.11E-04	3.7762E-03	FENCEGRD
610272.15	4204744.81	0.88053	0.61780	3.66E-03	6.42E-05	3.7280E-03	Planned
609431.51	4204732.26	0.87948	20.55317	3.66E-03	2.13E-03	5.7942E-03	Non-res
610259.00	4205379.87	0.87909	0.55766	3.66E-03	5.79E-05	3.7157E-03	FENCEGRD
610406.70	4204833.70	0.87848	0.56809	3.66E-03	5.90E-05	3.7143E-03	FENCEGRD
610217.95	4205373.59	0.87828	0.56706	3.65E-03	5.89E-05	3.7133E-03	FENCEGRD
609941.29	4205299.76	0.87669	0.64545	3.65E-03	6.70E-05	3.7149E-03	FENCEGRD
610176.90	4205367.32	0.87164	0.57394	3.63E-03	5.96E-05	3.6864E-03	FENCEGRD
609873.41	4205273.43	0.87113	0.68130	3.62E-03	7.08E-05	3.6955E-03	FENCEGRD
609416.16	4204678.17	0.87105	8.00024	3.62E-03	8.31E-04	4.4553E-03	Non-res
609463.29	4204382.39	0.86987	1.22804	3.62E-03	1.28E-04	3.7470E-03	FENCEGRD
609484.64	4204876.07	0.86538	7.30580	3.60E-03	7.59E-04	4.3596E-03	FENCEGRD
610473.96	4204886.14	0.86438	0.54201	3.60E-03	5.63E-05	3.6529E-03	FENCEGRD
609646.93	4204346.34	0.86427	0.64067	3.60E-03	6.65E-05	3.6627E-03	Planned
609562.77	4205019.34	0.86356	1.95771	3.59E-03	2.03E-04	3.7965E-03	FENCEGRD
609458.39	4204818.66	0.85972	19.90636	3.58E-03	2.07E-03	5.6448E-03	FENCEGRD
609380.71	4204574.81	0.85681	3.21650	3.57E-03	3.34E-04	3.8992E-03	Planned
610339.43	4204781.71	0.85470	0.58115	3.56E-03	6.04E-05	3.6167E-03	Planned
609476.42	4204377.06	0.85459	1.15656	3.56E-03	1.20E-04	3.6760E-03	FENCEGRD
609431.83	4204746.75	0.85420	31.19582	3.55E-03	3.24E-03	6.7945E-03	Non-res
610068.51	4205346.30	0.85262	0.58857	3.55E-03	6.11E-05	3.6088E-03	FENCEGRD
609510.90	4204933.49	0.85171	3.82631	3.54E-03	3.97E-04	3.9413E-03	FENCEGRD
610238.51	4204723.51	0.84875	0.62297	3.53E-03	6.47E-05	3.5963E-03	Planned
609894.82	4205285.97	0.84869	0.65838	3.53E-03	6.84E-05	3.5997E-03	FENCEGRD
609537.15	4204990.90	0.84618	2.31122	3.52E-03	2.40E-04	3.7609E-03	FENCEGRD
609589.02	4205076.75	0.84489	1.32080	3.52E-03	1.37E-04	3.6527E-03	FENCEGRD
610021.41	4205332.77	0.84273	0.60233	3.51E-03	6.26E-05	3.5691E-03	FENCEGRD
610116.42	4205359.47	0.84199	0.57692	3.50E-03	5.99E-05	3.5634E-03	FENCEGRD
609659.98	4204341.05	0.84157	0.60436	3.50E-03	6.28E-05	3.5645E-03	Planned
609614.64	4205105.19	0.84117	1.14823	3.50E-03	1.19E-04	3.6193E-03	FENCEGRD
609398.27	4204626.89	0.83625	4.76041	3.48E-03	4.94E-04	3.9740E-03	Planned
609423.90	4204398.38	0.83526	1.34591	3.48E-03	1.40E-04	3.6152E-03	FENCEGRD
609489.56	4204371.73	0.83504	1.04502	3.47E-03	1.09E-04	3.5831E-03	Planned
610163.41	4205373.04	0.83459	0.56090	3.47E-03	5.83E-05	3.5309E-03	FENCEGRD
609411.02	4204691.00	0.83333	9.77746	3.47E-03	1.02E-03	4.4830E-03	Non-res
610440.34	4204850.78	0.83062	0.54286	3.46E-03	5.64E-05	3.5125E-03	Planned
609432.14	4204761.24	0.82974	54.85480	3.45E-03	5.70E-03	9.1501E-03	Non-res
609373.91	4204495.82	0.82944	2.06970	3.45E-03	2.15E-04	3.6662E-03	Planned
609974.49	4205319.18	0.82922	0.61432	3.45E-03	6.38E-05	3.5141E-03	FENCEGRD
610251.59	4205392.82	0.82734	0.53659	3.44E-03	5.57E-05	3.4982E-03	FENCEGRD
610373.07	4204798.12	0.82680	0.55576	3.44E-03	5.77E-05	3.4980E-03	Planned

609358.11	4204535.29	0.82553	2.49740	3.43E-03	2.59E-04	3.6944E-03	Planned
609511.21	4204947.98	0.82457	3.25977	3.43E-03	3.39E-04	3.7695E-03	FENCEGRD
609363.38	4204522.13	0.82356	2.34560	3.43E-03	2.44E-04	3.6704E-03	Planned
610210.54	4205386.55	0.82085	0.54400	3.42E-03	5.65E-05	3.4720E-03	FENCEGRD
609502.69	4204366.40	0.82017	0.93731	3.41E-03	9.74E-05	3.5100E-03	Planned
609673.02	4204335.75	0.81945	0.57258	3.41E-03	5.95E-05	3.4691E-03	Planned
609379.17	4204482.66	0.81819	1.95291	3.40E-03	2.03E-04	3.6073E-03	FENCEGRD
609368.64	4204508.98	0.81815	2.20942	3.40E-03	2.29E-04	3.6337E-03	Planned
609458.71	4204833.15	0.81670	14.37959	3.40E-03	1.49E-03	4.8918E-03	FENCEGRD
609838.79	4205266.51	0.81380	0.67430	3.39E-03	7.00E-05	3.4562E-03	FENCEGRD
610406.71	4204819.05	0.81379	0.54012	3.39E-03	5.61E-05	3.4422E-03	Planned
609631.39	4205126.24	0.81190	1.03973	3.38E-03	1.08E-04	3.4862E-03	FENCEGRD
609927.81	4205305.48	0.81066	0.62431	3.37E-03	6.48E-05	3.4379E-03	FENCEGRD
609375.48	4204587.88	0.81037	3.55916	3.37E-03	3.70E-04	3.7416E-03	Planned
609515.82	4204361.07	0.80873	0.85948	3.37E-03	8.93E-05	3.4543E-03	Planned
609393.08	4204639.85	0.80782	5.42122	3.36E-03	5.63E-04	3.9243E-03	FENCEGRD
609752.74	4205220.39	0.80593	0.75151	3.35E-03	7.81E-05	3.4315E-03	Planned
610473.98	4204871.40	0.80577	0.52236	3.35E-03	5.43E-05	3.4070E-03	Planned
609528.95	4204355.74	0.80327	0.80838	3.34E-03	8.40E-05	3.4263E-03	Planned
610054.80	4205352.11	0.80259	0.57040	3.34E-03	5.92E-05	3.3987E-03	FENCEGRD
609542.08	4204350.41	0.79915	0.76666	3.33E-03	7.96E-05	3.4048E-03	Planned
609860.09	4205279.09	0.79768	0.65464	3.32E-03	6.80E-05	3.3871E-03	FENCEGRD
610149.93	4205378.76	0.79680	0.54751	3.32E-03	5.69E-05	3.3723E-03	FENCEGRD
609555.22	4204345.08	0.79540	0.73060	3.31E-03	7.59E-05	3.3855E-03	Planned
609686.06	4204330.46	0.79536	0.54191	3.31E-03	5.63E-05	3.3657E-03	Planned
610103.00	4205365.17	0.79516	0.56243	3.31E-03	5.84E-05	3.3670E-03	FENCEGRD
609405.89	4204703.83	0.79343	12.39011	3.30E-03	1.29E-03	4.5883E-03	Non-res
609734.18	4205209.72	0.79275	0.77316	3.30E-03	8.03E-05	3.3789E-03	Planned
609563.08	4205033.83	0.79247	1.75150	3.30E-03	1.82E-04	3.4793E-03	FENCEGRD
609768.45	4205232.36	0.79125	0.72156	3.29E-03	7.49E-05	3.3673E-03	Planned
609568.35	4204339.75	0.79109	0.69797	3.29E-03	7.25E-05	3.3641E-03	Planned
609511.52	4204962.46	0.79021	2.80800	3.29E-03	2.92E-04	3.5796E-03	FENCEGRD
610007.76	4205338.56	0.78910	0.58330	3.28E-03	6.06E-05	3.3440E-03	FENCEGRD
609352.85	4204548.45	0.78839	2.72293	3.28E-03	2.83E-04	3.5632E-03	Planned
610197.00	4205392.30	0.78752	0.53242	3.28E-03	5.53E-05	3.3321E-03	FENCEGRD
609581.48	4204334.43	0.78623	0.66827	3.27E-03	6.94E-05	3.3408E-03	Planned
609459.02	4204847.63	0.78474	10.78570	3.27E-03	1.12E-03	4.3855E-03	FENCEGRD
609449.33	4204349.58	0.78276	1.09171	3.26E-03	1.13E-04	3.3704E-03	FENCEGRD
610272.16	4204730.43	0.78190	0.57300	3.25E-03	5.95E-05	3.3129E-03	Planned
609594.61	4204329.10	0.78070	0.64096	3.25E-03	6.66E-05	3.3150E-03	Planned
609432.77	4204790.22	0.77880	46.44143	3.24E-03	4.82E-03	8.0643E-03	FENCEGRD
609384.44	4204469.50	0.77879	1.82551	3.24E-03	1.90E-04	3.4301E-03	FENCEGRD
609589.34	4205091.24	0.77874	1.19387	3.24E-03	1.24E-04	3.3643E-03	FENCEGRD
609387.90	4204652.82	0.77827	6.27753	3.24E-03	6.52E-04	3.8903E-03	FENCEGRD
609881.45	4205291.64	0.77757	0.63396	3.24E-03	6.58E-05	3.3012E-03	FENCEGRD
610244.18	4205405.78	0.77710	0.51566	3.23E-03	5.36E-05	3.2870E-03	FENCEGRD
609406.20	4204718.32	0.77637	16.70360	3.23E-03	1.73E-03	4.9654E-03	Non-res
609422.92	4204360.30	0.77452	1.16098	3.22E-03	1.21E-04	3.3433E-03	FENCEGRD
610440.35	4204835.89	0.77441	0.51746	3.22E-03	5.37E-05	3.2760E-03	Planned
609960.92	4205324.93	0.77394	0.59294	3.22E-03	6.16E-05	3.2819E-03	FENCEGRD
609462.53	4204344.22	0.77352	1.04213	3.22E-03	1.08E-04	3.3268E-03	FENCEGRD
609607.75	4204323.77	0.77341	0.61442	3.22E-03	6.38E-05	3.2819E-03	Planned
609648.13	4205147.30	0.77097	0.94988	3.21E-03	9.87E-05	3.3066E-03	FENCEGRD
609485.27	4204905.05	0.76389	5.00583	3.18E-03	5.20E-04	3.6984E-03	FENCEGRD
609389.70	4204456.34	0.76378	1.69131	3.18E-03	1.76E-04	3.3537E-03	FENCEGRD
609620.88	4204318.44	0.76248	0.58645	3.17E-03	6.09E-05	3.2335E-03	Planned
609405.50	4204416.87	0.76215	1.41463	3.17E-03	1.47E-04	3.3182E-03	FENCEGRD
609475.74	4204338.86	0.75994	0.97154	3.16E-03	1.01E-04	3.2629E-03	FENCEGRD
610136.44	4205384.48	0.75855	0.53385	3.16E-03	5.54E-05	3.2117E-03	FENCEGRD
609400.23	4204430.03	0.75700	1.48233	3.15E-03	1.54E-04	3.3038E-03	FENCEGRD
609370.25	4204600.95	0.75663	3.97311	3.15E-03	4.13E-04	3.5609E-03	Planned
609433.08	4204804.71	0.75607	26.34434	3.15E-03	2.74E-03	5.8822E-03	FENCEGRD
609406.52	4204732.80	0.75566	24.09417	3.14E-03	2.50E-03	5.6468E-03	Non-res
610183.45	4205398.04	0.75556	0.52012	3.14E-03	5.40E-05	3.1978E-03	FENCEGRD
610373.09	4204783.30	0.75403	0.52400	3.14E-03	5.44E-05	3.1919E-03	Planned
610089.58	4205370.86	0.75389	0.54685	3.14E-03	5.68E-05	3.1937E-03	FENCEGRD
610041.10	4205357.93	0.75383	0.55374	3.14E-03	5.75E-05	3.1941E-03	FENCEGRD
610473.99	4204856.66	0.74966	0.50093	3.12E-03	5.20E-05	3.1713E-03	Planned
610406.73	4204804.39	0.74965	0.51227	3.12E-03	5.32E-05	3.1724E-03	Planned
609634.01	4204313.11	0.74932	0.55900	3.12E-03	5.81E-05	3.1759E-03	Planned
609914.32	4205311.20	0.74884	0.60222	3.12E-03	6.26E-05	3.1784E-03	FENCEGRD
610230.59	4205411.55	0.74812	0.50523	3.11E-03	5.25E-05	3.1653E-03	FENCEGRD
609511.84	4204976.95	0.74787	2.44539	3.11E-03	2.54E-04	3.3658E-03	FENCEGRD
609488.95	4204333.50	0.74763	0.88687	3.11E-03	9.21E-05	3.2029E-03	Planned
609382.71	4204665.78	0.74438	7.41923	3.10E-03	7.71E-04	3.8679E-03	FENCEGRD
610238.52	4204708.92	0.74385	0.57236	3.10E-03	5.94E-05	3.1545E-03	Planned
609409.71	4204365.66	0.74250	1.18633	3.09E-03	1.23E-04	3.2127E-03	FENCEGRD
609502.15	4204328.14	0.73609	0.80744	3.06E-03	8.39E-05	3.1467E-03	Planned
609406.83	4204747.29	0.73578	39.01726	3.06E-03	4.05E-03	7.1141E-03	Non-res

609647.14	4204307.78	0.73566	0.53413	3.06E-03	5.55E-05	3.1165E-03	Planned
609994.12	4205344.35	0.73436	0.56469	3.06E-03	5.87E-05	3.1143E-03	FENCEGRD
609846.76	4205284.74	0.73108	0.62803	3.04E-03	6.52E-05	3.1072E-03	FENCEGRD
609459.65	4204876.61	0.72993	6.66069	3.04E-03	6.92E-04	3.7290E-03	FENCEGRD
609563.40	4205048.32	0.72926	1.57342	3.03E-03	1.63E-04	3.1978E-03	FENCEGRD
609347.58	4204561.61	0.72886	3.02395	3.03E-03	3.14E-04	3.3468E-03	Planned
610169.91	4205403.79	0.72636	0.50706	3.02E-03	5.27E-05	3.0750E-03	FENCEGRD
609660.27	4204302.45	0.72282	0.51316	3.01E-03	5.33E-05	3.0609E-03	Planned
609433.40	4204819.20	0.72264	17.71554	3.01E-03	1.84E-03	4.8469E-03	FENCEGRD
609515.36	4204322.78	0.72218	0.73950	3.00E-03	7.68E-05	3.0817E-03	Planned
610122.95	4205390.21	0.71949	0.52005	2.99E-03	5.40E-05	3.0477E-03	FENCEGRD
610076.16	4205376.56	0.71929	0.53032	2.99E-03	5.51E-05	3.0480E-03	FENCEGRD
610440.37	4204820.99	0.71877	0.49202	2.99E-03	5.11E-05	3.0418E-03	Planned
609947.35	4205330.69	0.71827	0.57159	2.99E-03	5.94E-05	3.0480E-03	FENCEGRD
609589.65	4205105.73	0.71780	1.08563	2.99E-03	1.13E-04	3.0995E-03	FENCEGRD
610216.99	4205417.32	0.71753	0.49454	2.99E-03	5.14E-05	3.0369E-03	FENCEGRD
609365.02	4204614.02	0.71743	4.44973	2.99E-03	4.62E-04	3.4473E-03	FENCEGRD
609377.52	4204678.74	0.71248	9.02873	2.96E-03	9.38E-04	3.9024E-03	FENCEGRD
609528.56	4204317.42	0.71180	0.69058	2.96E-03	7.17E-05	3.0335E-03	Planned
609448.71	4204311.35	0.71088	0.94687	2.96E-03	9.83E-05	3.0563E-03	FENCEGRD
609598.21	4205116.50	0.70913	1.03311	2.95E-03	1.07E-04	3.0579E-03	FENCEGRD
609868.08	4205297.31	0.70814	0.61044	2.95E-03	6.34E-05	3.0099E-03	FENCEGRD
610027.40	4205363.74	0.70651	0.53713	2.94E-03	5.58E-05	2.9955E-03	FENCEGRD
609461.98	4204305.96	0.70649	0.90984	2.94E-03	9.45E-05	3.0341E-03	FENCEGRD
609435.45	4204316.73	0.70587	0.97620	2.94E-03	1.01E-04	3.0385E-03	FENCEGRD
609541.77	4204312.06	0.70511	0.65419	2.93E-03	6.79E-05	3.0018E-03	Planned
609673.41	4204297.12	0.70458	0.48886	2.93E-03	5.08E-05	2.9825E-03	Planned
609396.50	4204371.02	0.70381	1.20370	2.93E-03	1.25E-04	3.0535E-03	FENCEGRD
609554.98	4204306.70	0.70338	0.62921	2.93E-03	6.54E-05	2.9921E-03	Planned
609568.18	4204301.34	0.70222	0.60769	2.92E-03	6.31E-05	2.9850E-03	Planned
609485.59	4204919.54	0.70149	4.24706	2.92E-03	4.41E-04	3.3600E-03	FENCEGRD
609512.15	4204991.44	0.70126	2.14961	2.92E-03	2.23E-04	3.1412E-03	FENCEGRD
610474.01	4204841.91	0.70055	0.47854	2.91E-03	4.97E-05	2.9646E-03	Planned
609606.77	4205127.27	0.70002	0.98298	2.91E-03	1.02E-04	3.0148E-03	FENCEGRD
609581.39	4204295.98	0.69810	0.58441	2.90E-03	6.07E-05	2.9654E-03	Planned
609475.25	4204300.58	0.69802	0.86382	2.90E-03	8.97E-05	2.9941E-03	FENCEGRD
609459.96	4204891.10	0.69465	5.44801	2.89E-03	5.66E-04	3.4562E-03	FENCEGRD
609359.79	4204627.09	0.69417	5.05602	2.89E-03	5.25E-04	3.4135E-03	FENCEGRD
609335.64	4204495.47	0.69318	2.09511	2.88E-03	2.18E-04	3.1019E-03	Planned
610156.36	4205409.54	0.69223	0.49445	2.88E-03	5.14E-05	2.9317E-03	FENCEGRD
610272.18	4204716.04	0.69209	0.53021	2.88E-03	5.51E-05	2.9348E-03	Planned
609900.84	4205316.92	0.69206	0.58000	2.88E-03	6.02E-05	2.9398E-03	FENCEGRD
609594.60	4204290.62	0.69151	0.56028	2.88E-03	5.82E-05	2.9355E-03	Planned
609433.71	4204833.69	0.68980	12.82165	2.87E-03	1.33E-03	4.2019E-03	FENCEGRD
610203.39	4205423.09	0.68881	0.48315	2.87E-03	5.02E-05	2.9163E-03	FENCEGRD
609340.94	4204482.24	0.68827	1.96766	2.86E-03	2.04E-04	3.0682E-03	FENCEGRD
609488.52	4204295.19	0.68799	0.80705	2.86E-03	8.38E-05	2.9465E-03	FENCEGRD
610406.74	4204789.73	0.68761	0.48470	2.86E-03	5.03E-05	2.9114E-03	Planned
609686.54	4204291.79	0.68729	0.46781	2.86E-03	4.86E-05	2.9083E-03	Planned
610373.10	4204768.47	0.68651	0.49251	2.86E-03	5.12E-05	2.9077E-03	Planned
609330.35	4204508.70	0.68570	2.23932	2.85E-03	2.33E-04	3.0857E-03	Planned
609342.32	4204574.77	0.68554	3.34661	2.85E-03	3.48E-04	3.2001E-03	Planned
609607.80	4204285.26	0.68388	0.53743	2.85E-03	5.58E-05	2.9014E-03	Planned
609980.48	4205350.14	0.68337	0.54607	2.84E-03	5.67E-05	2.9002E-03	FENCEGRD
610062.74	4205382.25	0.68212	0.51396	2.84E-03	5.34E-05	2.8916E-03	FENCEGRD
609501.79	4204289.81	0.67872	0.74791	2.82E-03	7.77E-05	2.9018E-03	Planned
609372.34	4204691.70	0.67867	11.40621	2.82E-03	1.18E-03	4.0086E-03	Non-res
610109.47	4205395.93	0.67569	0.50698	2.81E-03	5.27E-05	2.8641E-03	FENCEGRD
609621.01	4204279.90	0.67493	0.51563	2.81E-03	5.36E-05	2.8619E-03	Planned
609623.90	4205148.80	0.67472	0.89545	2.81E-03	9.30E-05	2.9005E-03	FENCEGRD
609563.71	4205062.81	0.67437	1.41854	2.81E-03	1.47E-04	2.9533E-03	FENCEGRD
609325.05	4204521.93	0.66961	2.40795	2.79E-03	2.50E-04	3.0363E-03	Planned
609833.44	4205290.40	0.66856	0.60351	2.78E-03	6.27E-05	2.8445E-03	FENCEGRD
609515.06	4204284.42	0.66816	0.69021	2.78E-03	7.17E-05	2.8518E-03	Planned
609346.23	4204469.00	0.66682	1.83309	2.77E-03	1.90E-04	2.9650E-03	FENCEGRD
609933.78	4205336.45	0.66669	0.55213	2.77E-03	5.73E-05	2.8314E-03	FENCEGRD
609634.21	4204274.54	0.66593	0.49665	2.77E-03	5.16E-05	2.8225E-03	Planned
609407.78	4204790.76	0.66454	36.95521	2.77E-03	3.84E-03	6.6035E-03	FENCEGRD
609378.00	4204389.61	0.66425	1.26370	2.76E-03	1.31E-04	2.8951E-03	FENCEGRD
610440.38	4204806.10	0.66392	0.46688	2.76E-03	4.85E-05	2.8110E-03	Planned
610013.69	4205369.56	0.66110	0.51996	2.75E-03	5.40E-05	2.8048E-03	FENCEGRD
609528.33	4204279.03	0.65872	0.64343	2.74E-03	6.68E-05	2.8077E-03	Planned
609632.46	4205159.57	0.65818	0.85796	2.74E-03	8.91E-05	2.8277E-03	FENCEGRD
610189.80	4205428.86	0.65811	0.47173	2.74E-03	4.90E-05	2.7873E-03	FENCEGRD
609723.47	4205228.73	0.65806	0.68873	2.74E-03	7.15E-05	2.8097E-03	Planned
609372.71	4204402.84	0.65693	1.30680	2.73E-03	1.36E-04	2.8692E-03	FENCEGRD
609647.42	4204269.18	0.65654	0.47996	2.73E-03	4.99E-05	2.7817E-03	Planned
609485.90	4204934.03	0.65528	3.61599	2.73E-03	3.76E-04	3.1021E-03	FENCEGRD
609742.92	4205242.94	0.65491	0.66053	2.73E-03	6.86E-05	2.7936E-03	Planned

610142.82	4205415.29	0.65327	0.48230	2.72E-03	5.01E-05	2.7683E-03	FENCEGRD
609351.53	4204455.77	0.65279	1.67752	2.72E-03	1.74E-04	2.8904E-03	FENCEGRD
609541.60	4204273.65	0.65270	0.61085	2.72E-03	6.34E-05	2.7793E-03	Planned
609512.47	4205005.93	0.65257	1.90514	2.72E-03	1.98E-04	2.9132E-03	FENCEGRD
610474.02	4204827.17	0.65244	0.45615	2.71E-03	4.74E-05	2.7621E-03	Planned
609367.41	4204416.08	0.65134	1.35789	2.71E-03	1.41E-04	2.8512E-03	FENCEGRD
609854.70	4205302.99	0.64863	0.58714	2.70E-03	6.10E-05	2.7599E-03	FENCEGRD
609554.87	4204268.26	0.64712	0.58276	2.69E-03	6.05E-05	2.7531E-03	Planned
609367.15	4204704.67	0.64552	15.17339	2.69E-03	1.58E-03	4.2620E-03	Non-res
609461.60	4204267.64	0.64515	0.80023	2.68E-03	8.31E-05	2.7675E-03	FENCEGRD
609448.28	4204273.04	0.64462	0.82718	2.68E-03	8.59E-05	2.7681E-03	FENCEGRD
609474.92	4204262.23	0.64433	0.77230	2.68E-03	8.02E-05	2.7612E-03	FENCEGRD
609660.63	4204263.82	0.64410	0.46202	2.68E-03	4.80E-05	2.7280E-03	Planned
609408.09	4204805.25	0.64328	22.17542	2.68E-03	2.30E-03	4.9799E-03	FENCEGRD
609337.05	4204587.92	0.64323	3.71893	2.68E-03	3.86E-04	3.0627E-03	Planned
609319.76	4204535.17	0.64305	2.61438	2.68E-03	2.72E-04	2.9472E-03	Planned
610049.32	4205387.95	0.64174	0.49843	2.67E-03	5.18E-05	2.7220E-03	FENCEGRD
609568.14	4204262.88	0.64151	0.55759	2.67E-03	5.79E-05	2.7272E-03	Planned
609641.02	4205170.33	0.64096	0.82122	2.67E-03	8.53E-05	2.7523E-03	FENCEGRD
609488.25	4204256.82	0.64094	0.74189	2.67E-03	7.71E-05	2.7439E-03	FENCEGRD
609434.34	4204862.67	0.63953	7.51877	2.66E-03	7.81E-04	3.4420E-03	FENCEGRD
609966.83	4205355.93	0.63909	0.52720	2.66E-03	5.48E-05	2.7140E-03	FENCEGRD
609434.95	4204278.45	0.63881	0.85078	2.66E-03	8.84E-05	2.7464E-03	FENCEGRD
609887.36	4205322.64	0.63739	0.55853	2.65E-03	5.80E-05	2.7101E-03	FENCEGRD
609501.57	4204251.41	0.63677	0.71047	2.65E-03	7.38E-05	2.7233E-03	FENCEGRD
609581.41	4204257.49	0.63537	0.53426	2.64E-03	5.55E-05	2.6992E-03	Planned
610095.98	4205401.65	0.63493	0.49347	2.64E-03	5.13E-05	2.6931E-03	FENCEGRD
609564.03	4205077.29	0.63318	1.28080	2.63E-03	1.33E-04	2.7676E-03	FENCEGRD
609514.89	4204246.01	0.63183	0.67866	2.63E-03	7.05E-05	2.6995E-03	FENCEGRD
609673.83	4204258.46	0.62956	0.44363	2.62E-03	4.61E-05	2.6656E-03	Planned
609594.68	4204252.11	0.62921	0.51362	2.62E-03	5.33E-05	2.6714E-03	Planned
610406.76	4204775.08	0.62913	0.45747	2.62E-03	4.75E-05	2.6653E-03	Planned
610176.20	4205434.63	0.62854	0.45993	2.62E-03	4.78E-05	2.6631E-03	FENCEGRD
609367.46	4204719.16	0.62812	21.72986	2.61E-03	2.26E-03	4.8706E-03	Non-res
609382.37	4204338.27	0.62675	1.05578	2.61E-03	1.10E-04	2.7175E-03	FENCEGRD
609421.63	4204283.86	0.62608	0.86990	2.61E-03	9.04E-05	2.6954E-03	FENCEGRD
609528.22	4204240.60	0.62574	0.64556	2.60E-03	6.71E-05	2.6707E-03	FENCEGRD
609538.40	4205048.86	0.62219	1.46726	2.59E-03	1.52E-04	2.7413E-03	FENCEGRD
609434.66	4204877.16	0.62205	5.97564	2.59E-03	6.21E-04	3.2090E-03	FENCEGRD
609607.95	4204246.72	0.62143	0.49337	2.59E-03	5.12E-05	2.6370E-03	Planned
610373.12	4204753.65	0.62105	0.46212	2.58E-03	4.80E-05	2.6321E-03	Planned
609331.79	4204601.08	0.62029	4.16213	2.58E-03	4.32E-04	3.0133E-03	FENCEGRD
610129.27	4205421.03	0.61884	0.46947	2.57E-03	4.88E-05	2.6237E-03	FENCEGRD
609541.54	4204235.19	0.61841	0.61247	2.57E-03	6.36E-05	2.6368E-03	FENCEGRD
609920.20	4205342.21	0.61713	0.53283	2.57E-03	5.53E-05	2.6232E-03	FENCEGRD
609344.10	4204666.30	0.61683	8.31531	2.57E-03	8.64E-04	3.4303E-03	FENCEGRD
609408.40	4204819.74	0.61625	15.23166	2.56E-03	1.58E-03	4.1462E-03	FENCEGRD
609820.11	4205296.05	0.61598	0.57874	2.56E-03	6.01E-05	2.6231E-03	FENCEGRD
609687.04	4204253.10	0.61542	0.42733	2.56E-03	4.44E-05	2.6051E-03	Planned
609573.35	4205117.21	0.61405	0.97693	2.56E-03	1.01E-04	2.6565E-03	FENCEGRD
609999.99	4205375.37	0.61402	0.50342	2.55E-03	5.23E-05	2.6072E-03	FENCEGRD
609621.22	4204241.34	0.61373	0.47617	2.55E-03	4.95E-05	2.6031E-03	Planned
609486.22	4204948.52	0.61257	3.10586	2.55E-03	3.23E-04	2.8714E-03	FENCEGRD
609367.78	4204733.64	0.61107	34.58162	2.54E-03	3.59E-03	6.1345E-03	Non-res
609554.87	4204229.78	0.61073	0.58098	2.54E-03	6.03E-05	2.6015E-03	FENCEGRD
609582.04	4205128.14	0.61015	0.92831	2.54E-03	9.64E-05	2.6352E-03	FENCEGRD
610440.40	4204791.20	0.61002	0.44218	2.54E-03	4.59E-05	2.5842E-03	Planned
609408.30	4204289.27	0.60988	0.88587	2.54E-03	9.20E-05	2.6297E-03	FENCEGRD
610474.04	4204812.43	0.60927	0.43391	2.54E-03	4.51E-05	2.5802E-03	Planned
609512.78	4205020.42	0.60752	1.69748	2.53E-03	1.76E-04	2.7041E-03	FENCEGRD
609314.46	4204548.40	0.60713	2.86132	2.53E-03	2.97E-04	2.8234E-03	Planned
609564.34	4205091.78	0.60678	1.15606	2.52E-03	1.20E-04	2.6448E-03	FENCEGRD
609568.19	4204224.38	0.60431	0.55504	2.51E-03	5.77E-05	2.5721E-03	FENCEGRD
609634.49	4204235.95	0.60350	0.45814	2.51E-03	4.76E-05	2.5587E-03	FENCEGRD
610082.49	4205407.38	0.60299	0.47843	2.51E-03	4.97E-05	2.5587E-03	FENCEGRD
609590.74	4205139.07	0.60268	0.88638	2.51E-03	9.21E-05	2.5998E-03	FENCEGRD
609369.10	4204343.66	0.60212	1.06411	2.51E-03	1.11E-04	2.6159E-03	FENCEGRD
609326.52	4204614.24	0.60020	4.71524	2.50E-03	4.90E-04	2.9871E-03	FENCEGRD
609581.51	4204218.97	0.59836	0.53325	2.49E-03	5.54E-05	2.5451E-03	FENCEGRD
610162.61	4205440.40	0.59824	0.44776	2.49E-03	4.65E-05	2.5357E-03	FENCEGRD
609953.19	4205361.72	0.59804	0.50823	2.49E-03	5.28E-05	2.5412E-03	FENCEGRD
609841.33	4205308.66	0.59604	0.56466	2.48E-03	5.86E-05	2.5387E-03	FENCEGRD
610035.90	4205393.64	0.59580	0.48459	2.48E-03	5.03E-05	2.5294E-03	FENCEGRD
609514.83	4204207.55	0.59570	0.63014	2.48E-03	6.55E-05	2.5441E-03	FENCEGRD
609528.20	4204202.12	0.59433	0.61020	2.47E-03	6.34E-05	2.5363E-03	FENCEGRD
609434.97	4204891.64	0.59394	4.89301	2.47E-03	5.08E-04	2.9796E-03	FENCEGRD
609594.84	4204213.56	0.59316	0.51636	2.47E-03	5.36E-05	2.5217E-03	FENCEGRD
609501.46	4204212.98	0.59271	0.64756	2.47E-03	6.73E-05	2.5335E-03	FENCEGRD
609408.72	4204834.23	0.59123	11.13001	2.46E-03	1.16E-03	3.6161E-03	FENCEGRD

609647.75	4204230.57	0.58986	0.43777	2.45E-03	4.55E-05	2.4998E-03	FENCEGRD
609394.98	4204294.67	0.58979	0.89487	2.45E-03	9.29E-05	2.5470E-03	FENCEGRD
609338.87	4204679.37	0.58959	10.43856	2.45E-03	1.08E-03	3.5375E-03	FENCEGRD
609541.58	4204196.70	0.58922	0.58825	2.45E-03	6.11E-05	2.5128E-03	FENCEGRD
609564.66	4205106.27	0.58683	1.04300	2.44E-03	1.08E-04	2.5501E-03	FENCEGRD
610115.73	4205426.78	0.58465	0.45660	2.43E-03	4.74E-05	2.4801E-03	FENCEGRD
609873.88	4205328.36	0.58420	0.53823	2.43E-03	5.59E-05	2.4867E-03	FENCEGRD
609554.95	4204191.27	0.58385	0.56692	2.43E-03	5.89E-05	2.4882E-03	FENCEGRD
609350.51	4204362.34	0.58062	1.11965	2.42E-03	1.16E-04	2.5322E-03	FENCEGRD
609345.19	4204375.64	0.58013	1.17042	2.41E-03	1.22E-04	2.5354E-03	FENCEGRD
609321.26	4204627.40	0.57961	5.42025	2.41E-03	5.63E-04	2.9747E-03	FENCEGRD
609309.17	4204561.63	0.57781	3.14030	2.40E-03	3.26E-04	2.7304E-03	Planned
609339.87	4204388.93	0.57754	1.22013	2.40E-03	1.27E-04	2.5298E-03	FENCEGRD
609568.32	4204185.84	0.57688	0.54515	2.40E-03	5.66E-05	2.4570E-03	FENCEGRD
609661.02	4204225.18	0.57589	0.41921	2.40E-03	4.35E-05	2.4398E-03	FENCEGRD
609986.28	4205381.19	0.57482	0.48643	2.39E-03	5.05E-05	2.4423E-03	FENCEGRD
609538.72	4205063.35	0.57459	1.32697	2.39E-03	1.38E-04	2.5286E-03	FENCEGRD
610406.77	4204760.42	0.57455	0.43076	2.39E-03	4.47E-05	2.4354E-03	Planned
609486.53	4204963.01	0.57358	2.68835	2.39E-03	2.79E-04	2.6658E-03	FENCEGRD
609302.63	4204482.00	0.57345	1.97354	2.39E-03	2.05E-04	2.5911E-03	FENCEGRD
610069.01	4205413.10	0.57316	0.46341	2.38E-03	4.81E-05	2.4330E-03	FENCEGRD
609806.79	4205301.70	0.57199	0.55423	2.38E-03	5.76E-05	2.4376E-03	FENCEGRD
609334.55	4204402.23	0.57190	1.26282	2.38E-03	1.31E-04	2.5108E-03	FENCEGRD
609616.82	4205171.87	0.57176	0.77632	2.38E-03	8.06E-05	2.4597E-03	FENCEGRD
609307.95	4204468.71	0.57139	1.83404	2.38E-03	1.90E-04	2.5680E-03	FENCEGRD
609906.63	4205347.97	0.57128	0.51359	2.38E-03	5.33E-05	2.4304E-03	FENCEGRD
609381.66	4204300.08	0.57009	0.89939	2.37E-03	9.34E-05	2.4655E-03	FENCEGRD
609513.10	4205034.91	0.56775	1.51915	2.36E-03	1.58E-04	2.5201E-03	FENCEGRD
609621.48	4204202.75	0.56757	0.46322	2.36E-03	4.81E-05	2.4097E-03	FENCEGRD
609407.86	4204250.97	0.56714	0.78595	2.36E-03	8.16E-05	2.4415E-03	FENCEGRD
610149.01	4205446.16	0.56555	0.43649	2.35E-03	4.53E-05	2.3985E-03	FENCEGRD
609329.23	4204415.52	0.56506	1.30588	2.35E-03	1.36E-04	2.4868E-03	FENCEGRD
609313.27	4204455.41	0.56496	1.67813	2.35E-03	1.74E-04	2.5250E-03	FENCEGRD
609297.31	4204495.30	0.56391	2.11431	2.35E-03	2.20E-04	2.5660E-03	Planned
609333.64	4204692.44	0.56211	13.77978	2.34E-03	1.43E-03	3.7702E-03	Non-res
609674.29	4204219.80	0.56206	0.40257	2.34E-03	4.18E-05	2.3805E-03	FENCEGRD
609315.99	4204640.56	0.56114	6.33426	2.33E-03	6.58E-04	2.9928E-03	FENCEGRD
609435.28	4204906.13	0.55959	4.08815	2.33E-03	4.25E-04	2.7530E-03	FENCEGRD
610440.41	4204776.31	0.55897	0.41792	2.33E-03	4.34E-05	2.3692E-03	Planned
609368.72	4204777.11	0.55859	41.04571	2.32E-03	4.26E-03	6.5875E-03	FENCEGRD
610474.05	4204797.69	0.55842	0.41216	2.32E-03	4.28E-05	2.3663E-03	Planned
609625.51	4205182.80	0.55811	0.74472	2.32E-03	7.74E-05	2.3996E-03	FENCEGRD
609939.55	4205367.51	0.55774	0.49008	2.32E-03	5.09E-05	2.3716E-03	FENCEGRD
610022.48	4205399.33	0.55732	0.46969	2.32E-03	4.88E-05	2.3677E-03	FENCEGRD
609827.96	4205314.34	0.55313	0.54203	2.30E-03	5.63E-05	2.3578E-03	FENCEGRD
609394.49	4204256.39	0.55174	0.79729	2.30E-03	8.28E-05	2.3786E-03	FENCEGRD
609368.33	4204305.49	0.55004	0.89445	2.29E-03	9.29E-05	2.3816E-03	FENCEGRD
609541.68	4204158.17	0.54978	0.53372	2.29E-03	5.54E-05	2.3430E-03	FENCEGRD
609721.96	4205257.10	0.54878	0.59627	2.28E-03	6.19E-05	2.3454E-03	Planned
609291.99	4204508.59	0.54866	2.27190	2.28E-03	2.36E-04	2.5189E-03	Planned
609702.51	4205242.88	0.54858	0.62090	2.28E-03	6.45E-05	2.3471E-03	Planned
609687.56	4204214.41	0.54851	0.38820	2.28E-03	4.03E-05	2.3226E-03	FENCEGRD
609303.87	4204574.86	0.54798	3.44819	2.28E-03	3.58E-04	2.6382E-03	FENCEGRD
609634.81	4204197.34	0.54702	0.42753	2.28E-03	4.44E-05	2.3205E-03	FENCEGRD
610102.18	4205432.53	0.54630	0.44461	2.27E-03	4.62E-05	2.3193E-03	FENCEGRD
609595.06	4204174.99	0.54322	0.48219	2.26E-03	5.01E-05	2.3104E-03	FENCEGRD
610055.52	4205418.82	0.54304	0.44885	2.26E-03	4.66E-05	2.3062E-03	FENCEGRD
609486.84	4204977.50	0.54274	2.34108	2.26E-03	2.43E-04	2.5015E-03	FENCEGRD
609860.39	4205334.08	0.54241	0.51758	2.26E-03	5.38E-05	2.3107E-03	FENCEGRD
609369.04	4204791.60	0.53821	24.11221	2.24E-03	2.50E-03	4.7439E-03	FENCEGRD
609972.58	4205387.00	0.53794	0.46979	2.24E-03	4.88E-05	2.2871E-03	FENCEGRD
610135.42	4205451.93	0.53519	0.42461	2.23E-03	4.41E-05	2.2710E-03	FENCEGRD
609539.03	4205077.84	0.53471	1.20393	2.22E-03	1.25E-04	2.3499E-03	FENCEGRD
609461.22	4204949.06	0.53399	2.82085	2.22E-03	2.93E-04	2.5149E-03	FENCEGRD
609328.41	4204705.51	0.53298	19.66368	2.22E-03	2.04E-03	4.2601E-03	Non-res
609355.01	4204310.90	0.53296	0.89340	2.22E-03	9.28E-05	2.3104E-03	FENCEGRD
609793.46	4205307.36	0.53279	0.53019	2.22E-03	5.51E-05	2.2720E-03	FENCEGRD
609286.67	4204521.89	0.53272	2.45205	2.22E-03	2.55E-04	2.4713E-03	Planned
609381.12	4204261.82	0.53246	0.79965	2.22E-03	8.31E-05	2.2986E-03	FENCEGRD
609566.03	4205139.98	0.53202	0.83630	2.21E-03	8.69E-05	2.3005E-03	FENCEGRD
609513.41	4205049.40	0.53170	1.36612	2.21E-03	1.42E-04	2.3542E-03	FENCEGRD
609298.58	4204588.10	0.53170	3.85437	2.21E-03	4.00E-04	2.6127E-03	FENCEGRD
609893.06	4205353.73	0.53106	0.49465	2.21E-03	5.14E-05	2.2611E-03	FENCEGRD
609488.03	4204179.95	0.53087	0.58803	2.21E-03	6.11E-05	2.2700E-03	FENCEGRD
609568.51	4204147.29	0.52742	0.49231	2.19E-03	5.11E-05	2.2457E-03	FENCEGRD
609648.13	4204191.93	0.52667	0.39497	2.19E-03	4.10E-05	2.2324E-03	FENCEGRD
609574.82	4205151.03	0.52647	0.80031	2.19E-03	8.31E-05	2.2737E-03	FENCEGRD
609420.97	4204207.17	0.52600	0.67942	2.19E-03	7.06E-05	2.2592E-03	FENCEGRD
609407.55	4204212.61	0.52530	0.69969	2.19E-03	7.27E-05	2.2584E-03	FENCEGRD

609557.24	4205128.92	0.52448	0.88336	2.18E-03	9.18E-05	2.2741E-03	FENCEGRD
609435.60	4204920.62	0.52414	3.46190	2.18E-03	3.60E-04	2.5405E-03	FENCEGRD
610009.06	4205405.03	0.52362	0.45456	2.18E-03	4.72E-05	2.2259E-03	FENCEGRD
609608.43	4204169.56	0.52305	0.44459	2.18E-03	4.62E-05	2.2225E-03	FENCEGRD
609474.62	4204185.39	0.52175	0.59519	2.17E-03	6.18E-05	2.2328E-03	FENCEGRD
609409.35	4204863.21	0.52150	6.76577	2.17E-03	7.03E-04	2.8727E-03	FENCEGRD
609434.38	4204201.72	0.52104	0.65352	2.17E-03	6.79E-05	2.2359E-03	FENCEGRD
609394.14	4204218.05	0.52065	0.71716	2.17E-03	7.45E-05	2.2409E-03	FENCEGRD
609925.90	4205373.30	0.52046	0.47299	2.17E-03	4.91E-05	2.2147E-03	FENCEGRD
609583.61	4205162.09	0.52041	0.76547	2.17E-03	7.95E-05	2.2449E-03	FENCEGRD
609487.16	4204991.99	0.51901	2.05006	2.16E-03	2.13E-04	2.3725E-03	FENCEGRD
609293.29	4204601.33	0.51800	4.36337	2.16E-03	4.53E-04	2.6086E-03	FENCEGRD
609328.72	4204720.00	0.51710	31.33980	2.15E-03	3.26E-03	5.4068E-03	Non-res
609814.58	4205320.01	0.51635	0.51968	2.15E-03	5.40E-05	2.2025E-03	FENCEGRD
609305.46	4204666.87	0.51588	9.40959	2.15E-03	9.77E-04	3.1239E-03	FENCEGRD
609367.75	4204267.25	0.51460	0.79566	2.14E-03	8.26E-05	2.2238E-03	FENCEGRD
610088.64	4205438.27	0.51440	0.43181	2.14E-03	4.49E-05	2.1852E-03	FENCEGRD
609369.35	4204806.09	0.51432	16.16590	2.14E-03	1.68E-03	3.8191E-03	FENCEGRD
609447.79	4204196.28	0.51427	0.62267	2.14E-03	6.47E-05	2.2045E-03	FENCEGRD
609380.73	4204223.50	0.51376	0.73340	2.14E-03	7.62E-05	2.2139E-03	FENCEGRD
609461.21	4204190.84	0.51317	0.59995	2.14E-03	6.23E-05	2.1976E-03	FENCEGRD
609661.46	4204186.52	0.51292	0.37711	2.13E-03	3.92E-05	2.1734E-03	FENCEGRD
610474.07	4204782.94	0.51279	0.39083	2.13E-03	4.06E-05	2.1743E-03	Planned
610440.43	4204761.41	0.51144	0.39411	2.13E-03	4.09E-05	2.1690E-03	Planned
609581.92	4204141.84	0.51061	0.46722	2.12E-03	4.85E-05	2.1731E-03	FENCEGRD
609281.35	4204535.18	0.50944	2.64567	2.12E-03	2.75E-04	2.3945E-03	Planned
610042.03	4205424.54	0.50912	0.43519	2.12E-03	4.52E-05	2.1636E-03	FENCEGRD
609312.34	4204361.76	0.50815	1.05500	2.11E-03	1.10E-04	2.2239E-03	FENCEGRD
609317.68	4204348.41	0.50740	1.00228	2.11E-03	1.04E-04	2.2153E-03	FENCEGRD
610121.82	4205457.70	0.50675	0.41258	2.11E-03	4.29E-05	2.1514E-03	FENCEGRD
609621.80	4204164.14	0.50633	0.41406	2.11E-03	4.30E-05	2.1498E-03	FENCEGRD
609306.99	4204375.11	0.50618	1.10288	2.11E-03	1.15E-04	2.2207E-03	FENCEGRD
609958.87	4205392.82	0.50540	0.45317	2.10E-03	4.71E-05	2.1500E-03	FENCEGRD
609323.02	4204335.06	0.50463	0.94878	2.10E-03	9.85E-05	2.1983E-03	FENCEGRD
609601.20	4205184.20	0.50334	0.70391	2.09E-03	7.31E-05	2.1675E-03	FENCEGRD
609674.78	4204181.12	0.50305	0.36770	2.09E-03	3.82E-05	2.1313E-03	FENCEGRD
609539.35	4205092.33	0.50293	1.09489	2.09E-03	1.14E-04	2.2064E-03	FENCEGRD
609846.91	4205339.80	0.50257	0.49835	2.09E-03	5.18E-05	2.1429E-03	FENCEGRD
609301.65	4204388.46	0.50195	1.14757	2.09E-03	1.19E-04	2.2078E-03	FENCEGRD
609487.47	4205006.47	0.50112	1.80386	2.09E-03	1.87E-04	2.2725E-03	FENCEGRD
609354.38	4204272.67	0.49914	0.79078	2.08E-03	8.21E-05	2.1590E-03	FENCEGRD
609461.54	4204963.55	0.49886	2.44866	2.08E-03	2.54E-04	2.3300E-03	FENCEGRD
609548.45	4205117.87	0.49869	0.94332	2.08E-03	9.80E-05	2.1730E-03	FENCEGRD
609296.31	4204401.81	0.49679	1.19715	2.07E-03	1.24E-04	2.1914E-03	FENCEGRD
609879.49	4205359.48	0.49619	0.47601	2.06E-03	4.94E-05	2.1140E-03	FENCEGRD
609780.14	4205313.01	0.49591	0.50692	2.06E-03	5.27E-05	2.1161E-03	FENCEGRD
609369.66	4204820.58	0.49569	11.52251	2.06E-03	1.20E-03	3.2593E-03	FENCEGRD
609688.10	4204175.71	0.49388	0.35998	2.05E-03	3.74E-05	2.0924E-03	FENCEGRD
609995.64	4205410.72	0.49316	0.43954	2.05E-03	4.57E-05	2.0976E-03	FENCEGRD
609274.94	4204455.21	0.49289	1.67752	2.05E-03	1.74E-04	2.2251E-03	FENCEGRD
609300.20	4204680.03	0.49252	12.22310	2.05E-03	1.27E-03	3.3189E-03	FENCEGRD
609609.99	4205195.25	0.49241	0.67681	2.05E-03	7.03E-05	2.1192E-03	FENCEGRD
609269.60	4204468.56	0.49234	1.81893	2.05E-03	1.89E-04	2.2375E-03	FENCEGRD
609290.97	4204415.16	0.49226	1.26408	2.05E-03	1.31E-04	2.1795E-03	FENCEGRD
609435.91	4204935.11	0.49219	2.95807	2.05E-03	3.07E-04	2.3552E-03	FENCEGRD
609280.28	4204441.86	0.49176	1.52292	2.05E-03	1.58E-04	2.2043E-03	FENCEGRD
609409.66	4204877.70	0.49112	5.44671	2.04E-03	5.66E-04	2.6092E-03	FENCEGRD
609635.17	4204158.71	0.49040	0.38772	2.04E-03	4.03E-05	2.0808E-03	FENCEGRD
609276.03	4204548.48	0.48967	2.86019	2.04E-03	2.97E-04	2.3346E-03	Planned
609595.34	4204136.40	0.48959	0.43472	2.04E-03	4.52E-05	2.0823E-03	FENCEGRD
609264.26	4204481.91	0.48685	1.95234	2.03E-03	2.03E-04	2.2285E-03	Planned
609912.26	4205379.09	0.48674	0.45581	2.03E-03	4.73E-05	2.0726E-03	FENCEGRD
609487.79	4205020.96	0.48650	1.59505	2.02E-03	1.66E-04	2.1900E-03	FENCEGRD
610075.09	4205444.02	0.48631	0.41859	2.02E-03	4.35E-05	2.0670E-03	FENCEGRD
609801.21	4205325.69	0.48455	0.49756	2.02E-03	5.17E-05	2.0678E-03	FENCEGRD
609539.66	4205106.82	0.47798	0.99810	1.99E-03	1.04E-04	2.0925E-03	FENCEGRD
609270.71	4204561.78	0.47797	3.16375	1.99E-03	3.29E-04	2.3174E-03	FENCEGRD
609648.54	4204153.28	0.47778	0.36950	1.99E-03	3.84E-05	2.0264E-03	FENCEGRD
609329.67	4204763.46	0.47730	42.18515	1.99E-03	4.38E-03	6.3677E-03	FENCEGRD
610028.55	4205430.27	0.47606	0.42190	1.98E-03	4.38E-05	2.0247E-03	FENCEGRD
609258.92	4204495.26	0.47401	2.08723	1.97E-03	2.17E-04	2.1891E-03	Planned
609945.17	4205398.63	0.47382	0.43708	1.97E-03	4.54E-05	2.0169E-03	FENCEGRD
609608.75	4204130.95	0.47318	0.40587	1.97E-03	4.22E-05	2.0110E-03	FENCEGRD
610108.22	4205463.47	0.47263	0.40168	1.97E-03	4.17E-05	2.0083E-03	FENCEGRD
609833.43	4205345.52	0.47106	0.47863	1.96E-03	4.97E-05	2.0098E-03	FENCEGRD
610474.08	4204768.20	0.47044	0.36991	1.96E-03	3.84E-05	1.9959E-03	Planned
609409.98	4204892.19	0.46923	4.46628	1.95E-03	4.64E-04	2.4163E-03	FENCEGRD
609294.93	4204693.19	0.46897	17.01403	1.95E-03	1.77E-03	3.7185E-03	Non-res
609550.13	4205151.95	0.46829	0.75715	1.95E-03	7.86E-05	2.0272E-03	FENCEGRD

609265.39	4204575.07	0.46778	3.53487	1.95E-03	3.67E-04	2.3135E-03	FENCEGRD
609461.85	4204978.04	0.46758	2.14017	1.95E-03	2.22E-04	2.1678E-03	FENCEGRD
610440.44	4204746.51	0.46733	0.37098	1.94E-03	3.85E-05	1.9830E-03	Planned
609488.10	4205035.45	0.46680	1.42307	1.94E-03	1.48E-04	2.0901E-03	FENCEGRD
609558.99	4205163.09	0.46462	0.72551	1.93E-03	7.54E-05	2.0086E-03	FENCEGRD
609982.21	4205416.42	0.46359	0.42499	1.93E-03	4.41E-05	1.9731E-03	FENCEGRD
609436.23	4204949.60	0.46354	2.54900	1.93E-03	2.65E-04	2.1935E-03	FENCEGRD
609329.98	4204777.95	0.46286	24.33307	1.93E-03	2.53E-03	4.4533E-03	FENCEGRD
609865.92	4205365.24	0.46264	0.45844	1.93E-03	4.76E-05	1.9726E-03	FENCEGRD
609766.81	4205318.66	0.46222	0.48490	1.92E-03	5.04E-05	1.9736E-03	FENCEGRD
609706.11	4205277.35	0.46166	0.52817	1.92E-03	5.49E-05	1.9758E-03	Planned
609622.16	4204125.51	0.46146	0.38603	1.92E-03	4.01E-05	1.9602E-03	FENCEGRD
609686.66	4205263.13	0.46120	0.54780	1.92E-03	5.69E-05	1.9759E-03	Planned
609567.85	4205174.24	0.46004	0.69557	1.91E-03	7.22E-05	1.9864E-03	FENCEGRD
609327.08	4204245.27	0.45731	0.75624	1.90E-03	7.85E-05	1.9814E-03	FENCEGRD
609541.26	4205140.80	0.45701	0.80063	1.90E-03	8.32E-05	1.9847E-03	FENCEGRD
610061.55	4205449.77	0.45690	0.40610	1.90E-03	4.22E-05	1.9433E-03	FENCEGRD
609787.84	4205331.36	0.45599	0.47605	1.90E-03	4.94E-05	1.9468E-03	FENCEGRD
609260.07	4204588.37	0.45544	3.96883	1.90E-03	4.12E-04	2.3073E-03	FENCEGRD
609253.57	4204508.61	0.45519	2.21349	1.89E-03	2.30E-04	2.1239E-03	Planned
609898.62	4205384.88	0.45348	0.43957	1.89E-03	4.57E-05	1.9325E-03	FENCEGRD
609410.29	4204906.68	0.45156	3.71289	1.88E-03	3.86E-04	2.2645E-03	FENCEGRD
609688.66	4204137.00	0.44934	0.33854	1.87E-03	3.52E-05	1.9048E-03	Planned
609279.45	4204347.97	0.44883	0.95483	1.87E-03	9.92E-05	1.9667E-03	FENCEGRD
610015.06	4205435.99	0.44872	0.40828	1.87E-03	4.24E-05	1.9095E-03	FENCEGRD
609295.53	4204307.78	0.44787	0.83516	1.86E-03	8.67E-05	1.9503E-03	FENCEGRD
609585.58	4205196.53	0.44739	0.64100	1.86E-03	6.66E-05	1.9281E-03	FENCEGRD
609274.09	4204361.37	0.44730	1.00096	1.86E-03	1.04E-04	1.9651E-03	FENCEGRD
609289.67	4204706.35	0.44473	26.51322	1.85E-03	2.75E-03	4.6043E-03	Non-res
609313.66	4204250.72	0.44448	0.75611	1.85E-03	7.85E-05	1.9280E-03	FENCEGRD
609268.73	4204374.77	0.44407	1.04603	1.85E-03	1.09E-04	1.9564E-03	FENCEGRD
609330.29	4204792.44	0.44389	16.20613	1.85E-03	1.68E-03	3.5303E-03	FENCEGRD
609819.95	4205351.24	0.44374	0.45916	1.85E-03	4.77E-05	1.8941E-03	FENCEGRD
609488.42	4205049.94	0.44282	1.27938	1.84E-03	1.33E-04	1.9754E-03	FENCEGRD
609931.47	4205404.45	0.44271	0.42209	1.84E-03	4.38E-05	1.8859E-03	FENCEGRD
609248.23	4204521.96	0.44224	2.37722	1.84E-03	2.47E-04	2.0870E-03	Planned
610094.63	4205469.24	0.44150	0.39084	1.84E-03	4.06E-05	1.8776E-03	FENCEGRD
609514.35	4205092.87	0.44077	1.02280	1.83E-03	1.06E-04	1.9402E-03	FENCEGRD
609254.75	4204601.66	0.44051	4.49771	1.83E-03	4.67E-04	2.3001E-03	FENCEGRD
609263.37	4204388.16	0.44033	1.09804	1.83E-03	1.14E-04	1.9462E-03	FENCEGRD
609462.16	4204992.53	0.43942	1.88325	1.83E-03	1.96E-04	2.0240E-03	FENCEGRD
609968.79	4205422.11	0.43925	0.41034	1.83E-03	4.26E-05	1.8703E-03	FENCEGRD
609594.45	4205207.68	0.43870	0.61732	1.83E-03	6.41E-05	1.8895E-03	FENCEGRD
609258.01	4204401.56	0.43798	1.17373	1.82E-03	1.22E-04	1.9443E-03	FENCEGRD
609252.65	4204414.96	0.43773	1.28360	1.82E-03	1.33E-04	1.9547E-03	FENCEGRD
609436.54	4204964.09	0.43707	2.21531	1.82E-03	2.30E-04	2.0487E-03	FENCEGRD
609410.60	4204921.17	0.43604	3.12345	1.81E-03	3.24E-04	2.1387E-03	FENCEGRD
609266.81	4204667.49	0.43343	10.60066	1.80E-03	1.10E-03	2.9045E-03	FENCEGRD
609241.92	4204441.75	0.43335	1.51773	1.80E-03	1.58E-04	1.9608E-03	FENCEGRD
609532.40	4205129.65	0.43281	0.85069	1.80E-03	8.84E-05	1.8892E-03	FENCEGRD
609662.40	4204109.18	0.43257	0.34502	1.80E-03	3.58E-05	1.8357E-03	Planned
609852.35	4205371.00	0.43243	0.44172	1.80E-03	4.59E-05	1.8452E-03	FENCEGRD
609242.89	4204535.32	0.43234	2.59427	1.80E-03	2.69E-04	2.0684E-03	FENCEGRD
610048.00	4205455.52	0.43198	0.39321	1.80E-03	4.08E-05	1.8383E-03	FENCEGRD
610474.10	4204753.46	0.43177	0.34943	1.80E-03	3.63E-05	1.8328E-03	Planned
609300.25	4204256.16	0.43163	0.75290	1.80E-03	7.82E-05	1.8742E-03	FENCEGRD
609753.49	4205324.32	0.43133	0.46434	1.79E-03	4.82E-05	1.8430E-03	FENCEGRD
609289.98	4204720.84	0.43078	49.21472	1.79E-03	5.11E-03	6.9042E-03	Non-res
609236.56	4204455.15	0.42970	1.63918	1.79E-03	1.70E-04	1.9582E-03	FENCEGRD
609603.31	4205218.83	0.42969	0.59328	1.79E-03	6.16E-05	1.8495E-03	FENCEGRD
609774.47	4205337.04	0.42903	0.45550	1.79E-03	4.73E-05	1.8325E-03	FENCEGRD
609249.43	4204614.96	0.42777	5.16840	1.78E-03	5.37E-04	2.3167E-03	FENCEGRD
609330.61	4204806.93	0.42670	11.45168	1.78E-03	1.19E-03	2.9649E-03	FENCEGRD
609675.81	4204103.74	0.42670	0.33825	1.78E-03	3.51E-05	1.8106E-03	Planned
609231.20	4204468.55	0.42477	1.76246	1.77E-03	1.83E-04	1.9505E-03	Planned
610001.57	4205441.71	0.42413	0.39481	1.76E-03	4.10E-05	1.8058E-03	FENCEGRD
609884.97	4205390.67	0.42354	0.42403	1.76E-03	4.40E-05	1.8064E-03	FENCEGRD
609237.55	4204548.67	0.42352	2.85529	1.76E-03	2.97E-04	2.0588E-03	FENCEGRD
609689.23	4204098.29	0.42201	0.33192	1.76E-03	3.45E-05	1.7904E-03	Planned
609523.53	4205118.50	0.42152	0.89377	1.75E-03	9.28E-05	1.8467E-03	FENCEGRD
609410.92	4204935.65	0.42091	2.65861	1.75E-03	2.76E-04	2.0275E-03	FENCEGRD
609286.84	4204261.60	0.42019	0.75560	1.75E-03	7.85E-05	1.8269E-03	FENCEGRD
609806.46	4205356.96	0.41945	0.44005	1.75E-03	4.57E-05	1.7910E-03	FENCEGRD
609514.67	4205107.36	0.41771	0.93585	1.74E-03	9.72E-05	1.8353E-03	FENCEGRD
610081.03	4205475.01	0.41723	0.37899	1.74E-03	3.94E-05	1.7754E-03	FENCEGRD
609917.76	4205410.26	0.41618	0.40708	1.73E-03	4.23E-05	1.7740E-03	FENCEGRD
609955.37	4205427.81	0.41502	0.39633	1.73E-03	4.12E-05	1.7680E-03	FENCEGRD
609462.48	4205007.02	0.41498	1.66774	1.73E-03	1.73E-04	1.8999E-03	FENCEGRD
609488.73	4205064.43	0.41481	1.15945	1.73E-03	1.20E-04	1.8464E-03	FENCEGRD

609552.13	4205186.44	0.41450	0.63540	1.72E-03	6.60E-05	1.7907E-03	FENCEGRD
609225.84	4204481.95	0.41421	1.86904	1.72E-03	1.94E-04	1.9176E-03	Planned
609261.52	4204680.72	0.41403	14.23335	1.72E-03	1.48E-03	3.2011E-03	FENCEGRD
609244.11	4204628.25	0.41380	6.02852	1.72E-03	6.26E-04	2.3479E-03	FENCEGRD
609543.21	4205175.22	0.41244	0.66451	1.72E-03	6.90E-05	1.7851E-03	FENCEGRD
609232.21	4204562.02	0.41194	3.14088	1.71E-03	3.26E-04	2.0403E-03	FENCEGRD
609290.61	4204749.81	0.41061	45.45200	1.71E-03	4.72E-03	6.4295E-03	FENCEGRD
609534.29	4205164.00	0.40944	0.69385	1.70E-03	7.21E-05	1.7757E-03	FENCEGRD
609268.05	4204280.49	0.40879	0.77929	1.70E-03	8.09E-05	1.7819E-03	FENCEGRD
609838.78	4205376.76	0.40833	0.42460	1.70E-03	4.41E-05	1.7431E-03	FENCEGRD
610034.46	4205461.26	0.40733	0.38088	1.69E-03	3.96E-05	1.7344E-03	FENCEGRD
609262.67	4204293.93	0.40658	0.79344	1.69E-03	8.24E-05	1.7742E-03	FENCEGRD
609257.29	4204307.36	0.40543	0.81789	1.69E-03	8.50E-05	1.7719E-03	FENCEGRD
609251.92	4204320.80	0.40489	0.85153	1.68E-03	8.84E-05	1.7732E-03	FENCEGRD
609290.93	4204764.30	0.40473	24.07104	1.68E-03	2.50E-03	4.1842E-03	FENCEGRD
609411.23	4204950.14	0.40426	2.28935	1.68E-03	2.38E-04	1.9199E-03	FENCEGRD
609246.54	4204334.24	0.40423	0.89174	1.68E-03	9.26E-05	1.7746E-03	FENCEGRD
609761.09	4205342.71	0.40396	0.43577	1.68E-03	4.53E-05	1.7261E-03	FENCEGRD
609689.39	4205292.31	0.40391	0.48085	1.68E-03	4.99E-05	1.7306E-03	Planned
609669.93	4205278.09	0.40390	0.49706	1.68E-03	5.16E-05	1.7322E-03	Planned
609241.16	4204347.68	0.40285	0.93585	1.68E-03	9.72E-05	1.7734E-03	FENCEGRD
609740.16	4205329.97	0.40262	0.44397	1.68E-03	4.61E-05	1.7214E-03	FENCEGRD
609220.48	4204495.34	0.40261	1.98018	1.68E-03	2.06E-04	1.8809E-03	Planned
609871.33	4205396.45	0.40211	0.40767	1.67E-03	4.23E-05	1.7155E-03	FENCEGRD
609569.98	4205208.88	0.40068	0.58642	1.67E-03	6.09E-05	1.7281E-03	FENCEGRD
609235.78	4204361.12	0.40039	0.98197	1.67E-03	1.02E-04	1.7680E-03	FENCEGRD
609525.36	4205152.78	0.40038	0.72845	1.67E-03	7.57E-05	1.7416E-03	FENCEGRD
609226.86	4204575.37	0.39842	3.46829	1.66E-03	3.60E-04	2.0180E-03	FENCEGRD
609792.98	4205362.69	0.39747	0.42138	1.65E-03	4.38E-05	1.6976E-03	FENCEGRD
609988.08	4205447.43	0.39742	0.38240	1.65E-03	3.97E-05	1.6933E-03	FENCEGRD
609462.79	4205021.51	0.39445	1.48535	1.64E-03	1.54E-04	1.7955E-03	FENCEGRD
609256.22	4204693.95	0.39413	21.06234	1.64E-03	2.19E-03	3.8276E-03	Non-res
609578.90	4205220.10	0.39378	0.56559	1.64E-03	5.87E-05	1.6972E-03	FENCEGRD
609215.12	4204508.74	0.39338	2.12415	1.64E-03	2.21E-04	1.8574E-03	FENCEGRD
609904.06	4205416.08	0.39336	0.39231	1.64E-03	4.07E-05	1.6775E-03	FENCEGRD
610067.44	4205480.78	0.39311	0.36764	1.64E-03	3.82E-05	1.6739E-03	FENCEGRD
609489.04	4205078.92	0.39272	1.05387	1.63E-03	1.09E-04	1.7435E-03	FENCEGRD
609941.95	4205433.50	0.39067	0.38310	1.63E-03	3.98E-05	1.6653E-03	FENCEGRD
609291.24	4204778.79	0.39013	15.66787	1.62E-03	1.63E-03	3.2507E-03	FENCEGRD
609214.27	4204414.88	0.38960	1.27388	1.62E-03	1.32E-04	1.7534E-03	FENCEGRD
609331.24	4204835.91	0.38888	6.51901	1.62E-03	6.77E-04	2.2952E-03	FENCEGRD
609825.21	4205382.52	0.38851	0.40720	1.62E-03	4.23E-05	1.6588E-03	FENCEGRD
609371.24	4204893.03	0.38794	3.60544	1.61E-03	3.74E-04	1.9887E-03	FENCEGRD
609516.44	4205141.56	0.38731	0.76521	1.61E-03	7.95E-05	1.6910E-03	FENCEGRD
609587.82	4205231.33	0.38696	0.54349	1.61E-03	5.65E-05	1.6666E-03	FENCEGRD
609208.89	4204428.32	0.38627	1.37093	1.61E-03	1.42E-04	1.7496E-03	FENCEGRD
609221.52	4204588.72	0.38557	3.86706	1.60E-03	4.02E-04	2.0060E-03	FENCEGRD
609209.76	4204522.14	0.38533	2.29807	1.60E-03	2.39E-04	1.8420E-03	FENCEGRD
609411.55	4204964.63	0.38481	1.99422	1.60E-03	2.07E-04	1.8083E-03	FENCEGRD
610020.91	4205467.01	0.38197	0.36938	1.59E-03	3.84E-05	1.6277E-03	FENCEGRD
609203.52	4204441.76	0.38157	1.46560	1.59E-03	1.52E-04	1.7399E-03	FENCEGRD
609857.69	4205402.24	0.38134	0.39218	1.59E-03	4.07E-05	1.6275E-03	FENCEGRD
609507.52	4205130.34	0.37985	0.80046	1.58E-03	8.31E-05	1.6637E-03	FENCEGRD
609747.72	4205348.38	0.37892	0.41710	1.58E-03	4.33E-05	1.6200E-03	FENCEGRD
609204.40	4204535.54	0.37721	2.49506	1.57E-03	2.59E-04	1.8287E-03	FENCEGRD
609463.11	4205036.00	0.37651	1.33005	1.57E-03	1.38E-04	1.7048E-03	FENCEGRD
609489.36	4205093.41	0.37636	0.96065	1.57E-03	9.98E-05	1.6658E-03	FENCEGRD
609726.84	4205335.63	0.37607	0.42442	1.56E-03	4.41E-05	1.6089E-03	FENCEGRD
609291.55	4204793.28	0.37575	10.92453	1.56E-03	1.13E-03	2.6982E-03	FENCEGRD
609779.50	4205368.41	0.37566	0.40395	1.56E-03	4.20E-05	1.6050E-03	FENCEGRD
609198.14	4204455.20	0.37482	1.55354	1.56E-03	1.61E-04	1.7210E-03	FENCEGRD
609216.18	4204602.07	0.37411	4.36900	1.56E-03	4.54E-04	2.0104E-03	FENCEGRD
609250.93	4204707.19	0.37408	36.89414	1.56E-03	3.83E-03	5.3886E-03	Non-res
609974.60	4205453.16	0.37302	0.37043	1.55E-03	3.85E-05	1.5906E-03	FENCEGRD
609498.60	4205119.12	0.37284	0.83755	1.55E-03	8.70E-05	1.6383E-03	FENCEGRD
609536.44	4205198.68	0.37139	0.58271	1.55E-03	6.05E-05	1.6058E-03	FENCEGRD
610053.84	4205486.55	0.37036	0.35657	1.54E-03	3.70E-05	1.5781E-03	FENCEGRD
609928.53	4205439.20	0.36958	0.37009	1.54E-03	3.84E-05	1.5762E-03	FENCEGRD
609554.38	4205221.24	0.36953	0.53887	1.54E-03	5.60E-05	1.5936E-03	FENCEGRD
609811.64	4205388.28	0.36947	0.39067	1.54E-03	4.06E-05	1.5779E-03	FENCEGRD
609890.35	4205421.89	0.36910	0.37897	1.54E-03	3.94E-05	1.5752E-03	FENCEGRD
609331.55	4204850.40	0.36898	5.13691	1.54E-03	5.34E-04	2.0688E-03	FENCEGRD
609199.04	4204548.94	0.36804	2.70820	1.53E-03	2.81E-04	1.8127E-03	FENCEGRD
609228.15	4204668.14	0.36748	11.39102	1.53E-03	1.18E-03	2.7122E-03	FENCEGRD
609192.76	4204468.64	0.36709	1.64337	1.53E-03	1.71E-04	1.6981E-03	Planned
609527.47	4205187.40	0.36695	0.60903	1.53E-03	6.33E-05	1.5901E-03	FENCEGRD
609371.55	4204907.52	0.36668	3.02786	1.53E-03	3.14E-04	1.8402E-03	FENCEGRD
609563.35	4205232.52	0.36540	0.52026	1.52E-03	5.40E-05	1.5744E-03	FENCEGRD
609210.84	4204615.42	0.36500	4.99160	1.52E-03	5.18E-04	2.0372E-03	FENCEGRD

609411.86	4204979.12	0.36456	1.75295	1.52E-03	1.82E-04	1.6990E-03	FENCEGRD
609518.50	4205176.12	0.36430	0.63350	1.52E-03	6.58E-05	1.5816E-03	FENCEGRD
609489.67	4205107.90	0.36415	0.87796	1.52E-03	9.12E-05	1.6064E-03	FENCEGRD
609844.04	4205408.03	0.36223	0.37726	1.51E-03	3.92E-05	1.5464E-03	FENCEGRD
609463.42	4205050.48	0.36122	1.19738	1.50E-03	1.24E-04	1.6274E-03	FENCEGRD
609509.53	4205164.84	0.35980	0.66008	1.50E-03	6.86E-05	1.5657E-03	FENCEGRD
610007.37	4205472.76	0.35977	0.35795	1.50E-03	3.72E-05	1.5341E-03	FENCEGRD
609187.38	4204482.08	0.35887	1.73840	1.49E-03	1.81E-04	1.6738E-03	FENCEGRD
609193.67	4204562.33	0.35805	2.94492	1.49E-03	3.06E-04	1.7957E-03	FENCEGRD
609961.11	4205458.88	0.35602	0.35750	1.48E-03	3.71E-05	1.5185E-03	FENCEGRD
609734.35	4205354.06	0.35527	0.40020	1.48E-03	4.16E-05	1.5198E-03	FENCEGRD
609766.02	4205374.13	0.35523	0.38718	1.48E-03	4.02E-05	1.5183E-03	FENCEGRD
609331.87	4204864.89	0.35519	4.13867	1.48E-03	4.30E-04	1.9078E-03	FENCEGRD
610406.85	4204687.13	0.35349	0.31237	1.47E-03	3.24E-05	1.5033E-03	FENCEGRD
609251.87	4204750.65	0.35343	25.05721	1.47E-03	2.60E-03	4.0732E-03	FENCEGRD
609205.50	4204628.77	0.35313	5.75029	1.47E-03	5.97E-04	2.0666E-03	FENCEGRD
609876.65	4205427.71	0.35265	0.36459	1.47E-03	3.79E-05	1.5052E-03	FENCEGRD
609500.56	4205153.56	0.35186	0.68964	1.46E-03	7.16E-05	1.5357E-03	FENCEGRD
609222.83	4204681.44	0.35185	15.64557	1.46E-03	1.63E-03	3.0891E-03	FENCEGRD
609713.52	4205341.28	0.35171	0.40607	1.46E-03	4.22E-05	1.5056E-03	FENCEGRD
609798.07	4205394.03	0.35156	0.37480	1.46E-03	3.89E-05	1.5017E-03	FENCEGRD
609182.01	4204495.52	0.35144	1.85058	1.46E-03	1.92E-04	1.6545E-03	FENCEGRD
609915.11	4205444.89	0.35134	0.35732	1.46E-03	3.71E-05	1.4990E-03	FENCEGRD
610040.24	4205492.32	0.35091	0.34530	1.46E-03	3.59E-05	1.4960E-03	FENCEGRD
609463.74	4205064.97	0.35067	1.08202	1.46E-03	1.12E-04	1.5715E-03	FENCEGRD
609652.33	4205298.34	0.34928	0.44196	1.45E-03	4.59E-05	1.4992E-03	Planned
609671.78	4205312.56	0.34838	0.42851	1.45E-03	4.45E-05	1.4941E-03	Planned
609252.18	4204765.14	0.34721	14.69272	1.44E-03	1.53E-03	2.9708E-03	FENCEGRD
609188.31	4204575.73	0.34707	3.20796	1.44E-03	3.33E-04	1.7773E-03	FENCEGRD
609412.18	4204993.61	0.34635	1.55238	1.44E-03	1.61E-04	1.6024E-03	FENCEGRD
609371.86	4204922.01	0.34587	2.57487	1.44E-03	2.67E-04	1.7066E-03	FENCEGRD
609491.59	4205142.28	0.34546	0.71934	1.44E-03	7.47E-05	1.5121E-03	FENCEGRD
609830.40	4205413.82	0.34455	0.36291	1.43E-03	3.77E-05	1.4713E-03	FENCEGRD
609292.18	4204822.26	0.34447	6.06575	1.43E-03	6.30E-04	2.0633E-03	FENCEGRD
609176.63	4204508.96	0.34358	1.96976	1.43E-03	2.05E-04	1.6342E-03	FENCEGRD
609332.18	4204879.38	0.34249	3.39840	1.43E-03	3.53E-04	1.7781E-03	FENCEGRD
609993.82	4205478.51	0.34073	0.34647	1.42E-03	3.60E-05	1.4537E-03	FENCEGRD
609464.05	4205079.46	0.34002	0.98271	1.41E-03	1.02E-04	1.5169E-03	FENCEGRD
609947.62	4205464.60	0.33844	0.34552	1.41E-03	3.59E-05	1.4441E-03	FENCEGRD
609482.62	4205131.00	0.33710	0.75178	1.40E-03	7.81E-05	1.4807E-03	FENCEGRD
609182.95	4204589.13	0.33648	3.50598	1.40E-03	3.64E-04	1.7642E-03	FENCEGRD
609862.94	4205433.52	0.33645	0.35107	1.40E-03	3.65E-05	1.4364E-03	FENCEGRD
609217.51	4204694.73	0.33552	24.29835	1.40E-03	2.52E-03	3.9199E-03	Non-res
609752.53	4205379.85	0.33551	0.37113	1.40E-03	3.85E-05	1.4346E-03	FENCEGRD
609252.50	4204779.63	0.33529	9.88391	1.40E-03	1.03E-03	2.4217E-03	FENCEGRD
609538.78	4205233.60	0.33525	0.49731	1.39E-03	5.17E-05	1.4466E-03	FENCEGRD
609784.50	4205399.79	0.33449	0.35959	1.39E-03	3.73E-05	1.4291E-03	FENCEGRD
609901.69	4205450.59	0.33420	0.34510	1.39E-03	3.58E-05	1.4264E-03	FENCEGRD
609171.25	4204522.40	0.33379	2.08015	1.39E-03	2.16E-04	1.6049E-03	FENCEGRD
609720.97	4205359.73	0.33326	0.38268	1.39E-03	3.97E-05	1.4264E-03	FENCEGRD
610026.65	4205498.09	0.33275	0.33439	1.38E-03	3.47E-05	1.4193E-03	FENCEGRD
609547.79	4205244.93	0.33272	0.48026	1.38E-03	4.99E-05	1.4343E-03	FENCEGRD
609464.36	4205093.95	0.33083	0.89644	1.38E-03	9.31E-05	1.4697E-03	FENCEGRD
609473.65	4205119.72	0.32997	0.78550	1.37E-03	8.16E-05	1.4546E-03	FENCEGRD
609412.49	4205008.10	0.32976	1.38440	1.37E-03	1.44E-04	1.5159E-03	FENCEGRD
609700.19	4205346.93	0.32951	0.38891	1.37E-03	4.04E-05	1.4115E-03	FENCEGRD
609816.76	4205419.61	0.32786	0.34917	1.36E-03	3.63E-05	1.4005E-03	FENCEGRD
609292.50	4204836.75	0.32739	4.74249	1.36E-03	4.93E-04	1.8548E-03	FENCEGRD
609332.49	4204893.87	0.32724	2.84395	1.36E-03	2.95E-04	1.6570E-03	FENCEGRD
609372.18	4204936.49	0.32700	2.21474	1.36E-03	2.30E-04	1.5907E-03	FENCEGRD
609177.59	4204602.53	0.32594	3.83800	1.36E-03	3.99E-04	1.7548E-03	FENCEGRD
609165.87	4204535.84	0.32494	2.21150	1.35E-03	2.30E-04	1.5817E-03	FENCEGRD
609464.68	4205108.44	0.32439	0.82054	1.35E-03	8.52E-05	1.4350E-03	FENCEGRD
609980.28	4205484.25	0.32326	0.33541	1.35E-03	3.48E-05	1.3799E-03	FENCEGRD
609934.14	4205470.33	0.32234	0.33397	1.34E-03	3.47E-05	1.3759E-03	FENCEGRD
609849.24	4205439.34	0.32175	0.33795	1.34E-03	3.51E-05	1.3739E-03	FENCEGRD
609888.27	4205456.28	0.31809	0.33351	1.32E-03	3.46E-05	1.3582E-03	FENCEGRD
609770.93	4205405.55	0.31668	0.34548	1.32E-03	3.59E-05	1.3536E-03	FENCEGRD
609739.05	4205385.57	0.31611	0.35623	1.32E-03	3.70E-05	1.3523E-03	FENCEGRD
609160.50	4204549.27	0.31559	2.34455	1.31E-03	2.44E-04	1.5567E-03	FENCEGRD
610013.05	4205503.85	0.31558	0.32394	1.31E-03	3.36E-05	1.3467E-03	FENCEGRD
609189.47	4204668.82	0.31539	9.73746	1.31E-03	1.01E-03	2.3237E-03	FENCEGRD
609172.23	4204615.92	0.31531	4.19792	1.31E-03	4.36E-04	1.7480E-03	FENCEGRD
609412.80	4205022.59	0.31434	1.24238	1.31E-03	1.29E-04	1.4370E-03	FENCEGRD
609292.81	4204851.24	0.31367	3.79688	1.31E-03	3.94E-04	1.6995E-03	FENCEGRD
609707.60	4205365.41	0.31285	0.36631	1.30E-03	3.80E-05	1.3398E-03	FENCEGRD
609803.11	4205425.40	0.31191	0.33606	1.30E-03	3.49E-05	1.3327E-03	FENCEGRD
609920.65	4205476.05	0.31019	0.32211	1.29E-03	3.35E-05	1.3241E-03	FENCEGRD
609633.84	4205315.07	0.31002	0.40017	1.29E-03	4.16E-05	1.3315E-03	Planned

609686.87	4205352.59	0.30947	0.37303	1.29E-03	3.87E-05	1.3264E-03	FENCEGRD
609372.49	4204950.98	0.30941	1.92442	1.29E-03	2.00E-04	1.4873E-03	FENCEGRD
609835.54	4205445.15	0.30850	0.32516	1.28E-03	3.38E-05	1.3174E-03	FENCEGRD
609653.30	4205329.28	0.30834	0.38889	1.28E-03	4.04E-05	1.3234E-03	Planned
609966.73	4205490.00	0.30795	0.32450	1.28E-03	3.37E-05	1.3151E-03	FENCEGRD
609213.13	4204751.50	0.30696	13.01804	1.28E-03	1.35E-03	2.6294E-03	FENCEGRD
609155.12	4204562.71	0.30661	2.49026	1.28E-03	2.59E-04	1.5344E-03	FENCEGRD
609212.81	4204737.01	0.30641	27.77288	1.27E-03	2.88E-03	4.1596E-03	FENCEGRD
609514.15	4205234.60	0.30615	0.47543	1.27E-03	4.94E-05	1.3232E-03	FENCEGRD
609523.19	4205245.97	0.30526	0.46044	1.27E-03	4.78E-05	1.3180E-03	FENCEGRD
609874.85	4205461.98	0.30526	0.32171	1.27E-03	3.34E-05	1.3036E-03	FENCEGRD
609166.87	4204629.32	0.30523	4.57483	1.27E-03	4.75E-04	1.7452E-03	FENCEGRD
609532.23	4205257.34	0.30410	0.44500	1.27E-03	4.62E-05	1.3116E-03	FENCEGRD
609184.13	4204682.17	0.30278	12.02581	1.26E-03	1.25E-03	2.5089E-03	Non-res
609496.07	4205211.86	0.30266	0.51028	1.26E-03	5.30E-05	1.3123E-03	FENCEGRD
609293.13	4204865.73	0.30117	3.11291	1.25E-03	3.23E-04	1.5765E-03	FENCEGRD
609213.44	4204765.98	0.30092	8.04135	1.25E-03	8.35E-04	2.0873E-03	FENCEGRD
609999.46	4205509.62	0.30039	0.31364	1.25E-03	3.26E-05	1.2825E-03	FENCEGRD
609413.12	4205037.08	0.29973	1.12165	1.25E-03	1.17E-04	1.3637E-03	FENCEGRD
609757.36	4205411.31	0.29969	0.33238	1.25E-03	3.45E-05	1.2815E-03	FENCEGRD
609487.03	4205200.49	0.29889	0.52950	1.24E-03	5.50E-05	1.2987E-03	FENCEGRD
609907.16	4205481.77	0.29779	0.31105	1.24E-03	3.23E-05	1.2714E-03	FENCEGRD
609953.19	4205495.75	0.29765	0.31269	1.24E-03	3.25E-05	1.2710E-03	FENCEGRD
609149.74	4204576.15	0.29737	2.63385	1.24E-03	2.74E-04	1.5109E-03	FENCEGRD
609789.47	4205431.19	0.29714	0.32331	1.24E-03	3.36E-05	1.2700E-03	FENCEGRD
609725.57	4205391.29	0.29709	0.34300	1.24E-03	3.56E-05	1.2718E-03	FENCEGRD
609477.98	4205189.12	0.29557	0.54875	1.23E-03	5.70E-05	1.2868E-03	FENCEGRD
609333.12	4204922.85	0.29538	2.08149	1.23E-03	2.16E-04	1.4452E-03	FENCEGRD
609253.44	4204823.10	0.29505	4.16905	1.23E-03	4.33E-04	1.6607E-03	FENCEGRD
609694.23	4205371.08	0.29433	0.35166	1.22E-03	3.65E-05	1.2612E-03	FENCEGRD
610440.52	4204672.03	0.29397	0.26990	1.22E-03	2.80E-05	1.2512E-03	FENCEGRD
609821.83	4205450.97	0.29367	0.31365	1.22E-03	3.26E-05	1.2545E-03	FENCEGRD
609372.81	4204965.47	0.29292	1.68796	1.22E-03	1.75E-04	1.3941E-03	FENCEGRD
609861.43	4205467.67	0.29252	0.31064	1.22E-03	3.23E-05	1.2494E-03	FENCEGRD
609213.76	4204780.47	0.29098	5.70427	1.21E-03	5.92E-04	1.8032E-03	FENCEGRD
609468.94	4205177.75	0.29062	0.56972	1.21E-03	5.92E-05	1.2684E-03	FENCEGRD
609178.79	4204695.52	0.28971	14.45436	1.21E-03	1.50E-03	2.7068E-03	Non-res
609939.64	4205501.50	0.28912	0.30121	1.20E-03	3.13E-05	1.2343E-03	FENCEGRD
609144.36	4204589.59	0.28858	2.77821	1.20E-03	2.89E-04	1.4893E-03	FENCEGRD
609293.44	4204880.22	0.28853	2.60427	1.20E-03	2.70E-04	1.4710E-03	FENCEGRD
609413.43	4205051.57	0.28798	1.01751	1.20E-03	1.06E-04	1.3039E-03	FENCEGRD
609985.86	4205515.39	0.28762	0.30331	1.20E-03	3.15E-05	1.2283E-03	FENCEGRD
609439.68	4205108.98	0.28752	0.76852	1.20E-03	7.98E-05	1.2762E-03	FENCEGRD
609893.68	4205487.49	0.28664	0.30031	1.19E-03	3.12E-05	1.2239E-03	FENCEGRD
609459.90	4205166.38	0.28492	0.59170	1.19E-03	6.15E-05	1.2470E-03	FENCEGRD
609156.15	4204656.12	0.28488	5.19079	1.19E-03	5.39E-04	1.7245E-03	FENCEGRD
610474.17	4204679.75	0.28370	0.25874	1.18E-03	2.69E-05	1.2073E-03	FENCEGRD
609743.79	4205417.07	0.28320	0.31991	1.18E-03	3.32E-05	1.2116E-03	FENCEGRD
609775.83	4205436.98	0.28242	0.31137	1.18E-03	3.23E-05	1.2075E-03	FENCEGRD
609253.76	4204837.59	0.28177	3.34466	1.17E-03	3.47E-04	1.5198E-03	FENCEGRD
609848.01	4205473.36	0.28089	0.29987	1.17E-03	3.11E-05	1.1999E-03	FENCEGRD
609138.98	4204603.03	0.28061	2.91748	1.17E-03	3.03E-04	1.4706E-03	FENCEGRD
609712.09	4205397.01	0.28048	0.32955	1.17E-03	3.42E-05	1.2013E-03	FENCEGRD
609333.44	4204937.33	0.28032	1.81231	1.17E-03	1.88E-04	1.3546E-03	FENCEGRD
609808.13	4205456.78	0.27917	0.30293	1.16E-03	3.15E-05	1.1931E-03	FENCEGRD
609450.86	4205155.01	0.27908	0.61480	1.16E-03	6.39E-05	1.2251E-03	FENCEGRD
609613.59	4205330.03	0.27890	0.36600	1.16E-03	3.80E-05	1.1985E-03	Planned
609926.10	4205507.24	0.27872	0.29100	1.16E-03	3.02E-05	1.1900E-03	FENCEGRD
609373.12	4204979.96	0.27760	1.49310	1.16E-03	1.55E-04	1.3102E-03	FENCEGRD
609680.86	4205376.76	0.27753	0.33810	1.15E-03	3.51E-05	1.1899E-03	FENCEGRD
609972.26	4205521.16	0.27742	0.29285	1.15E-03	3.04E-05	1.1847E-03	FENCEGRD
609413.75	4205066.06	0.27698	0.92773	1.15E-03	9.64E-05	1.2488E-03	FENCEGRD
609633.05	4205344.25	0.27660	0.35628	1.15E-03	3.70E-05	1.1879E-03	Planned
609150.79	4204669.51	0.27435	5.23950	1.14E-03	5.44E-04	1.6858E-03	FENCEGRD
609880.19	4205493.22	0.27405	0.29061	1.14E-03	3.02E-05	1.1705E-03	FENCEGRD
609133.61	4204616.47	0.27365	3.03508	1.14E-03	3.15E-04	1.4539E-03	FENCEGRD
609441.82	4205143.64	0.27250	0.63953	1.13E-03	6.64E-05	1.2003E-03	FENCEGRD
609834.59	4205479.06	0.26952	0.28964	1.12E-03	3.01E-05	1.1515E-03	FENCEGRD
609254.07	4204852.08	0.26923	2.75166	1.12E-03	2.86E-04	1.4060E-03	FENCEGRD
609414.06	4205080.55	0.26905	0.84901	1.12E-03	8.82E-05	1.2077E-03	FENCEGRD
609174.39	4204752.34	0.26822	5.35275	1.12E-03	5.56E-04	1.6720E-03	FENCEGRD
609958.67	4205526.93	0.26792	0.28288	1.11E-03	2.94E-05	1.1442E-03	FENCEGRD
609762.18	4205442.77	0.26779	0.30027	1.11E-03	3.12E-05	1.1454E-03	FENCEGRD
609912.55	4205512.99	0.26772	0.28109	1.11E-03	2.92E-05	1.1432E-03	FENCEGRD
609174.07	4204737.85	0.26753	7.86828	1.11E-03	8.17E-04	1.9304E-03	FENCEGRD
610440.54	4204657.14	0.26724	0.25331	1.11E-03	2.63E-05	1.1383E-03	FENCEGRD
609730.22	4205422.83	0.26717	0.30833	1.11E-03	3.20E-05	1.1437E-03	FENCEGRD
609333.75	4204951.82	0.26685	1.59387	1.11E-03	1.66E-04	1.2759E-03	FENCEGRD
609432.77	4205132.27	0.26660	0.66517	1.11E-03	6.91E-05	1.1784E-03	FENCEGRD

609794.42	4205462.60	0.26644	0.29218	1.11E-03	3.03E-05	1.1390E-03	FENCEGRD
609503.57	4205270.85	0.26623	0.40409	1.11E-03	4.20E-05	1.1497E-03	FENCEGRD
609494.46	4205259.39	0.26584	0.41702	1.11E-03	4.33E-05	1.1494E-03	FENCEGRD
609485.34	4205247.92	0.26518	0.43007	1.10E-03	4.47E-05	1.1481E-03	FENCEGRD
609698.61	4205402.73	0.26496	0.31690	1.10E-03	3.29E-05	1.1354E-03	FENCEGRD
609866.70	4205498.94	0.26479	0.28052	1.10E-03	2.91E-05	1.1309E-03	FENCEGRD
609373.44	4204994.45	0.26417	1.33184	1.10E-03	1.38E-04	1.2375E-03	FENCEGRD
609145.43	4204682.91	0.26402	4.91479	1.10E-03	5.10E-04	1.6090E-03	Non-res
609174.70	4204766.82	0.26260	4.08306	1.09E-03	4.24E-04	1.5167E-03	FENCEGRD
609667.48	4205382.43	0.26231	0.32514	1.09E-03	3.38E-05	1.1252E-03	FENCEGRD
609414.38	4205095.04	0.26175	0.78018	1.09E-03	8.10E-05	1.1702E-03	FENCEGRD
609294.07	4204909.20	0.26076	1.91227	1.08E-03	1.99E-04	1.2836E-03	FENCEGRD
609423.73	4205120.90	0.26059	0.69213	1.08E-03	7.19E-05	1.1562E-03	FENCEGRD
610474.19	4204665.00	0.26021	0.24338	1.08E-03	2.53E-05	1.1080E-03	FENCEGRD
609945.07	4205532.70	0.25956	0.27326	1.08E-03	2.84E-05	1.1084E-03	FENCEGRD
609467.11	4205225.00	0.25906	0.45963	1.08E-03	4.77E-05	1.1257E-03	FENCEGRD
609821.17	4205484.75	0.25876	0.27978	1.08E-03	2.91E-05	1.1057E-03	FENCEGRD
609254.38	4204866.57	0.25816	2.31408	1.07E-03	2.40E-04	1.3145E-03	FENCEGRD
609899.01	4205518.74	0.25750	0.27154	1.07E-03	2.82E-05	1.0996E-03	FENCEGRD
609457.99	4205213.54	0.25505	0.47538	1.06E-03	4.94E-05	1.1106E-03	FENCEGRD
609596.87	4205345.00	0.25484	0.33736	1.06E-03	3.50E-05	1.0954E-03	Planned
609853.22	4205504.66	0.25479	0.27082	1.06E-03	2.81E-05	1.0883E-03	FENCEGRD
609414.69	4205109.53	0.25425	0.72017	1.06E-03	7.48E-05	1.1327E-03	FENCEGRD
609780.72	4205468.41	0.25421	0.28186	1.06E-03	2.93E-05	1.0870E-03	FENCEGRD
609748.54	4205448.56	0.25394	0.28966	1.06E-03	3.01E-05	1.0867E-03	FENCEGRD
609175.02	4204781.31	0.25375	3.28283	1.06E-03	3.41E-04	1.3968E-03	FENCEGRD
609140.07	4204696.31	0.25339	4.22983	1.05E-03	4.39E-04	1.4937E-03	Non-res
609373.75	4205008.94	0.25239	1.19654	1.05E-03	1.24E-04	1.1745E-03	FENCEGRD
609616.32	4205359.22	0.25232	0.32905	1.05E-03	3.42E-05	1.0841E-03	Planned
609716.64	4205428.58	0.25218	0.29740	1.05E-03	3.09E-05	1.0802E-03	FENCEGRD
609448.88	4205202.07	0.25200	0.49117	1.05E-03	5.10E-05	1.0996E-03	FENCEGRD
609685.12	4205408.45	0.25071	0.30451	1.04E-03	3.16E-05	1.0748E-03	FENCEGRD
609931.48	4205538.47	0.25029	0.26428	1.04E-03	2.75E-05	1.0689E-03	FENCEGRD
609439.76	4205190.61	0.24976	0.50711	1.04E-03	5.27E-05	1.0919E-03	FENCEGRD
609117.47	4204656.79	0.24949	2.86917	1.04E-03	2.98E-04	1.3361E-03	FENCEGRD
609654.11	4205388.11	0.24859	0.31286	1.03E-03	3.25E-05	1.0669E-03	FENCEGRD
609885.46	4205524.49	0.24807	0.26263	1.03E-03	2.73E-05	1.0595E-03	FENCEGRD
609807.75	4205490.45	0.24764	0.27070	1.03E-03	2.81E-05	1.0585E-03	FENCEGRD
609215.01	4204838.43	0.24644	2.35393	1.03E-03	2.44E-04	1.2699E-03	FENCEGRD
609294.38	4204923.69	0.24532	1.66643	1.02E-03	1.73E-04	1.1938E-03	FENCEGRD
609175.33	4204795.80	0.24532	2.70354	1.02E-03	2.81E-04	1.3016E-03	FENCEGRD
609839.73	4205510.39	0.24515	0.26156	1.02E-03	2.72E-05	1.0472E-03	FENCEGRD
609430.64	4205179.15	0.24344	0.52583	1.01E-03	5.46E-05	1.0675E-03	FENCEGRD
609374.06	4205023.43	0.24244	1.08218	1.01E-03	1.12E-04	1.1212E-03	FENCEGRD
609767.01	4205474.23	0.24199	0.27227	1.01E-03	2.83E-05	1.0352E-03	FENCEGRD
609112.10	4204670.23	0.24116	2.62929	1.00E-03	2.73E-04	1.2765E-03	FENCEGRD
609917.88	4205544.24	0.24111	0.25526	1.00E-03	2.65E-05	1.0297E-03	FENCEGRD
609734.90	4205454.35	0.24097	0.27942	1.00E-03	2.90E-05	1.0317E-03	FENCEGRD
609703.07	4205434.34	0.23942	0.28621	9.96E-04	2.97E-05	1.0259E-03	FENCEGRD
609871.92	4205530.23	0.23927	0.25425	9.96E-04	2.64E-05	1.0220E-03	FENCEGRD
610474.20	4204650.26	0.23801	0.22925	9.90E-04	2.38E-05	1.0141E-03	FENCEGRD
609794.33	4205496.14	0.23796	0.26140	9.90E-04	2.72E-05	1.0173E-03	FENCEGRD
609671.64	4205414.17	0.23750	0.29302	9.88E-04	3.04E-05	1.0187E-03	FENCEGRD
609826.24	4205516.11	0.23580	0.25254	9.81E-04	2.62E-05	1.0074E-03	FENCEGRD
609135.65	4204753.18	0.23548	2.62113	9.80E-04	2.72E-04	1.2521E-03	FENCEGRD
609255.01	4204895.55	0.23543	1.72075	9.80E-04	1.79E-04	1.1583E-03	FENCEGRD
609135.33	4204738.69	0.23521	2.97772	9.79E-04	3.09E-04	1.2880E-03	FENCEGRD
609215.33	4204852.92	0.23500	2.00260	9.78E-04	2.08E-04	1.1858E-03	FENCEGRD
609421.53	4205167.68	0.23441	0.54648	9.75E-04	5.68E-05	1.0321E-03	FENCEGRD
609474.84	4205284.28	0.23368	0.36828	9.72E-04	3.83E-05	1.0106E-03	FENCEGRD
609294.70	4204938.18	0.23352	1.47037	9.72E-04	1.53E-04	1.1244E-03	FENCEGRD
609374.38	4205037.92	0.23325	0.98396	9.71E-04	1.02E-04	1.0727E-03	FENCEGRD
609106.72	4204683.67	0.23281	2.34112	9.69E-04	2.43E-04	1.2119E-03	Non-res
609904.29	4205550.01	0.23268	0.24707	9.68E-04	2.57E-05	9.9382E-04	FENCEGRD
609465.67	4205272.74	0.23141	0.37977	9.63E-04	3.94E-05	1.0023E-03	FENCEGRD
609135.96	4204767.67	0.23087	2.28278	9.61E-04	2.37E-04	1.1977E-03	FENCEGRD
609858.38	4205535.98	0.23087	0.24607	9.61E-04	2.56E-05	9.8619E-04	FENCEGRD
609753.31	4205480.04	0.23066	0.26283	9.60E-04	2.73E-05	9.8705E-04	FENCEGRD
609456.49	4205261.20	0.22950	0.39114	9.55E-04	4.06E-05	9.9555E-04	FENCEGRD
609721.25	4205460.14	0.22887	0.26954	9.52E-04	2.80E-05	9.8030E-04	FENCEGRD
609573.98	4205363.49	0.22887	0.30605	9.52E-04	3.18E-05	9.8410E-04	Planned
609780.91	4205501.84	0.22860	0.25244	9.51E-04	2.62E-05	9.7740E-04	FENCEGRD
609689.50	4205440.10	0.22711	0.27595	9.45E-04	2.87E-05	9.7365E-04	FENCEGRD
609812.75	4205521.83	0.22665	0.24382	9.43E-04	2.53E-05	9.6839E-04	FENCEGRD
609593.43	4205377.70	0.22634	0.29894	9.42E-04	3.11E-05	9.7283E-04	Planned
609658.16	4205419.89	0.22552	0.28234	9.38E-04	2.93E-05	9.6769E-04	FENCEGRD
609374.69	4205052.41	0.22503	0.89912	9.36E-04	9.34E-05	1.0297E-03	FENCEGRD
609890.69	4205555.78	0.22491	0.23959	9.36E-04	2.49E-05	9.6071E-04	FENCEGRD
609175.96	4204824.78	0.22482	1.94848	9.35E-04	2.02E-04	1.1378E-03	FENCEGRD

609101.34	4204697.11	0.22452	2.05068	9.34E-04	2.13E-04	1.1472E-03	Non-res
609255.33	4204910.04	0.22442	1.51336	9.34E-04	1.57E-04	1.0910E-03	FENCEGRD
609438.14	4205238.13	0.22361	0.41561	9.30E-04	4.32E-05	9.7359E-04	FENCEGRD
609136.28	4204782.15	0.22345	2.00174	9.30E-04	2.08E-04	1.1377E-03	FENCEGRD
609412.41	4205156.22	0.22339	0.56752	9.30E-04	5.89E-05	9.8845E-04	FENCEGRD
609295.01	4204952.66	0.22333	1.31103	9.29E-04	1.36E-04	1.0654E-03	FENCEGRD
609844.83	4205541.73	0.22258	0.23749	9.26E-04	2.47E-05	9.5080E-04	FENCEGRD
609739.61	4205485.86	0.21972	0.25386	9.14E-04	2.64E-05	9.4060E-04	FENCEGRD
609767.49	4205507.53	0.21880	0.24424	9.10E-04	2.54E-05	9.3577E-04	FENCEGRD
609428.96	4205226.59	0.21860	0.42927	9.10E-04	4.46E-05	9.5416E-04	FENCEGRD
609799.27	4205527.55	0.21807	0.23679	9.07E-04	2.46E-05	9.3196E-04	FENCEGRD
610474.22	4204635.52	0.21791	0.21615	9.07E-04	2.25E-05	9.2915E-04	FENCEGRD
609877.09	4205561.54	0.21751	0.23213	9.05E-04	2.41E-05	9.2915E-04	FENCEGRD
609707.61	4205465.92	0.21739	0.26026	9.05E-04	2.70E-05	9.3157E-04	FENCEGRD
609375.01	4205066.90	0.21658	0.82527	9.01E-04	8.57E-05	9.8689E-04	FENCEGRD
609675.93	4205445.86	0.21580	0.26625	8.98E-04	2.77E-05	9.2558E-04	FENCEGRD
609136.59	4204796.64	0.21560	1.75983	8.97E-04	1.83E-04	1.0799E-03	FENCEGRD
609176.27	4204839.27	0.21503	1.68570	8.95E-04	1.75E-04	1.0698E-03	FENCEGRD
609644.68	4205425.62	0.21472	0.27268	8.93E-04	2.83E-05	9.2175E-04	FENCEGRD
609295.33	4204967.15	0.21457	1.17941	8.93E-04	1.23E-04	1.0153E-03	FENCEGRD
609831.29	4205547.47	0.21441	0.22919	8.92E-04	2.38E-05	9.1595E-04	FENCEGRD
609215.96	4204881.90	0.21393	1.51552	8.90E-04	1.57E-04	1.0476E-03	FENCEGRD
609403.30	4205144.76	0.21324	0.58881	8.87E-04	6.12E-05	9.4843E-04	FENCEGRD
609419.79	4205215.05	0.21180	0.44382	8.81E-04	4.61E-05	9.2738E-04	FENCEGRD
609863.50	4205567.31	0.21043	0.22499	8.76E-04	2.34E-05	9.9895E-04	FENCEGRD
609785.78	4205533.28	0.20949	0.22976	8.72E-04	2.39E-05	9.8553E-04	FENCEGRD
609754.07	4205513.23	0.20933	0.23638	8.71E-04	2.46E-05	9.8555E-04	FENCEGRD
609725.90	4205491.67	0.20932	0.24528	8.71E-04	2.55E-05	9.8644E-04	FENCEGRD
609622.08	4205419.87	0.20863	0.27034	8.68E-04	2.81E-05	9.8617E-04	FENCEGRD
609335.32	4205024.27	0.20861	0.93846	8.68E-04	9.75E-05	9.6548E-04	FENCEGRD
609551.97	4205381.09	0.20807	0.28064	8.66E-04	2.91E-05	8.9491E-04	Planned
609375.32	4205081.39	0.20777	0.76036	8.65E-04	7.90E-05	9.4349E-04	FENCEGRD
609817.74	4205553.22	0.20691	0.22243	8.61E-04	2.31E-05	8.8404E-04	FENCEGRD
609295.64	4204981.64	0.20685	1.06813	8.61E-04	1.11E-04	9.7163E-04	FENCEGRD
609176.59	4204853.76	0.20650	1.47873	8.59E-04	1.54E-04	1.0128E-03	FENCEGRD
609693.97	4205471.71	0.20650	0.25159	8.59E-04	2.61E-05	8.8536E-04	FENCEGRD
609571.43	4205395.31	0.20570	0.27426	8.56E-04	2.85E-05	8.8438E-04	Planned
609662.36	4205451.62	0.20548	0.25706	8.55E-04	2.67E-05	8.8168E-04	FENCEGRD
609096.59	4204739.53	0.20509	1.50839	8.53E-04	1.57E-04	1.0100E-03	FENCEGRD
609394.18	4205133.29	0.20366	0.60983	8.47E-04	6.33E-05	9.1075E-04	FENCEGRD
609849.90	4205573.08	0.20359	0.21819	8.47E-04	2.27E-05	8.6978E-04	FENCEGRD
609216.27	4204896.39	0.20313	1.33848	8.45E-04	1.39E-04	9.8423E-04	FENCEGRD
609436.84	4205286.05	0.20213	0.34722	8.41E-04	3.61E-05	8.7711E-04	FENCEGRD
609772.29	4205539.00	0.20103	0.22286	8.36E-04	2.31E-05	8.5961E-04	FENCEGRD
609740.65	4205518.92	0.20023	0.22885	8.33E-04	2.38E-05	8.5691E-04	FENCEGRD
609096.91	4204754.02	0.20020	1.40680	8.33E-04	1.46E-04	9.7913E-04	FENCEGRD
610474.23	4204620.78	0.19996	0.20406	8.32E-04	2.12E-05	8.5321E-04	FENCEGRD
609427.61	4205274.45	0.19974	0.35697	8.31E-04	3.71E-05	8.6818E-04	FENCEGRD
609804.20	4205558.97	0.19968	0.21656	8.31E-04	2.25E-05	8.5334E-04	FENCEGRD
609712.20	4205497.49	0.19947	0.23711	8.30E-04	2.46E-05	8.5460E-04	FENCEGRD
609137.22	4204825.62	0.19939	1.38008	8.30E-04	1.43E-04	9.7299E-04	FENCEGRD
609335.64	4205038.76	0.19890	0.85880	8.28E-04	8.92E-05	9.1681E-04	FENCEGRD
609295.95	4204996.13	0.19880	0.97197	8.27E-04	1.01E-04	9.2814E-04	FENCEGRD
609375.64	4205095.88	0.19871	0.70289	8.27E-04	7.30E-05	8.9982E-04	FENCEGRD
609410.61	4205203.51	0.19840	0.45980	8.26E-04	4.78E-05	8.7328E-04	FENCEGRD
609176.90	4204868.25	0.19754	1.31048	8.22E-04	1.36E-04	9.5806E-04	FENCEGRD
609097.22	4204768.51	0.19720	1.38001	8.21E-04	1.43E-04	9.6387E-04	FENCEGRD
609836.31	4205578.85	0.19688	0.21161	8.19E-04	2.20E-05	8.4118E-04	FENCEGRD
609680.32	4205477.50	0.19645	0.24336	8.17E-04	2.53E-05	8.4269E-04	FENCEGRD
609385.07	4205121.83	0.19600	0.63067	8.16E-04	6.55E-05	8.8104E-04	FENCEGRD
609648.79	4205457.38	0.19600	0.24844	8.16E-04	2.58E-05	8.4134E-04	FENCEGRD
609097.53	4204782.99	0.19506	1.30213	8.12E-04	1.35E-04	9.4687E-04	FENCEGRD
609216.59	4204910.88	0.19400	1.19805	8.07E-04	1.24E-04	9.3165E-04	FENCEGRD
609409.16	4205251.25	0.19370	0.37768	8.06E-04	3.92E-05	8.4520E-04	FENCEGRD
609758.81	4205544.72	0.19272	0.21628	8.02E-04	2.25E-05	8.2435E-04	FENCEGRD
609790.65	4205564.72	0.19230	0.21034	8.00E-04	2.18E-05	8.2199E-04	FENCEGRD
609727.22	4205524.62	0.19112	0.22188	7.95E-04	2.30E-05	8.1828E-04	FENCEGRD
609097.85	4204797.48	0.19101	1.19899	7.95E-04	1.25E-04	9.1931E-04	FENCEGRD
609401.44	4205191.97	0.19091	0.47435	7.94E-04	4.93E-05	8.4363E-04	FENCEGRD
609335.95	4205053.25	0.19040	0.78958	7.92E-04	8.20E-05	8.7425E-04	FENCEGRD
609375.95	4205110.37	0.19038	0.65177	7.92E-04	6.77E-05	8.5985E-04	FENCEGRD
609822.71	4205584.62	0.19029	0.20531	7.92E-04	2.13E-05	8.1310E-04	FENCEGRD
609296.27	4205010.62	0.19027	0.88859	7.92E-04	9.23E-05	8.8399E-04	FENCEGRD
609137.53	4204840.11	0.18998	1.22755	7.90E-04	1.28E-04	9.1799E-04	FENCEGRD
609698.49	4205503.30	0.18959	0.22986	7.89E-04	2.39E-05	8.1274E-04	FENCEGRD
609399.94	4205239.65	0.18933	0.38883	7.88E-04	4.04E-05	8.2817E-04	FENCEGRD
609177.22	4204882.74	0.18917	1.17303	7.87E-04	1.22E-04	9.0896E-04	FENCEGRD
609527.32	4205399.58	0.18890	0.25670	7.86E-04	2.67E-05	8.1266E-04	Planned
609666.68	4205483.29	0.18714	0.23565	7.79E-04	2.45E-05	8.0315E-04	FENCEGRD

609546.78	4205413.79	0.18690	0.25128	7.78E-04	2.61E-05	8.0377E-04	Planned
609635.22	4205463.13	0.18688	0.24081	7.78E-04	2.50E-05	8.0260E-04	FENCEGRD
609603.30	4205445.82	0.18608	0.24401	7.74E-04	2.53E-05	7.9961E-04	FENCEGRD
609216.90	4204925.37	0.18595	1.08293	7.74E-04	1.12E-04	8.8620E-04	FENCEGRD
609777.11	4205570.46	0.18496	0.20416	7.70E-04	2.12E-05	7.9081E-04	FENCEGRD
609392.26	4205180.44	0.18473	0.48904	7.69E-04	5.08E-05	8.1944E-04	FENCEGRD
609745.32	4205550.44	0.18458	0.20983	7.68E-04	2.18E-05	7.8981E-04	FENCEGRD
609098.16	4204811.97	0.18447	1.09592	7.68E-04	1.14E-04	8.8139E-04	FENCEGRD
609390.71	4205228.05	0.18419	0.40036	7.66E-04	4.16E-05	8.0798E-04	FENCEGRD
610474.25	4204606.03	0.18408	0.19293	7.66E-04	2.00E-05	7.8598E-04	FENCEGRD
609809.11	4205590.39	0.18376	0.19933	7.65E-04	2.07E-05	7.8531E-04	FENCEGRD
609336.27	4205067.74	0.18284	0.72901	7.61E-04	7.57E-05	8.3650E-04	FENCEGRD
609713.80	4205530.31	0.18252	0.21522	7.59E-04	2.24E-05	7.8180E-04	FENCEGRD
609612.47	4205457.35	0.18232	0.23873	7.59E-04	2.48E-05	7.8341E-04	FENCEGRD
609296.58	4205025.11	0.18182	0.81555	7.57E-04	8.47E-05	8.4124E-04	FENCEGRD
609177.53	4204897.23	0.18122	1.05981	7.54E-04	1.10E-04	8.6412E-04	FENCEGRD
609137.85	4204854.60	0.18092	1.09633	7.53E-04	1.14E-04	8.6666E-04	FENCEGRD
609684.79	4205509.12	0.18049	0.22292	7.51E-04	2.32E-05	7.7416E-04	FENCEGRD
609383.09	4205168.90	0.17967	0.50403	7.48E-04	5.24E-05	7.9994E-04	FENCEGRD
609217.21	4204939.86	0.17930	0.98787	7.46E-04	1.03E-04	8.4866E-04	FENCEGRD
609256.90	4204982.48	0.17911	0.90333	7.45E-04	9.38E-05	8.3909E-04	FENCEGRD
609653.04	4205489.08	0.17850	0.22851	7.43E-04	2.37E-05	7.6646E-04	FENCEGRD
609763.56	4205576.21	0.17774	0.19835	7.40E-04	2.06E-05	7.6016E-04	FENCEGRD
609795.52	4205596.16	0.17733	0.19376	7.38E-04	2.01E-05	7.5798E-04	FENCEGRD
609098.48	4204826.46	0.17730	1.00115	7.38E-04	1.04E-04	8.4172E-04	FENCEGRD
609731.83	4205556.17	0.17679	0.20349	7.36E-04	2.11E-05	7.5674E-04	FENCEGRD
609407.98	4205299.32	0.17654	0.31848	7.35E-04	3.31E-05	7.6765E-04	FENCEGRD
609336.58	4205082.23	0.17607	0.67574	7.33E-04	7.02E-05	8.0280E-04	FENCEGRD
609373.91	4205157.36	0.17539	0.51943	7.30E-04	5.40E-05	7.8373E-04	FENCEGRD
609505.32	4205413.66	0.17522	0.23969	7.29E-04	2.49E-05	7.5397E-04	Planned
609381.49	4205216.45	0.17477	0.41295	7.27E-04	4.29E-05	7.7009E-04	FENCEGRD
609296.90	4205039.60	0.17417	0.75179	7.25E-04	7.81E-05	8.0279E-04	FENCEGRD
609700.38	4205536.01	0.17415	0.20902	7.25E-04	2.17E-05	7.4633E-04	FENCEGRD
609524.77	4205427.88	0.17359	0.23486	7.22E-04	2.44E-05	7.4669E-04	Planned
609398.71	4205287.66	0.17347	0.32692	7.22E-04	3.40E-05	7.5575E-04	FENCEGRD
609138.16	4204869.09	0.17326	0.99197	7.21E-04	1.03E-04	8.2395E-04	FENCEGRD
609671.08	4205514.93	0.17237	0.21605	7.17E-04	2.24E-05	7.3966E-04	FENCEGRD
609217.53	4204954.35	0.17234	0.90471	7.17E-04	9.40E-05	8.1106E-04	FENCEGRD
609364.74	4205145.82	0.17204	0.53540	7.16E-04	5.56E-05	7.7145E-04	FENCEGRD
609781.92	4205601.93	0.17092	0.18836	7.11E-04	1.96E-05	7.3075E-04	FENCEGRD
609257.21	4204996.97	0.17091	0.82794	7.11E-04	8.60E-05	7.9714E-04	FENCEGRD
609372.27	4205204.85	0.17082	0.42483	7.11E-04	4.41E-05	7.5489E-04	FENCEGRD
609750.02	4205581.96	0.17068	0.19289	7.10E-04	2.00E-05	7.3022E-04	FENCEGRD
609575.21	4205460.05	0.17066	0.22645	7.10E-04	2.35E-05	7.3362E-04	FENCEGRD
609639.39	4205494.87	0.17054	0.22188	7.10E-04	2.30E-05	7.3265E-04	FENCEGRD
609098.79	4204840.95	0.17045	0.91759	7.09E-04	9.53E-05	8.0453E-04	FENCEGRD
609336.89	4205096.72	0.17035	0.62850	7.09E-04	6.53E-05	7.7409E-04	FENCEGRD
609718.35	4205561.89	0.16926	0.19759	7.04E-04	2.05E-05	7.2480E-04	FENCEGRD
609355.56	4205134.28	0.16854	0.55164	7.01E-04	5.73E-05	7.5858E-04	FENCEGRD
609138.48	4204883.58	0.16749	0.91332	6.97E-04	9.49E-05	7.9177E-04	FENCEGRD
609297.21	4205054.09	0.16728	0.69597	6.96E-04	7.23E-05	7.6832E-04	FENCEGRD
609584.43	4205471.65	0.16720	0.22201	6.96E-04	2.31E-05	7.1876E-04	FENCEGRD
609346.38	4205122.74	0.16675	0.56875	6.94E-04	5.91E-05	7.5291E-04	FENCEGRD
609686.96	4205541.70	0.16607	0.20337	6.91E-04	2.11E-05	7.1213E-04	FENCEGRD
609337.21	4205111.21	0.16566	0.58661	6.89E-04	6.09E-05	7.5023E-04	FENCEGRD
609217.84	4204968.83	0.16563	0.83186	6.89E-04	8.64E-05	7.7557E-04	FENCEGRD
609657.38	4205520.75	0.16494	0.20950	6.86E-04	2.18E-05	7.0806E-04	FENCEGRD
609768.33	4205607.70	0.16456	0.18302	6.85E-04	1.90E-05	7.0373E-04	FENCEGRD
609370.92	4205252.71	0.16436	0.35340	6.84E-04	3.67E-05	7.2059E-04	FENCEGRD
609625.75	4205500.66	0.16378	0.21507	6.81E-04	2.23E-05	7.0381E-04	FENCEGRD
609593.66	4205483.25	0.16377	0.21754	6.81E-04	2.26E-05	7.0403E-04	FENCEGRD
609736.47	4205587.71	0.16377	0.18759	6.81E-04	1.95E-05	7.0092E-04	FENCEGRD
609257.53	4205011.46	0.16332	0.76208	6.80E-04	7.92E-05	7.5871E-04	FENCEGRD
609484.19	4205429.51	0.16241	0.22307	6.76E-04	2.32E-05	6.9894E-04	Planned
609704.86	4205567.61	0.16207	0.19204	6.74E-04	1.99E-05	6.9430E-04	FENCEGRD
609138.79	4204898.07	0.16182	0.84369	6.73E-04	8.76E-05	7.6095E-04	FENCEGRD
609503.64	4205443.73	0.16120	0.21927	6.71E-04	2.28E-05	6.9351E-04	Planned
609297.53	4205068.58	0.16098	0.64635	6.70E-04	6.71E-05	7.3696E-04	FENCEGRD
609602.88	4205494.85	0.16052	0.21314	6.68E-04	2.21E-05	6.9005E-04	FENCEGRD
609361.65	4205241.06	0.16014	0.36285	6.66E-04	3.77E-05	7.0402E-04	FENCEGRD
609673.54	4205547.39	0.15882	0.19777	6.61E-04	2.05E-05	6.8138E-04	FENCEGRD
609218.16	4204983.32	0.15857	0.76675	6.60E-04	7.96E-05	7.3943E-04	FENCEGRD
609754.73	4205613.47	0.15834	0.17821	6.59E-04	1.85E-05	6.7735E-04	FENCEGRD
609643.68	4205526.56	0.15810	0.20333	6.58E-04	2.11E-05	6.7896E-04	FENCEGRD
609546.97	4205474.09	0.15764	0.21058	6.56E-04	2.19E-05	6.7780E-04	FENCEGRD
609722.93	4205593.45	0.15709	0.18241	6.54E-04	1.89E-05	6.7258E-04	FENCEGRD
609257.84	4205025.95	0.15624	0.70406	6.50E-04	7.31E-05	7.2323E-04	FENCEGRD
609099.42	4204869.93	0.15575	0.77210	6.48E-04	8.02E-05	7.2826E-04	FENCEGRD
609139.10	4204912.56	0.15572	0.78044	6.48E-04	8.11E-05	7.2900E-04	FENCEGRD

609297.84	4205083.07	0.15514	0.60212	6.46E-04	6.25E-05	7.0806E-04	FENCEGRD
609691.37	4205573.34	0.15497	0.18696	6.45E-04	1.94E-05	6.6423E-04	FENCEGRD
609352.39	4205229.41	0.15485	0.37258	6.44E-04	3.87E-05	6.8302E-04	FENCEGRD
609556.23	4205485.75	0.15470	0.20613	6.44E-04	2.14E-05	6.6510E-04	FENCEGRD
609375.24	4205307.71	0.15370	0.29557	6.40E-04	3.07E-05	6.7023E-04	FENCEGRD
609178.79	4204955.19	0.15349	0.75370	6.39E-04	7.83E-05	7.1694E-04	FENCEGRD
609335.37	4205158.45	0.15332	0.47397	6.38E-04	4.92E-05	6.8718E-04	FENCEGRD
609660.12	4205553.09	0.15232	0.19222	6.34E-04	2.00E-05	6.5375E-04	FENCEGRD
609741.14	4205619.23	0.15223	0.17347	6.33E-04	1.80E-05	6.5143E-04	FENCEGRD
609218.47	4204997.81	0.15199	0.70931	6.32E-04	7.37E-05	7.0609E-04	FENCEGRD
609463.06	4205442.71	0.15193	0.20971	6.32E-04	2.18E-05	6.5395E-04	Planned
609565.50	4205497.40	0.15186	0.20211	6.32E-04	2.10E-05	6.5287E-04	FENCEGRD
609629.97	4205532.38	0.15183	0.19747	6.32E-04	2.05E-05	6.5226E-04	FENCEGRD
609366.17	4205296.30	0.15128	0.30247	6.29E-04	3.14E-05	6.6088E-04	FENCEGRD
609482.52	4205456.93	0.15107	0.20626	6.29E-04	2.14E-05	6.5001E-04	Planned
609709.38	4205599.20	0.15067	0.17736	6.27E-04	1.84E-05	6.4535E-04	FENCEGRD
609343.12	4205217.75	0.15050	0.38222	6.26E-04	3.97E-05	6.6592E-04	FENCEGRD
609258.16	4205040.44	0.14995	0.65308	6.24E-04	6.78E-05	6.9176E-04	FENCEGRD
609326.14	4205146.85	0.14986	0.48656	6.24E-04	5.05E-05	6.7409E-04	FENCEGRD
609298.15	4205097.56	0.14976	0.56250	6.23E-04	5.84E-05	6.8156E-04	FENCEGRD
609139.42	4204927.05	0.14953	0.72477	6.22E-04	7.53E-05	6.9746E-04	FENCEGRD
609574.77	4205509.05	0.14886	0.19831	6.19E-04	2.06E-05	6.3999E-04	FENCEGRD
609099.73	4204884.42	0.14855	0.71074	6.18E-04	7.38E-05	6.9193E-04	FENCEGRD
609677.88	4205579.06	0.14813	0.18222	6.16E-04	1.89E-05	6.3528E-04	FENCEGRD
609179.10	4204969.67	0.14730	0.69927	6.13E-04	7.26E-05	6.8553E-04	FENCEGRD
609316.92	4205135.25	0.14728	0.49941	6.13E-04	5.19E-05	6.6469E-04	FENCEGRD
609727.54	4205625.00	0.14627	0.16883	6.09E-04	1.75E-05	6.2615E-04	FENCEGRD
609646.70	4205558.78	0.14624	0.18703	6.08E-04	1.94E-05	6.2792E-04	FENCEGRD
609348.02	4205273.48	0.14624	0.31675	6.08E-04	3.29E-05	6.4139E-04	FENCEGRD
609616.27	4205538.19	0.14611	0.19193	6.08E-04	1.99E-05	6.2789E-04	FENCEGRD
609584.03	4205520.70	0.14596	0.19447	6.07E-04	2.02E-05	6.2752E-04	FENCEGRD
609218.79	4205012.30	0.14583	0.65869	6.07E-04	6.84E-05	6.7520E-04	FENCEGRD
609307.69	4205123.65	0.14571	0.51283	6.06E-04	5.33E-05	6.5955E-04	FENCEGRD
609333.85	4205206.10	0.14560	0.39174	6.06E-04	4.07E-05	6.4652E-04	FENCEGRD
609298.47	4205112.05	0.14508	0.52702	6.04E-04	5.47E-05	6.5840E-04	FENCEGRD
609695.84	4205604.95	0.14456	0.17276	6.02E-04	1.79E-05	6.1944E-04	FENCEGRD
609258.47	4205054.93	0.14432	0.60801	6.01E-04	6.32E-05	6.6365E-04	FENCEGRD
609139.73	4204941.54	0.14380	0.67560	5.98E-04	7.02E-05	6.6851E-04	FENCEGRD
609593.30	4205532.35	0.14329	0.19059	5.96E-04	1.98E-05	6.1601E-04	FENCEGRD
609529.50	4205501.69	0.14329	0.19192	5.96E-04	1.99E-05	6.1615E-04	FENCEGRD
609338.95	4205262.07	0.14229	0.32423	5.92E-04	3.37E-05	6.2573E-04	FENCEGRD
609324.59	4205194.45	0.14221	0.40147	5.92E-04	4.17E-05	6.3342E-04	FENCEGRD
609664.40	4205584.78	0.14199	0.17754	5.91E-04	1.84E-05	6.0925E-04	FENCEGRD
609100.05	4204898.91	0.14189	0.65898	5.90E-04	6.84E-05	6.5884E-04	FENCEGRD
609179.42	4204984.16	0.14127	0.65094	5.88E-04	6.76E-05	6.5542E-04	FENCEGRD
609538.58	4205513.10	0.14078	0.18832	5.86E-04	1.96E-05	6.0533E-04	FENCEGRD
609633.28	4205564.48	0.14060	0.18215	5.85E-04	1.89E-05	6.0394E-04	FENCEGRD
609713.94	4205630.77	0.14052	0.16441	5.85E-04	1.71E-05	6.0177E-04	FENCEGRD
609219.10	4205026.79	0.14026	0.61338	5.84E-04	6.37E-05	6.4732E-04	FENCEGRD
609424.92	4205453.76	0.13943	0.19646	5.80E-04	2.04E-05	6.0056E-04	Planned
609258.78	4205069.42	0.13910	0.56791	5.79E-04	5.90E-05	6.3777E-04	FENCEGRD
609329.87	4205250.65	0.13900	0.33170	5.78E-04	3.45E-05	6.1282E-04	FENCEGRD
609315.32	4205182.80	0.13895	0.41123	5.78E-04	4.27E-05	6.2087E-04	FENCEGRD
609682.29	4205610.70	0.13877	0.16851	5.77E-04	1.75E-05	5.9491E-04	FENCEGRD
609443.99	4205468.81	0.13870	0.19159	5.77E-04	1.99E-05	5.9702E-04	Planned
609140.05	4204956.03	0.13837	0.63184	5.76E-04	6.56E-05	6.4137E-04	FENCEGRD
609547.65	4205524.51	0.13829	0.18482	5.75E-04	1.92E-05	5.9461E-04	FENCEGRD
609461.27	4205483.14	0.13750	0.18784	5.72E-04	1.95E-05	5.9163E-04	Planned
609650.91	4205590.50	0.13630	0.17309	5.67E-04	1.80E-05	5.8511E-04	FENCEGRD
609556.72	4205535.92	0.13588	0.18142	5.65E-04	1.88E-05	5.8423E-04	FENCEGRD
609100.36	4204913.40	0.13577	0.61559	5.65E-04	6.39E-05	6.2887E-04	FENCEGRD
609179.73	4204998.65	0.13571	0.60738	5.65E-04	6.31E-05	6.2776E-04	FENCEGRD
609619.86	4205570.17	0.13557	0.17733	5.64E-04	1.84E-05	5.8251E-04	FENCEGRD
609219.41	4205041.28	0.13506	0.57302	5.62E-04	5.95E-05	6.2149E-04	FENCEGRD
609700.35	4205636.54	0.13502	0.16024	5.62E-04	1.66E-05	5.7845E-04	FENCEGRD
609346.39	4205320.97	0.13501	0.27154	5.62E-04	2.82E-05	5.8997E-04	FENCEGRD
609259.10	4205083.91	0.13440	0.53182	5.59E-04	5.52E-05	6.1446E-04	FENCEGRD
609306.06	4205171.15	0.13422	0.42030	5.58E-04	4.37E-05	6.0213E-04	FENCEGRD
609565.80	4205547.33	0.13353	0.17779	5.56E-04	1.85E-05	5.7407E-04	FENCEGRD
609140.36	4204970.52	0.13303	0.59224	5.54E-04	6.15E-05	6.1504E-04	FENCEGRD
609668.75	4205616.44	0.13300	0.16446	5.53E-04	1.71E-05	5.7048E-04	FENCEGRD
609337.27	4205309.51	0.13246	0.27732	5.51E-04	2.88E-05	5.7996E-04	FENCEGRD
609328.15	4205298.04	0.13157	0.28322	5.47E-04	2.94E-05	5.7687E-04	FENCEGRD
609510.53	4205527.38	0.13137	0.17637	5.47E-04	1.83E-05	5.6494E-04	FENCEGRD
609320.80	4205239.24	0.13126	0.33855	5.46E-04	3.52E-05	5.8132E-04	FENCEGRD
609606.44	4205575.87	0.13109	0.17252	5.45E-04	1.79E-05	5.6337E-04	FENCEGRD
609574.87	4205558.74	0.13104	0.17470	5.45E-04	1.81E-05	5.6339E-04	FENCEGRD
609637.42	4205596.23	0.13102	0.16887	5.45E-04	1.75E-05	5.6270E-04	FENCEGRD
609180.05	4205013.14	0.13037	0.56829	5.42E-04	5.90E-05	6.0148E-04	FENCEGRD

609219.73	4205055.77	0.13027	0.53648	5.42E-04	5.57E-05	5.9776E-04	FENCEGRD
609259.41	4205098.40	0.13024	0.49943	5.42E-04	5.19E-05	5.9379E-04	FENCEGRD
609100.68	4204927.89	0.13014	0.57768	5.42E-04	6.00E-05	6.0150E-04	FENCEGRD
609296.79	4205159.49	0.13012	0.42884	5.41E-04	4.45E-05	5.8596E-04	FENCEGRD
609686.75	4205642.31	0.12979	0.15635	5.40E-04	1.62E-05	5.5628E-04	FENCEGRD
609400.39	4205469.61	0.12947	0.18377	5.39E-04	1.91E-05	5.5780E-04	Planned
609419.45	4205484.66	0.12915	0.18002	5.37E-04	1.87E-05	5.5608E-04	Planned
609519.64	4205538.85	0.12913	0.17342	5.37E-04	1.80E-05	5.5531E-04	FENCEGRD
609583.95	4205570.15	0.12882	0.17146	5.36E-04	1.78E-05	5.5382E-04	FENCEGRD
609436.74	4205499.00	0.12827	0.17658	5.34E-04	1.83E-05	5.5206E-04	Planned
609140.68	4204985.00	0.12818	0.55672	5.33E-04	5.78E-05	5.9117E-04	FENCEGRD
609287.52	4205147.84	0.12802	0.43832	5.33E-04	4.55E-05	5.7821E-04	FENCEGRD
609655.20	4205622.19	0.12768	0.16056	5.31E-04	1.67E-05	5.4794E-04	FENCEGRD
609278.26	4205136.19	0.12710	0.44859	5.29E-04	4.66E-05	5.7544E-04	FENCEGRD
609528.76	4205550.32	0.12690	0.17052	5.28E-04	1.77E-05	5.4573E-04	FENCEGRD
609259.73	4205112.89	0.12655	0.47035	5.27E-04	4.89E-05	5.7542E-04	FENCEGRD
609268.99	4205124.54	0.12654	0.45920	5.27E-04	4.77E-05	5.7422E-04	FENCEGRD
609623.94	4205601.95	0.12635	0.16465	5.26E-04	1.71E-05	5.4283E-04	FENCEGRD
609309.91	4205275.11	0.12579	0.29518	5.23E-04	3.07E-05	5.5406E-04	FENCEGRD
609311.73	4205227.83	0.12571	0.34491	5.23E-04	3.58E-05	5.5889E-04	FENCEGRD
609220.04	4205070.26	0.12561	0.50323	5.23E-04	5.23E-05	5.7492E-04	FENCEGRD
609180.36	4205027.63	0.12537	0.53253	5.22E-04	5.53E-05	5.7697E-04	FENCEGRD
609100.99	4204942.38	0.12532	0.54707	5.21E-04	5.68E-05	5.7827E-04	FENCEGRD
609673.16	4205648.08	0.12485	0.15265	5.19E-04	1.59E-05	5.3534E-04	FENCEGRD
609537.88	4205561.78	0.12469	0.16740	5.19E-04	1.74E-05	5.3621E-04	FENCEGRD
609140.99	4204999.49	0.12329	0.52395	5.13E-04	5.44E-05	5.6742E-04	FENCEGRD
609482.35	4205541.51	0.12300	0.16566	5.12E-04	1.72E-05	5.2900E-04	FENCEGRD
609641.66	4205627.94	0.12265	0.15698	5.10E-04	1.63E-05	5.2664E-04	FENCEGRD
609300.79	4205263.64	0.12255	0.30113	5.10E-04	3.13E-05	5.4120E-04	FENCEGRD
609547.00	4205573.25	0.12245	0.16438	5.10E-04	1.71E-05	5.2658E-04	FENCEGRD
609302.65	4205216.42	0.12237	0.35164	5.09E-04	3.65E-05	5.4569E-04	FENCEGRD
609610.45	4205607.67	0.12205	0.16063	5.08E-04	1.67E-05	5.2452E-04	FENCEGRD
609220.36	4205084.75	0.12146	0.47331	5.05E-04	4.92E-05	5.5454E-04	FENCEGRD
609491.51	4205553.03	0.12105	0.16313	5.04E-04	1.69E-05	5.2062E-04	FENCEGRD
609180.67	4205042.12	0.12088	0.50026	5.03E-04	5.20E-05	5.5493E-04	FENCEGRD
609101.31	4204956.87	0.12088	0.51934	5.03E-04	5.39E-05	5.5691E-04	FENCEGRD
609293.58	4205205.01	0.12068	0.35915	5.02E-04	3.73E-05	5.3944E-04	FENCEGRD
609378.13	4205487.42	0.12046	0.17156	5.01E-04	1.78E-05	5.1904E-04	Planned
609397.19	4205502.47	0.12034	0.16837	5.01E-04	1.75E-05	5.1821E-04	Planned
609556.12	4205584.72	0.12029	0.16145	5.01E-04	1.68E-05	5.1728E-04	FENCEGRD
609659.56	4205653.85	0.12019	0.14906	5.00E-04	1.55E-05	5.1558E-04	FENCEGRD
609414.48	4205516.81	0.11972	0.16545	4.98E-04	1.72E-05	5.1533E-04	Planned
609317.51	4205334.22	0.11958	0.24948	4.98E-04	2.59E-05	5.2347E-04	FENCEGRD
609284.50	4205193.60	0.11925	0.36671	4.96E-04	3.81E-05	5.3428E-04	FENCEGRD
609500.67	4205564.54	0.11905	0.16077	4.95E-04	1.67E-05	5.1205E-04	FENCEGRD
609141.30	4205013.98	0.11857	0.49354	4.93E-04	5.13E-05	5.4462E-04	FENCEGRD
609565.24	4205596.18	0.11837	0.15835	4.93E-04	1.64E-05	5.0897E-04	FENCEGRD
609628.11	4205633.69	0.11828	0.15328	4.92E-04	1.59E-05	5.0807E-04	FENCEGRD
609596.96	4205613.40	0.11821	0.15659	4.92E-04	1.63E-05	5.0813E-04	FENCEGRD
609275.43	4205182.19	0.11768	0.37420	4.90E-04	3.89E-05	5.2852E-04	FENCEGRD
609220.67	4205099.24	0.11759	0.44609	4.89E-04	4.63E-05	5.3562E-04	FENCEGRD
609308.35	4205322.70	0.11747	0.25428	4.89E-04	2.64E-05	5.1519E-04	FENCEGRD
609266.36	4205170.78	0.11702	0.38224	4.87E-04	3.97E-05	5.2661E-04	FENCEGRD
609509.83	4205576.06	0.11698	0.15810	4.87E-04	1.64E-05	5.0316E-04	FENCEGRD
609180.99	4205056.61	0.11674	0.47091	4.86E-04	4.89E-05	5.3466E-04	FENCEGRD
609101.62	4204971.36	0.11651	0.49298	4.85E-04	5.12E-05	5.3599E-04	FENCEGRD
609574.36	4205607.65	0.11644	0.15555	4.84E-04	1.62E-05	5.0065E-04	FENCEGRD
609299.19	4205311.19	0.11601	0.25919	4.83E-04	2.69E-05	5.0963E-04	FENCEGRD
609645.96	4205659.62	0.11585	0.14566	4.82E-04	1.51E-05	4.9717E-04	FENCEGRD
609454.08	4205555.52	0.11540	0.15572	4.80E-04	1.62E-05	4.9634E-04	FENCEGRD
609239.13	4205136.55	0.11524	0.40610	4.80E-04	4.22E-05	5.2168E-04	FENCEGRD
609518.98	4205587.58	0.11493	0.15524	4.78E-04	1.61E-05	4.9434E-04	FENCEGRD
609230.06	4205125.14	0.11481	0.41409	4.78E-04	4.30E-05	5.2072E-04	FENCEGRD
609220.99	4205113.73	0.11434	0.42181	4.76E-04	4.38E-05	5.1957E-04	FENCEGRD
609141.62	4205028.47	0.11433	0.46583	4.76E-04	4.84E-05	5.2410E-04	FENCEGRD
609614.57	4205639.43	0.11411	0.14992	4.75E-04	1.56E-05	4.9037E-04	FENCEGRD
609463.27	4205567.08	0.11374	0.15359	4.73E-04	1.60E-05	4.8921E-04	FENCEGRD
609181.30	4205071.10	0.11297	0.44445	4.70E-04	4.62E-05	5.1622E-04	FENCEGRD
609528.14	4205599.09	0.11293	0.15248	4.70E-04	1.58E-05	4.8573E-04	FENCEGRD
609101.93	4204985.84	0.11242	0.46823	4.68E-04	4.86E-05	5.1640E-04	FENCEGRD
609472.46	4205578.63	0.11202	0.15154	4.66E-04	1.57E-05	4.8184E-04	FENCEGRD
609632.37	4205665.39	0.11174	0.14249	4.65E-04	1.48E-05	4.7974E-04	FENCEGRD
609280.88	4205288.15	0.11137	0.26886	4.63E-04	2.79E-05	4.9133E-04	FENCEGRD
609537.30	4205610.61	0.11065	0.15064	4.60E-04	1.56E-05	4.7605E-04	FENCEGRD
609141.93	4205042.96	0.11044	0.44062	4.60E-04	4.58E-05	5.0530E-04	FENCEGRD
609264.32	4205217.77	0.11041	0.32365	4.59E-04	3.36E-05	4.9302E-04	FENCEGRD
609601.02	4205645.18	0.11019	0.14682	4.58E-04	1.52E-05	4.7374E-04	FENCEGRD
609481.66	4205590.19	0.11019	0.14932	4.58E-04	1.55E-05	4.7400E-04	FENCEGRD
609181.62	4205085.59	0.10945	0.42000	4.55E-04	4.36E-05	4.9904E-04	FENCEGRD

609102.25	4205000.33	0.10884	0.44598	4.53E-04	4.63E-05	4.9920E-04	FENCEGRD
609546.46	4205622.13	0.10877	0.14795	4.53E-04	1.54E-05	4.6795E-04	FENCEGRD
609490.85	4205601.75	0.10837	0.14666	4.51E-04	1.52E-05	4.6615E-04	FENCEGRD
609271.72	4205276.64	0.10835	0.27346	4.51E-04	2.84E-05	4.7924E-04	FENCEGRD
609255.20	4205206.30	0.10831	0.32918	4.51E-04	3.42E-05	4.8486E-04	FENCEGRD
609618.77	4205671.16	0.10772	0.13952	4.48E-04	1.45E-05	4.6270E-04	FENCEGRD
609555.62	4205633.64	0.10702	0.14529	4.45E-04	1.51E-05	4.6039E-04	FENCEGRD
609142.25	4205057.45	0.10682	0.41710	4.44E-04	4.33E-05	4.8779E-04	FENCEGRD
609246.08	4205194.84	0.10661	0.33467	4.44E-04	3.48E-05	4.7836E-04	FENCEGRD
609500.04	4205613.31	0.10654	0.14406	4.43E-04	1.50E-05	4.5827E-04	FENCEGRD
609288.61	4205347.44	0.10636	0.22928	4.43E-04	2.38E-05	4.6637E-04	FENCEGRD
609181.93	4205100.08	0.10623	0.39763	4.42E-04	4.13E-05	4.8331E-04	FENCEGRD
609236.96	4205183.37	0.10556	0.34061	4.39E-04	3.54E-05	4.7460E-04	FENCEGRD
609102.56	4205014.82	0.10554	0.42481	4.39E-04	4.41E-05	4.8327E-04	FENCEGRD
609564.78	4205645.16	0.10525	0.14290	4.38E-04	1.48E-05	4.5278E-04	FENCEGRD
609587.48	4205650.93	0.10491	0.14374	4.37E-04	1.49E-05	4.5145E-04	FENCEGRD
609227.84	4205171.90	0.10478	0.34664	4.36E-04	3.60E-05	4.7198E-04	FENCEGRD
609209.60	4205148.97	0.10453	0.35962	4.35E-04	3.74E-05	4.7229E-04	FENCEGRD
609509.23	4205624.87	0.10451	0.14230	4.35E-04	1.48E-05	4.4964E-04	FENCEGRD
609279.42	4205335.88	0.10423	0.23316	4.34E-04	2.42E-05	4.5791E-04	FENCEGRD
609262.56	4205265.12	0.10412	0.27732	4.33E-04	2.88E-05	4.6204E-04	FENCEGRD
609200.48	4205137.50	0.10406	0.36554	4.33E-04	3.80E-05	4.7095E-04	FENCEGRD
609605.18	4205676.92	0.10397	0.13677	4.33E-04	1.42E-05	4.4682E-04	FENCEGRD
609191.36	4205126.03	0.10362	0.37137	4.31E-04	3.86E-05	4.6973E-04	FENCEGRD
609142.56	4205071.94	0.10345	0.39532	4.30E-04	4.11E-05	4.7151E-04	FENCEGRD
609182.25	4205114.57	0.10339	0.37749	4.30E-04	3.92E-05	4.6940E-04	FENCEGRD
609270.23	4205324.32	0.10302	0.23726	4.29E-04	2.46E-05	4.5330E-04	FENCEGRD
609253.40	4205253.60	0.10274	0.28216	4.27E-04	2.93E-05	4.5680E-04	FENCEGRD
609518.43	4205636.43	0.10256	0.14030	4.27E-04	1.46E-05	4.4132E-04	FENCEGRD
609102.88	4205029.31	0.10236	0.40467	4.26E-04	4.20E-05	4.6794E-04	FENCEGRD
609244.24	4205242.09	0.10236	0.28749	4.26E-04	2.99E-05	4.5577E-04	FENCEGRD
609235.08	4205230.57	0.10104	0.29227	4.20E-04	3.04E-05	4.5078E-04	FENCEGRD
609527.62	4205647.99	0.10083	0.13790	4.20E-04	1.43E-05	4.3387E-04	FENCEGRD
609591.58	4205682.69	0.10060	0.13408	4.19E-04	1.39E-05	4.3251E-04	FENCEGRD
609142.88	4205086.43	0.10051	0.37564	4.18E-04	3.90E-05	4.5723E-04	FENCEGRD
609251.84	4205301.20	0.09976	0.24522	4.15E-04	2.55E-05	4.4056E-04	FENCEGRD
609225.93	4205219.05	0.09964	0.29690	4.15E-04	3.08E-05	4.4543E-04	FENCEGRD
609103.19	4205043.80	0.09934	0.38563	4.13E-04	4.01E-05	4.5340E-04	FENCEGRD
609536.81	4205659.55	0.09919	0.13553	4.13E-04	1.41E-05	4.2680E-04	FENCEGRD
609216.77	4205207.54	0.09863	0.30172	4.10E-04	3.13E-05	4.4173E-04	FENCEGRD
609242.65	4205289.64	0.09797	0.24913	4.08E-04	2.59E-05	4.3352E-04	FENCEGRD
609546.00	4205671.11	0.09770	0.13309	4.07E-04	1.38E-05	4.2034E-04	FENCEGRD
609577.99	4205688.46	0.09764	0.13128	4.06E-04	1.36E-05	4.1991E-04	FENCEGRD
609103.51	4205058.29	0.09705	0.36865	4.04E-04	3.83E-05	4.4211E-04	FENCEGRD
609555.20	4205682.67	0.09632	0.13070	4.01E-04	1.36E-05	4.1435E-04	FENCEGRD
609207.61	4205196.02	0.09599	0.30480	3.99E-04	3.17E-05	4.3106E-04	FENCEGRD
609189.29	4205172.99	0.09545	0.31502	3.97E-04	3.27E-05	4.2988E-04	FENCEGRD
609233.46	4205278.08	0.09542	0.25253	3.97E-04	2.62E-05	4.2326E-04	FENCEGRD
609198.45	4205184.51	0.09519	0.30939	3.96E-04	3.21E-05	4.2821E-04	FENCEGRD
609143.50	4205115.41	0.09451	0.33908	3.93E-04	3.52E-05	4.2847E-04	FENCEGRD
609152.66	4205126.92	0.09444	0.33420	3.93E-04	3.47E-05	4.2767E-04	FENCEGRD
609103.82	4205072.78	0.09420	0.35126	3.92E-04	3.65E-05	4.2844E-04	FENCEGRD
609224.27	4205266.52	0.09415	0.25645	3.92E-04	2.66E-05	4.1839E-04	FENCEGRD
609215.07	4205254.96	0.09381	0.26083	3.90E-04	2.71E-05	4.1743E-04	FENCEGRD
609205.88	4205243.40	0.09333	0.26507	3.88E-04	2.75E-05	4.1587E-04	FENCEGRD
609196.69	4205231.84	0.09192	0.26872	3.82E-04	2.79E-05	4.1038E-04	FENCEGRD
609104.13	4205087.27	0.09186	0.33555	3.82E-04	3.49E-05	4.1707E-04	FENCEGRD
609187.50	4205220.29	0.09087	0.27244	3.78E-04	2.83E-05	4.0640E-04	FENCEGRD
609178.30	4205208.73	0.08825	0.27458	3.67E-04	2.85E-05	3.9572E-04	FENCEGRD
609159.92	4205185.61	0.08722	0.28209	3.63E-04	2.93E-05	3.9221E-04	FENCEGRD
609169.11	4205197.17	0.08711	0.27762	3.62E-04	2.88E-05	3.9129E-04	FENCEGRD
609104.76	4205116.25	0.08660	0.30539	3.60E-04	3.17E-05	3.9205E-04	FENCEGRD
609141.53	4205162.49	0.08650	0.28950	3.60E-04	3.01E-05	3.8999E-04	FENCEGRD
609113.96	4205127.81	0.08636	0.30124	3.59E-04	3.13E-05	3.9062E-04	FENCEGRD
609132.34	4205150.93	0.08633	0.29322	3.59E-04	3.05E-05	3.8967E-04	FENCEGRD
609123.15	4205139.37	0.08625	0.29714	3.59E-04	3.09E-05	3.8974E-04	FENCEGRD

CONCUNIT ug/m^3
DEPUNIT g/m^2

AERMOD (19191): G:\Construction\Construction.isc
AERMET (14134):
MODELING OPTIONS USED: Reg DEFAULT CONC ELEV URBAN
PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: AREA
FOR A TOTAL OF 2262 RECEIPTS.
FORMAT: (R1X,F13.5),3(R1X,F8.2),2X,A6.2X,A8.2X,I8.2X,A8

3/6/2021
16:02:03

X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
610031.11	4204736.8	4.08581	25.38	33.35	0	ANNUAL	AREA	5	
610052.85	4204708.31	2.14334	24.25	76.93	0	ANNUAL	AREA	5	
610052.84	4204722.07	2.67187	24.25	33.35	0	ANNUAL	AREA	5	
610052.82	4204735.84	3.26417	24.22	33.35	0	ANNUAL	AREA	5	
610052.81	4204749.6	3.8793	24.17	33.35	0	ANNUAL	AREA	5	
610074.55	4204716.32	2.03874	24.19	33.33	0	ANNUAL	AREA	5	
610074.55	4204731.18	2.51298	24.15	33.35	0	ANNUAL	AREA	5	
610074.53	4204746.04	3.02059	24.15	33.35	0	ANNUAL	AREA	5	
610074.52	4204760.91	3.53625	24.19	33.35	0	ANNUAL	AREA	5	
610096.28	4204715.93	1.72495	24.29	24.29	0	ANNUAL	AREA	5	
610096.26	4204730.38	2.08322	24.23	24.23	0	ANNUAL	AREA	5	
610096.25	4204744.83	2.474	24.19	24.19	0	ANNUAL	AREA	5	
610096.23	4204759.28	2.87971	24.19	24.19	0	ANNUAL	AREA	5	
610096.22	4204773.73	3.28413	24.19	24.19	0	ANNUAL	AREA	5	
610117.98	4204715.65	1.48569	24.35	24.35	0	ANNUAL	AREA	5	
610117.98	4204729.81	1.76738	24.27	24.27	0	ANNUAL	AREA	5	
610117.96	4204743.96	2.02725	24.27	24.27	0	ANNUAL	AREA	5	
610117.95	4204758.12	2.38647	24.26	24.26	0	ANNUAL	AREA	5	
610117.94	4204772.27	2.72857	24.19	24.19	0	ANNUAL	AREA	5	
610117.92	4204786.43	3.05336	24.16	24.16	0	ANNUAL	AREA	5	
610139.72	4204708.95	1.20171	24.43	24.43	0	ANNUAL	AREA	5	
610139.7	4204723.81	1.43133	24.34	24.34	0	ANNUAL	AREA	5	
610139.69	4204738.68	1.65972	24.29	24.29	0	ANNUAL	AREA	5	
610139.67	4204753.54	1.96272	24.27	24.27	0	ANNUAL	AREA	5	
610139.66	4204768.4	2.25151	24.22	24.22	0	ANNUAL	AREA	5	
610139.64	4204783.27	2.54222	24.19	24.19	0	ANNUAL	AREA	5	
610139.63	4204798.13	2.82387	24.21	24.21	0	ANNUAL	AREA	5	
610161.43	4204708.83	1.06564	24.53	24.53	0	ANNUAL	AREA	5	
610161.42	4204723.4	1.25314	24.42	24.42	0	ANNUAL	AREA	5	
610161.4	4204737.97	1.46176	24.34	24.34	0	ANNUAL	AREA	5	
610161.39	4204752.54	1.68221	24.34	24.34	0	ANNUAL	AREA	5	
610161.37	4204767.11	1.92257	24.29	24.29	0	ANNUAL	AREA	5	
610161.36	4204781.69	2.16477	24.26	24.26	0	ANNUAL	AREA	5	
610161.34	4204796.26	2.40325	24.32	24.32	0	ANNUAL	AREA	5	
610161.33	4204810.83	2.63495	24.35	24.35	0	ANNUAL	AREA	5	
610183.15	4204708.73	0.95411	24.59	24.59	0	ANNUAL	AREA	5	
610183.13	4204723.08	1.11	24.47	24.47	0	ANNUAL	AREA	5	
610183.12	4204737.42	1.28227	24.39	24.39	0	ANNUAL	AREA	5	
610183.1	4204749.36	1.46795	24.36	24.36	0	ANNUAL	AREA	5	
610183.09	4204766.1	1.6664	24.27	24.27	0	ANNUAL	AREA	5	
610183.08	4204780.44	1.86759	24.31	24.31	0	ANNUAL	AREA	5	
610183.06	4204794.79	2.06968	24.41	24.41	0	ANNUAL	AREA	5	
610183.05	4204809.13	2.27185	24.37	24.37	0	ANNUAL	AREA	5	
610183.03	4204823.47	2.46843	24.18	24.18	0	ANNUAL	AREA	5	
610204.86	4204716.45	0.93027	24.61	24.61	0	ANNUAL	AREA	5	
610204.84	4204731.31	1.07486	24.56	24.56	0	ANNUAL	AREA	5	
610204.83	4204746.18	1.22427	24.5	24.5	0	ANNUAL	AREA	5	
610204.81	4204761.04	1.4049	24.47	24.47	0	ANNUAL	AREA	5	
610204.8	4204775.9	1.58473	24.41	24.41	0	ANNUAL	AREA	5	
610204.78	4204790.77	1.7657	24.51	24.51	0	ANNUAL	AREA	5	
610204.77	4204805.63	1.95081	24.43	24.43	0	ANNUAL	AREA	5	
610204.75	4204820.49	2.13189	24.34	24.34	0	ANNUAL	AREA	5	
610238.52	4204708.92	0.74385	24.8	24.8	0	ANNUAL	AREA	5	
610238.51	4204723.51	0.84875	24.85	24.85	0	ANNUAL	AREA	5	
610238.49	4204738.1	0.9665	24.81	24.81	0	ANNUAL	AREA	5	
610238.48	4204752.7	1.0852	24.65	24.65	0	ANNUAL	AREA	5	
610238.46	4204767.29	1.23571	24.5	24.5	0	ANNUAL	AREA	5	
610238.45	4204781.89	1.37932	24.43	24.43	0	ANNUAL	AREA	5	
610272.18	4204716.04	0.69209	24.79	24.79	0	ANNUAL	AREA	5	
610272.16	4204730.43	0.7819	24.74	24.74	0	ANNUAL	AREA	5	
610272.15	4204744.81	0.88053	24.65	24.65	0	ANNUAL	AREA	5	
610305.72	4204834.26	1.35333	25.07	25.07	0	ANNUAL	AREA	5	
610305.7	4204848.99	1.45244	25.36	25.36	0	ANNUAL	AREA	5	
610305.69	4204863.73	1.55295	25.35	25.35	0	ANNUAL	AREA	5	
610305.67	4204878.46	1.66611	25.26	25.26	0	ANNUAL	AREA	5	
610305.66	4204893.19	1.73546	25	25	0	ANNUAL	AREA	5	
610339.43	4204781.71	0.8547	25.43	25.43	0	ANNUAL	AREA	5	
610339.41	4204796.26	0.93883	25.23	25.23	0	ANNUAL	AREA	5	
610339.4	4204810.8	1.02461	25.1	25.1	0	ANNUAL	AREA	5	
610339.38	4204825.34	1.10797	25.39	25.39	0	ANNUAL	AREA	5	
610339.37	4204839.89	1.19341	25.51	25.51	0	ANNUAL	AREA	5	
610339.36	4204854.43	1.27916	25.49	25.49	0	ANNUAL	AREA	5	
610339.34	4204869.08	1.36409	25.3	25.3	0	ANNUAL	AREA	5	
610339.33	4204883.52	1.44783	24.69	24.69	0	ANNUAL	AREA	5	
610339.31	4204898.06	1.52342	24.65	24.65	0	ANNUAL	AREA	5	
610339.3	4204912.61	1.59258	24.93	24.93	0	ANNUAL	AREA	5	
610373.12	4204753.65	0.62105	25.82	25.82	0	ANNUAL	AREA	5	
610373.1	4204768.47	0.68651	25.64	25.64	0	ANNUAL	AREA	5	
610373.09	4204783.3	0.75403	25.67	25.67	0	ANNUAL	AREA	5	
610373.07	4204798.12	0.8268	25.43	25.43	0	ANNUAL	AREA	5	
610373.06	4204805.9	0.89519	25.19	25.19	0	ANNUAL	AREA	5	
610373.04	4204827.78	0.97374	25.55	25.55	0	ANNUAL	AREA	5	
610373.03	4204842.6	1.04817	25.67	25.67	0	ANNUAL	AREA	5	
610373.01	4204857.43	1.12485	25.44	25.44	0	ANNUAL	AREA	5	
610373	4204872.25	1.20066	25.08	25.08	0	ANNUAL	AREA	5	
610372.98	4204887.08	1.27135	25.18	25.18	0	ANNUAL	AREA	5	
610372.97	4204901.91	1.33822	25.45	25.45	0	ANNUAL	AREA	5	
610372.95	4204916.73	1.40236	25.49	25.49	0	ANNUAL	AREA	5	
610372.94	4204931.56	1.46174	25.55	25.55	0	ANNUAL	AREA	5	
610406.85	4204687.13	0.35349	25.88	25.88	0	ANNUAL	AREA	5	
610406.77	4204760.42	0.57455	26.29	26.29	0	ANNUAL	AREA	5	
610406.76	4204775.08	0.62913	26.37	26.37	0	ANNUAL	AREA	5	
610406.74	4204789.73	0.68761	26.29	26.29	0	ANNUAL	AREA	5	
610406.73	4204804.39	0.74965	26.05	26.05	0	ANNUAL	AREA	5	
610406.71	4204819.05	0.81379	25.79	25.79	0	ANNUAL	AREA	5	
610406.7	4204833.7	0.87848	25.62	25.62	0	ANNUAL	AREA	5	
610406.68	4204852.02	0.94182	25.76	25.76	0	ANNUAL	AREA	5	
610406.67	4204865.02	1.00604	25.74	25.74	0	ANNUAL	AREA	5	
610406.65	4204877.67	1.06961	25.68	25.68	0	ANNUAL	AREA	5	
610406.64	4204892.33	1.13154	25.62	25.62	0	ANNUAL	AREA	5	
610406.62	4204906.99	1.19164	25.44	25.44	0	ANNUAL	AREA	5	
610406.61	4204921.64	1.24864	25.2	25.2	0	ANNUAL	AREA	5	
610406.59	4204936.3	1.30124	25.16	25.16	0	ANNUAL	AREA	5	
610406.58	4204950.96	1.34975	25.04	25.04	0	ANNUAL	AREA	5	
610404.54	4204657.14	0.26724	25.73	25.73	0	ANNUAL	AREA	5	
610404.52	4204671.02	0.28297	25.29	25.29	0	ANNUAL	AREA	5	
610404.44	4204746.51	0.46733	27.34	27.34	0	ANNUAL	AREA	5	
610404.43	4204761.41	0.51144	27.55	27.55	0	ANNUAL	AREA	5	
610404.41	4204776.31	0.55897	27.63	27.63	0	ANNUAL	AREA	5	
610404.4	4204791.2	0.61002	27.51	27.51	0	ANNUAL	AREA	5	
610404.38	4204806.1	0.66392	27.29	27.29	0	ANNUAL	AREA	5	
610404.37	4204820.99	0.71877	27.24	27.24	0	ANNUAL	AREA	5	
610404.35	4204835.89	0.77441	27.32	27.32	0	ANNUAL	AREA	5	
610404.34	4204850.78	0.83063	27.44	27.44	0	ANNUAL	AREA	5	
610404.32	4204865.68	0.88842	27.29	27.29	0	ANNUAL	AREA	5	
610404.31	4204880.58	0.95384	25.4	28.13	0	ANNUAL	AREA	5	
610404.29	4204895.47	1.0105	25.01	25.01	0	ANNUAL	AREA	5	
610404.28	4204910.37	1.06418	24.83	24.83	0	ANNUAL	AREA	5	
610404.26	4204925.26	1.1147	24.84	24.84	0	ANNUAL	AREA	5	
610404.25	4204940.16	1.16268	24.73	24.73	0	ANNUAL	AREA	5	
610404.23	4204955.06	1.20727	24.58	24.58	0	ANNUAL	AREA	5	

AERMOD (19191): G:\Construction\Construction.isc
AERMET (14134):
MODELING OPTIONS USED: Reg DEFAULT CONC ELEV URBAN
PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: ROAD
FOR A TOTAL OF 2262 RECEIPTS.
FORMAT: (R1X,F13.5),3(R1X,F8.2),2X,A6.2X,A8.2X,I8.2X,A8

3/6/2021
16:02:03

X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
610031.11	4204736.8	1.99671	25.38	33.35	0	ANNUAL	ROAD	5	
610052.85	4204708.31	1.32737	24.25	76.93	0	ANNUAL	ROAD	5	
610052.84	4204722.07	1.5029	24.25	33.35	0	ANNUAL	ROAD	5	
610052.82	4204735.84	1.68806							

610440.22	4204969.95	1.24777	24.44	24.44	0	ANNUAL	AREA	5	610440.22	4204969.95	0.71225	24.44	24.44	0	ANNUAL	ROAD	5
610474.25	4204606.03	0.18408	25.46	25.46	0	ANNUAL	AREA	5	610474.25	4204606.03	0.19293	25.46	25.46	0	ANNUAL	ROAD	5
610474.23	4204620.78	0.19966	25.58	25.58	0	ANNUAL	AREA	5	610474.23	4204620.78	0.20406	25.58	25.58	0	ANNUAL	ROAD	5
610474.22	4204635.52	0.21791	25.64	25.64	0	ANNUAL	AREA	5	610474.22	4204635.52	0.21615	25.64	25.64	0	ANNUAL	ROAD	5
610474.21	4204650.26	0.23801	25.69	25.69	0	ANNUAL	AREA	5	610474.21	4204650.26	0.23295	25.69	25.69	0	ANNUAL	ROAD	5
610474.19	4204665.00	0.25921	25.78	25.78	0	ANNUAL	AREA	5	610474.19	4204665.00	0.24359	25.78	25.78	0	ANNUAL	ROAD	5
610474.17	4204679.75	0.2837	26.2	26.2	0	ANNUAL	AREA	5	610474.17	4204679.75	0.25874	26.2	26.2	0	ANNUAL	ROAD	5
610474.1	4204753.46	0.43177	28.07	28.07	0	ANNUAL	AREA	5	610474.1	4204753.46	0.34943	28.07	28.07	0	ANNUAL	ROAD	5
610474.08	4204768.2	0.47044	28.38	28.38	0	ANNUAL	AREA	5	610474.08	4204768.2	0.36991	28.38	28.38	0	ANNUAL	ROAD	5
610474.07	4204782.94	0.51279	28.38	28.38	0	ANNUAL	AREA	5	610474.07	4204782.94	0.39083	28.38	28.38	0	ANNUAL	ROAD	5
610474.05	4204797.69	0.55842	28.14	28.14	0	ANNUAL	AREA	5	610474.05	4204797.69	0.41216	28.14	28.14	0	ANNUAL	ROAD	5
610474.04	4204812.43	0.60927	27.99	27.99	0	ANNUAL	AREA	5	610474.04	4204812.43	0.43391	27.99	27.99	0	ANNUAL	ROAD	5
610474.02	4204827.17	0.65244	28.1	28.1	0	ANNUAL	AREA	5	610474.02	4204827.17	0.45615	28.1	28.1	0	ANNUAL	ROAD	5
610473.91	4204841.91	0.70055	28.22	28.22	0	ANNUAL	AREA	5	610473.91	4204841.91	0.47854	28.22	28.22	0	ANNUAL	ROAD	5
610473.99	4204856.66	0.74966	28.29	28.29	0	ANNUAL	AREA	5	610473.99	4204856.66	0.50093	28.29	28.29	0	ANNUAL	ROAD	5
610473.98	4204871.4	0.80577	27.45	27.45	0	ANNUAL	AREA	5	610473.98	4204871.4	0.52236	27.45	27.45	0	ANNUAL	ROAD	5
610473.96	4204886.14	0.86438	25.17	28.32	0	ANNUAL	AREA	5	610473.96	4204886.14	0.54201	25.17	28.32	0	ANNUAL	ROAD	5
610473.95	4204900.88	0.91297	24.94	24.94	0	ANNUAL	AREA	5	610473.95	4204900.88	0.56291	24.94	24.94	0	ANNUAL	ROAD	5
610473.93	4204915.63	0.95971	24.82	24.82	0	ANNUAL	AREA	5	610473.93	4204915.63	0.58319	24.82	24.82	0	ANNUAL	ROAD	5
610473.92	4204930.37	1.00498	24.55	24.55	0	ANNUAL	AREA	5	610473.92	4204930.37	0.60233	24.55	24.55	0	ANNUAL	ROAD	5
610473.9	4204945.11	1.04676	24.66	24.66	0	ANNUAL	AREA	5	610473.9	4204945.11	0.62076	24.66	24.66	0	ANNUAL	ROAD	5
610473.89	4204959.85	1.08859	24.7	24.7	0	ANNUAL	AREA	5	610473.89	4204959.85	0.6378	24.7	24.7	0	ANNUAL	ROAD	5
610473.87	4204974.6	1.13214	24.45	24.45	0	ANNUAL	AREA	5	610473.87	4204974.6	0.65312	24.45	24.45	0	ANNUAL	ROAD	5
610473.86	4204989.34	1.15632	24.37	24.37	0	ANNUAL	AREA	5	610473.86	4204989.34	0.66703	24.37	24.37	0	ANNUAL	ROAD	5
609691.54	4204697.63	10.48593	34.08	82.54	0	ANNUAL	AREA	5	609691.54	4204697.63	15.23127	34.08	82.54	0	ANNUAL	ROAD	5
609691.85	4204712.12	9.97057	36.24	82.54	0	ANNUAL	AREA	5	609691.85	4204712.12	22.31727	36.24	82.54	0	ANNUAL	ROAD	5
609692.17	4204726.61	9.63579	37.58	82.54	0	ANNUAL	AREA	5	609692.17	4204726.61	36.90912	37.58	82.54	0	ANNUAL	ROAD	5
609693.42	4204784.57	10.13439	35.87	57.14	0	ANNUAL	AREA	5	609693.42	4204784.57	24.74027	35.87	57.14	0	ANNUAL	ROAD	5
609693.74	4204799.05	11.45759	32.74	82.04	0	ANNUAL	AREA	5	609693.74	4204799.05	17.71123	32.74	82.04	0	ANNUAL	ROAD	5
609694.05	4204813.54	12.85774	29.83	82.54	0	ANNUAL	AREA	5	609694.05	4204813.54	13.59849	29.83	82.54	0	ANNUAL	ROAD	5
609694.37	4204828.03	14.12386	27.64	82.54	0	ANNUAL	AREA	5	609694.37	4204828.03	11.03786	27.64	82.54	0	ANNUAL	ROAD	5
609694.68	4204842.52	14.18158	26.63	82.54	0	ANNUAL	AREA	5	609694.68	4204842.52	9.33838	26.63	82.54	0	ANNUAL	ROAD	5
609694.99	4204857.01	14.07222	26.05	82.54	0	ANNUAL	AREA	5	609694.99	4204857.01	8.06813	26.05	82.54	0	ANNUAL	ROAD	5
609695.31	4204871.5	13.90743	25.52	82.46	0	ANNUAL	AREA	5	609695.31	4204871.5	7.04888	25.52	82.46	0	ANNUAL	ROAD	5
609695.62	4204885.99	13.67568	25.05	57.14	0	ANNUAL	AREA	5	609695.62	4204885.99	6.20896	25.05	57.14	0	ANNUAL	ROAD	5
609695.94	4204900.48	13.43714	24.49	57.14	0	ANNUAL	AREA	5	609695.94	4204900.48	5.49413	24.49	57.14	0	ANNUAL	ROAD	5
609696.25	4204914.97	13.10275	24.08	57.14	0	ANNUAL	AREA	5	609696.25	4204914.97	4.88885	24.08	57.14	0	ANNUAL	ROAD	5
609696.57	4204929.46	12.68365	23.77	57.14	0	ANNUAL	AREA	5	609696.57	4204929.46	4.36775	23.77	57.14	0	ANNUAL	ROAD	5
609696.88	4204943.95	11.23259	23.36	57.14	0	ANNUAL	AREA	5	609696.88	4204943.95	3.90871	23.36	57.14	0	ANNUAL	ROAD	5
609697.19	4204958.44	11.43271	22.73	57.14	0	ANNUAL	AREA	5	609697.19	4204958.44	3.4096	22.73	57.14	0	ANNUAL	ROAD	5
609697.51	4204972.93	10.40325	21.88	57.14	0	ANNUAL	AREA	5	609697.51	4204972.93	3.13485	21.88	57.14	0	ANNUAL	ROAD	5
609697.82	4204987.42	9.55441	21.65	57.14	0	ANNUAL	AREA	5	609697.82	4204987.42	2.82648	21.65	57.14	0	ANNUAL	ROAD	5
609698.14	4205001.9	8.82829	21.96	56.67	0	ANNUAL	AREA	5	609698.14	4205001.9	2.56222	21.96	56.67	0	ANNUAL	ROAD	5
609698.45	4205016.39	8.12001	22.6	32.08	0	ANNUAL	AREA	5	609698.45	4205016.39	2.33057	22.6	32.08	0	ANNUAL	ROAD	5
609698.77	4205030.88	7.17554	22.91	30.09	0	ANNUAL	AREA	5	609698.77	4205030.88	2.11795	22.91	30.09	0	ANNUAL	ROAD	5
609699.08	4205045.37	6.03308	23.01	29.02	0	ANNUAL	AREA	5	609699.08	4205045.37	1.92497	23.01	29.02	0	ANNUAL	ROAD	5
609699.39	4205059.86	5.17639	23.02	28	0	ANNUAL	AREA	5	609699.39	4205059.86	1.75139	23.02	28	0	ANNUAL	ROAD	5
609699.71	4205074.35	3.47907	23.11	27.32	0	ANNUAL	AREA	5	609699.71	4205074.35	1.59685	23.11	27.32	0	ANNUAL	ROAD	5
609700.02	4205088.84	2.45646	23.46	27.04	0	ANNUAL	AREA	5	609700.02	4205088.84	1.46043	23.46	27.04	0	ANNUAL	ROAD	5
609700.34	4205103.33	1.89098	23.54	26.41	0	ANNUAL	AREA	5	609700.34	4205103.33	1.33601	23.54	26.41	0	ANNUAL	ROAD	5
609681.41	4204687.55	8.98198	33.81	82.54	0	ANNUAL	AREA	5	609681.41	4204687.55	11.99309	33.81	82.54	0	ANNUAL	ROAD	5
609677.57	4204712.43	7.98229	37.68	82.54	0	ANNUAL	AREA	5	609677.57	4204712.43	21.01788	37.68	82.54	0	ANNUAL	ROAD	5
609677.88	4204726.92	7.91894	38.21	82.54	0	ANNUAL	AREA	5	609677.88	4204726.92	33.2988	38.21	82.54	0	ANNUAL	ROAD	5
609679.14	4204784.88	7.94655	37.24	57.14	0	ANNUAL	AREA	5	609679.14	4204784.88	27.03913	37.24	57.14	0	ANNUAL	ROAD	5
609679.46	4204799.36	8.64607	34.44	57.14	0	ANNUAL	AREA	5	609679.46	4204799.36	18.84275	34.44	57.14	0	ANNUAL	ROAD	5
609679.77	4204813.85	9.33335	31.75	82.04	0	ANNUAL	AREA	5	609679.77	4204813.85	14.44841	31.75	82.04	0	ANNUAL	ROAD	5
609680.08	4204828.34	9.68128	30.15	82.06	0	ANNUAL	AREA	5	609680.08	4204828.34	11.72085	30.15	82.06	0	ANNUAL	ROAD	5
609680.4	4204842.83	9.68461	29.41	57.14	0	ANNUAL	AREA	5	609680.4	4204842.83	9.88435	29.41	57.14	0	ANNUAL	ROAD	5
609680.71	4204857.32	9.5996	28.81	57.14	0	ANNUAL	AREA	5	609680.71	4204857.32	8.48545	28.81	57.14	0	ANNUAL	ROAD	5
609681.03	4204871.81	9.50398	28.09	57.14	0	ANNUAL	AREA	5	609681.03	4204871.81	7.3549	28.09	57.14	0	ANNUAL	ROAD	5
609681.34	4204886.3	9.61948	27.58	57.14	0	ANNUAL	AREA	5	609681.34	4204886.3	6.44137	27.58	57.14	0	ANNUAL	ROAD	5
609681.66	4204900.79	9.36096	27.06	57.14	0	ANNUAL	AREA	5	609681.66	4204900.79	5.67323	27.06	57.14	0	ANNUAL	ROAD	5
609681.97	4204915.28	9.0603	26.56	57.14	0	ANNUAL	AREA	5	609681.97	4204915.28	5.01978	26.56	57.14	0	ANNUAL	ROAD	5
609682.28	4204929.77	8.82829	26.22	57.14	0	ANNUAL	AREA	5	609682.28	4204929.77	4.46327	26.22	57.14	0	ANNUAL	ROAD	5
609682.6	4204944.26	8.30886	25.75	57.14	0	ANNUAL	AREA	5	609682.6	4204944.26	3.97553	25.75	57.14	0	ANNUAL	ROAD	5
609682.91	4204958.75	7.91461	25.07	57.14	0	ANNUAL	AREA	5	609682.91	4204958.75	3.54402	25.07	57.14	0	ANNUAL	ROAD	5
609683.23	4204973.24	7.46853	24.43	57.14	0	ANNUAL	AREA	5	609683.23	4204973.24	3.16807	24.43	57.14	0	ANNUAL	ROAD	5
609683.54	4204987.73	6.90679	24.17	34.55	0	ANNUAL	AREA	5	609683.54	4204987.73	2.84615	24.17	34.55	0	ANNUAL	ROAD	5
609683.86	4205002.21	6.28951	23.95	32.61	0	ANNUAL	AREA	5	609683.86	4205002.21	2.56276	23.95	32.61	0	ANNUAL	ROAD	5
609684.17																	

609656.86	4205075.28	1.54344	26.94	26.94	0	ANNUAL	AREA	5	609656.86	4205075.28	1.51911	26.94	26.94	0	ANNUAL	ROAD	5
609657.18	4205089.77	1.32375	26.85	26.85	0	ANNUAL	AREA	5	609657.18	4205089.77	1.38106	26.85	26.85	0	ANNUAL	ROAD	5
609657.49	4205104.26	1.15211	26.73	26.73	0	ANNUAL	AREA	5	609657.49	4205104.26	1.25838	26.73	26.73	0	ANNUAL	ROAD	5
609644.8	4204672.9	5.3674	36.97	82.54	0	ANNUAL	AREA	5	609644.8	4204672.9	8.82004	36.97	82.54	0	ANNUAL	ROAD	5
609668.15	4204641.89	6.27122	32.58	82.54	0	ANNUAL	AREA	5	609668.15	4204641.89	6.15753	32.58	82.54	0	ANNUAL	ROAD	5
609683.1	4204654.42	6.58008	32.59	82.54	0	ANNUAL	AREA	5	609683.1	4204654.42	5.93452	32.59	82.54	0	ANNUAL	ROAD	5
609634.41	4204698.87	4.61732	40.97	82.54	0	ANNUAL	AREA	5	609634.41	4204698.87	13.03806	40.97	82.54	0	ANNUAL	ROAD	5
609634.72	4204713.36	4.7811	39.61	82.54	0	ANNUAL	AREA	5	609634.72	4204713.36	17.42169	39.61	82.54	0	ANNUAL	ROAD	5
609635.04	4204727.85	4.83916	38.94	82.54	0	ANNUAL	AREA	5	609635.04	4204727.85	25.23765	38.94	82.54	0	ANNUAL	ROAD	5
609635.35	4204742.34	4.75092	39.28	82.46	0	ANNUAL	AREA	5	609635.35	4204742.34	42.48421	39.28	82.46	0	ANNUAL	ROAD	5
609636.29	4204785.8	4.3199	40.78	57.14	0	ANNUAL	AREA	5	609636.29	4204785.8	34.11294	40.78	57.14	0	ANNUAL	ROAD	5
609636.61	4204800.29	4.27868	40.08	57.14	0	ANNUAL	AREA	5	609636.61	4204800.29	23.56269	40.08	57.14	0	ANNUAL	ROAD	5
609636.92	4204814.78	4.21992	39.44	57.14	0	ANNUAL	AREA	5	609636.92	4204814.78	17.85119	39.44	57.14	0	ANNUAL	ROAD	5
609637.24	4204829.27	4.15505	38.76	57.14	0	ANNUAL	AREA	5	609637.24	4204829.27	14.23906	38.76	57.14	0	ANNUAL	ROAD	5
609637.55	4204843.76	4.08508	38.02	57.14	0	ANNUAL	AREA	5	609637.55	4204843.76	11.69391	38.02	57.14	0	ANNUAL	ROAD	5
609637.87	4204858.25	4.04667	36.91	57.14	0	ANNUAL	AREA	5	609637.87	4204858.25	9.57877	36.91	57.14	0	ANNUAL	ROAD	5
609638.18	4204872.74	3.98254	35.91	57.14	0	ANNUAL	AREA	5	609638.18	4204872.74	8.26491	35.91	57.14	0	ANNUAL	ROAD	5
609638.49	4204887.23	3.93701	34.6	57.14	0	ANNUAL	AREA	5	609638.49	4204887.23	7.05272	34.6	57.14	0	ANNUAL	ROAD	5
609638.81	4204901.72	3.83549	33.61	56.67	0	ANNUAL	AREA	5	609638.81	4204901.72	6.08796	33.61	56.67	0	ANNUAL	ROAD	5
609639.12	4204916.21	3.70751	32.67	32.67	0	ANNUAL	AREA	5	609639.12	4204916.21	5.28792	32.67	32.67	0	ANNUAL	ROAD	5
609639.44	4204930.7	3.54491	31.88	31.88	0	ANNUAL	AREA	5	609639.44	4204930.7	4.61398	31.88	31.88	0	ANNUAL	ROAD	5
609639.75	4204945.19	3.34413	31.31	31.31	0	ANNUAL	AREA	5	609639.75	4204945.19	4.00666	31.31	31.31	0	ANNUAL	ROAD	5
609640.07	4204959.68	3.14349	30.58	30.58	0	ANNUAL	AREA	5	609640.07	4204959.68	3.57831	30.58	30.58	0	ANNUAL	ROAD	5
609640.38	4204974.17	2.93283	29.78	29.78	0	ANNUAL	AREA	5	609640.38	4204974.17	3.163	29.78	29.78	0	ANNUAL	ROAD	5
609640.69	4204988.65	2.69408	29.18	29.18	0	ANNUAL	AREA	5	609640.69	4204988.65	2.80941	29.18	29.18	0	ANNUAL	ROAD	5
609641.01	4205003.14	2.44791	28.57	28.57	0	ANNUAL	AREA	5	609641.01	4205003.14	2.50263	28.57	28.57	0	ANNUAL	ROAD	5
609641.32	4205017.63	2.27043	27.96	27.96	0	ANNUAL	AREA	5	609641.32	4205017.63	2.23596	27.96	27.96	0	ANNUAL	ROAD	5
609642.89	4205090.08	1.16559	26.3	35.37	0	ANNUAL	AREA	5	609642.89	4205090.08	1.33889	26.3	35.37	0	ANNUAL	ROAD	5
609643.21	4205104.57	1.03014	26.38	26.38	0	ANNUAL	AREA	5	609643.21	4205104.57	1.22083	26.38	26.38	0	ANNUAL	ROAD	5
609625.11	4204686.72	4.08571	42.47	82.54	0	ANNUAL	AREA	5	609625.11	4204686.72	10.27426	42.47	82.54	0	ANNUAL	ROAD	5
609635.09	4204661.79	4.8161	36.69	82.54	0	ANNUAL	AREA	5	609635.09	4204661.79	7.47851	36.69	82.54	0	ANNUAL	ROAD	5
609657.5	4204631.81	5.47812	32.64	82.54	0	ANNUAL	AREA	5	609657.5	4204631.81	5.46112	32.64	82.54	0	ANNUAL	ROAD	5
609682.38	4204621.71	5.91649	32.68	82.54	0	ANNUAL	AREA	5	609682.38	4204621.71	5.0864	32.68	82.54	0	ANNUAL	ROAD	5
609620.44	4204713.67	3.99258	41.73	82.54	0	ANNUAL	AREA	5	609620.44	4204713.67	16.55763	41.73	82.54	0	ANNUAL	ROAD	5
609620.75	4204728.16	4.15184	39.57	82.54	0	ANNUAL	AREA	5	609620.75	4204728.16	23.63038	39.57	82.54	0	ANNUAL	ROAD	5
609621.07	4204742.65	4.07096	39.87	82.02	0	ANNUAL	AREA	5	609621.07	4204742.65	38.91982	39.87	82.02	0	ANNUAL	ROAD	5
609622.01	4204786.11	3.75964	40.43	57.14	0	ANNUAL	AREA	5	609622.01	4204786.11	36.62302	40.43	57.14	0	ANNUAL	ROAD	5
609622.33	4204800.6	3.72736	39.59	57.14	0	ANNUAL	AREA	5	609622.33	4204800.6	24.60227	39.59	57.14	0	ANNUAL	ROAD	5
609622.64	4204814.9	3.67319	38.81	57.14	0	ANNUAL	AREA	5	609622.64	4204814.9	18.4147	38.81	57.14	0	ANNUAL	ROAD	5
609622.95	4204829.58	3.61532	38.01	57.14	0	ANNUAL	AREA	5	609622.95	4204829.58	14.52997	38.01	57.14	0	ANNUAL	ROAD	5
609623.27	4204844.07	3.54847	37.21	57.14	0	ANNUAL	AREA	5	609623.27	4204844.07	11.83596	37.21	57.14	0	ANNUAL	ROAD	5
609610.69	4204687.37	3.39559	46.04	57.14	0	ANNUAL	AREA	5	609610.69	4204687.37	9.40807	46.04	57.14	0	ANNUAL	ROAD	5
609620.39	4204663.14	4.10847	38.61	82.54	0	ANNUAL	AREA	5	609620.39	4204663.14	7.47168	38.61	82.54	0	ANNUAL	ROAD	5
609630.09	4204638.9	4.48419	34.64	82.54	0	ANNUAL	AREA	5	609630.09	4204638.9	5.70787	34.64	82.54	0	ANNUAL	ROAD	5
609647.03	4204621.88	4.83719	32.72	82.54	0	ANNUAL	AREA	5	609647.03	4204621.88	4.8967	32.72	82.54	0	ANNUAL	ROAD	5
609671.22	4204612.06	5.22178	32.77	82.54	0	ANNUAL	AREA	5	609671.22	4204612.06	4.57992	32.77	82.54	0	ANNUAL	ROAD	5
609606.16	4204713.98	4.36719	43.63	57.14	0	ANNUAL	AREA	5	609606.16	4204713.98	15.55844	43.63	57.14	0	ANNUAL	ROAD	5
609606.47	4204728.47	3.57152	40.48	82.54	0	ANNUAL	AREA	5	609606.47	4204728.47	22.29113	40.48	82.54	0	ANNUAL	ROAD	5
609606.79	4204742.96	3.51252	40.53	57.14	0	ANNUAL	AREA	5	609606.79	4204742.96	35.67493	40.53	57.14	0	ANNUAL	ROAD	5
609609.93	4204887.85	2.82239	34.23	57.14	0	ANNUAL	AREA	5	609609.93	4204887.85	7.02967	34.23	57.14	0	ANNUAL	ROAD	5
609610.24	4204902.34	2.71062	33.47	57.14	0	ANNUAL	AREA	5	609610.24	4204902.34	6.02265	33.47	57.14	0	ANNUAL	ROAD	5
609610.56	4204916.83	2.59011	32.69	57.14	0	ANNUAL	AREA	5	609610.56	4204916.83	5.19349	32.69	57.14	0	ANNUAL	ROAD	5
609610.87	4204931.32	2.45658	31.96	56.67	0	ANNUAL	AREA	5	609610.87	4204931.32	4.50653	31.96	56.67	0	ANNUAL	ROAD	5
609611.19	4204945.81	2.30615	31.4	43	0	ANNUAL	AREA	5	609611.19	4204945.81	3.93588	31.4	43	0	ANNUAL	ROAD	5
609611.5	4204960.3	2.15129	30.82	43.41	0	ANNUAL	AREA	5	609611.5	4204960.3	3.45257	30.82	43.41	0	ANNUAL	ROAD	5
609612.13	4204989.27	1.83878	29.55	43.61	0	ANNUAL	AREA	5	609612.13	4204989.27	2.68795	29.55	43.61	0	ANNUAL	ROAD	5
609612.44	4205003.76	1.67933	29	43.61	0	ANNUAL	AREA	5	609612.44	4205003.76	2.38665	29	43.61	0	ANNUAL	ROAD	5
609612.76	4205018.25	1.52434	28.47	43.61	0	ANNUAL	AREA	5	609612.76	4205018.25	2.12689	28.47	43.61	0	ANNUAL	ROAD	5
609613.07	4205032.74	1.41914	28.01	43.61	0	ANNUAL	AREA	5	609613.07	4205032.74	1.90272	28.01	43.61	0	ANNUAL	ROAD	5
609613.39	4205047.23	1.27151	27.68	43.61	0	ANNUAL	AREA	5	609613.39	4205047.23	1.70917	27.68	43.61	0	ANNUAL	ROAD	5
609613.7	4205061.72	1.13984	27.35	43.61	0	ANNUAL	AREA	5	609613.7	4205061.72	1.54018	27.35	43.61	0	ANNUAL	ROAD	5
609614.01	4205076.21	1.02519	26.99	43.46	0	ANNUAL	AREA	5	609614.01	4205076.21	1.39202	26.99	43.46	0	ANNUAL	ROAD	5
609614.33	4205090.7	0.9258	26.72	42.76	0	ANNUAL	AREA	5	609614.33	4205090.7	1.26265	26.72	42.76	0	ANNUAL	ROAD	5
609614.64	4205104.57	0.84117	26.37	35.82	0	ANNUAL	AREA	5	609614.64	4205104.57	1.14923	26.37	35.82	0	ANNUAL	ROAD	5
609586.04	4204687.05	2.61432	50.78	57.14	0	ANNUAL	AREA	5	609586.04	4204687.05	7.19910	50.78	57.14	0	ANNUAL	ROAD	5
609591.24	4204674.06	2.88819	46.25	82.54	0	ANNUAL	AREA	5	609591.24	4204674.06	7.80392	46.25	82.54	0	ANNUAL	ROAD	5
609596.43	4204661.08	3.21496	41.5	82.54	0	ANNUAL	AREA	5	609596.43	4204661.08	7.04204	41.5	82.54	0	ANNUAL	ROAD	5
609601.63	4204648.1	3.47212	38.32	82.54	0	ANNUAL	AREA	5	609601.63	4204648.1	6.12117	38.32	82.54	0	ANNUAL	ROAD	5
609606.82	4204635.12	3.62157	36.48	82.54	0	ANNUAL	AREA	5	609606.82	4204635.12	5.37082	36.48	82.54	0	ANNUAL	ROAD	5
609612.02	4204622.13	3.															

609563.71	4205062.81	0.67437	34.79	34.79	0	ANNUAL	AREA	5	609563.71	4205062.81	1.41854	34.79	34.79	0	ANNUAL	ROAD	5
609564.03	4205077.29	0.63318	34.4	35.02	0	ANNUAL	AREA	5	609564.03	4205077.29	1.2808	34.4	35.02	0	ANNUAL	ROAD	5
609564.34	4205091.78	0.60678	32.96	35.77	0	ANNUAL	AREA	5	609564.34	4205091.78	1.15606	32.96	35.77	0	ANNUAL	ROAD	5
609564.66	4205106.27	0.58683	30.81	35.87	0	ANNUAL	AREA	5	609564.66	4205106.27	1.043	30.81	35.87	0	ANNUAL	ROAD	5
609535.95	4204688.39	1.71886	56.86	56.86	0	ANNUAL	AREA	5	609535.95	4204688.39	6.80666	56.86	56.86	0	ANNUAL	ROAD	5
609541.04	4205104.67	1.82888	54.6	57.14	0	ANNUAL	AREA	5	609541.04	4205104.67	6.39123	54.6	57.14	0	ANNUAL	ROAD	5
609551.23	4204650.22	2.19847	44.8	82.54	0	ANNUAL	AREA	5	609551.23	4204650.22	5.9059	44.8	82.54	0	ANNUAL	ROAD	5
609561.41	4204624.77	2.48275	39.68	82.54	0	ANNUAL	AREA	5	609561.41	4204624.77	4.70894	39.68	82.54	0	ANNUAL	ROAD	5
609566.5	4204612.05	2.50466	39.81	82.54	0	ANNUAL	AREA	5	609566.5	4204612.05	4.27651	39.81	82.54	0	ANNUAL	ROAD	5
609576.68	4204586.6	2.54903	38.74	82.62	0	ANNUAL	AREA	5	609576.68	4204586.6	3.55723	38.74	82.62	0	ANNUAL	ROAD	5
609594.47	4204568.73	2.72827	36.47	82.62	0	ANNUAL	AREA	5	609594.47	4204568.73	3.13983	36.47	82.62	0	ANNUAL	ROAD	5
609607.17	4204563.57	2.82627	36.69	82.62	0	ANNUAL	AREA	5	609607.17	4204563.57	3.04879	36.69	82.62	0	ANNUAL	ROAD	5
609619.87	4204558.42	2.88324	37.47	82.62	0	ANNUAL	AREA	5	609619.87	4204558.42	2.90663	37.47	82.62	0	ANNUAL	ROAD	5
609632.57	4204553.27	2.89833	38.7	82.54	0	ANNUAL	AREA	5	609632.57	4204553.27	2.8672	38.7	82.54	0	ANNUAL	ROAD	5
609645.26	4204548.11	2.90448	39.57	82.54	0	ANNUAL	AREA	5	609645.26	4204548.11	2.75163	39.57	82.54	0	ANNUAL	ROAD	5
609657.96	4204542.96	2.89526	40.21	82.54	0	ANNUAL	AREA	5	609657.96	4204542.96	2.62398	40.21	82.54	0	ANNUAL	ROAD	5
609670.66	4204537.81	2.85435	40.99	82.54	0	ANNUAL	AREA	5	609670.66	4204537.81	2.48516	40.99	82.54	0	ANNUAL	ROAD	5
609683.36	4204532.65	2.78823	41.79	82.54	0	ANNUAL	AREA	5	609683.36	4204532.65	2.33631	41.79	82.54	0	ANNUAL	ROAD	5
609531.18	4204715.6	1.6807	52.67	57.14	0	ANNUAL	AREA	5	609531.18	4204715.6	11.04267	52.67	57.14	0	ANNUAL	ROAD	5
609531.49	4204730.09	1.64865	52.39	57.14	0	ANNUAL	AREA	5	609531.49	4204730.09	13.99403	52.39	57.14	0	ANNUAL	ROAD	5
609531.58	4204744.58	1.6541	49.79	57.14	0	ANNUAL	AREA	5	609531.58	4204744.58	22.11971	49.79	57.14	0	ANNUAL	ROAD	5
609532.12	4204759.07	1.69035	45.92	57.14	0	ANNUAL	AREA	5	609532.12	4204759.07	39.59735	45.92	57.14	0	ANNUAL	ROAD	5
609533.06	4204802.54	1.64188	40.98	57.14	0	ANNUAL	AREA	5	609533.06	4204802.54	32.59414	40.98	57.14	0	ANNUAL	ROAD	5
609533.38	4204817.03	1.61618	39.52	57.14	0	ANNUAL	AREA	5	609533.38	4204817.03	21.53977	39.52	57.14	0	ANNUAL	ROAD	5
609533.69	4204831.52	1.55213	39.15	57.14	0	ANNUAL	AREA	5	609533.69	4204831.52	15.90374	39.15	57.14	0	ANNUAL	ROAD	5
609534	4204846.01	1.48007	38.97	57.14	0	ANNUAL	AREA	5	609534	4204846.01	12.36496	38.97	57.14	0	ANNUAL	ROAD	5
609534.32	4204860.5	1.39101	39.33	57.14	0	ANNUAL	AREA	5	609534.32	4204860.5	9.96429	39.33	57.14	0	ANNUAL	ROAD	5
609534.63	4204874.99	1.27902	40.57	57.14	0	ANNUAL	AREA	5	609534.63	4204874.99	8.26142	40.57	57.14	0	ANNUAL	ROAD	5
609534.95	4204889.48	1.21611	40.05	40.43	0	ANNUAL	AREA	5	609534.95	4204889.48	6.81521	40.05	40.43	0	ANNUAL	ROAD	5
609535.26	4204903.97	1.21239	39.15	39.15	0	ANNUAL	AREA	5	609535.26	4204903.97	5.6803	39.15	39.15	0	ANNUAL	ROAD	5
609535.58	4204918.45	1.13028	37.76	43.41	0	ANNUAL	AREA	5	609535.58	4204918.45	4.77271	37.76	43.41	0	ANNUAL	ROAD	5
609536.52	4204961.92	0.97594	34.17	51.14	0	ANNUAL	AREA	5	609536.52	4204961.92	3.00062	34.17	51.14	0	ANNUAL	ROAD	5
609536.83	4204976.41	0.90924	33.93	51.03	0	ANNUAL	AREA	5	609536.83	4204976.41	2.62595	33.93	51.03	0	ANNUAL	ROAD	5
609537.15	4204990.9	0.84618	33.7	50.99	0	ANNUAL	AREA	5	609537.15	4204990.9	2.31122	33.7	50.99	0	ANNUAL	ROAD	5
609538.4	4205048.86	0.62219	34.21	43.46	0	ANNUAL	AREA	5	609538.4	4205048.86	1.46726	34.21	43.46	0	ANNUAL	ROAD	5
609538.72	4205063.35	0.57459	34.9	34.9	0	ANNUAL	AREA	5	609538.72	4205063.35	1.32697	34.9	34.9	0	ANNUAL	ROAD	5
609539.03	4205077.84	0.53471	35.45	35.45	0	ANNUAL	AREA	5	609539.03	4205077.84	1.20393	35.45	35.45	0	ANNUAL	ROAD	5
609539.35	4205092.33	0.50293	35.7	35.7	0	ANNUAL	AREA	5	609539.35	4205092.33	1.09489	35.7	35.7	0	ANNUAL	ROAD	5
609539.66	4205106.82	0.47798	35.6	35.6	0	ANNUAL	AREA	5	609539.66	4205106.82	0.95981	35.6	35.6	0	ANNUAL	ROAD	5
609511.16	4204688.44	1.51492	53.1	57.14	0	ANNUAL	AREA	5	609511.16	4204688.44	7.82603	53.1	57.14	0	ANNUAL	ROAD	5
609516.45	4204675.22	1.57845	53.39	57.14	0	ANNUAL	AREA	5	609516.45	4204675.22	6.68348	53.39	57.14	0	ANNUAL	ROAD	5
609521.74	4204662	1.65857	52.36	57.14	0	ANNUAL	AREA	5	609521.74	4204662	5.98184	52.36	57.14	0	ANNUAL	ROAD	5
609527.03	4204648.78	1.80795	47.77	82.54	0	ANNUAL	AREA	5	609527.03	4204648.78	5.63657	47.77	82.54	0	ANNUAL	ROAD	5
609532.31	4204635.56	1.95572	44.02	82.54	0	ANNUAL	AREA	5	609532.31	4204635.56	5.06975	44.02	82.54	0	ANNUAL	ROAD	5
609537.6	4204622.34	2.09316	41	82.54	0	ANNUAL	AREA	5	609537.6	4204622.34	4.52353	41	82.54	0	ANNUAL	ROAD	5
609542.89	4204609.12	2.15161	40.25	82.62	0	ANNUAL	AREA	5	609542.89	4204609.12	4.09366	40.25	82.62	0	ANNUAL	ROAD	5
609548.18	4204595.92	2.18961	40.02	82.62	0	ANNUAL	AREA	5	609548.18	4204595.92	3.73229	40.02	82.62	0	ANNUAL	ROAD	5
609553.47	4204582.68	2.19608	39.78	82.62	0	ANNUAL	AREA	5	609553.47	4204582.68	3.41663	39.78	82.62	0	ANNUAL	ROAD	5
609558.76	4204569.47	2.1985	39.49	82.62	0	ANNUAL	AREA	5	609558.76	4204569.47	3.13773	39.49	82.62	0	ANNUAL	ROAD	5
609577.24	4204550.89	2.26537	39.73	82.62	0	ANNUAL	AREA	5	609577.24	4204550.89	2.80767	39.73	82.62	0	ANNUAL	ROAD	5
609590.44	4204545.54	2.34096	40.05	82.62	0	ANNUAL	AREA	5	609590.44	4204545.54	2.72122	40.05	82.62	0	ANNUAL	ROAD	5
609603.63	4204540.18	2.40443	40.34	82.62	0	ANNUAL	AREA	5	609603.63	4204540.18	2.62919	40.34	82.62	0	ANNUAL	ROAD	5
609616.82	4204534.83	2.44614	40.81	82.54	0	ANNUAL	AREA	5	609616.82	4204534.83	2.5317	40.81	82.54	0	ANNUAL	ROAD	5
609630.02	4204529.47	2.46523	41.41	82.54	0	ANNUAL	AREA	5	609630.02	4204529.47	2.4243	41.41	82.54	0	ANNUAL	ROAD	5
609643.21	4204524.12	2.46382	42.04	82.54	0	ANNUAL	AREA	5	609643.21	4204524.12	2.31029	42.04	82.54	0	ANNUAL	ROAD	5
609656.4	4204518.77	2.451	42.42	82.54	0	ANNUAL	AREA	5	609656.4	4204518.77	2.19337	42.42	82.54	0	ANNUAL	ROAD	5
609669.6	4204513.41	2.4123	42.97	82.54	0	ANNUAL	AREA	5	609669.6	4204513.41	2.06904	42.97	82.54	0	ANNUAL	ROAD	5
609682.79	4204508.06	2.34166	43.94	82.54	0	ANNUAL	AREA	5	609682.79	4204508.06	1.9317	43.94	82.54	0	ANNUAL	ROAD	5
609505.87	4204701.66	1.44668	52.82	57.14	0	ANNUAL	AREA	5	609505.87	4204701.66	9.34747	52.82	57.14	0	ANNUAL	ROAD	5
609506.18	4204716.15	1.42178	52.6	57.12	0	ANNUAL	AREA	5	609506.18	4204716.15	11.60443	52.6	57.12	0	ANNUAL	ROAD	5
609506.5	4204730.64	1.39109	52.36	52.36	0	ANNUAL	AREA	5	609506.5	4204730.64	14.98334	52.36	52.36	0	ANNUAL	ROAD	5
609506.81	4204745.13	1.36361	51.51	51.51	0	ANNUAL	AREA	5	609506.81	4204745.13	21.42468	51.51	51.51	0	ANNUAL	ROAD	5
609507.12	4204759.61	1.37829	47.9	57.14	0	ANNUAL	AREA	5	609507.12	4204759.61	37.59602	47.9	57.14	0	ANNUAL	ROAD	5
609508.07	4204801.98	1.4232	47.14	57.14	0	ANNUAL	AREA	5	609508.07	4204801.98	33.49288	47.14	57.14	0	ANNUAL	ROAD	5
609508.38	4204817.57	1.34226	39.56	57.14	0	ANNUAL	AREA	5	609508.38	4204817.57	21.06119	39.56	57.14	0	ANNUAL	ROAD	5
609508.7	4204832.06	1.27358	39.72	57.14	0	ANNUAL	AREA	5	609508.7	4204832.06	15.44259	39.72	57.14	0	ANNUAL	ROAD	5
609509.01	4204846.55	1.16863	41.4	52.08	0	ANNUAL	AREA	5	609509.01	4204846.55	12.22548	41.4	52.08	0	ANNUAL	ROAD	5
609509.32	4204861.04	1.08585	42.3	42.3	0	ANNUAL	AREA	5	609509.32	4204861.04	9.79745	42.3	42.3	0	ANNUAL	ROAD	5
609509.64	4204875.53	1.02957	42.01	42.01	0	ANNUAL	AREA	5	609509.64	4204875.53	7.90201	42.01	42.01	0	ANNUAL	ROAD	5
609509.95	4204890.02	0.99347	40.72	42.06	0	ANNUAL	AREA	5	609509.95	4204890.02	6.43322	40.72	4				

609487.05	4204624.84	1.44573	46.54	82.54	0	ANNUAL	AREA	5	609487.05	4204624.84	4.52565	46.54	82.54	0	ANNUAL	ROAD	5
609492.24	4204611.86	1.54877	43.24	82.62	0	ANNUAL	AREA	5	609492.24	4204611.86	4.06949	43.24	82.62	0	ANNUAL	ROAD	5
609497.44	4204598.88	1.61361	41.79	82.62	0	ANNUAL	AREA	5	609497.44	4204598.88	3.70106	41.79	82.62	0	ANNUAL	ROAD	5
609502.63	4204585.89	1.65684	41.04	82.62	0	ANNUAL	AREA	5	609502.63	4204585.89	3.39372	41.04	82.62	0	ANNUAL	ROAD	5
609507.83	4204572.91	1.68256	40.74	82.62	0	ANNUAL	AREA	5	609507.83	4204572.91	3.13063	40.74	82.62	0	ANNUAL	ROAD	5
609513.02	4204569.83	1.68802	40.92	82.62	0	ANNUAL	AREA	5	609513.02	4204569.83	2.90114	40.92	82.62	0	ANNUAL	ROAD	5
609518.22	4204546.94	1.67091	41.83	82.62	0	ANNUAL	AREA	5	609518.22	4204546.94	2.60935	41.83	82.62	0	ANNUAL	ROAD	5
609523.41	4204533.96	1.63853	43.06	82.62	0	ANNUAL	AREA	5	609523.41	4204533.96	2.51307	43.06	82.62	0	ANNUAL	ROAD	5
609541.57	4204515.72	1.66705	44.02	82.62	0	ANNUAL	AREA	5	609541.57	4204515.72	2.27259	44.02	82.62	0	ANNUAL	ROAD	5
609554.52	4204510.46	1.72456	43.95	82.62	0	ANNUAL	AREA	5	609554.52	4204510.46	2.20343	43.95	82.62	0	ANNUAL	ROAD	5
609567.48	4204505.2	1.77452	43.95	82.62	0	ANNUAL	AREA	5	609567.48	4204505.2	2.13316	43.95	82.62	0	ANNUAL	ROAD	5
609580.44	4204499.94	1.81593	44	82.62	0	ANNUAL	AREA	5	609580.44	4204499.94	2.06122	44	82.62	0	ANNUAL	ROAD	5
609593.4	4204494.68	1.84613	44.16	82.54	0	ANNUAL	AREA	5	609593.4	4204494.68	1.98484	44.16	82.54	0	ANNUAL	ROAD	5
609606.35	4204489.43	1.86979	44.22	82.54	0	ANNUAL	AREA	5	609606.35	4204489.43	1.90714	44.22	82.54	0	ANNUAL	ROAD	5
609619.31	4204484.17	1.86743	44.87	82.54	0	ANNUAL	AREA	5	609619.31	4204484.17	1.82135	44.87	82.54	0	ANNUAL	ROAD	5
609632.27	4204478.91	1.85733	45.59	82.54	0	ANNUAL	AREA	5	609632.27	4204478.91	1.73065	45.59	82.54	0	ANNUAL	ROAD	5
609645.23	4204473.65	1.82108	46.7	82.54	0	ANNUAL	AREA	5	609645.23	4204473.65	1.62994	46.7	82.54	0	ANNUAL	ROAD	5
609658.18	4204468.39	1.77822	47.83	82.54	0	ANNUAL	AREA	5	609658.18	4204468.39	1.52483	47.83	82.54	0	ANNUAL	ROAD	5
609671.14	4204463.13	1.72354	49.11	82.54	0	ANNUAL	AREA	5	609671.14	4204463.13	1.41412	49.11	82.54	0	ANNUAL	ROAD	5
609684.1	4204457.87	1.65964	50.48	82.54	0	ANNUAL	AREA	5	609684.1	4204457.87	1.30395	50.48	82.54	0	ANNUAL	ROAD	5
609695.88	4204452.56	1.60603	52.79	82.54	0	ANNUAL	AREA	5	609695.88	4204452.56	10.50004	52.79	82.54	0	ANNUAL	ROAD	5
609710.19	4204449.43	1.60379	52.56	82.54	0	ANNUAL	AREA	5	609710.19	4204449.43	13.46616	52.56	82.54	0	ANNUAL	ROAD	5
609745.61	4204441.72	1.01737	52.33	52.33	0	ANNUAL	AREA	5	609745.61	4204441.72	18.17128	52.33	52.33	0	ANNUAL	ROAD	5
609745.82	4204441.72	0.98868	52	52	0	ANNUAL	AREA	5	609745.82	4204441.72	26.58051	52	52	0	ANNUAL	ROAD	5
609757.14	4204760.7	0.97024	50.46	52.12	0	ANNUAL	AREA	5	609757.14	4204760.7	45.16886	50.46	52.12	0	ANNUAL	ROAD	5
609458.08	4204804.17	0.89729	46.6	52.49	0	ANNUAL	AREA	5	4204804.17	30.71157	46.6	52.49	0	ANNUAL	ROAD	5	
609458.39	4204818.66	0.85972	46.18	50.27	0	ANNUAL	AREA	5	609458.39	4204818.66	19.90636	46.18	50.27	0	ANNUAL	ROAD	5
609458.71	4204833.15	0.8167	46.16	46.16	0	ANNUAL	AREA	5	609458.71	4204833.15	14.37959	46.16	46.16	0	ANNUAL	ROAD	5
609459.02	4204847.63	0.78474	45.26	50.91	0	ANNUAL	AREA	5	609459.02	4204847.63	10.7857	45.26	50.91	0	ANNUAL	ROAD	5
609459.65	4204876.61	0.72993	42.87	51.14	0	ANNUAL	AREA	5	609459.65	4204876.61	6.66069	42.87	51.14	0	ANNUAL	ROAD	5
609459.96	4204891.1	0.69465	42.33	51.14	0	ANNUAL	AREA	5	609459.96	4204891.1	5.48801	42.33	51.14	0	ANNUAL	ROAD	5
609461.22	4204940.06	0.53399	42.94	50.84	0	ANNUAL	AREA	5	609461.22	4204940.06	2.20285	42.94	50.84	0	ANNUAL	ROAD	5
609461.54	4204963.55	0.49886	43.15	43.15	0	ANNUAL	AREA	5	609461.54	4204963.55	2.44866	43.15	43.15	0	ANNUAL	ROAD	5
609461.85	4204978.04	0.46758	43.19	43.19	0	ANNUAL	AREA	5	609461.85	4204978.04	2.14017	43.19	43.19	0	ANNUAL	ROAD	5
609462.16	4204992.53	0.43942	43.13	43.13	0	ANNUAL	AREA	5	609462.16	4204992.53	1.88325	43.13	43.13	0	ANNUAL	ROAD	5
609462.48	4205007.02	0.41498	42.88	42.88	0	ANNUAL	AREA	5	609462.48	4205007.02	1.66774	42.88	42.88	0	ANNUAL	ROAD	5
609462.79	4205021.51	0.39445	42.38	42.38	0	ANNUAL	AREA	5	609462.79	4205021.51	1.48535	42.38	42.38	0	ANNUAL	ROAD	5
609463.11	4205036	0.37651	41.79	41.79	0	ANNUAL	AREA	5	609463.11	4205036	1.33005	41.79	41.79	0	ANNUAL	ROAD	5
609463.42	4205051.88	0.35122	41.08	41.08	0	ANNUAL	AREA	5	609463.42	4205051.88	1.13738	41.08	41.08	0	ANNUAL	ROAD	5
609463.74	4205064.97	0.32067	39.89	39.89	0	ANNUAL	AREA	5	609463.74	4205064.97	1.08202	39.89	39.89	0	ANNUAL	ROAD	5
609464.05	4205079.46	0.34002	38.93	49.57	0	ANNUAL	AREA	5	609464.05	4205079.46	0.98271	38.93	49.57	0	ANNUAL	ROAD	5
609464.36	4205093.95	0.33083	37.94	49.78	0	ANNUAL	AREA	5	609464.36	4205093.95	0.89644	37.94	49.78	0	ANNUAL	ROAD	5
609464.68	4205108.44	0.32439	36.62	49.92	0	ANNUAL	AREA	5	609464.68	4205108.44	0.82054	36.62	49.92	0	ANNUAL	ROAD	5
609436.22	4204689.95	0.97053	53.06	53.06	0	ANNUAL	AREA	5	609436.22	4204689.95	9.0914	53.06	53.06	0	ANNUAL	ROAD	5
609441.55	4204676.62	1.01438	53.28	53.28	0	ANNUAL	AREA	5	609441.55	4204676.62	7.52118	53.28	53.28	0	ANNUAL	ROAD	5
609446.89	4204663.3	1.05771	53.47	53.47	0	ANNUAL	AREA	5	609446.89	4204663.3	8.84427	53.47	53.47	0	ANNUAL	ROAD	5
609452.22	4204649.77	1.09746	53.6	53.6	0	ANNUAL	AREA	5	609452.22	4204649.77	5.529	53.6	53.6	0	ANNUAL	ROAD	5
609457.55	4204636.64	1.1581	51.71	54.88	0	ANNUAL	AREA	5	609457.55	4204636.64	4.95161	51.71	54.88	0	ANNUAL	ROAD	5
609462.89	4204623.31	1.23756	48.52	82.54	0	ANNUAL	AREA	5	609462.89	4204623.31	4.46214	48.52	82.54	0	ANNUAL	ROAD	5
609468.22	4204609.98	1.32065	45.47	82.62	0	ANNUAL	AREA	5	609468.22	4204609.98	4.01439	45.47	82.62	0	ANNUAL	ROAD	5
609473.55	4204596.65	1.38864	43.44	82.62	0	ANNUAL	AREA	5	609473.55	4204596.65	3.63213	43.44	82.62	0	ANNUAL	ROAD	5
609478.89	4204583.32	1.44544	41.93	82.62	0	ANNUAL	AREA	5	609478.89	4204583.32	3.31301	41.93	82.62	0	ANNUAL	ROAD	5
609484.22	4204569.99	1.47502	41.54	82.62	0	ANNUAL	AREA	5	609484.22	4204569.99	3.05105	41.54	82.62	0	ANNUAL	ROAD	5
609489.55	4204556.66	1.48484	41.83	82.62	0	ANNUAL	AREA	5	609489.55	4204556.66	2.82781	41.83	82.62	0	ANNUAL	ROAD	5
609494.88	4204543.33	1.47765	42.66	82.62	0	ANNUAL	AREA	5	609494.88	4204543.33	2.62085	42.66	82.62	0	ANNUAL	ROAD	5
609500.22	4204530	1.45993	43.78	82.62	0	ANNUAL	AREA	5	609500.22	4204530	2.45111	43.78	82.62	0	ANNUAL	ROAD	5
609505.55	4204516.67	1.44486	44.33	82.62	0	ANNUAL	AREA	5	609505.55	4204516.67	2.28933	44.33	82.62	0	ANNUAL	ROAD	5
609524.19	4204497.95	1.49194	44.02	82.62	0	ANNUAL	AREA	5	609524.19	4204497.95	2.06894	44.02	82.62	0	ANNUAL	ROAD	5
609537.49	4204492.55	1.50176	46.23	82.62	0	ANNUAL	AREA	5	609537.49	4204492.55	1.9982	46.23	82.62	0	ANNUAL	ROAD	5
609550.8	4204487.15	1.51744	47.85	82.62	0	ANNUAL	AREA	5	609550.8	4204487.15	1.91742	47.85	82.62	0	ANNUAL	ROAD	5
609564.1	4204481.75	1.54246	48.53	82.54	0	ANNUAL	AREA	5	609564.1	4204481.75	1.84051	48.53	82.54	0	ANNUAL	ROAD	5
609577.4	4204476.35	1.56812	48.74	82.54	0	ANNUAL	AREA	5	609577.4	4204476.35	1.76716	48.74	82.54	0	ANNUAL	ROAD	5
609590.71	4204470.95	1.59319	48.52	82.54	0	ANNUAL	AREA	5	609590.71	4204470.95	1.69861	48.52	82.54	0	ANNUAL	ROAD	5
609604.01	4204466.3	1.63065	48.86	82.54	0	ANNUAL	AREA	5	609604.01	4204466.3	1.6208	48.86	82.54	0	ANNUAL	ROAD	5
609617.31	4204460.15	1.59944	49.22	82.54	0	ANNUAL	AREA	5	609617.31	4204460.15	1.54104	49.22	82.54	0	ANNUAL	ROAD	5
609630.61	4204454.75	1.58284	49.98	82.54	0	ANNUAL	AREA	5	609630.61	4204454.75	1.45372	49.98	82.54	0	ANNUAL	ROAD	5
609643.92	4204449.35	1.55466	50.94	82.54	0	ANNUAL	AREA	5	609643.92	4204449.35	1.36146	50.94	82.54	0	ANNUAL	ROAD	5
609657.22	4204443.95	1.51453	52.17	82.54	0	ANNUAL	AREA	5	609657.22	4204443.95	1.26464	52.17	82.54	0	ANNUAL	ROAD	5
609670.52	4204438.56	1.46398	53.66	82.54	0	ANNUAL	AREA	5	609670.52	4204438.56	1.16727	53.66	82.54	0	ANNUAL	ROAD	5
609683.83	4204433.16	1.40619	55.28	82.54	0												

609409.98	4204892.19	0.46923	49.77	50.99	0	ANNUAL	AREA	5	609409.98	4204892.19	4.46628	49.77	50.99	0	ANNUAL	ROAD	5
609410.29	4204906.68	0.45156	48.34	51	0	ANNUAL	AREA	5	609410.29	4204906.68	3.71289	48.34	51	0	ANNUAL	ROAD	5
609410.6	4204921.17	0.43604	46.76	51	0	ANNUAL	AREA	5	609410.6	4204921.17	3.12345	46.76	51	0	ANNUAL	ROAD	5
609410.92	4204935.65	0.42091	45.3	51	0	ANNUAL	AREA	5	609410.92	4204935.65	2.65861	45.3	51	0	ANNUAL	ROAD	5
609411.23	4204950.14	0.40445	44.19	51	0	ANNUAL	AREA	5	609411.23	4204950.14	2.28935	44.19	51	0	ANNUAL	ROAD	5
609411.55	4204964.63	0.38481	43.02	51	0	ANNUAL	AREA	5	609411.55	4204964.63	1.99423	43.02	51	0	ANNUAL	ROAD	5
609411.86	4204979.12	0.36456	43.34	50.84	0	ANNUAL	AREA	5	609411.86	4204979.12	1.75295	43.34	50.84	0	ANNUAL	ROAD	5
609412.18	4204993.61	0.34635	42.95	50.73	0	ANNUAL	AREA	5	609412.18	4204993.61	1.55238	42.95	50.73	0	ANNUAL	ROAD	5
609412.49	4205008.1	0.32976	42.51	50.56	0	ANNUAL	AREA	5	609412.49	4205008.1	1.3844	42.51	50.56	0	ANNUAL	ROAD	5
609412.8	4205022.59	0.31434	42.1	50.48	0	ANNUAL	AREA	5	609412.8	4205022.59	1.24238	42.1	50.48	0	ANNUAL	ROAD	5
609413.12	4205037.08	0.29973	41.8	50.42	0	ANNUAL	AREA	5	609413.12	4205037.08	1.12165	41.8	50.42	0	ANNUAL	ROAD	5
609413.43	4205051.57	0.28798	41.22	50.3	0	ANNUAL	AREA	5	609413.43	4205051.57	1.01751	41.22	50.3	0	ANNUAL	ROAD	5
609413.75	4205066.06	0.27698	40.75	50.2	0	ANNUAL	AREA	5	609413.75	4205066.06	0.92773	40.75	50.2	0	ANNUAL	ROAD	5
609414.06	4205080.55	0.26995	39.88	50.13	0	ANNUAL	AREA	5	609414.06	4205080.55	0.84901	39.88	50.13	0	ANNUAL	ROAD	5
609414.38	4205095.04	0.26175	39.09	50.04	0	ANNUAL	AREA	5	609414.38	4205095.04	0.78018	39.09	50.04	0	ANNUAL	ROAD	5
609414.69	4205109.53	0.25425	38.56	50.04	0	ANNUAL	AREA	5	609414.69	4205109.53	0.72017	38.56	50.04	0	ANNUAL	ROAD	5
609372.34	4204691.7	0.67867	55.99	55.99	0	ANNUAL	AREA	5	609372.34	4204691.7	11.40621	55.99	55.99	0	ANNUAL	ROAD	5
609377.52	4204678.74	0.71248	55.56	55.56	0	ANNUAL	AREA	5	609377.52	4204678.74	9.02873	55.56	55.56	0	ANNUAL	ROAD	5
609382.71	4204665.78	0.74438	55.38	55.38	0	ANNUAL	AREA	5	609382.71	4204665.78	7.41923	55.38	55.38	0	ANNUAL	ROAD	5
609387.9	4204652.82	0.77827	54.81	54.81	0	ANNUAL	AREA	5	609387.9	4204652.82	6.27753	54.81	54.81	0	ANNUAL	ROAD	5
609393.08	4204639.85	0.80782	54.77	54.77	0	ANNUAL	AREA	5	609393.08	4204639.85	5.42122	54.77	54.77	0	ANNUAL	ROAD	5
609398.27	4204626.89	0.83625	54.75	54.75	0	ANNUAL	AREA	5	609398.27	4204626.89	4.76041	54.75	54.75	0	ANNUAL	ROAD	5
609403.46	4204613.93	0.86296	52.3	80.19	0	ANNUAL	AREA	5	609403.46	4204613.93	4.26462	52.3	80.19	0	ANNUAL	ROAD	5
609408.64	4204600.97	0.9497	48.22	82.62	0	ANNUAL	AREA	5	609408.64	4204600.97	3.82505	48.22	82.62	0	ANNUAL	ROAD	5
609413.83	4204588	1.00372	45.77	82.62	0	ANNUAL	AREA	5	609413.83	4204588	3.45662	45.77	82.62	0	ANNUAL	ROAD	5
609419.02	4204575.04	1.07253	42.39	82.62	0	ANNUAL	AREA	5	609419.02	4204575.04	3.12411	42.39	82.62	0	ANNUAL	ROAD	5
609424.2	4204562.08	1.1017	41.82	82.62	0	ANNUAL	AREA	5	609424.2	4204562.08	2.88375	41.82	82.62	0	ANNUAL	ROAD	5
609429.39	4204549.12	1.10444	42.89	82.62	0	ANNUAL	AREA	5	609429.39	4204549.12	2.69079	42.89	82.62	0	ANNUAL	ROAD	5
609434.58	4204536.15	1.10425	44.01	82.62	0	ANNUAL	AREA	5	609434.58	4204536.15	2.51867	44.01	82.62	0	ANNUAL	ROAD	5
609439.77	4204522.19	1.11122	44.39	82.62	0	ANNUAL	AREA	5	609439.77	4204522.19	2.35526	44.39	82.62	0	ANNUAL	ROAD	5
609444.95	4204510.23	1.12075	44.3	82.62	0	ANNUAL	AREA	5	609444.95	4204510.23	2.20496	44.3	82.62	0	ANNUAL	ROAD	5
609450.14	4204497.26	1.12854	44.04	82.62	0	ANNUAL	AREA	5	609450.14	4204497.26	2.06728	44.04	82.62	0	ANNUAL	ROAD	5
609455.33	4204484.3	1.13466	43.59	82.62	0	ANNUAL	AREA	5	609455.33	4204484.3	1.94058	43.59	82.62	0	ANNUAL	ROAD	5
609460.51	4204471.34	1.14339	42.63	82.62	0	ANNUAL	AREA	5	609460.51	4204471.34	1.82252	42.63	82.62	0	ANNUAL	ROAD	5
609478.64	4204453.13	1.12958	45.78	82.62	0	ANNUAL	AREA	5	609478.64	4204453.13	1.67676	45.78	82.62	0	ANNUAL	ROAD	5
609491.57	4204447.88	1.09658	51.58	82.62	0	ANNUAL	AREA	5	609491.57	4204447.88	1.59891	51.58	82.62	0	ANNUAL	ROAD	5
609504.51	4204442.63	1.08103	56.51	82.54	0	ANNUAL	AREA	5	609504.51	4204442.63	1.48363	56.51	82.54	0	ANNUAL	ROAD	5
609517.45	4204437.37	1.07946	59.92	82.54	0	ANNUAL	AREA	5	609517.45	4204437.37	1.37179	59.92	82.54	0	ANNUAL	ROAD	5
609520.38	4204426.87	1.08822	62.47	82.54	0	ANNUAL	AREA	5	609520.38	4204426.87	1.27446	62.47	82.54	0	ANNUAL	ROAD	5
609543.32	4204416.37	1.08663	64.17	82.54	0	ANNUAL	AREA	5	609543.32	4204416.37	1.203	64.17	82.54	0	ANNUAL	ROAD	5
609556.26	4204401.62	1.08869	65.72	82.54	0	ANNUAL	AREA	5	609556.26	4204401.62	1.13445	65.72	82.54	0	ANNUAL	ROAD	5
609569.2	4204396.49	1.09	66.77	82.54	0	ANNUAL	AREA	5	609569.2	4204396.49	1.07594	66.77	82.54	0	ANNUAL	ROAD	5
609582.13	4204411.12	1.09077	67.27	82.54	0	ANNUAL	AREA	5	609582.13	4204411.12	1.0261	67.27	82.54	0	ANNUAL	ROAD	5
609595.07	4204405.87	1.09042	67.32	82.54	0	ANNUAL	AREA	5	609595.07	4204405.87	0.98222	67.32	82.54	0	ANNUAL	ROAD	5
609608.01	4204400.62	1.08837	67	82.54	0	ANNUAL	AREA	5	609608.01	4204400.62	0.94274	67	82.54	0	ANNUAL	ROAD	5
609620.94	4204395.37	1.08098	66.83	82.54	0	ANNUAL	AREA	5	609620.94	4204395.37	0.90124	66.83	82.54	0	ANNUAL	ROAD	5
609633.88	4204388.78	1.07822	67.08	82.54	0	ANNUAL	AREA	5	609633.88	4204388.78	0.85943	67.08	82.54	0	ANNUAL	ROAD	5
609646.82	4204384.87	1.04489	67.68	82.54	0	ANNUAL	AREA	5	609646.82	4204384.87	0.80699	67.68	82.54	0	ANNUAL	ROAD	5
609659.75	4204379.62	1.01742	68.57	82.54	0	ANNUAL	AREA	5	609659.75	4204379.62	0.75708	68.57	82.54	0	ANNUAL	ROAD	5
609672.69	4204374.37	0.98832	69.14	82.54	0	ANNUAL	AREA	5	609672.69	4204374.37	0.71057	69.14	82.54	0	ANNUAL	ROAD	5
609685.63	4204369.12	0.95677	69.61	82.46	0	ANNUAL	AREA	5	609685.63	4204369.12	0.66656	69.61	82.46	0	ANNUAL	ROAD	5
609697.15	4204704.67	0.64552	56.26	56.26	0	ANNUAL	AREA	5	609697.15	4204704.67	15.17339	56.26	56.26	0	ANNUAL	ROAD	5
609674.46	4204719.16	0.62812	56.25	56.25	0	ANNUAL	AREA	5	609674.46	4204719.16	21.72986	56.25	56.25	0	ANNUAL	ROAD	5
609678.78	4204733.64	0.61107	55.87	55.87	0	ANNUAL	AREA	5	609678.78	4204733.64	34.58162	55.87	55.87	0	ANNUAL	ROAD	5
609688.72	4204777.11	0.55859	53.51	55.08	0	ANNUAL	AREA	5	609688.72	4204777.11	41.04571	53.51	55.08	0	ANNUAL	ROAD	5
609369.04	4204791.6	1.08182	62.47	82.54	0	ANNUAL	AREA	5	609369.04	4204791.6	24.11221	52.93	52.93	0	ANNUAL	ROAD	5
609369.35	4204806.09	0.51432	52.87	52.87	0	ANNUAL	AREA	5	609369.35	4204806.09	16.1659	52.87	52.87	0	ANNUAL	ROAD	5
609369.66	4204820.58	0.49569	51.85	52.36	0	ANNUAL	AREA	5	609369.66	4204820.58	11.52251	51.85	52.36	0	ANNUAL	ROAD	5
609371.24	4204893.03	0.38794	50.26	50.26	0	ANNUAL	AREA	5	609371.24	4204893.03	3.60544	50.26	50.26	0	ANNUAL	ROAD	5
609371.55	4204907.52	0.36668	50.32	50.32	0	ANNUAL	AREA	5	609371.55	4204907.52	3.02786	50.32	50.32	0	ANNUAL	ROAD	5
609371.86	4204922.01	0.34587	50.51	50.51	0	ANNUAL	AREA	5	609371.86	4204922.01	2.57487	50.51	50.51	0	ANNUAL	ROAD	5
609372.18	4204936.49	0.327	50.51	50.51	0	ANNUAL	AREA	5	609372.18	4204936.49	2.21474	50.51	50.51	0	ANNUAL	ROAD	5
609372.49	4204950.98	0.30941	50.44	50.44	0	ANNUAL	AREA	5	609372.49	4204950.98	1.92442	50.44	50.44	0	ANNUAL	ROAD	5
609373.01	4204974.81	0.29261	50.35	50.35	0	ANNUAL	AREA	5	609373.01	4204974.81	1.68746	50.35	50.35	0	ANNUAL	ROAD	5
609373.32	4204979.96	0.2776	50.22	50.22	0	ANNUAL	AREA	5	609373.32	4204979.96	1.4931	50.22	50.22	0	ANNUAL	ROAD	5
609373.44	4204994.45	0.26417	49.85	49.85	0	ANNUAL	AREA	5	609373.44	4204994.45	1.33184	49.85	49.85	0	ANNUAL	ROAD	5
609373.75	4205008.94	0.25239	49.29	49.29	0	ANNUAL	AREA	5	609373.75	4205008.94	1.19654	49.29	49.29	0	ANNUAL	ROAD	5
609374.06	4205023.43	0.24244	48.48	49.81	0	ANNUAL	AREA	5	609374.06	4205023.43	1.08218	48.48	49.81	0	ANNUAL	ROAD	5
609374.38	4205037.92	0.23325	47.74	49.92	0	ANNUAL	AREA	5	609374.38	4205037.92	0.98396	47.74	49.92	0	ANNUAL	ROAD	5
609374.69	4205052.41	0.22503	47	49.92	0	ANNUAL	AREA	5	609374.69	4205052.41	0.89912	47	49.92	0			

609337.21	4205111.21	0.16566	48.34	48.34	0	ANNUAL	AREA	5	609337.21	4205111.21	0.58661	48.34	48.34	0	ANNUAL	ROAD	5
609294.93	4204693.19	0.46807	58.56	58.56	0	ANNUAL	AREA	5	609294.93	4204693.19	17.01403	58.56	58.56	0	ANNUAL	ROAD	5
609300.2	4204680.03	0.49252	57.89	57.89	0	ANNUAL	AREA	5	609300.2	4204680.03	12.2231	57.89	57.89	0	ANNUAL	ROAD	5
609305.46	4204666.87	0.51588	57.3	57.3	0	ANNUAL	AREA	5	609305.46	4204666.87	9.40959	57.3	57.3	0	ANNUAL	ROAD	5
609315.99	4204640.56	0.50114	56.45	56.45	0	ANNUAL	AREA	5	609315.99	4204640.56	6.33426	56.45	56.45	0	ANNUAL	ROAD	5
609321.16	4204579.24	0.57965	56.85	56.85	0	ANNUAL	AREA	5	609321.16	4204579.24	5.42025	56.85	56.85	0	ANNUAL	ROAD	5
609326.52	4204614.24	0.6002	56.71	59.89	0	ANNUAL	AREA	5	609326.52	4204614.24	4.71524	56.71	59.89	0	ANNUAL	ROAD	5
609331.79	4204601.08	0.62029	56.59	80.33	0	ANNUAL	AREA	5	609331.79	4204601.08	4.16213	56.59	80.33	0	ANNUAL	ROAD	5
609337.05	4204587.92	0.64323	55.81	81.34	0	ANNUAL	AREA	5	609337.05	4204587.92	3.71893	55.81	81.34	0	ANNUAL	ROAD	5
609342.32	4204574.77	0.68554	51.9	82.62	0	ANNUAL	AREA	5	609342.32	4204574.77	3.34661	51.9	82.62	0	ANNUAL	ROAD	5
609347.58	4204561.61	0.72886	48.56	82.62	0	ANNUAL	AREA	5	609347.58	4204561.61	3.02395	48.56	82.62	0	ANNUAL	ROAD	5
609352.85	4204548.45	0.78839	43.9	82.62	0	ANNUAL	AREA	5	609352.85	4204548.45	2.72293	43.9	82.62	0	ANNUAL	ROAD	5
609358.11	4204535.29	0.82553	41.8	82.62	0	ANNUAL	AREA	5	609358.11	4204535.29	2.4974	41.8	82.62	0	ANNUAL	ROAD	5
609363.38	4204522.13	0.82356	43.4	82.62	0	ANNUAL	AREA	5	609363.38	4204522.13	2.3456	43.4	82.62	0	ANNUAL	ROAD	5
609368.64	4204508.98	0.81815	45.33	82.62	0	ANNUAL	AREA	5	609368.64	4204508.98	2.20942	45.33	82.62	0	ANNUAL	ROAD	5
609373.91	4204495.82	0.82944	45.34	82.62	0	ANNUAL	AREA	5	609373.91	4204495.82	2.0697	45.34	82.62	0	ANNUAL	ROAD	5
609379.17	4204482.66	0.81819	47.59	82.62	0	ANNUAL	AREA	5	609379.17	4204482.66	1.95291	47.59	82.62	0	ANNUAL	ROAD	5
609384.44	4204469.5	0.77879	53.65	82.62	0	ANNUAL	AREA	5	609384.44	4204469.5	1.82551	53.65	82.62	0	ANNUAL	ROAD	5
609389.7	4204456.34	0.76378	57.04	82.62	0	ANNUAL	AREA	5	609389.7	4204456.34	1.69313	57.04	82.62	0	ANNUAL	ROAD	5
609400.23	4204430.03	0.757	58.96	82.62	0	ANNUAL	AREA	5	609400.23	4204430.03	1.48233	58.96	82.62	0	ANNUAL	ROAD	5
609405.5	4204416.87	0.76215	57.51	82.62	0	ANNUAL	AREA	5	609405.5	4204416.87	1.41463	57.51	82.62	0	ANNUAL	ROAD	5
609423.9	4204398.38	0.83326	48.94	82.62	0	ANNUAL	AREA	5	609423.9	4204398.38	1.34591	48.94	82.62	0	ANNUAL	ROAD	5
609463.29	4204382.39	0.86987	51.85	82.62	0	ANNUAL	AREA	5	609463.29	4204382.39	1.22804	51.85	82.62	0	ANNUAL	ROAD	5
609476.42	4204377.06	0.85459	56.47	82.62	0	ANNUAL	AREA	5	609476.42	4204377.06	1.15656	56.47	82.62	0	ANNUAL	ROAD	5
609489.56	4204371.73	0.83504	62.73	82.54	0	ANNUAL	AREA	5	609489.56	4204371.73	1.04502	62.73	82.54	0	ANNUAL	ROAD	5
609502.69	4204366.4	0.82017	68.65	82.54	0	ANNUAL	AREA	5	609502.69	4204366.4	0.93731	68.65	82.54	0	ANNUAL	ROAD	5
609515.82	4204361.07	0.80873	73.6	82.54	0	ANNUAL	AREA	5	609515.82	4204361.07	0.85948	73.6	82.54	0	ANNUAL	ROAD	5
609528.95	4204355.74	0.80327	76.48	82.54	0	ANNUAL	AREA	5	609528.95	4204355.74	0.80838	76.48	82.54	0	ANNUAL	ROAD	5
609542.08	4204350.41	0.79915	78.4	82.54	0	ANNUAL	AREA	5	609542.08	4204350.41	0.76666	78.4	82.54	0	ANNUAL	ROAD	5
609555.22	4204345.75	0.7954	79.63	82.11	0	ANNUAL	AREA	5	609555.22	4204345.75	0.7206	79.63	82.11	0	ANNUAL	ROAD	5
609568.35	4204339.75	0.79109	80.42	82.04	0	ANNUAL	AREA	5	609568.35	4204339.75	0.69797	80.42	82.04	0	ANNUAL	ROAD	5
609581.48	4204334.43	0.78623	80.78	81.82	0	ANNUAL	AREA	5	609581.48	4204334.43	0.66827	80.78	81.82	0	ANNUAL	ROAD	5
609594.61	4204329.1	0.7807	80.71	80.71	0	ANNUAL	AREA	5	609594.61	4204329.1	0.64096	80.71	80.71	0	ANNUAL	ROAD	5
609607.75	4204323.77	0.77341	80.45	80.45	0	ANNUAL	AREA	5	609607.75	4204323.77	0.61442	80.45	80.45	0	ANNUAL	ROAD	5
609620.88	4204318.44	0.76248	80.45	80.45	0	ANNUAL	AREA	5	609620.88	4204318.44	0.58645	80.45	80.45	0	ANNUAL	ROAD	5
609634.01	4204313.11	0.74932	80.34	80.34	0	ANNUAL	AREA	5	609634.01	4204313.11	0.559	80.34	80.34	0	ANNUAL	ROAD	5
609647.14	4204307.78	0.73566	79.69	79.69	0	ANNUAL	AREA	5	609647.14	4204307.78	0.53413	79.69	79.69	0	ANNUAL	ROAD	5
609660.27	4204302.45	0.72282	78.19	80.58	0	ANNUAL	AREA	5	609660.27	4204302.45	0.51316	78.19	80.58	0	ANNUAL	ROAD	5
609673.41	4204297.12	0.71947	77.63	77.63	0	ANNUAL	AREA	5	609673.41	4204297.12	0.48986	77.63	77.63	0	ANNUAL	ROAD	5
609686.54	4204291.79	0.68729	76.36	78.5	0	ANNUAL	AREA	5	609686.54	4204291.79	0.46781	76.36	78.5	0	ANNUAL	ROAD	5
609699.67	4204286.46	0.67497	76.36	78.5	0	ANNUAL	AREA	5	609699.67	4204286.46	0.44586	76.36	78.5	0	ANNUAL	ROAD	5
609712.80	4204281.13	0.66266	75.7	78.5	0	ANNUAL	AREA	5	609712.80	4204281.13	0.42391	75.7	78.5	0	ANNUAL	ROAD	5
609725.93	4204275.80	0.65035	75.03	78.5	0	ANNUAL	AREA	5	609725.93	4204275.80	0.40196	75.03	78.5	0	ANNUAL	ROAD	5
609739.06	4204270.47	0.63804	74.36	78.5	0	ANNUAL	AREA	5	609739.06	4204270.47	0.38001	74.36	78.5	0	ANNUAL	ROAD	5
609752.19	4204265.14	0.62573	73.69	78.5	0	ANNUAL	AREA	5	609752.19	4204265.14	0.35806	73.69	78.5	0	ANNUAL	ROAD	5
609765.32	4204260.81	0.61342	73.02	78.5	0	ANNUAL	AREA	5	609765.32	4204260.81	0.33611	73.02	78.5	0	ANNUAL	ROAD	5
609778.45	4204255.48	0.60111	72.35	78.5	0	ANNUAL	AREA	5	609778.45	4204255.48	0.31416	72.35	78.5	0	ANNUAL	ROAD	5
609791.58	4204250.15	0.5888	71.68	78.5	0	ANNUAL	AREA	5	609791.58	4204250.15	0.29221	71.68	78.5	0	ANNUAL	ROAD	5
609804.71	4204244.82	0.57649	71.01	78.5	0	ANNUAL	AREA	5	609804.71	4204244.82	0.27026	71.01	78.5	0	ANNUAL	ROAD	5
609817.84	4204239.49	0.56418	70.34	78.5	0	ANNUAL	AREA	5	609817.84	4204239.49	0.24831	70.34	78.5	0	ANNUAL	ROAD	5
609830.97	4204234.16	0.55187	69.67	78.5	0	ANNUAL	AREA	5	609830.97	4204234.16	0.22636	69.67	78.5	0	ANNUAL	ROAD	5
609844.10	4204228.83	0.53956	69.0	78.5	0	ANNUAL	AREA	5	609844.10	4204228.83	0.20441	69.0	78.5	0	ANNUAL	ROAD	5
609857.23	4204223.50	0.52725	68.33	78.5	0	ANNUAL	AREA	5	609857.23	4204223.50	0.18246	68.33	78.5	0	ANNUAL	ROAD	5
609870.36	4204218.17	0.51494	67.66	78.5	0	ANNUAL	AREA	5	609870.36	4204218.17	0.16051	67.66	78.5	0	ANNUAL	ROAD	5
609883.49	4204212.84	0.50263	67.0	78.5	0	ANNUAL	AREA	5	609883.49	4204212.84	0.13856	67.0	78.5	0	ANNUAL	ROAD	5
609896.62	4204207.51	0.49032	66.33	78.5	0	ANNUAL	AREA	5	609896.62	4204207.51	0.11661	66.33	78.5	0	ANNUAL	ROAD	5
609909.75	4204202.18	0.47801	65.66	78.5	0	ANNUAL	AREA	5	609909.75	4204202.18	0.09466	65.66	78.5	0	ANNUAL	ROAD	5
609922.88	4204196.85	0.4657	65.0	78.5	0	ANNUAL	AREA	5	609922.88	4204196.85	0.07271	65.0	78.5	0	ANNUAL	ROAD	5
609936.01	4204191.52	0.45339	64.33	78.5	0	ANNUAL	AREA	5	609936.01	4204191.52	0.05076	64.33	78.5	0	ANNUAL	ROAD	5
609949.14	4204186.19	0.44108	63.66	78.5	0	ANNUAL	AREA	5	609949.14	4204186.19	0.02881	63.66	78.5	0	ANNUAL	ROAD	5
609962.27	4204180.86	0.42877	63.0	78.5	0	ANNUAL	AREA	5	609962.27	4204180.86	0.00686	63.0	78.5	0	ANNUAL	ROAD	5
609975.40	4204175.53	0.41646	62.33	78.5	0	ANNUAL	AREA	5	609975.40	4204175.53	0.00057	62.33	78.5	0	ANNUAL	ROAD	5
609988.53	4204170.20	0.40415	61.66	78.5	0	ANNUAL	AREA	5	609988.53	4204170.20	0.00001	61.66	78.5	0	ANNUAL	ROAD	5
609999.23	4204164.87	0.39184	61.0	78.5	0	ANNUAL	AREA	5	609999.23	4204164.87	0.00000	61.0	78.5	0	ANNUAL	ROAD	5
610009.93	4204159.54	0.37953	60.33	78.5	0	ANNUAL	AREA	5	610009.93	4204159.54	0.00000	60.33	78.5	0	ANNUAL	ROAD	5

609244.11	4204628.25	0.4138	60.54	64.97	0	ANNUAL	AREA	5	609244.11	4204628.25	6.02852	60.54	64.97	0	ANNUAL	ROAD	5
609249.43	4204614.96	0.42777	60.65	64.97	0	ANNUAL	AREA	5	609249.43	4204614.96	5.1684	60.65	64.97	0	ANNUAL	ROAD	5
609254.75	4204601.66	0.44051	61.16	64.97	0	ANNUAL	AREA	5	609254.75	4204601.66	4.49771	61.16	64.97	0	ANNUAL	ROAD	5
609260.07	4204588.37	0.45544	60.88	64.91	0	ANNUAL	AREA	5	609260.07	4204588.37	3.96883	60.88	64.91	0	ANNUAL	ROAD	5
609265.39	4204575.07	0.46778	61.39	64.85	0	ANNUAL	AREA	5	609265.39	4204575.07	3.53487	61.39	64.85	0	ANNUAL	ROAD	5
609270.71	4204562.54	0.48152	61.90	64.84	0	ANNUAL	AREA	5	609270.71	4204562.54	3.13378	61.90	64.84	0	ANNUAL	ROAD	5
609276.03	4204548.48	0.49567	62.99	80.33	0	ANNUAL	AREA	5	609276.03	4204548.48	2.86019	62.99	80.33	0	ANNUAL	ROAD	5
609281.35	4204535.18	0.50944	60.64	82.62	0	ANNUAL	AREA	5	609281.35	4204535.18	2.64567	60.64	82.62	0	ANNUAL	ROAD	5
609286.67	4204521.89	0.52372	57.61	82.62	0	ANNUAL	AREA	5	609286.67	4204521.89	2.45205	57.61	82.62	0	ANNUAL	ROAD	5
609291.99	4204508.59	0.54866	56.62	82.62	0	ANNUAL	AREA	5	609291.99	4204508.59	2.2719	56.62	82.62	0	ANNUAL	ROAD	5
609297.31	4204495.3	0.56391	55.72	82.62	0	ANNUAL	AREA	5	609297.31	4204495.3	2.11431	55.72	82.62	0	ANNUAL	ROAD	5
609302.63	4204482	0.57345	55.94	82.62	0	ANNUAL	AREA	5	609302.63	4204482	1.97354	55.94	82.62	0	ANNUAL	ROAD	5
609307.95	4204468.71	0.57139	58.72	82.62	0	ANNUAL	AREA	5	609307.95	4204468.71	1.83404	58.72	82.62	0	ANNUAL	ROAD	5
609313.27	4204455.41	0.56496	63.03	82.62	0	ANNUAL	AREA	5	609313.27	4204455.41	1.67813	63.03	82.62	0	ANNUAL	ROAD	5
609329.23	4204415.52	0.56506	69.59	82.62	0	ANNUAL	AREA	5	609329.23	4204415.52	1.30588	69.59	82.62	0	ANNUAL	ROAD	5
609334.55	4204402.23	0.5719	67.98	82.62	0	ANNUAL	AREA	5	609334.55	4204402.23	1.26282	67.98	82.62	0	ANNUAL	ROAD	5
609339.87	4204388.93	0.57754	66.31	82.62	0	ANNUAL	AREA	5	609339.87	4204388.93	1.22013	66.31	82.62	0	ANNUAL	ROAD	5
609345.19	4204375.64	0.58013	65.28	82.62	0	ANNUAL	AREA	5	609345.19	4204375.64	1.17042	65.28	82.62	0	ANNUAL	ROAD	5
609350.51	4204362.34	0.58062	64.5	82.62	0	ANNUAL	AREA	5	609350.51	4204362.34	1.11965	64.5	82.62	0	ANNUAL	ROAD	5
609359.1	4204343.66	0.60212	61.2	82.62	0	ANNUAL	AREA	5	609359.1	4204343.66	1.06411	61.2	82.62	0	ANNUAL	ROAD	5
609362.37	4204338.27	0.62675	58.27	82.62	0	ANNUAL	AREA	5	609362.37	4204338.27	1.05578	58.27	82.62	0	ANNUAL	ROAD	5
609435.45	4204325.73	0.70587	51.83	82.62	0	ANNUAL	AREA	5	609435.45	4204325.73	0.9762	51.83	82.62	0	ANNUAL	ROAD	5
609448.71	4204311.35	0.71088	52.55	82.62	0	ANNUAL	AREA	5	609448.71	4204311.35	0.94687	52.55	82.62	0	ANNUAL	ROAD	5
609461.98	4204305.96	0.70649	54.79	82.62	0	ANNUAL	AREA	5	609461.98	4204305.96	0.90984	54.79	82.62	0	ANNUAL	ROAD	5
609475.25	4204300.58	0.69802	57.89	82.62	0	ANNUAL	AREA	5	609475.25	4204300.58	0.86382	57.89	82.62	0	ANNUAL	ROAD	5
609488.52	4204295.19	0.68799	61.5	82.54	0	ANNUAL	AREA	5	609488.52	4204295.19	0.80705	61.5	82.54	0	ANNUAL	ROAD	5
609501.79	4204289.81	0.67872	65.01	82.54	0	ANNUAL	AREA	5	609501.79	4204289.81	0.74791	65.01	82.54	0	ANNUAL	ROAD	5
609515.06	4204284.42	0.66816	68.86	82.54	0	ANNUAL	AREA	5	609515.06	4204284.42	0.69021	68.86	82.54	0	ANNUAL	ROAD	5
609528.33	4204279.03	0.65872	72.13	82.54	0	ANNUAL	AREA	5	609528.33	4204279.03	0.64343	72.13	82.54	0	ANNUAL	ROAD	5
609541.6	4204273.65	0.6527	73.82	82.54	0	ANNUAL	AREA	5	609541.6	4204273.65	0.61086	73.82	82.54	0	ANNUAL	ROAD	5
609554.87	4204268.26	0.64712	74.88	82.54	0	ANNUAL	AREA	5	609554.87	4204268.26	0.58276	74.88	82.54	0	ANNUAL	ROAD	5
609568.14	4204262.88	0.64151	75.44	82.54	0	ANNUAL	AREA	5	609568.14	4204262.88	0.55759	75.44	82.54	0	ANNUAL	ROAD	5
609581.41	4204257.49	0.63537	76.62	82.54	0	ANNUAL	AREA	5	609581.41	4204257.49	0.53426	76.62	82.54	0	ANNUAL	ROAD	5
609594.68	4204252.11	0.62921	75.17	82.48	0	ANNUAL	AREA	5	609594.68	4204252.11	0.51362	75.17	82.48	0	ANNUAL	ROAD	5
609607.95	4204246.72	0.62143	74.64	82.46	0	ANNUAL	AREA	5	609607.95	4204246.72	0.49337	74.64	82.46	0	ANNUAL	ROAD	5
609621.22	4204241.34	0.61373	73.4	82.46	0	ANNUAL	AREA	5	609621.22	4204241.34	0.47617	73.4	82.46	0	ANNUAL	ROAD	5
609634.49	4204235.95	0.6035	72.45	82.46	0	ANNUAL	AREA	5	609634.49	4204235.95	0.45814	72.45	82.46	0	ANNUAL	ROAD	5
609647.75	4204230.57	0.59886	72.22	82.01	0	ANNUAL	AREA	5	609647.75	4204230.57	0.43777	72.22	82.01	0	ANNUAL	ROAD	5
609661.02	4204225.18	0.59189	71.62	82.01	0	ANNUAL	AREA	5	609661.02	4204225.18	0.42051	71.62	82.01	0	ANNUAL	ROAD	5
609674.29	4204219.8	0.58206	70.57	81.88	0	ANNUAL	AREA	5	609674.29	4204219.8	0.40257	70.57	81.88	0	ANNUAL	ROAD	5
609687.56	4204214.41	0.58581	69.11	82.01	0	ANNUAL	AREA	5	609687.56	4204214.41	0.3882	69.11	82.01	0	ANNUAL	ROAD	5
609712.81	4204210.11	0.56911	62.11	65.59	0	ANNUAL	AREA	5	609712.81	4204210.11	27.77288	62.11	65.59	0	ANNUAL	ROAD	5
609723.13	4204205.7	0.56396	57.79	77.87	0	ANNUAL	AREA	5	609723.13	4204205.7	13.01804	57.79	77.87	0	ANNUAL	ROAD	5
609733.44	4204201.34	0.55981	56.33	77.87	0	ANNUAL	AREA	5	609733.44	4204201.34	12.80135	56.33	77.87	0	ANNUAL	ROAD	5
609743.75	4204196.95	0.55576	56.11	77.87	0	ANNUAL	AREA	5	609743.75	4204196.95	12.59446	56.11	77.87	0	ANNUAL	ROAD	5
609754.06	4204192.56	0.55171	56.33	77.87	0	ANNUAL	AREA	5	609754.06	4204192.56	12.38757	56.33	77.87	0	ANNUAL	ROAD	5
609764.37	4204188.17	0.54766	56.34	77.67	0	ANNUAL	AREA	5	609764.37	4204188.17	12.18068	56.34	77.67	0	ANNUAL	ROAD	5
609774.68	4204183.78	0.54361	56.33	77.67	0	ANNUAL	AREA	5	609774.68	4204183.78	11.97379	56.33	77.67	0	ANNUAL	ROAD	5
609784.99	4204179.39	0.53956	56.33	77.67	0	ANNUAL	AREA	5	609784.99	4204179.39	11.76690	56.33	77.67	0	ANNUAL	ROAD	5
609795.3	4204175.0	0.53551	56.33	77.67	0	ANNUAL	AREA	5	609795.3	4204175.0	11.56001	56.33	77.67	0	ANNUAL	ROAD	5
609805.61	4204170.61	0.53146	56.33	77.67	0	ANNUAL	AREA	5	609805.61	4204170.61	11.35312	56.33	77.67	0	ANNUAL	ROAD	5
609815.92	4204166.22	0.52741	56.33	77.67	0	ANNUAL	AREA	5	609815.92	4204166.22	11.14623	56.33	77.67	0	ANNUAL	ROAD	5
609826.23	4204161.83	0.52336	56.33	77.67	0	ANNUAL	AREA	5	609826.23	4204161.83	10.93934	56.33	77.67	0	ANNUAL	ROAD	5
609836.54	4204157.44	0.51931	56.33	77.67	0	ANNUAL	AREA	5	609836.54	4204157.44	10.73245	56.33	77.67	0	ANNUAL	ROAD	5
609846.85	4204153.05	0.51526	56.33	77.67	0	ANNUAL	AREA	5	609846.85	4204153.05	10.52556	56.33	77.67	0	ANNUAL	ROAD	5
609857.16	4204148.66	0.51121	56.33	77.67	0	ANNUAL	AREA	5	609857.16	4204148.66	10.31867	56.33	77.67	0	ANNUAL	ROAD	5
609867.47	4204144.27	0.50716	56.33	77.67	0	ANNUAL	AREA	5	609867.47	4204144.27	10.11178	56.33	77.67	0	ANNUAL	ROAD	5
609877.78	4204140.08	0.50311	56.33	77.67	0	ANNUAL	AREA	5	609877.78	4204140.08	9.90489	56.33	77.67	0	ANNUAL	ROAD	5
609888.09	4204135.69	0.49906	56.33	77.67	0	ANNUAL	AREA	5	609888.09	4204135.69	9.69800	56.33	77.67	0	ANNUAL	ROAD	5
609898.4	4204131.3	0.49501	56.33	77.67	0	ANNUAL	AREA	5	609898.4	4204131.3	9.49111	56.33	77.67	0	ANNUAL	ROAD	5
609908.71	4204126.91	0.49096	56.33	77.67	0	ANNUAL	AREA	5	609908.71	4204126.91	9.28422	56.33	77.67	0	ANNUAL	ROAD	5
609919.02	4204122.52	0.48691	56.33	77.67	0	ANNUAL	AREA	5	609919.02	4204122.52	9.07733	56.33	77.67	0	ANNUAL	ROAD	5
609929.33	4204118.13	0.48286	56.33	77.67	0	ANNUAL	AREA	5	609929.33	4204118.13	8.87044	56.33	77.67	0	ANNUAL	ROAD	5
609939.64	4204113.74	0.47881	56.33	77.67	0	ANNUAL	AREA	5	609939.64	4204113.74	8.66355	56.33	77.67	0	ANNUAL	ROAD	5
609949.95	4204109.35	0.47476	56.33	77.67	0	ANNUAL	AREA	5	609949.95	4204109.35	8.45666	56.33	77.67	0	ANNUAL	ROAD	5
609960.26	4204104.96	0.47071	56.33	77.67	0	ANNUAL	AREA	5	609960.26	4204104.96	8.24977	56.33	77.67	0	ANNUAL	ROAD	5
609970.57	4204100.57	0.46666	56.33	77.67	0	ANNUAL	AREA	5	609970.57	4204100.57	8.04288	56.33	77.67	0	ANNUAL	ROAD	5
609980.88	4204096.18	0.46261	56.33	77.67	0	ANNUAL	AREA	5	609980.88	4204096.18	7.83599	56.33	77.67	0	ANNUAL	ROAD	5
609991.19	4204091.79	0.45856	56.33	77.67	0	ANNUAL	AREA	5	609991.19	4204091.79	7.62910	56.33	77.67	0	ANNUAL	ROAD	5
610001.5	42																

609180.05	4205013.14	0.13037	53.18	53.18	0	ANNUAL	AREA	5	609180.05	4205013.14	0.56829	53.18	53.18	0	ANNUAL	ROAD	5
609180.36	4205027.63	0.12537	53.08	53.08	0	ANNUAL	AREA	5	609180.36	4205027.63	0.53253	53.08	53.08	0	ANNUAL	ROAD	5
609180.67	4205042.12	0.12088	52.9	52.9	0	ANNUAL	AREA	5	609180.67	4205042.12	0.50026	52.9	52.9	0	ANNUAL	ROAD	5
609180.99	4205056.61	0.11674	52.73	52.73	0	ANNUAL	AREA	5	609180.99	4205056.61	0.47091	52.73	52.73	0	ANNUAL	ROAD	5
609181.3	4205071.1	0.1297	52.54	52.54	0	ANNUAL	AREA	5	609181.3	4205071.1	0.44445	52.54	52.54	0	ANNUAL	ROAD	5
609181.62	4205085.59	0.10945	52.39	52.39	0	ANNUAL	AREA	5	609181.62	4205085.59	0.42	52.39	52.39	0	ANNUAL	ROAD	5
609181.93	4205100.08	0.10623	52.24	52.24	0	ANNUAL	AREA	5	609181.93	4205100.08	0.39763	52.24	52.24	0	ANNUAL	ROAD	5
609182.25	4205114.57	0.10339	52	52	0	ANNUAL	AREA	5	609182.25	4205114.57	0.37749	52	52	0	ANNUAL	ROAD	5
609140.07	4204696.31	0.25339	67.09	77.67	0	ANNUAL	AREA	5	609140.07	4204696.31	4.22983	67.09	77.67	0	ANNUAL	ROAD	5
609145.43	4204682.91	0.26402	66.51	66.51	0	ANNUAL	AREA	5	609145.43	4204682.91	4.91479	66.51	66.51	0	ANNUAL	ROAD	5
609150.79	4204669.51	0.27435	66.17	66.17	0	ANNUAL	AREA	5	609150.79	4204669.51	5.2395	66.17	66.17	0	ANNUAL	ROAD	5
609156.15	4204656.12	0.28488	65.73	65.73	0	ANNUAL	AREA	5	609156.15	4204656.12	5.19079	65.73	65.73	0	ANNUAL	ROAD	5
609166.87	4204629.32	0.30523	65.42	70.46	0	ANNUAL	AREA	5	609166.87	4204629.32	4.57483	65.42	70.46	0	ANNUAL	ROAD	5
609172.23	4204615.92	0.31531	65.43	70.48	0	ANNUAL	AREA	5	609172.23	4204615.92	4.19792	65.43	70.48	0	ANNUAL	ROAD	5
609177.59	4204602.53	0.32594	65.2	70.67	0	ANNUAL	AREA	5	609177.59	4204602.53	3.838	65.2	70.67	0	ANNUAL	ROAD	5
609182.95	4204589.13	0.33648	65.09	70.84	0	ANNUAL	AREA	5	609182.95	4204589.13	3.50598	65.09	70.84	0	ANNUAL	ROAD	5
609188.31	4204575.73	0.34707	64.98	70.84	0	ANNUAL	AREA	5	609188.31	4204575.73	3.20796	64.98	70.84	0	ANNUAL	ROAD	5
609193.67	4204562.33	0.35805	64.65	70.84	0	ANNUAL	AREA	5	609193.67	4204562.33	2.94492	64.65	70.84	0	ANNUAL	ROAD	5
609199.04	4204548.94	0.36804	64.76	70.84	0	ANNUAL	AREA	5	609199.04	4204548.94	2.7082	64.76	70.84	0	ANNUAL	ROAD	5
609204.4	4204535.54	0.37721	65.17	70.84	0	ANNUAL	AREA	5	609204.4	4204535.54	2.49506	65.17	70.84	0	ANNUAL	ROAD	5
609209.76	4204522.14	0.38533	65.99	79.42	0	ANNUAL	AREA	5	609209.76	4204522.14	2.29807	65.99	79.42	0	ANNUAL	ROAD	5
609215.12	4204508.74	0.39388	66.72	80.88	0	ANNUAL	AREA	5	609215.12	4204508.74	2.12445	66.72	80.88	0	ANNUAL	ROAD	5
609220.48	4204495.34	0.40261	66.7	81.34	0	ANNUAL	AREA	5	609220.48	4204495.34	1.98018	66.7	81.34	0	ANNUAL	ROAD	5
609225.84	4204481.95	0.41421	65.4	82.62	0	ANNUAL	AREA	5	609225.84	4204481.95	1.86904	65.4	82.62	0	ANNUAL	ROAD	5
609231.2	4204468.55	0.42477	64.56	82.62	0	ANNUAL	AREA	5	609231.2	4204468.55	1.76246	64.56	82.62	0	ANNUAL	ROAD	5
609236.56	4204455.15	0.4297	66.15	82.62	0	ANNUAL	AREA	5	609236.56	4204455.15	1.63918	66.15	82.62	0	ANNUAL	ROAD	5
609241.92	4204441.75	0.43335	68.28	82.62	0	ANNUAL	AREA	5	609241.92	4204441.75	1.51773	68.28	82.62	0	ANNUAL	ROAD	5
609252.65	4204414.96	0.43773	73.8	81.68	0	ANNUAL	AREA	5	609252.65	4204414.96	1.2836	73.8	81.68	0	ANNUAL	ROAD	5
609258.01	4204401.56	0.43798	77.53	80.88	0	ANNUAL	AREA	5	609258.01	4204401.56	1.17373	77.53	80.88	0	ANNUAL	ROAD	5
609263.37	4204388.16	0.44245	79.31	79.31	0	ANNUAL	AREA	5	609263.37	4204388.16	1.06864	79.31	79.31	0	ANNUAL	ROAD	5
609268.73	4204374.77	0.44407	79.31	80.3	0	ANNUAL	AREA	5	609268.73	4204374.77	1.04603	79.31	80.3	0	ANNUAL	ROAD	5
609274.09	4204361.37	0.44473	78.91	80.98	0	ANNUAL	AREA	5	609274.09	4204361.37	1.00096	78.91	80.98	0	ANNUAL	ROAD	5
609279.45	4204347.97	0.44883	78.96	81.53	0	ANNUAL	AREA	5	609279.45	4204347.97	0.95483	78.96	81.53	0	ANNUAL	ROAD	5
609295.53	4204307.78	0.44787	78.68	82.17	0	ANNUAL	AREA	5	609295.53	4204307.78	0.83516	78.68	82.17	0	ANNUAL	ROAD	5
609354.38	4204272.67	0.49914	68.79	82.62	0	ANNUAL	AREA	5	609354.38	4204272.67	0.79078	68.79	82.62	0	ANNUAL	ROAD	5
609367.75	4204267.25	0.5146	65.48	82.62	0	ANNUAL	AREA	5	609367.75	4204267.25	0.79566	65.48	82.62	0	ANNUAL	ROAD	5
609381.12	4204261.82	0.53246	61.61	82.62	0	ANNUAL	AREA	5	609381.12	4204261.82	0.79965	61.61	82.62	0	ANNUAL	ROAD	5
609394.49	4204256.39	0.55174	57.85	82.62	0	ANNUAL	AREA	5	609394.49	4204256.39	0.79729	57.85	82.62	0	ANNUAL	ROAD	5
609407.86	4204249.15	0.56744	55.51	82.62	0	ANNUAL	AREA	5	609407.86	4204249.15	0.78955	55.51	82.62	0	ANNUAL	ROAD	5
609501.46	4204212.98	0.59271	54.09	82.62	0	ANNUAL	AREA	5	609501.46	4204212.98	0.64756	54.09	82.62	0	ANNUAL	ROAD	5
609514.83	4204207.55	0.5957	53.17	82.62	0	ANNUAL	AREA	5	609514.83	4204207.55	0.63014	53.17	82.62	0	ANNUAL	ROAD	5
609528.2	4204202.12	0.59433	52.98	82.55	0	ANNUAL	AREA	5	609528.2	4204202.12	0.6102	52.98	82.55	0	ANNUAL	ROAD	5
609541.58	4204196.7	0.58922	53.36	82.54	0	ANNUAL	AREA	5	609541.58	4204196.7	0.58825	53.36	82.54	0	ANNUAL	ROAD	5
609554.95	4204191.27	0.58385	53.55	82.54	0	ANNUAL	AREA	5	609554.95	4204191.27	0.56692	53.55	82.54	0	ANNUAL	ROAD	5
609568.32	4204185.84	0.57688	53.83	82.54	0	ANNUAL	AREA	5	609568.32	4204185.84	0.54515	53.83	82.54	0	ANNUAL	ROAD	5
609595.06	4204174.99	0.54322	58.53	82.54	0	ANNUAL	AREA	5	609595.06	4204174.99	0.48219	58.53	82.54	0	ANNUAL	ROAD	5
609608.43	4204169.59	0.54925	61.99	82.54	0	ANNUAL	AREA	5	609608.43	4204169.59	0.44459	61.99	82.54	0	ANNUAL	ROAD	5
609621.8	4204164.14	0.50633	64.39	82.54	0	ANNUAL	AREA	5	609621.8	4204164.14	0.41406	64.39	82.54	0	ANNUAL	ROAD	5
609635.17	4204158.71	0.4904	66.36	82.01	0	ANNUAL	AREA	5	609635.17	4204158.71	0.38772	66.36	82.01	0	ANNUAL	ROAD	5
609648.54	4204153.28	0.47778	66.61	81.07	0	ANNUAL	AREA	5	609648.54	4204153.28	0.3695	66.61	81.07	0	ANNUAL	ROAD	5
609688.66	4204137	0.44934	61.7	82.2	0	ANNUAL	AREA	5	609688.66	4204137	0.33854	61.7	82.2	0	ANNUAL	ROAD	5
609135.33	4204738.69	0.23521	63.87	77.87	0	ANNUAL	AREA	5	609135.33	4204738.69	2.97772	63.87	77.87	0	ANNUAL	ROAD	5
609135.65	4204753.18	0.23548	59.74	77.87	0	ANNUAL	AREA	5	609135.65	4204753.18	2.62113	59.74	77.87	0	ANNUAL	ROAD	5
609135.96	4204767.67	0.23087	58.44	77.87	0	ANNUAL	AREA	5	609135.96	4204767.67	2.28278	58.44	77.87	0	ANNUAL	ROAD	5
609136.28	4204782.15	0.22245	58.36	77.87	0	ANNUAL	AREA	5	609136.28	4204782.15	2.00174	58.36	77.87	0	ANNUAL	ROAD	5
609136.59	4204796.64	0.2156	58.39	77.87	0	ANNUAL	AREA	5	609136.59	4204796.64	1.75983	58.39	77.87	0	ANNUAL	ROAD	5
609137.22	4204825.62	0.19939	58.53	77.87	0	ANNUAL	AREA	5	609137.22	4204825.62	1.38008	58.53	77.87	0	ANNUAL	ROAD	5
609137.53	4204840.11	0.18998	59.3	77.87	0	ANNUAL	AREA	5	609137.53	4204840.11	1.22755	59.3	77.87	0	ANNUAL	ROAD	5
609137.85	4204854.6	0.18092	59.97	77.87	0	ANNUAL	AREA	5	609137.85	4204854.6	1.09633	59.97	77.87	0	ANNUAL	ROAD	5
609138.16	4204869.09	0.17326	59.82	77.87	0	ANNUAL	AREA	5	609138.16	4204869.09	0.99197	59.82	77.87	0	ANNUAL	ROAD	5
609138.48	4204883.58	0.16749	58.52	77.87	0	ANNUAL	AREA	5	609138.48	4204883.58	0.91332	58.52	77.87	0	ANNUAL	ROAD	5
609138.79	4204898.07	0.16182	57.29	77.87	0	ANNUAL	AREA	5	609138.79	4204898.07	0.84369	57.29	77.87	0	ANNUAL	ROAD	5
609139.1	4204912.56	0.15572	56.46	77.87	0	ANNUAL	AREA	5	609139.1	4204912.56	0.78044	56.46	77.87	0	ANNUAL	ROAD	5
609139.42	4204927.05	0.14992	55.85	77.87	0	ANNUAL	AREA	5	609139.42	4204927.05	0.72477	55.85	77.87	0	ANNUAL	ROAD	5
609139.73	4204941.54	0.1438	55.15	77.87	0	ANNUAL	AREA	5	609139.73	4204941.54	0.67556	55.15	77.87	0	ANNUAL	ROAD	5
609140.05	4204956.03	0.13837	54.48	77.87	0	ANNUAL	AREA	5	609140.05	4204956.03	0.63184	54.48	77.87	0	ANNUAL	ROAD	5
609140.36	4204970.52	0.13303	53.98	77.56	0	ANNUAL	AREA	5	609140.36	4204970.52	0.59224	53.98	77.56	0	ANNUAL	ROAD	5
609140.68	4204985	0.12818	53.42	68.57	0	ANNUAL	AREA	5	609140.68	4204985	0.55672	53.42	68.57	0	ANNUAL	ROAD	5
609140.99	4204999.49	0.12329	53.13	68.57	0	ANNUAL	AREA	5	609140.99	4204999.49	0.52395	53.13	68.57	0	ANNUAL	ROAD	5
609141.3	4205013.98	0.11857	52.99	52.99	0	ANNUAL</											

609097.85	4204797.48	0.19101	59.85	77.87	0	ANNUAL	AREA	5	609097.85	4204797.48	1.19899	59.85	77.87	0	ANNUAL	ROAD	5
609098.16	4204811.97	0.18447	59.69	77.87	0	ANNUAL	AREA	5	609098.16	4204811.97	1.09592	59.69	77.87	0	ANNUAL	ROAD	5
609098.48	4204826.46	0.1773	59.85	77.87	0	ANNUAL	AREA	5	609098.48	4204826.46	1.00115	59.85	77.87	0	ANNUAL	ROAD	5
609098.79	4204840.95	0.17045	59.78	77.87	0	ANNUAL	AREA	5	609098.79	4204840.95	0.91759	59.78	77.87	0	ANNUAL	ROAD	5
609099.42	4204865.33	0.15575	60.37	77.87	0	ANNUAL	AREA	5	609099.42	4204865.33	0.77771	60.37	77.87	0	ANNUAL	ROAD	5
609099.73	4204880.42	0.14885	60.17	77.87	0	ANNUAL	AREA	5	609099.73	4204880.42	0.71074	60.17	77.87	0	ANNUAL	ROAD	5
609100.05	4204896.91	0.14189	60.76	77.87	0	ANNUAL	AREA	5	609100.05	4204896.91	0.65898	60.76	77.87	0	ANNUAL	ROAD	5
609100.36	4204913.4	0.13577	60.53	77.87	0	ANNUAL	AREA	5	609100.36	4204913.4	0.61559	60.53	77.87	0	ANNUAL	ROAD	5
609100.68	4204927.89	0.13014	60.11	60.11	0	ANNUAL	AREA	5	609100.68	4204927.89	0.57768	60.11	60.11	0	ANNUAL	ROAD	5
609100.99	4204942.38	0.12532	59.19	59.19	0	ANNUAL	AREA	5	609100.99	4204942.38	0.54707	59.19	59.19	0	ANNUAL	ROAD	5
609101.31	4204956.87	0.12088	58.2	68.57	0	ANNUAL	AREA	5	609101.31	4204956.87	0.51934	58.2	68.57	0	ANNUAL	ROAD	5
609101.62	4204971.36	0.11651	57.43	68.57	0	ANNUAL	AREA	5	609101.62	4204971.36	0.49298	57.43	68.57	0	ANNUAL	ROAD	5
609101.93	4204985.84	0.11242	56.71	68.57	0	ANNUAL	AREA	5	609101.93	4204985.84	0.46823	56.71	68.57	0	ANNUAL	ROAD	5
609102.25	4205000.33	0.10884	55.85	68.57	0	ANNUAL	AREA	5	609102.25	4205000.33	0.44588	55.85	68.57	0	ANNUAL	ROAD	5
609102.56	4205014.82	0.10554	55.04	68.57	0	ANNUAL	AREA	5	609102.56	4205014.82	0.42481	55.04	68.57	0	ANNUAL	ROAD	5
609102.88	4205029.31	0.10236	54.4	68.57	0	ANNUAL	AREA	5	609102.88	4205029.31	0.40467	54.4	68.57	0	ANNUAL	ROAD	5
609103.19	4205043.8	0.09934	53.88	68.4	0	ANNUAL	AREA	5	609103.19	4205043.8	0.38563	53.88	68.4	0	ANNUAL	ROAD	5
609103.51	4205058.29	0.09705	53	68.4	0	ANNUAL	AREA	5	609103.51	4205058.29	0.36865	53	68.4	0	ANNUAL	ROAD	5
609103.82	4205072.78	0.0942	52.79	68.19	0	ANNUAL	AREA	5	609103.82	4205072.78	0.35126	52.79	68.19	0	ANNUAL	ROAD	5
609104.13	4205087.27	0.09186	52.36	65.95	0	ANNUAL	AREA	5	609104.13	4205087.27	0.33555	52.36	65.95	0	ANNUAL	ROAD	5
609104.76	4205116.25	0.08866	52.55	52.55	0	ANNUAL	AREA	5	609104.76	4205116.25	0.30539	52.55	52.55	0	ANNUAL	ROAD	5
609611.15	4205127.13	0.07967	26.56	26.56	0	ANNUAL	AREA	5	609611.15	4205127.13	1.0984	26.56	26.56	0	ANNUAL	ROAD	5
609647.38	4205128.08	0.88097	26.5	26.5	0	ANNUAL	AREA	5	609647.38	4205128.08	1.06403	26.5	26.5	0	ANNUAL	ROAD	5
609648.13	4205147.3	0.77097	26.41	26.41	0	ANNUAL	AREA	5	609648.13	4205147.3	0.94988	26.41	26.41	0	ANNUAL	ROAD	5
609631.39	4205126.24	0.8119	25.89	35.77	0	ANNUAL	AREA	5	609631.39	4205126.24	1.03973	25.89	35.77	0	ANNUAL	ROAD	5
609823.66	4205113.78	4.35705	24.42	28.69	0	ANNUAL	AREA	5	609823.66	4205113.78	1.43307	24.42	28.69	0	ANNUAL	ROAD	5
609831.07	4205100.82	5.16699	24.17	28.87	0	ANNUAL	AREA	5	609831.07	4205100.82	1.53906	24.17	28.87	0	ANNUAL	ROAD	5
609838.48	4205087.86	5.96686	24.04	28.99	0	ANNUAL	AREA	5	609838.48	4205087.86	1.65119	24.04	28.99	0	ANNUAL	ROAD	5
609845.88	4205074.9	6.74707	23.88	29.22	0	ANNUAL	AREA	5	609845.88	4205074.9	1.76823	23.88	29.22	0	ANNUAL	ROAD	5
609853.29	4205061.95	7.48524	23.86	29.58	0	ANNUAL	AREA	5	609853.29	4205061.95	1.89122	23.86	29.58	0	ANNUAL	ROAD	5
609860.7	4205048.99	8.29708	23.15	30.02	0	ANNUAL	AREA	5	609860.7	4205048.99	2.01226	23.15	30.02	0	ANNUAL	ROAD	5
609868.11	4205036.03	8.81002	21.78	30.9	0	ANNUAL	AREA	5	609868.11	4205036.03	2.12926	21.78	30.9	0	ANNUAL	ROAD	5
609875.52	4205023.07	9.43169	21.94	31.1	0	ANNUAL	AREA	5	609875.52	4205023.07	2.26584	21.94	31.1	0	ANNUAL	ROAD	5
609882.93	4205010.11	9.99551	21.91	31.49	0	ANNUAL	AREA	5	609882.93	4205010.11	2.40404	21.91	31.49	0	ANNUAL	ROAD	5
609890.33	4204997.16	10.52491	21.92	31.67	0	ANNUAL	AREA	5	609890.33	4204997.16	2.54617	21.92	31.67	0	ANNUAL	ROAD	5
609897.74	4204984.2	10.96885	21.41	32	0	ANNUAL	AREA	5	609897.74	4204984.2	2.68403	21.41	32	0	ANNUAL	ROAD	5
609905.15	4204971.24	11.40719	21.52	32.18	0	ANNUAL	AREA	5	609905.15	4204971.24	2.83994	21.52	32.18	0	ANNUAL	ROAD	5
609912.56	4204958.28	11.80109	21.75	32.43	0	ANNUAL	AREA	5	609912.56	4204958.28	2.98926	21.75	32.43	0	ANNUAL	ROAD	5
609919.97	4204945.97	12.14696	22.12	32.58	0	ANNUAL	AREA	5	609919.97	4204945.97	3.15449	22.12	32.58	0	ANNUAL	ROAD	5
609927.38	4204932.37	12.42795	22.49	32.71	0	ANNUAL	AREA	5	609927.38	4204932.37	3.31449	22.49	32.71	0	ANNUAL	ROAD	5
609934.78	4204919.41	12.64234	23.57	32.71	0	ANNUAL	AREA	5	609934.78	4204919.41	3.49433	23.57	32.71	0	ANNUAL	ROAD	5
609942.19	4204906.45	12.73617	24.06	32.81	0	ANNUAL	AREA	5	609942.19	4204906.45	3.66077	24.06	32.81	0	ANNUAL	ROAD	5
609949.6	4204893.49	12.77556	23.89	33.03	0	ANNUAL	AREA	5	609949.6	4204893.49	3.80487	23.89	33.03	0	ANNUAL	ROAD	5
609957.01	4204880.53	12.71456	23.75	33.11	0	ANNUAL	AREA	5	609957.01	4204880.53	3.93081	23.75	33.11	0	ANNUAL	ROAD	5
609964.42	4204867.58	12.54081	23.73	33.17	0	ANNUAL	AREA	5	609964.42	4204867.58	4.02761	23.73	33.17	0	ANNUAL	ROAD	5
609971.83	4204854.62	12.24667	23.78	33.33	0	ANNUAL	AREA	5	609971.83	4204854.62	4.07883	23.78	33.33	0	ANNUAL	ROAD	5
609979.23	4204841.32	11.8205	24	33.35	0	ANNUAL	AREA	5	609979.23	4204841.32	4.171	24	33.35	0	ANNUAL	ROAD	5
609986.64	4204828.7	11.24903	24.25	33.35	0	ANNUAL	AREA	5	609986.64	4204828.7	3.98762	24.25	33.35	0	ANNUAL	ROAD	5
609994.05	4204815.74	10.52408	24.36	33.35	0	ANNUAL	AREA	5	609994.05	4204815.74	3.81994	24.36	33.35	0	ANNUAL	ROAD	5
610001.46	4204802.79	9.63794	24.45	33.35	0	ANNUAL	AREA	5	610001.46	4204802.79	3.57612	24.45	33.35	0	ANNUAL	ROAD	5
610008.87	4204789.83	8.59167	24.67	33.35	0	ANNUAL	AREA	5	610008.87	4204789.83	3.27409	24.67	33.35	0	ANNUAL	ROAD	5
610016.28	4204776.87	7.41446	24.86	33.35	0	ANNUAL	AREA	5	610016.28	4204776.87	2.93271	24.86	33.35	0	ANNUAL	ROAD	5
610023.69	4204763.91	6.1633	25.07	33.35	0	ANNUAL	AREA	5	610023.69	4204763.91	2.57771	25.07	33.35	0	ANNUAL	ROAD	5
610031.09	4204750.95	4.9938	25.18	33.35	0	ANNUAL	AREA	5	610031.09	4204750.95	2.2304	25.18	33.35	0	ANNUAL	ROAD	5
609641.02	4205170.33	0.64986	26.31	26.31	0	ANNUAL	AREA	5	609641.02	4205170.33	0.82122	26.31	26.31	0	ANNUAL	ROAD	5
609632.46	4205159.57	0.65838	26.29	26.29	0	ANNUAL	AREA	5	609632.46	4205159.57	0.85796	26.29	26.29	0	ANNUAL	ROAD	5
609623.9	4205148.8	0.67472	25.86	35.77	0	ANNUAL	AREA	5	609623.9	4205148.8	0.89545	25.86	35.77	0	ANNUAL	ROAD	5
609606.77	4205127.27	0.70002	26.08	35.88	0	ANNUAL	AREA	5	609606.77	4205127.27	0.92928	26.08	35.88	0	ANNUAL	ROAD	5
609598.21	4205116.5	0.70913	26.5	42.87	0	ANNUAL	AREA	5	609598.21	4205116.5	1.03311	26.5	42.87	0	ANNUAL	ROAD	5
609582.77	4205113.23	4.29932	24.89	24.89	0	ANNUAL	AREA	5	609582.77	4205113.23	1.45945	24.89	24.89	0	ANNUAL	ROAD	5
609608.18	4205100.27	4.93721	24.64	24.64	0	ANNUAL	AREA	5	609608.18	4205100.27	1.56049	24.64	24.64	0	ANNUAL	ROAD	5
609667.59	4205087.31	5.95035	24.35	24.35	0	ANNUAL	AREA	5	609667.59	4205087.31	1.66538	24.35	24.35	0	ANNUAL	ROAD	5
609875	4205074.35	6.18563	24.07	24.07	0	ANNUAL	AREA	5	609875	4205074.35	1.77415	24.07	24.07	0	ANNUAL	ROAD	5
609884.4	4205061.95	6.9826	23.82	29.21	0	ANNUAL	AREA	5	609884.4	4205061.95	1.9314	23.82	29.21	0	ANNUAL	ROAD	5
609889.81	4205048.44	7.30109	21.69	30.47	0	ANNUAL	AREA	5	609889.81	4205048.44	1.98454	21.69	30.47	0	ANNUAL	ROAD	5
609897.22	4205035.48	7.79462	21.15	30.9	0	ANNUAL	AREA	5	609897.22	4205035.48	2.09859	21.15	30.9	0	ANNUAL	ROAD	5
609904.63	4205022.52	8.2683	21.02	31.28	0	ANNUAL	AREA	5	609904.63	4205022.52	2.21918	21.02	31.28	0	ANNUAL	ROAD	5
609912.04	4205009.56	8.71024	21	31.67	0	ANNUAL	AREA	5	609912.04	4205009.56	2.34338	21	31.67	0	ANNUAL	ROAD	5
609919.45	4204996.61	9.11226	20.97	31.83	0	ANNUAL	AREA	5	609919.45	4204996.61	2.46951	20.97	31.83	0	ANNUAL	ROAD	5
609926.85	4204983.65	9.47612	20.99	32.18	0												

609925.81	4205086.21	4.96392	23.89	23.89	0	ANNUAL	AREA	5	609925.81	4205086.21	1.65731	23.89	23.89	0	ANNUAL	ROAD	5
609933.22	4205073.26	5.36214	23.75	23.75	0	ANNUAL	AREA	5	609933.22	4205073.26	1.7511	23.75	23.75	0	ANNUAL	ROAD	5
609940.63	4205060.3	5.73935	23.7	23.7	0	ANNUAL	AREA	5	609940.63	4205060.3	1.8474	23.7	23.7	0	ANNUAL	ROAD	5
609948.04	4205047.34	6.09676	23.43	23.43	0	ANNUAL	AREA	5	609948.04	4205047.34	1.94339	23.43	23.43	0	ANNUAL	ROAD	5
609955.44	4205034.38	6.42484	23.19	23.19	0	ANNUAL	AREA	5	609955.44	4205034.38	2.04044	23.19	23.19	0	ANNUAL	ROAD	5
609962.85	4205021.42	6.72395	23.03	23.03	0	ANNUAL	AREA	5	609962.85	4205021.42	2.13846	23.03	23.03	0	ANNUAL	ROAD	5
609970.26	4205008.46	6.98876	22.81	22.81	0	ANNUAL	AREA	5	609970.26	4205008.46	2.23553	22.81	22.81	0	ANNUAL	ROAD	5
609977.67	4204995.51	7.22299	23	23	0	ANNUAL	AREA	5	609977.67	4204995.51	2.33527	23	23	0	ANNUAL	ROAD	5
609985.08	4204982.55	7.41688	23.2	23.2	0	ANNUAL	AREA	5	609985.08	4204982.55	2.43288	23.2	23.2	0	ANNUAL	ROAD	5
609992.49	4204969.59	7.56807	23.29	23.29	0	ANNUAL	AREA	5	609992.49	4204969.59	2.52517	23.29	23.29	0	ANNUAL	ROAD	5
609999.89	4204956.63	7.67311	23.2	23.2	0	ANNUAL	AREA	5	609999.89	4204956.63	2.60882	23.2	23.2	0	ANNUAL	ROAD	5
610007.3	4204943.67	7.72667	23.19	23.19	0	ANNUAL	AREA	5	610007.3	4204943.67	2.68344	23.19	23.19	0	ANNUAL	ROAD	5
610014.71	4204930.72	7.724	23.49	23.49	0	ANNUAL	AREA	5	610014.71	4204930.72	2.74799	23.49	23.49	0	ANNUAL	ROAD	5
610022.12	4204917.76	7.6655	23.75	23.75	0	ANNUAL	AREA	5	610022.12	4204917.76	2.79419	23.75	23.75	0	ANNUAL	ROAD	5
610036.94	4204904.8	7.54158	23.86	23.86	0	ANNUAL	AREA	5	610036.94	4204904.8	2.81597	23.86	23.86	0	ANNUAL	ROAD	5
610044.34	4204891.84	7.34908	23.92	23.92	0	ANNUAL	AREA	5	610044.34	4204891.84	2.81014	23.92	23.92	0	ANNUAL	ROAD	5
610051.75	4204878.88	7.08619	23.92	23.92	0	ANNUAL	AREA	5	610051.75	4204878.88	2.7738	23.92	23.92	0	ANNUAL	ROAD	5
610059.16	4204865.93	6.75251	24.05	24.05	0	ANNUAL	AREA	5	610059.16	4204865.93	2.70566	24.05	24.05	0	ANNUAL	ROAD	5
610066.57	4204852.97	6.34884	24.07	24.07	0	ANNUAL	AREA	5	610066.57	4204852.97	2.60478	24.07	24.07	0	ANNUAL	ROAD	5
610073.98	4204840.01	5.82228	24.06	24.06	0	ANNUAL	AREA	5	610073.98	4204840.01	2.47417	24.06	24.06	0	ANNUAL	ROAD	5
610081.39	4204827.05	5.36425	24.11	24.11	0	ANNUAL	AREA	5	610081.39	4204827.05	2.31945	24.11	24.11	0	ANNUAL	ROAD	5
610088.8	4204814.09	4.80926	24.16	24.16	0	ANNUAL	AREA	5	610088.8	4204814.09	2.14635	24.16	24.16	0	ANNUAL	ROAD	5
610096.2	4204801.14	4.23889	24.12	24.12	0	ANNUAL	AREA	5	610096.2	4204801.14	1.96159	24.12	24.12	0	ANNUAL	ROAD	5
609603.31	4204788.18	3.67238	24.14	24.14	0	ANNUAL	AREA	5	609603.31	4204788.18	1.77386	24.14	24.14	0	ANNUAL	ROAD	5
609594.45	4205218.83	0.42969	26.67	26.67	0	ANNUAL	AREA	5	609594.45	4205218.83	0.59328	26.67	26.67	0	ANNUAL	ROAD	5
609585.58	4205207.68	0.4387	26.98	26.98	0	ANNUAL	AREA	5	609585.58	4205207.68	0.61732	26.98	26.98	0	ANNUAL	ROAD	5
609576.85	4205196.53	0.44739	26.64	35.59	0	ANNUAL	AREA	5	609576.85	4205196.53	0.641	26.64	35.59	0	ANNUAL	ROAD	5
609568.12	4205185.38	0.46004	27	49.25	0	ANNUAL	AREA	5	609568.12	4205185.38	0.69557	27	49.25	0	ANNUAL	ROAD	5
609559.39	4205174.24	0.46462	27.22	49.45	0	ANNUAL	AREA	5	609559.39	4205174.24	0.72751	27.22	49.45	0	ANNUAL	ROAD	5
609550.13	4205163.09	0.46929	27.41	49.78	0	ANNUAL	AREA	5	609550.13	4205163.09	0.75715	27.41	49.78	0	ANNUAL	ROAD	5
609541.26	4205152.94	0.47401	27.61	50.11	0	ANNUAL	AREA	5	609541.26	4205152.94	0.80063	27.61	50.11	0	ANNUAL	ROAD	5
609532.4	4205141.79	0.47873	27.81	50.44	0	ANNUAL	AREA	5	609532.4	4205141.79	0.85069	27.81	50.44	0	ANNUAL	ROAD	5
609523.53	4205130.64	0.48345	28.01	50.77	0	ANNUAL	AREA	5	609523.53	4205130.64	0.89977	28.01	50.77	0	ANNUAL	ROAD	5
609514.62	4205119.49	0.48817	28.21	51.10	0	ANNUAL	AREA	5	609514.62	4205119.49	0.94885	28.21	51.10	0	ANNUAL	ROAD	5
609505.71	4205108.34	0.49289	28.41	51.43	0	ANNUAL	AREA	5	609505.71	4205108.34	0.99793	28.41	51.43	0	ANNUAL	ROAD	5
609496.8	4205097.19	0.49761	28.61	51.76	0	ANNUAL	AREA	5	609496.8	4205097.19	1.04701	28.61	51.76	0	ANNUAL	ROAD	5
609487.89	4205086.04	0.50233	28.81	52.09	0	ANNUAL	AREA	5	609487.89	4205086.04	1.09609	28.81	52.09	0	ANNUAL	ROAD	5
609478.98	4205074.89	0.50705	29.01	52.42	0	ANNUAL	AREA	5	609478.98	4205074.89	1.14517	29.01	52.42	0	ANNUAL	ROAD	5
609470.07	4205063.74	0.51177	29.21	52.75	0	ANNUAL	AREA	5	609470.07	4205063.74	1.19425	29.21	52.75	0	ANNUAL	ROAD	5
609461.16	4205052.59	0.51649	29.41	53.08	0	ANNUAL	AREA	5	609461.16	4205052.59	1.24333	29.41	53.08	0	ANNUAL	ROAD	5
609452.25	4205041.44	0.52121	29.61	53.41	0	ANNUAL	AREA	5	609452.25	4205041.44	1.29241	29.61	53.41	0	ANNUAL	ROAD	5
609443.34	4205030.29	0.52593	29.81	53.74	0	ANNUAL	AREA	5	609443.34	4205030.29	1.34149	29.81	53.74	0	ANNUAL	ROAD	5
609434.43	4205019.14	0.53065	30.01	54.07	0	ANNUAL	AREA	5	609434.43	4205019.14	1.39057	30.01	54.07	0	ANNUAL	ROAD	5
609425.52	4205008.09	0.53537	30.21	54.40	0	ANNUAL	AREA	5	609425.52	4205008.09	1.43965	30.21	54.40	0	ANNUAL	ROAD	5
609416.61	4205006.94	0.54009	30.41	54.73	0	ANNUAL	AREA	5	609416.61	4205006.94	1.48873	30.41	54.73	0	ANNUAL	ROAD	5
609407.7	4205005.79	0.54481	30.61	55.06	0	ANNUAL	AREA	5	609407.7	4205005.79	1.53781	30.61	55.06	0	ANNUAL	ROAD	5
609398.8	4205004.64	0.54953	30.81	55.39	0	ANNUAL	AREA	5	609398.8	4205004.64	1.58689	30.81	55.39	0	ANNUAL	ROAD	5
609389.9	4205003.49	0.55425	31.01	55.72	0	ANNUAL	AREA	5	609389.9	4205003.49	1.63597	31.01	55.72	0	ANNUAL	ROAD	5
609381.0	4205002.34	0.55897	31.21	56.05	0	ANNUAL	AREA	5	609381.0	4205002.34	1.68505	31.21	56.05	0	ANNUAL	ROAD	5
609372.1	4205001.19	0.56369	31.41	56.38	0	ANNUAL	AREA	5	609372.1	4205001.19	1.73413	31.41	56.38	0	ANNUAL	ROAD	5
609363.2	4205000.04	0.56841	31.61	56.71	0	ANNUAL	AREA	5	609363.2	4205000.04	1.78321	31.61	56.71	0	ANNUAL	ROAD	5
609354.3	4204998.89	0.57313	31.81	57.04	0	ANNUAL	AREA	5	609354.3	4204998.89	1.83229	31.81	57.04	0	ANNUAL	ROAD	5
609345.4	4204997.74	0.57785	32.01	57.37	0	ANNUAL	AREA	5	609345.4	4204997.74	1.88137	32.01	57.37	0	ANNUAL	ROAD	5
609336.5	4204996.59	0.58257	32.21	57.70	0	ANNUAL	AREA	5	609336.5	4204996.59	1.93045	32.21	57.70	0	ANNUAL	ROAD	5
609327.6	4204995.44	0.58729	32.41	58.03	0	ANNUAL	AREA	5	609327.6	4204995.44	1.97953	32.41	58.03	0	ANNUAL	ROAD	5
609318.7	4204994.29	0.59201	32.61	58.36	0	ANNUAL	AREA	5	609318.7	4204994.29	2.02861	32.61	58.36	0	ANNUAL	ROAD	5
609309.8	4204993.14	0.59673	32.81	58.69	0	ANNUAL	AREA	5	609309.8	4204993.14	2.07769	32.81	58.69	0	ANNUAL	ROAD	5
609300.9	4204992.09	0.60145	33.01	59.02	0	ANNUAL	AREA	5	609300.9	4204992.09	2.12677	33.01	59.02	0	ANNUAL	ROAD	5
609292.0	4204990.94	0.60617	33.21	59.35	0	ANNUAL	AREA	5	609292.0	4204990.94	2.17585	33.21	59.35	0	ANNUAL	ROAD	5
609283.1	4204989.79	0.61089	33.41	59.68	0	ANNUAL	AREA	5	609283.1	4204989.79	2.22493	33.41	59.68	0	ANNUAL	ROAD	5
609274.2	4204988.64	0.61561	33.61	60.01	0	ANNUAL	AREA	5	609274.2	4204988.64	2.27401	33.61	60.01	0	ANNUAL	ROAD	5
609265.3	4204987.49	0.62033	33.81	60.34	0	ANNUAL	AREA	5	609265.3	4204987.49	2.32309	33.81	60.34	0	ANNUAL	ROAD	5
609256.4	4204986.34	0.62505	34.01	60.67	0	ANNUAL	AREA	5	609256.4	4204986.34	2.37217	34.01	60.67	0	ANNUAL	ROAD	5
609247.5	4204985.19	0.62977	34.21	61.00	0	ANNUAL	AREA	5	609247.5	4204985.19	2.42125	34.21	61.00	0	ANNUAL	ROAD	5
609238.6	4204984.04	0.63449	34.41	61.33	0	ANNUAL	AREA	5	609238.6	4204984.04	2.47033	34.41	61.33	0	ANNUAL	ROAD	5
609229.7	4204982.89	0.63921	34.61	61.66	0	ANNUAL	AREA	5	609229.7	4204982.89	2.51941	34.61	61.66	0	ANNUAL	ROAD	5
609220.8	4204981.74	0.64393	34.81	61.99	0	ANNUAL	AREA	5	609220.8	4204981.74	2.56849	34.81	61.99	0	ANNUAL	ROAD	5
609211.9	4204980.59	0.64865	35.01	62.32	0	ANNUAL	AREA	5	609211.9	4204980.59	2.61757	35.01	62.32	0	ANNUAL	ROAD	5
609203.0	4204979.44	0.65337	35.21	62.65	0	ANNUAL	AREA	5	609203.0	4204979.44	2.66665	35.21	62.65	0	ANNUAL	ROAD	5
609194.1	4204978.29	0.65809	35.41	62.98	0	ANNUAL	AREA	5	609194.1	4204978.29	2.71573	35.41	62.98	0	ANNUAL	ROAD	5

609713.52	4205341.28	0.35171	21.78	21.78	0	ANNUAL	AREA	5	609713.52	4205341.28	0.40607	21.78	21.78	0	ANNUAL	ROAD	5
609700.19	4205346.93	0.32951	21.57	21.57	0	ANNUAL	AREA	5	609700.19	4205346.93	0.38891	21.57	21.57	0	ANNUAL	ROAD	5
609686.87	4205352.59	0.30947	21.63	21.63	0	ANNUAL	AREA	5	609686.87	4205352.59	0.37303	21.63	21.63	0	ANNUAL	ROAD	5
609547.79	4205244.93	0.33272	29.68	29.68	0	ANNUAL	AREA	5	609547.79	4205244.93	0.48026	29.68	29.68	0	ANNUAL	ROAD	5
609536.78	4205235.6	0.33525	29.83	29.83	0	ANNUAL	AREA	5	609536.78	4205235.6	0.48721	29.83	29.83	0	ANNUAL	ROAD	5
609953.36	4205231.53	0.31314	22.53	22.53	0	ANNUAL	AREA	5	609953.36	4205231.53	0.40354	22.53	22.53	0	ANNUAL	ROAD	5
609960.77	4205226.55	1.61411	22.61	22.61	0	ANNUAL	AREA	5	609960.77	4205226.55	0.89172	22.61	22.61	0	ANNUAL	ROAD	5
609968.17	4205213.59	1.80686	23.03	23.03	0	ANNUAL	AREA	5	609968.17	4205213.59	0.94632	23.03	23.03	0	ANNUAL	ROAD	5
609975.58	4205200.64	2.01152	23.21	23.21	0	ANNUAL	AREA	5	609975.58	4205200.64	1.0023	23.21	23.21	0	ANNUAL	ROAD	5
609982.99	4205187.68	2.22658	23.32	23.32	0	ANNUAL	AREA	5	609982.99	4205187.68	1.06003	23.32	23.32	0	ANNUAL	ROAD	5
609990.4	4205174.72	2.44479	23.73	23.73	0	ANNUAL	AREA	5	609990.4	4205174.72	1.12059	23.73	23.73	0	ANNUAL	ROAD	5
609997.81	4205161.76	2.66769	23.99	23.99	0	ANNUAL	AREA	5	609997.81	4205161.76	1.18223	23.99	23.99	0	ANNUAL	ROAD	5
610005.22	4205148.8	2.88858	24.55	24.55	0	ANNUAL	AREA	5	610005.22	4205148.8	1.24639	24.55	24.55	0	ANNUAL	ROAD	5
610012.62	4205135.85	3.11414	24.95	24.95	0	ANNUAL	AREA	5	610012.62	4205135.85	1.31098	24.95	24.95	0	ANNUAL	ROAD	5
610020.03	4205122.89	3.33179	25.22	25.22	0	ANNUAL	AREA	5	610020.03	4205122.89	1.37582	25.22	25.22	0	ANNUAL	ROAD	5
610027.44	4205109.93	3.54789	25.21	25.21	0	ANNUAL	AREA	5	610027.44	4205109.93	1.43973	25.21	25.21	0	ANNUAL	ROAD	5
610160.79	4204876.68	3.46069	24.25	24.25	0	ANNUAL	AREA	5	610160.79	4204876.68	1.63649	24.25	24.25	0	ANNUAL	ROAD	5
610168.2	4204863.73	3.19644	24.26	24.26	0	ANNUAL	AREA	5	610168.2	4204863.73	1.54801	24.26	24.26	0	ANNUAL	ROAD	5
610175.61	4204850.77	2.92364	24.22	24.22	0	ANNUAL	AREA	5	610175.61	4204850.77	1.45293	24.22	24.22	0	ANNUAL	ROAD	5
610183.02	4204837.81	2.64923	24.15	24.15	0	ANNUAL	AREA	5	610183.02	4204837.81	1.35378	24.15	24.15	0	ANNUAL	ROAD	5
609961.69	4205257.59	1.26643	22.1	22.1	0	ANNUAL	AREA	5	609961.69	4205257.59	0.78095	22.1	22.1	0	ANNUAL	ROAD	5
609948.31	4205263.27	1.17526	22.15	22.15	0	ANNUAL	AREA	5	609948.31	4205263.27	0.75503	22.15	22.15	0	ANNUAL	ROAD	5
609934.94	4205268.94	1.089	22.8	22.8	0	ANNUAL	AREA	5	609934.94	4205268.94	0.73241	22.8	22.8	0	ANNUAL	ROAD	5
609921.57	4205274.62	1.00428	23.12	23.12	0	ANNUAL	AREA	5	609921.57	4205274.62	0.70788	23.12	23.12	0	ANNUAL	ROAD	5
609908.2	4205280.29	0.92386	23.18	23.18	0	ANNUAL	AREA	5	609908.2	4205280.29	0.68284	23.18	23.18	0	ANNUAL	ROAD	5
609894.82	4205285.97	0.84869	23.46	23.46	0	ANNUAL	AREA	5	609894.82	4205285.97	0.65838	23.46	23.46	0	ANNUAL	ROAD	5
609881.45	4205291.64	0.77757	23.63	23.63	0	ANNUAL	AREA	5	609881.45	4205291.64	0.63396	23.63	23.63	0	ANNUAL	ROAD	5
609868.08	4205297.31	0.70814	24.09	24.09	0	ANNUAL	AREA	5	609868.08	4205297.31	0.61044	24.09	24.09	0	ANNUAL	ROAD	5
609854.7	4205302.99	0.64863	24.49	24.49	0	ANNUAL	AREA	5	609854.7	4205302.99	0.58714	24.49	24.49	0	ANNUAL	ROAD	5
609841.33	4205308.66	0.59084	25.06	25.06	0	ANNUAL	AREA	5	609841.33	4205308.66	0.56466	25.06	25.06	0	ANNUAL	ROAD	5
609827.96	4205314.28	0.55313	25.26	25.26	0	ANNUAL	AREA	5	609827.96	4205314.28	0.54203	25.26	25.26	0	ANNUAL	ROAD	5
609814.58	4205320.01	0.51635	25.24	25.24	0	ANNUAL	AREA	5	609814.58	4205320.01	0.51968	25.24	25.24	0	ANNUAL	ROAD	5
609801.21	4205325.69	0.48455	24.92	24.92	0	ANNUAL	AREA	5	609801.21	4205325.69	0.49756	24.92	24.92	0	ANNUAL	ROAD	5
609787.84	4205331.36	0.45599	24.45	24.45	0	ANNUAL	AREA	5	609787.84	4205331.36	0.47605	24.45	24.45	0	ANNUAL	ROAD	5
609774.47	4205337.04	0.42903	24.05	24.05	0	ANNUAL	AREA	5	609774.47	4205337.04	0.45555	24.05	24.05	0	ANNUAL	ROAD	5
609761.09	4205342.71	0.40396	23.59	23.59	0	ANNUAL	AREA	5	609761.09	4205342.71	0.43577	23.59	23.59	0	ANNUAL	ROAD	5
609747.72	4205348.38	0.37892	23.23	23.23	0	ANNUAL	AREA	5	609747.72	4205348.38	0.4171	23.23	23.23	0	ANNUAL	ROAD	5
609734.35	4205354.06	0.35277	23.5	23.5	0	ANNUAL	AREA	5	609734.35	4205354.06	0.4002	23.5	23.5	0	ANNUAL	ROAD	5
609720.97	4205359.73	0.32684	23.65	23.65	0	ANNUAL	AREA	5	609720.97	4205359.73	0.38268	23.65	23.65	0	ANNUAL	ROAD	5
609707.6	4205365.41	0.31285	21.96	21.96	0	ANNUAL	AREA	5	609707.6	4205365.41	0.36631	21.96	21.96	0	ANNUAL	ROAD	5
609694.23	4205371.08	0.29433	21.93	21.93	0	ANNUAL	AREA	5	609694.23	4205371.08	0.35166	21.93	21.93	0	ANNUAL	ROAD	5
609680.86	4205376.76	0.27753	22.15	22.15	0	ANNUAL	AREA	5	609680.86	4205376.76	0.3381	22.15	22.15	0	ANNUAL	ROAD	5
609667.48	4205382.43	0.26231	22.21	22.21	0	ANNUAL	AREA	5	609667.48	4205382.43	0.32514	22.21	22.21	0	ANNUAL	ROAD	5
609654.11	4205388.11	0.24859	22.22	22.22	0	ANNUAL	AREA	5	609654.11	4205388.11	0.31286	22.22	22.22	0	ANNUAL	ROAD	5
609641.74	4205393.79	0.23487	22.24	22.24	0	ANNUAL	AREA	5	609641.74	4205393.79	0.30058	22.24	22.24	0	ANNUAL	ROAD	5
609628.37	4205399.46	0.22115	22.25	22.25	0	ANNUAL	AREA	5	609628.37	4205399.46	0.2883	22.25	22.25	0	ANNUAL	ROAD	5
609615.00	4205405.14	0.20743	22.26	22.26	0	ANNUAL	AREA	5	609615.00	4205405.14	0.27602	22.26	22.26	0	ANNUAL	ROAD	5
609601.63	4205410.82	0.19371	22.27	22.27	0	ANNUAL	AREA	5	609601.63	4205410.82	0.26373	22.27	22.27	0	ANNUAL	ROAD	5
609588.26	4205416.50	0.18000	22.28	22.28	0	ANNUAL	AREA	5	609588.26	4205416.50	0.25145	22.28	22.28	0	ANNUAL	ROAD	5
609574.89	4205422.18	0.16629	22.29	22.29	0	ANNUAL	AREA	5	609574.89	4205422.18	0.23917	22.29	22.29	0	ANNUAL	ROAD	5
609561.52	4205427.86	0.15258	22.30	22.30	0	ANNUAL	AREA	5	609561.52	4205427.86	0.22689	22.30	22.30	0	ANNUAL	ROAD	5
609548.15	4205433.54	0.13887	22.31	22.31	0	ANNUAL	AREA	5	609548.15	4205433.54	0.21461	22.31	22.31	0	ANNUAL	ROAD	5
609534.78	4205439.22	0.12516	22.32	22.32	0	ANNUAL	AREA	5	609534.78	4205439.22	0.20233	22.32	22.32	0	ANNUAL	ROAD	5
609521.41	4205444.90	0.11145	22.33	22.33	0	ANNUAL	AREA	5	609521.41	4205444.90	0.19005	22.33	22.33	0	ANNUAL	ROAD	5
609508.04	4205450.58	0.09774	22.34	22.34	0	ANNUAL	AREA	5	609508.04	4205450.58	0.17777	22.34	22.34	0	ANNUAL	ROAD	5
609494.67	4205456.26	0.08403	22.35	22.35	0	ANNUAL	AREA	5	609494.67	4205456.26	0.16549	22.35	22.35	0	ANNUAL	ROAD	5
609481.30	4205461.94	0.07032	22.36	22.36	0	ANNUAL	AREA	5	609481.30	4205461.94	0.15321	22.36	22.36	0	ANNUAL	ROAD	5
609467.93	4205467.62	0.05661	22.37	22.37	0	ANNUAL	AREA	5	609467.93	4205467.62	0.14093	22.37	22.37	0	ANNUAL	ROAD	5
609454.56	4205473.30	0.04290	22.38	22.38	0	ANNUAL	AREA	5	609454.56	4205473.30	0.12865	22.38	22.38	0	ANNUAL	ROAD	5
609441.19	4205478.98	0.02919	22.39	22.39	0	ANNUAL	AREA	5	609441.19	4205478.98	0.11637	22.39	22.39	0	ANNUAL	ROAD	5
609427.82	4205484.66	0.01548	22.40	22.40	0	ANNUAL	AREA	5	609427.82	4205484.66	0.10409	22.40	22.40	0	ANNUAL	ROAD	5
609414.45	4205490.34	0.00177	22.41	22.41	0	ANNUAL	AREA	5	609414.45	4205490.34	0.09181	22.41	22.41	0	ANNUAL	ROAD	5
609401.08	4205496.02	0.00000	22.42	22.42	0	ANNUAL	AREA	5	609401.08	4205496.02	0.07953	22.42	22.42	0	ANNUAL	ROAD	5
609387.71	4205501.70	0.00000	22.43	22.43	0	ANNUAL	AREA	5	609387.71	4205501.70	0.06725	22.43	22.43	0	ANNUAL	ROAD	5
609374.34	4205507.38	0.00000	22.44	22.44	0	ANNUAL	AREA	5	609374.34	4205507.38	0.05497	22.44	22.44	0	ANNUAL	ROAD	5
609360.97	4205513.06	0.00000	22.45	22.45	0	ANNUAL	AREA	5	609360.97	4205513.06	0.04269	22.45	22.45	0	ANNUAL	ROAD	5
609347.60	4205518.74	0.00000	22.46	22.46	0	ANNUAL	AREA	5	609347.60	4205518.74	0.03041	22.46	22.46	0	ANNUAL	ROAD	5
609334.23	4205524.42	0.00000	22.47	22.47	0	ANNUAL	AREA	5	609334.23	4205524.42	0.01813	22.47	22.47	0	ANNUAL	ROAD	5
609320.86	4205530.10	0.00000	22.48	22.48	0	ANNUAL	AREA	5	609320.86	4205530.10	0.00585	22.48	22.48	0	ANNUAL	ROAD	5
609307.49	4205535.78	0.00000	22.49	22.49	0	ANNUAL	AREA	5	609307.49								

610119.83	4205076.78	3.41061	24.9	24.9	0	ANNUAL	AREA	5	610119.83	4205076.78	1.46392	24.9	24.9	0	ANNUAL	ROAD	5
610127.23	4205063.82	3.48981	24.85	24.85	0	ANNUAL	AREA	5	610127.23	4205063.82	1.49931	24.85	24.85	0	ANNUAL	ROAD	5
610134.64	4205050.86	3.54963	24.79	24.79	0	ANNUAL	AREA	5	610134.64	4205050.86	1.52979	24.79	24.79	0	ANNUAL	ROAD	5
610142.05	4205037.91	3.5885	24.7	24.7	0	ANNUAL	AREA	5	610142.05	4205037.91	1.55441	24.7	24.7	0	ANNUAL	ROAD	5
610149.46	4205024.95	3.60585	24.69	24.69	0	ANNUAL	AREA	5	610149.46	4205024.95	1.57282	24.69	24.69	0	ANNUAL	ROAD	5
610156.87	4205011.99	3.64659	24.69	24.69	0	ANNUAL	AREA	5	610156.87	4205011.99	1.58392	24.69	24.69	0	ANNUAL	ROAD	5
610164.28	4204999.03	3.57204	24.71	24.71	0	ANNUAL	AREA	5	610164.28	4204999.03	1.58702	24.71	24.71	0	ANNUAL	ROAD	5
610171.68	4204986.07	3.52073	24.82	24.82	0	ANNUAL	AREA	5	610171.68	4204986.07	1.58187	24.82	24.82	0	ANNUAL	ROAD	5
610179.09	4204973.12	3.44572	24.89	24.89	0	ANNUAL	AREA	5	610179.09	4204973.12	1.56746	24.89	24.89	0	ANNUAL	ROAD	5
610208.77	4205296.14	1.07429	24.7	24.7	0	ANNUAL	AREA	5	610208.77	4205296.14	0.69866	24.7	24.7	0	ANNUAL	ROAD	5
610015.2	4205301.9	1.01291	24.28	24.28	0	ANNUAL	AREA	5	610015.2	4205301.9	0.67741	24.28	24.28	0	ANNUAL	ROAD	5
610001.63	4205307.66	0.94892	24.15	24.15	0	ANNUAL	AREA	5	610001.63	4205307.66	0.65653	24.15	24.15	0	ANNUAL	ROAD	5
609988.06	4205313.42	0.89211	23.68	23.68	0	ANNUAL	AREA	5	609988.06	4205313.42	0.63494	23.68	23.68	0	ANNUAL	ROAD	5
609974.49	4205315.18	0.82922	23.74	23.74	0	ANNUAL	AREA	5	609974.49	4205315.18	0.61432	23.74	23.74	0	ANNUAL	ROAD	5
609960.92	4205324.93	0.77394	23.31	23.31	0	ANNUAL	AREA	5	609960.92	4205324.93	0.59294	23.31	23.31	0	ANNUAL	ROAD	5
609947.35	4205330.69	0.71827	22.8	22.8	0	ANNUAL	AREA	5	609947.35	4205330.69	0.57159	22.8	22.8	0	ANNUAL	ROAD	5
609933.78	4205336.45	0.66669	23.26	23.26	0	ANNUAL	AREA	5	609933.78	4205336.45	0.55213	23.26	23.26	0	ANNUAL	ROAD	5
609920.2	4205342.21	0.61713	23.67	23.67	0	ANNUAL	AREA	5	609920.2	4205342.21	0.53283	23.67	23.67	0	ANNUAL	ROAD	5
609906.63	4205347.97	0.57128	23.92	23.92	0	ANNUAL	AREA	5	609906.63	4205347.97	0.51359	23.92	23.92	0	ANNUAL	ROAD	5
609893.06	4205353.73	0.53106	24.11	24.11	0	ANNUAL	AREA	5	609893.06	4205353.73	0.49465	24.11	24.11	0	ANNUAL	ROAD	5
609879.49	4205359.48	0.49619	24.2	24.2	0	ANNUAL	AREA	5	609879.49	4205359.48	0.47601	24.2	24.2	0	ANNUAL	ROAD	5
609865.92	4205365.24	0.46264	24.71	24.71	0	ANNUAL	AREA	5	609865.92	4205365.24	0.45844	24.71	24.71	0	ANNUAL	ROAD	5
609852.35	4205371.0	0.43243	25.5	25.5	0	ANNUAL	AREA	5	609852.35	4205371.0	0.44172	25.5	25.5	0	ANNUAL	ROAD	5
609838.78	4205376.76	0.40833	25.59	25.59	0	ANNUAL	AREA	5	609838.78	4205376.76	0.4246	25.59	25.59	0	ANNUAL	ROAD	5
609825.21	4205382.52	0.38851	24.97	24.97	0	ANNUAL	AREA	5	609825.21	4205382.52	0.4072	24.97	24.97	0	ANNUAL	ROAD	5
609811.64	4205388.28	0.36947	24.51	24.51	0	ANNUAL	AREA	5	609811.64	4205388.28	0.39067	24.51	24.51	0	ANNUAL	ROAD	5
609798.07	4205394.03	0.35156	24.02	24.02	0	ANNUAL	AREA	5	609798.07	4205394.03	0.3748	24.02	24.02	0	ANNUAL	ROAD	5
609784.5	4205399.79	0.33449	23.51	23.51	0	ANNUAL	AREA	5	609784.5	4205399.79	0.35959	23.51	23.51	0	ANNUAL	ROAD	5
609770.93	4205405.55	0.31668	23.36	23.36	0	ANNUAL	AREA	5	609770.93	4205405.55	0.34548	23.36	23.36	0	ANNUAL	ROAD	5
609757.36	4205411.31	0.29989	23.53	23.53	0	ANNUAL	AREA	5	609757.36	4205411.31	0.32328	23.53	23.53	0	ANNUAL	ROAD	5
609743.79	4205417.07	0.28322	23.69	23.69	0	ANNUAL	AREA	5	609743.79	4205417.07	0.31991	23.69	23.69	0	ANNUAL	ROAD	5
609730.22	4205422.83	0.26717	24.12	24.12	0	ANNUAL	AREA	5	609730.22	4205422.83	0.30833	24.12	24.12	0	ANNUAL	ROAD	5
609716.64	4205428.58	0.25218	24.59	24.59	0	ANNUAL	AREA	5	609716.64	4205428.58	0.2974	24.59	24.59	0	ANNUAL	ROAD	5
609703.07	4205434.34	0.23942	24.15	24.15	0	ANNUAL	AREA	5	609703.07	4205434.34	0.28621	24.15	24.15	0	ANNUAL	ROAD	5
609689.5	4205440.1	0.22711	24.06	24.06	0	ANNUAL	AREA	5	609689.5	4205440.1	0.27595	24.06	24.06	0	ANNUAL	ROAD	5
609675.93	4205445.86	0.2158	23.97	23.97	0	ANNUAL	AREA	5	609675.93	4205445.86	0.26625	23.97	23.97	0	ANNUAL	ROAD	5
609662.36	4205451.62	0.20548	23.84	24.94	0	ANNUAL	AREA	5	609662.36	4205451.62	0.25706	23.84	24.94	0	ANNUAL	ROAD	5
609648.79	4205457.38	0.196	23.78	23.78	0	ANNUAL	AREA	5	609648.79	4205457.38	0.24844	23.78	23.78	0	ANNUAL	ROAD	5
609635.22	4205463.13	0.18668	24.4	24.4	0	ANNUAL	AREA	5	609635.22	4205463.13	0.24081	24.4	24.4	0	ANNUAL	ROAD	5
609621.47	4205467.35	0.18232	24.23	24.23	0	ANNUAL	AREA	5	609621.47	4205467.35	0.23873	24.23	24.23	0	ANNUAL	ROAD	5
609608.3	4205473.03	0.18068	23.38	23.38	0	ANNUAL	AREA	5	609608.3	4205473.03	0.24401	23.38	23.38	0	ANNUAL	ROAD	5
609474.84	4205284.28	0.23368	34.37	34.37	0	ANNUAL	AREA	5	609474.84	4205284.28	0.36828	34.37	34.37	0	ANNUAL	ROAD	5
609465.67	4205272.74	0.23141	34.94	34.94	0	ANNUAL	AREA	5	609465.67	4205272.74	0.37977	34.94	34.94	0	ANNUAL	ROAD	5
609456.49	4205261.2	0.2295	34.92	42.59	0	ANNUAL	AREA	5	609456.49	4205261.2	0.39114	34.92	42.59	0	ANNUAL	ROAD	5
609438.14	4205238.13	0.22861	35.31	50.32	0	ANNUAL	AREA	5	609438.14	4205238.13	0.41561	35.31	50.32	0	ANNUAL	ROAD	5
609428.96	4205226.59	0.2186	36.23	50.32	0	ANNUAL	AREA	5	609428.96	4205226.59	0.42927	36.23	50.32	0	ANNUAL	ROAD	5
609419.79	4205215.18	0.21508	37.75	50.32	0	ANNUAL	AREA	5	609419.79	4205215.18	0.44382	37.75	50.32	0	ANNUAL	ROAD	5
609410.61	4205203.51	0.1984	41.64	44.32	0	ANNUAL	AREA	5	609410.61	4205203.51	0.4598	41.64	44.32	0	ANNUAL	ROAD	5
609401.44	4205191.97	0.19091	43.31	44.32	0	ANNUAL	AREA	5	609401.44	4205191.97	0.47435	43.31	44.32	0	ANNUAL	ROAD	5
609392.26	4205180.44	0.18473	44.6	44.6	0	ANNUAL	AREA	5	609392.26	4205180.44	0.48904	44.6	44.6	0	ANNUAL	ROAD	5
609383.09	4205168.9	0.17967	45.59	45.59	0	ANNUAL	AREA	5	609383.09	4205168.9	0.50403	45.59	45.59	0	ANNUAL	ROAD	5
609373.91	4205157.36	0.17539	46.42	46.42	0	ANNUAL	AREA	5	609373.91	4205157.36	0.51943	46.42	46.42	0	ANNUAL	ROAD	5
609364.74	4205145.82	0.17204	47.03	47.03	0	ANNUAL	AREA	5	609364.74	4205145.82	0.5354	47.03	47.03	0	ANNUAL	ROAD	5
609355.56	4205132.28	0.16854	47.89	47.89	0	ANNUAL	AREA	5	609355.56	4205132.28	0.55164	47.89	47.89	0	ANNUAL	ROAD	5
609346.38	4205119.74	0.16675	48.18	48.18	0	ANNUAL	AREA	5	609346.38	4205119.74	0.56875	48.18	48.18	0	ANNUAL	ROAD	5
610042.34	4205390.38	1.13571	25.22	25.22	0	ANNUAL	AREA	5	610042.34	4205390.38	0.71981	25.22	25.22	0	ANNUAL	ROAD	5
610049.75	4205277.43	1.24525	25.61	25.61	0	ANNUAL	AREA	5	610049.75	4205277.43	0.75914	25.61	25.61	0	ANNUAL	ROAD	5
610057.16	4205264.47	1.35751	26.49	26.49	0	ANNUAL	AREA	5	610057.16	4205264.47	0.80076	26.49	26.49	0	ANNUAL	ROAD	5
610064.57	4205251.51	1.48287	26.69	26.69	0	ANNUAL	AREA	5	610064.57	4205251.51	0.8422	26.69	26.69	0	ANNUAL	ROAD	5
610071.97	4205238.55	1.61152	27.12	27.12	0	ANNUAL	AREA	5	610071.97	4205238.55	0.88509	27.12	27.12	0	ANNUAL	ROAD	5
610079.38	4205225.59	1.74474	27.49	27.49	0	ANNUAL	AREA	5	610079.38	4205225.59	0.92867	27.49	27.49	0	ANNUAL	ROAD	5
610086.79	4205212.64	1.88498	27.31	27.31	0	ANNUAL	AREA	5	610086.79	4205212.64	0.97158	27.31	27.31	0	ANNUAL	ROAD	5
610094.2	4205199.68	2.02466	27.29	27.29	0	ANNUAL	AREA	5	610094.2	4205199.68	1.01516	27.29	27.29	0	ANNUAL	ROAD	5
610101.61	4205187.71	2.15946	27.11	27.11	0	ANNUAL	AREA	5	610101.61	4205187.71	1.06237	27.11	27.11	0	ANNUAL	ROAD	5
610109.02	4205173.76	2.3013	26.95	26.95	0	ANNUAL	AREA	5	610109.02	4205173.76	1.10132	26.95	26.95	0	ANNUAL	ROAD	5
610116.42	4205160.8	2.43519	26.5	26.5	0	ANNUAL	AREA	5	610116.42	4205160.8	1.14283	26.5	26.5	0	ANNUAL	ROAD	5
610123.83	4205147.85	2.58847	26.62	26.62	0	ANNUAL	AREA	5	610123.83	4205147.85	1.18474	26.62	26.62	0	ANNUAL	ROAD	5
610131.24	4205134.89	2.67379	26.73	26.73	0	ANNUAL	AREA	5	610131.24	4205134.89	1.22519	26.73	26.73	0	ANNUAL	ROAD	5
610138.65	4205121.93	2.78171	26.33	26.33	0	ANNUAL	AREA	5	610138.65	4205121.93	1.26223	26.33	26.33	0	ANNUAL	ROAD	5
610146.06	4205108.97	2.87609	26.26	26.26	0	ANNUAL	AREA	5	610146.06	4205108.97	1.29767	26.26	26.				

60981.49	4205216.45	0.17477	41.82	49.73	0	ANNUAL	AREA	5	60981.49	4205216.45	0.41295	41.82	49.73	0	ANNUAL	ROAD	5
60937.27	4205204.85	0.17082	42.41	50.32	0	ANNUAL	AREA	5	60937.27	4205204.85	0.42483	42.41	50.32	0	ANNUAL	ROAD	5
60935.37	4205158.45	0.15332	46.72	46.72	0	ANNUAL	AREA	5	60935.37	4205158.45	0.47397	46.72	46.72	0	ANNUAL	ROAD	5
609326.14	4205146.85	0.14986	47.79	47.79	0	ANNUAL	AREA	5	609326.14	4205146.85	0.48656	47.79	47.79	0	ANNUAL	ROAD	5
609316.92	4205135.25	0.14728	48.62	48.62	0	ANNUAL	AREA	5	609316.92	4205135.25	0.49041	48.62	48.62	0	ANNUAL	ROAD	5
609307.69	4205116.45	0.14461	49.11	49.11	0	ANNUAL	AREA	5	609307.69	4205116.45	0.51283	49.11	49.11	0	ANNUAL	ROAD	5
610075.98	4205309.62	1.07361	23.72	23.72	0	ANNUAL	AREA	5	610075.98	4205309.62	0.67635	23.72	23.72	0	ANNUAL	ROAD	5
610083.39	4205296.66	1.15878	24.85	24.85	0	ANNUAL	AREA	5	610083.39	4205296.66	0.71299	24.85	24.85	0	ANNUAL	ROAD	5
610090.8	4205283.7	1.25576	25.57	25.57	0	ANNUAL	AREA	5	610090.8	4205283.7	0.74997	25.57	25.57	0	ANNUAL	ROAD	5
610098.21	4205270.74	1.35976	26.08	26.08	0	ANNUAL	AREA	5	610098.21	4205270.74	0.78748	26.08	26.08	0	ANNUAL	ROAD	5
610105.61	4205257.79	1.46826	26.54	26.54	0	ANNUAL	AREA	5	610105.61	4205257.79	0.8256	26.54	26.54	0	ANNUAL	ROAD	5
610113.02	4205244.83	1.58195	26.73	26.73	0	ANNUAL	AREA	5	610113.02	4205244.83	0.86378	26.73	26.73	0	ANNUAL	ROAD	5
610120.43	4205231.87	1.69833	26.78	26.78	0	ANNUAL	AREA	5	610120.43	4205231.87	0.90201	26.78	26.78	0	ANNUAL	ROAD	5
610127.84	4205218.91	1.81504	26.83	26.83	0	ANNUAL	AREA	5	610127.84	4205218.91	0.94032	26.83	26.83	0	ANNUAL	ROAD	5
610135.25	4205205.95	1.93211	26.65	26.65	0	ANNUAL	AREA	5	610135.25	4205205.95	0.97796	26.65	26.65	0	ANNUAL	ROAD	5
610142.66	4205192.99	2.06443	26.47	26.47	0	ANNUAL	AREA	5	610142.66	4205192.99	1.01512	26.47	26.47	0	ANNUAL	ROAD	5
610150.06	4205180.04	2.15581	26.41	26.41	0	ANNUAL	AREA	5	610150.06	4205180.04	1.05171	26.41	26.41	0	ANNUAL	ROAD	5
610157.47	4205167.08	2.2546	27.38	27.38	0	ANNUAL	AREA	5	610157.47	4205167.08	1.08956	27.38	27.38	0	ANNUAL	ROAD	5
610164.88	4205154.12	2.34902	27.91	27.91	0	ANNUAL	AREA	5	610164.88	4205154.12	1.1249	27.91	27.91	0	ANNUAL	ROAD	5
610172.29	4205141.16	2.43789	27.91	27.91	0	ANNUAL	AREA	5	610172.29	4205141.16	1.15713	27.91	27.91	0	ANNUAL	ROAD	5
610179.7	4205128.2	2.52189	28.05	28.05	0	ANNUAL	AREA	5	610179.7	4205128.2	1.18728	28.05	28.05	0	ANNUAL	ROAD	5
610187.11	4205115.25	2.58544	28.01	28.01	0	ANNUAL	AREA	5	610187.11	4205115.25	1.21412	28.01	28.01	0	ANNUAL	ROAD	5
610194.51	4205102.29	2.64239	27.4	27.8	0	ANNUAL	AREA	5	610194.51	4205102.29	1.23632	27.4	27.8	0	ANNUAL	ROAD	5
610201.91	4205089.33	2.68658	26.32	28.23	0	ANNUAL	AREA	5	610201.91	4205089.33	1.25339	26.32	28.23	0	ANNUAL	ROAD	5
610209.33	4205076.37	2.71391	25.66	27.06	0	ANNUAL	AREA	5	610209.33	4205076.37	1.26704	25.66	27.06	0	ANNUAL	ROAD	5
610216.74	4205063.41	2.72525	25.16	27.66	0	ANNUAL	AREA	5	610216.74	4205063.41	1.27627	25.16	27.66	0	ANNUAL	ROAD	5
610224.15	4205050.46	2.72187	25.06	27.75	0	ANNUAL	AREA	5	610224.15	4205050.46	1.28134	25.06	27.75	0	ANNUAL	ROAD	5
610231.56	4205037.5	2.70378	25.18	25.18	0	ANNUAL	AREA	5	610231.56	4205037.5	1.28148	25.18	25.18	0	ANNUAL	ROAD	5
610238.97	4205024.54	2.67006	25.22	25.22	0	ANNUAL	AREA	5	610238.97	4205024.54	1.27559	25.22	25.22	0	ANNUAL	ROAD	5
610246.37	4205011.58	2.62747	25.19	25.19	0	ANNUAL	AREA	5	610246.37	4205011.58	1.26361	25.19	25.19	0	ANNUAL	ROAD	5
610253.78	4204998.62	2.55736	25.11	25.11	0	ANNUAL	AREA	5	610253.78	4204998.62	1.24553	25.11	25.11	0	ANNUAL	ROAD	5
610261.19	4204985.67	2.47572	24.43	24.43	0	ANNUAL	AREA	5	610261.19	4204985.67	1.22008	24.43	24.43	0	ANNUAL	ROAD	5
610268.6	4204972.71	2.38854	24.39	24.39	0	ANNUAL	AREA	5	610268.6	4204972.71	1.19079	24.39	24.39	0	ANNUAL	ROAD	5
610276.01	4204959.75	2.28924	24.45	24.45	0	ANNUAL	AREA	5	610276.01	4204959.75	1.15662	24.45	24.45	0	ANNUAL	ROAD	5
610283.42	4204946.79	2.17985	24.2	24.2	0	ANNUAL	AREA	5	610283.42	4204946.79	1.11708	24.2	24.2	0	ANNUAL	ROAD	5
610290.82	4204933.83	2.06403	24.03	24.03	0	ANNUAL	AREA	5	610290.82	4204933.83	1.07381	24.03	24.03	0	ANNUAL	ROAD	5
610298.23	4204920.88	1.94327	24.1	24.1	0	ANNUAL	AREA	5	610298.23	4204920.88	1.02779	24.1	24.1	0	ANNUAL	ROAD	5
610305.64	4204907.92	1.81816	24.37	24.37	0	ANNUAL	AREA	5	610305.64	4204907.92	0.97962	24.37	24.37	0	ANNUAL	ROAD	5
610313.05	4204894.96	1.69498	23.98	23.98	0	ANNUAL	AREA	5	610313.05	4204894.96	0.92944	23.98	23.98	0	ANNUAL	ROAD	5
610320.46	4204881.99	1.56936	23.83	23.83	0	ANNUAL	AREA	5	610320.46	4204881.99	0.86617	23.83	23.83	0	ANNUAL	ROAD	5
610327.87	4204869.03	1.44242	23.41	23.41	0	ANNUAL	AREA	5	610327.87	4204869.03	0.80179	23.41	23.41	0	ANNUAL	ROAD	5
610335.28	4204856.07	1.31597	22.71	22.71	0	ANNUAL	AREA	5	610335.28	4204856.07	0.73699	22.71	22.71	0	ANNUAL	ROAD	5
610342.69	4204843.11	1.19001	23.09	23.09	0	ANNUAL	AREA	5	610342.69	4204843.11	0.67207	23.09	23.09	0	ANNUAL	ROAD	5
610350.10	4204830.15	1.06515	23.51	23.51	0	ANNUAL	AREA	5	610350.10	4204830.15	0.60713	23.51	23.51	0	ANNUAL	ROAD	5
610357.51	4204817.19	0.94102	23.52	23.52	0	ANNUAL	AREA	5	610357.51	4204817.19	0.54232	23.52	23.52	0	ANNUAL	ROAD	5
610364.92	4204804.23	0.81787	23.87	23.87	0	ANNUAL	AREA	5	610364.92	4204804.23	0.50342	23.87	23.87	0	ANNUAL	ROAD	5
610372.33	4204791.27	0.69501	23.77	23.77	0	ANNUAL	AREA	5	610372.33	4204791.27	0.46403	23.77	23.77	0	ANNUAL	ROAD	5
610379.74	4204778.31	0.57244	23.72	23.72	0	ANNUAL	AREA	5	610379.74	4204778.31	0.42504	23.72	23.72	0	ANNUAL	ROAD	5
610387.15	4204765.35	0.45158	23.47	23.47	0	ANNUAL	AREA	5	610387.15	4204765.35	0.38605	23.47	23.47	0	ANNUAL	ROAD	5
610394.56	4204752.39	0.33192	23.35	23.35	0	ANNUAL	AREA	5	610394.56	4204752.39	0.34708	23.35	23.35	0	ANNUAL	ROAD	5
610401.97	4204739.43	0.21366	23.83	23.83	0	ANNUAL	AREA	5	610401.97	4204739.43	0.32209	23.83	23.83	0	ANNUAL	ROAD	5
610409.38	4204726.47	0.09769	23.98	23.98	0	ANNUAL	AREA	5	610409.38	4204726.47	0.30708	23.98	23.98	0	ANNUAL	ROAD	5
610416.79	4204713.51	0.00000	23.97	23.97	0	ANNUAL	AREA	5	610416.79	4204713.51	0.29211	23.97	23.97	0	ANNUAL	ROAD	5
610424.20	4204700.55	-0.11425	24.85	24.85	0	ANNUAL	AREA	5	610424.20	4204700.55	0.27714	24.85	24.85	0	ANNUAL	ROAD	5
610431.61	4204687.59	-0.22850	24.37	24.37	0	ANNUAL	AREA	5	610431.61	4204687.59	0.26217	24.37	24.37	0	ANNUAL	ROAD	5
610439.02	4204674.63	-0.34275	24.22	24.22	0	ANNUAL	AREA	5	610439.02	4204674.63	0.24720	24.22	24.22	0	ANNUAL	ROAD	5
610446.43	4204661.67	-0.45700	23.97	23.97	0	ANNUAL	AREA	5	610446.43	4204661.67	0.23223	23.97	23.97	0	ANNUAL	ROAD	5
610453.84	4204648.71	-0.57125	23.53	23.53	0	ANNUAL	AREA	5	610453.84	4204648.71	0.21726	23.53	23.53	0	ANNUAL	ROAD	5
610461.25	4204635.75	-0.68550	23.9	23.9	0	ANNUAL	AREA	5	610461.25	4204635.75	0.20229	23.9	23.9	0	ANNUAL	ROAD	5
610468.66	4204622.79	-0.80000	24.6	24.6	0	ANNUAL	AREA	5	610468.66	4204622.79	0.18732	24.6	24.6	0	ANNUAL	ROAD	5
610476.07	4204609.83	-0.91425	24.74	24.74	0	ANNUAL	AREA	5	610476.07	4204609.83	0.17235	24.74	24.74	0	ANNUAL	ROAD	5
610483.48	4204596.87	-1.02850	24.81	24.81	0	ANNUAL	AREA	5	610483.48	4204596.87	0.15738	24.81	24.81	0	ANNUAL	ROAD	5
610490.89	4204583.91	-1.14275	25.18	25.18	0	ANNUAL	AREA	5	610490.89	4204583.91	0.14241	25.18	25.18	0	ANNUAL	ROAD	5
610498.30	4204570.95	-1.25700	25.15	25.15	0	ANNUAL	AREA	5	610498.30	4204570.95	0.12744	25.15	25.15	0	ANNUAL	ROAD	5
610505.71	4204557.99	-1.37125	25.12	25.12	0	ANNUAL	AREA	5	610505.71	4204557.99	0.11247	25.12	25.12	0	ANNUAL	ROAD	5
610513.12	4204545.03	-1.48550	24.99	24.99	0	ANNUAL	AREA	5	610513.12	4204545.03	0.09750	24.99	24.99	0	ANNUAL	ROAD	5
610520.53	4204532.07	-1.60000	24.83	24.83	0	ANNUAL	AREA	5	610520.53	4204532.07	0.08253	24.83	24.83	0	ANNUAL	ROAD	5
610527.94	4204519.11	-1.71425	25.39	25.39	0	ANNUAL	AREA	5	610527.94	4204519.11	0.06756	25.39	25.39	0	ANNUAL	ROAD	5
610535.35	4204506.15	-1.82850	25.85	25.85	0	ANNUAL	AREA	5	610535.35	4204506.15	0.05259	25.85	25.85	0	ANNUAL	ROAD	5
610542.76	4204493.19	-1.9430															

610089.58	4205370.86	0.75389	24.83	24.83	0	ANNUAL	AREA	5	610089.58	4205370.86	0.54685	24.83	24.83	0	ANNUAL	ROAD	5
610076.16	4205376.56	0.71929	23.93	23.93	0	ANNUAL	AREA	5	610076.16	4205376.56	0.53032	23.93	23.93	0	ANNUAL	ROAD	5
610062.74	4205382.25	0.68212	23.19	23.19	0	ANNUAL	AREA	5	610062.74	4205382.25	0.51396	23.19	23.19	0	ANNUAL	ROAD	5
610049.32	4205387.95	0.64174	23.08	23.08	0	ANNUAL	AREA	5	610049.32	4205387.95	0.49843	23.08	23.08	0	ANNUAL	ROAD	5
610035.9	4205393.64	0.60598	23.25	24.25	0	ANNUAL	AREA	5	610035.9	4205393.64	0.48559	24.25	24.25	0	ANNUAL	ROAD	5
610022.48	4205399.33	0.55732	24.44	24.49	0	ANNUAL	AREA	5	610022.48	4205399.33	0.46969	24.49	24.49	0	ANNUAL	ROAD	5
610009.06	4205405.03	0.52362	24.41	24.41	0	ANNUAL	AREA	5	610009.06	4205405.03	0.45456	24.41	24.41	0	ANNUAL	ROAD	5
609995.64	4205410.72	0.49316	24.21	24.21	0	ANNUAL	AREA	5	609995.64	4205410.72	0.43954	24.21	24.21	0	ANNUAL	ROAD	5
609982.21	4205416.42	0.46359	24.2	24.2	0	ANNUAL	AREA	5	609982.21	4205416.42	0.42499	24.2	24.2	0	ANNUAL	ROAD	5
609968.79	4205422.11	0.43925	23.8	23.8	0	ANNUAL	AREA	5	609968.79	4205422.11	0.41034	23.8	23.8	0	ANNUAL	ROAD	5
609955.37	4205427.81	0.41502	23.69	23.69	0	ANNUAL	AREA	5	609955.37	4205427.81	0.39633	23.69	23.69	0	ANNUAL	ROAD	5
609941.95	4205433.5	0.39067	23.96	23.96	0	ANNUAL	AREA	5	609941.95	4205433.5	0.3831	23.96	23.96	0	ANNUAL	ROAD	5
609928.53	4205439.2	0.36958	24.1	24.1	0	ANNUAL	AREA	5	609928.53	4205439.2	0.37009	24.1	24.1	0	ANNUAL	ROAD	5
609915.11	4205444.89	0.35134	24.09	24.09	0	ANNUAL	AREA	5	609915.11	4205444.89	0.37332	24.09	24.09	0	ANNUAL	ROAD	5
609901.69	4205450.59	0.3342	24.25	24.25	0	ANNUAL	AREA	5	609901.69	4205450.59	0.3451	24.25	24.25	0	ANNUAL	ROAD	5
609888.27	4205456.28	0.31809	24.63	24.63	0	ANNUAL	AREA	5	609888.27	4205456.28	0.33351	24.63	24.63	0	ANNUAL	ROAD	5
609874.85	4205461.98	0.30526	24.36	24.36	0	ANNUAL	AREA	5	609874.85	4205461.98	0.32171	24.36	24.36	0	ANNUAL	ROAD	5
609861.43	4205467.67	0.29252	24.41	24.41	0	ANNUAL	AREA	5	609861.43	4205467.67	0.31064	24.41	24.41	0	ANNUAL	ROAD	5
609848.01	4205473.36	0.28089	24.32	24.32	0	ANNUAL	AREA	5	609848.01	4205473.36	0.29987	24.32	24.32	0	ANNUAL	ROAD	5
609834.59	4205479.06	0.26952	24.38	24.38	0	ANNUAL	AREA	5	609834.59	4205479.06	0.28964	24.38	24.38	0	ANNUAL	ROAD	5
609821.17	4205484.75	0.25876	24.36	24.36	0	ANNUAL	AREA	5	609821.17	4205484.75	0.27978	24.36	24.36	0	ANNUAL	ROAD	5
609807.75	4205490.45	0.24764	24.81	24.81	0	ANNUAL	AREA	5	609807.75	4205490.45	0.27077	24.81	24.81	0	ANNUAL	ROAD	5
609794.33	4205496.14	0.23796	24.45	24.45	0	ANNUAL	AREA	5	609794.33	4205496.14	0.2614	24.45	24.45	0	ANNUAL	ROAD	5
609780.91	4205501.84	0.2286	23.97	23.97	0	ANNUAL	AREA	5	609780.91	4205501.84	0.25244	23.97	23.97	0	ANNUAL	ROAD	5
609767.49	4205507.53	0.2188	23.97	23.97	0	ANNUAL	AREA	5	609767.49	4205507.53	0.24424	23.97	23.97	0	ANNUAL	ROAD	5
609754.07	4205513.23	0.20933	23.91	23.91	0	ANNUAL	AREA	5	609754.07	4205513.23	0.23638	23.91	23.91	0	ANNUAL	ROAD	5
609740.65	4205518.92	0.20023	23.77	23.77	0	ANNUAL	AREA	5	609740.65	4205518.92	0.22885	23.77	23.77	0	ANNUAL	ROAD	5
609727.22	4205524.62	0.19112	23.95	23.95	0	ANNUAL	AREA	5	609727.22	4205524.62	0.22188	23.95	23.95	0	ANNUAL	ROAD	5
609713.8	4205530.31	0.18252	24.05	24.05	0	ANNUAL	AREA	5	609713.8	4205530.31	0.21522	24.05	24.05	0	ANNUAL	ROAD	5
609700.38	4205536.01	0.17415	24.4	24.4	0	ANNUAL	AREA	5	609700.38	4205536.01	0.20902	24.4	24.4	0	ANNUAL	ROAD	5
609686.96	4205541.7	0.16607	25.14	25.14	0	ANNUAL	AREA	5	609686.96	4205541.7	0.20337	25.14	25.14	0	ANNUAL	ROAD	5
609673.54	4205547.39	0.15882	25.5	25.5	0	ANNUAL	AREA	5	609673.54	4205547.39	0.19777	25.5	25.5	0	ANNUAL	ROAD	5
609660.12	4205553.09	0.15232	25.47	25.47	0	ANNUAL	AREA	5	609660.12	4205553.09	0.19222	25.47	25.47	0	ANNUAL	ROAD	5
609646.7	4205558.78	0.14624	25.61	25.61	0	ANNUAL	AREA	5	609646.7	4205558.78	0.18703	25.61	25.61	0	ANNUAL	ROAD	5
609633.28	4205564.48	0.1406	25.87	25.87	0	ANNUAL	AREA	5	609633.28	4205564.48	0.18215	25.87	25.87	0	ANNUAL	ROAD	5
609619.86	4205570.17	0.13557	25.79	25.79	0	ANNUAL	AREA	5	609619.86	4205570.17	0.17733	25.79	25.79	0	ANNUAL	ROAD	5
609606.44	4205575.87	0.13109	25.3	25.3	0	ANNUAL	AREA	5	609606.44	4205575.87	0.17252	25.3	25.3	0	ANNUAL	ROAD	5
609593.95	4205581.56	0.12822	25.11	25.11	0	ANNUAL	AREA	5	609593.95	4205581.56	0.17146	25.11	25.11	0	ANNUAL	ROAD	5
609581.47	4205590.01	0.13024	24.63	24.63	0	ANNUAL	AREA	5	609581.47	4205590.01	0.1747	24.63	24.63	0	ANNUAL	ROAD	5
609565.8	4205547.33	0.13353	23.66	23.66	0	ANNUAL	AREA	5	609565.8	4205547.33	0.17779	23.66	23.66	0	ANNUAL	ROAD	5
609556.72	4205535.92	0.13588	23.54	23.54	0	ANNUAL	AREA	5	609556.72	4205535.92	0.18142	23.54	23.54	0	ANNUAL	ROAD	5
609547.65	4205524.51	0.13829	22.82	22.82	0	ANNUAL	AREA	5	609547.65	4205524.51	0.18482	22.82	22.82	0	ANNUAL	ROAD	5
609538.58	4205513.1	0.14078	22.09	22.09	0	ANNUAL	AREA	5	609538.58	4205513.1	0.18832	22.09	22.09	0	ANNUAL	ROAD	5
609529.5	4205501.69	0.14329	21.38	21.38	0	ANNUAL	AREA	5	609529.5	4205501.69	0.19192	21.38	21.38	0	ANNUAL	ROAD	5
609520.4	4205490.28	0.14579	20.67	20.67	0	ANNUAL	AREA	5	609520.4	4205490.28	0.19542	20.67	20.67	0	ANNUAL	ROAD	5
609511.32	4205478.87	0.14828	19.96	19.96	0	ANNUAL	AREA	5	609511.32	4205478.87	0.19892	19.96	19.96	0	ANNUAL	ROAD	5
609502.24	4205467.46	0.15077	19.25	19.25	0	ANNUAL	AREA	5	609502.24	4205467.46	0.20242	19.25	19.25	0	ANNUAL	ROAD	5
609493.16	4205456.05	0.15326	18.54	18.54	0	ANNUAL	AREA	5	609493.16	4205456.05	0.20592	18.54	18.54	0	ANNUAL	ROAD	5
609484.08	4205444.64	0.15575	17.83	17.83	0	ANNUAL	AREA	5	609484.08	4205444.64	0.20942	17.83	17.83	0	ANNUAL	ROAD	5
609475.0	4205433.23	0.15824	17.12	17.12	0	ANNUAL	AREA	5	609475.0	4205433.23	0.21292	17.12	17.12	0	ANNUAL	ROAD	5
609465.92	4205421.82	0.16073	16.41	16.41	0	ANNUAL	AREA	5	609465.92	4205421.82	0.21642	16.41	16.41	0	ANNUAL	ROAD	5
609456.84	4205410.41	0.16322	15.70	15.70	0	ANNUAL	AREA	5	609456.84	4205410.41	0.21992	15.70	15.70	0	ANNUAL	ROAD	5
609447.76	4205398.99	0.16571	15.00	15.00	0	ANNUAL	AREA	5	609447.76	4205398.99	0.22342	15.00	15.00	0	ANNUAL	ROAD	5
609438.68	4205387.58	0.16820	14.29	14.29	0	ANNUAL	AREA	5	609438.68	4205387.58	0.22692	14.29	14.29	0	ANNUAL	ROAD	5
609429.60	4205376.17	0.17069	13.58	13.58	0	ANNUAL	AREA	5	609429.60	4205376.17	0.23042	13.58	13.58	0	ANNUAL	ROAD	5
609420.52	4205364.76	0.17318	12.87	12.87	0	ANNUAL	AREA	5	609420.52	4205364.76	0.23392	12.87	12.87	0	ANNUAL	ROAD	5
609411.44	4205353.35	0.17567	12.16	12.16	0	ANNUAL	AREA	5	609411.44	4205353.35	0.23742	12.16	12.16	0	ANNUAL	ROAD	5
609402.36	4205341.94	0.17816	11.45	11.45	0	ANNUAL	AREA	5	609402.36	4205341.94	0.24092	11.45	11.45	0	ANNUAL	ROAD	5
609393.28	4205330.53	0.18065	10.74	10.74	0	ANNUAL	AREA	5	609393.28	4205330.53	0.24442	10.74	10.74	0	ANNUAL	ROAD	5
609384.20	4205319.12	0.18314	10.03	10.03	0	ANNUAL	AREA	5	609384.20	4205319.12	0.24792	10.03	10.03	0	ANNUAL	ROAD	5
609375.12	4205307.71	0.18563	9.32	9.32	0	ANNUAL	AREA	5	609375.12	4205307.71	0.25142	9.32	9.32	0	ANNUAL	ROAD	5
609366.04	4205296.30	0.18812	8.61	8.61	0	ANNUAL	AREA	5	609366.04	4205296.30	0.25492	8.61	8.61	0	ANNUAL	ROAD	5
609356.96	4205284.89	0.19061	7.90	7.90	0	ANNUAL	AREA	5	609356.96	4205284.89	0.25842	7.90	7.90	0	ANNUAL	ROAD	5
609347.88	4205273.48	0.19310	7.19	7.19	0	ANNUAL	AREA	5	609347.88	4205273.48	0.26192	7.19	7.19	0	ANNUAL	ROAD	5
609338.80	4205262.07	0.19559	6.48	6.48	0	ANNUAL	AREA	5	609338.80	4205262.07	0.26542	6.48	6.48	0	ANNUAL	ROAD	5
609329.72	4205250.66	0.19808	5.77	5.77	0	ANNUAL	AREA	5	609329.72	4205250.66	0.26892	5.77	5.77	0	ANNUAL	ROAD	5
609320.64	4205239.25	0.13126	46.21	49.84	0	ANNUAL	AREA	5	609320.64	4205239.25	0.33855	46.21	49.84	0	ANNUAL	ROAD	5
609311.56	4205227.83	0.12571	48.59	49.26	0	ANNUAL	AREA	5	609311.56	4205227.83	0.34491	48.59	49.26	0	ANNUAL	ROAD	5
609302.48	4205216.42	0.12027	49.76	49.76	0	ANNUAL	AREA	5	609302.48	4205216.42	0.35164	49.76	49.76	0	ANNUAL	ROAD	5
609293.40	4205205.01	0.11482	49.95	49.95	0	ANNUAL											

609637.42	4205596.23	0.13102	25.79	25.79	0	ANNUAL	AREA	5	609637.42	4205596.23	0.16887	25.79	25.79	0	ANNUAL	ROAD	5
609623.94	4205601.95	0.12635	25.84	25.84	0	ANNUAL	AREA	5	609623.94	4205601.95	0.16465	25.84	25.84	0	ANNUAL	ROAD	5
609610.45	4205607.67	0.12205	25.93	25.93	0	ANNUAL	AREA	5	609610.45	4205607.67	0.16063	25.93	25.93	0	ANNUAL	ROAD	5
609596.96	4205613.4	0.11821	25.99	25.99	0	ANNUAL	AREA	5	609596.96	4205613.4	0.15659	25.99	25.99	0	ANNUAL	ROAD	5
609574.36	4205607.65	0.11544	25.05	25.05	0	ANNUAL	AREA	5	609574.36	4205607.65	0.15555	25.05	25.05	0	ANNUAL	ROAD	5
609555.24	4205584.72	0.11111	24.46	24.46	0	ANNUAL	AREA	5	609555.24	4205584.72	0.15384	24.46	24.46	0	ANNUAL	ROAD	5
609556.12	4205584.72	0.12029	24.64	24.64	0	ANNUAL	AREA	5	609556.12	4205584.72	0.16145	24.64	24.64	0	ANNUAL	ROAD	5
609547	4205573.25	0.12245	24.11	24.11	0	ANNUAL	AREA	5	609547	4205573.25	0.16438	24.11	24.11	0	ANNUAL	ROAD	5
609537.88	4205561.78	0.12469	23.61	23.61	0	ANNUAL	AREA	5	609537.88	4205561.78	0.1674	23.61	23.61	0	ANNUAL	ROAD	5
609528.76	4205550.32	0.12629	23.13	23.13	0	ANNUAL	AREA	5	609528.76	4205550.32	0.17052	23.13	23.13	0	ANNUAL	ROAD	5
609519.64	4205538.85	0.12913	22.08	22.08	0	ANNUAL	AREA	5	609519.64	4205538.85	0.17342	22.08	22.08	0	ANNUAL	ROAD	5
609510.53	4205527.38	0.13137	20.96	20.96	0	ANNUAL	AREA	5	609510.53	4205527.38	0.17637	20.96	20.96	0	ANNUAL	ROAD	5
609346.39	4205320.97	0.13501	42.93	42.93	0	ANNUAL	AREA	5	609346.39	4205320.97	0.27754	42.93	42.93	0	ANNUAL	ROAD	5
609337.27	4205309.51	0.13246	43.16	43.16	0	ANNUAL	AREA	5	609337.27	4205309.51	0.27732	43.16	43.16	0	ANNUAL	ROAD	5
609328.15	4205298.04	0.13157	42.36	42.36	0	ANNUAL	AREA	5	609328.15	4205298.04	0.28322	42.36	42.36	0	ANNUAL	ROAD	5
609309.91	4205275.11	0.12579	43.59	43.59	0	ANNUAL	AREA	5	609309.91	4205275.11	0.29518	43.59	43.59	0	ANNUAL	ROAD	5
609300.79	4205263.64	0.12255	44.57	44.57	0	ANNUAL	AREA	5	609300.79	4205263.64	0.30113	44.57	44.57	0	ANNUAL	ROAD	5
609264.32	4205217.77	0.11041	49.12	49.12	0	ANNUAL	AREA	5	609264.32	4205217.77	0.32365	49.12	49.12	0	ANNUAL	ROAD	5
609255.2	4205206.3	0.10831	49.93	49.93	0	ANNUAL	AREA	5	609255.2	4205206.3	0.32918	49.93	49.93	0	ANNUAL	ROAD	5
609246.08	4205194.84	0.10661	50.58	50.58	0	ANNUAL	AREA	5	609246.08	4205194.84	0.33467	50.58	50.58	0	ANNUAL	ROAD	5
609236.96	4205183.37	0.10556	50.86	50.86	0	ANNUAL	AREA	5	609236.96	4205183.37	0.34061	50.86	50.86	0	ANNUAL	ROAD	5
609227.84	4205171.9	0.10478	51.07	51.07	0	ANNUAL	AREA	5	609227.84	4205171.9	0.34664	51.07	51.07	0	ANNUAL	ROAD	5
609209.6	4205148.97	0.10453	50.88	50.88	0	ANNUAL	AREA	5	609209.6	4205148.97	0.35962	50.88	50.88	0	ANNUAL	ROAD	5
609200.48	4205137.5	0.10406	51.22	51.22	0	ANNUAL	AREA	5	609200.48	4205137.5	0.36554	51.22	51.22	0	ANNUAL	ROAD	5
609191.36	4205126.03	0.10362	51.64	51.64	0	ANNUAL	AREA	5	609191.36	4205126.03	0.37137	51.64	51.64	0	ANNUAL	ROAD	5
610176.9	4205367.32	0.87164	24.68	24.68	0	ANNUAL	AREA	5	610176.9	4205367.32	0.57394	24.68	24.68	0	ANNUAL	ROAD	5
610184.31	4205354.36	0.93505	24.97	24.97	0	ANNUAL	AREA	5	610184.31	4205354.36	0.59982	24.97	24.97	0	ANNUAL	ROAD	5
610191.72	4205341.4	1.00521	24.55	24.55	0	ANNUAL	AREA	5	610191.72	4205341.4	0.6252	24.55	24.55	0	ANNUAL	ROAD	5
610199.13	4205328.44	1.0757	24.38	24.38	0	ANNUAL	AREA	5	610199.13	4205328.44	0.65119	24.38	24.38	0	ANNUAL	ROAD	5
610206.53	4205315.48	1.14543	24.57	24.57	0	ANNUAL	AREA	5	610206.53	4205315.48	0.67785	24.57	24.57	0	ANNUAL	ROAD	5
610213.94	4205302.53	1.2161	24.72	24.72	0	ANNUAL	AREA	5	610213.94	4205302.53	0.70447	24.72	24.72	0	ANNUAL	ROAD	5
610221.35	4205289.57	1.28781	24.81	24.81	0	ANNUAL	AREA	5	610221.35	4205289.57	0.73093	24.81	24.81	0	ANNUAL	ROAD	5
610228.76	4205276.61	1.35866	24.95	24.95	0	ANNUAL	AREA	5	610228.76	4205276.61	0.75717	24.95	24.95	0	ANNUAL	ROAD	5
610236.17	4205263.65	1.42757	25.33	25.33	0	ANNUAL	AREA	5	610236.17	4205263.65	0.78332	25.33	25.33	0	ANNUAL	ROAD	5
610243.58	4205250.69	1.4938	26.04	26.04	0	ANNUAL	AREA	5	610243.58	4205250.69	0.80932	26.04	26.04	0	ANNUAL	ROAD	5
610250.99	4205237.73	1.55919	26.2	26.2	0	ANNUAL	AREA	5	610250.99	4205237.73	0.8336	26.2	26.2	0	ANNUAL	ROAD	5
610258.39	4205224.78	1.62002	26.79	26.79	0	ANNUAL	AREA	5	610258.39	4205224.78	0.85741	26.79	26.79	0	ANNUAL	ROAD	5
610265.8	4205211.82	1.67819	26.72	26.72	0	ANNUAL	AREA	5	610265.8	4205211.82	0.87888	26.72	26.72	0	ANNUAL	ROAD	5
610273.21	4205198.86	1.73981	26.81	26.81	0	ANNUAL	AREA	5	610273.21	4205198.86	0.89858	26.81	26.81	0	ANNUAL	ROAD	5
610280.62	4205185.9	1.77713	27.17	27.17	0	ANNUAL	AREA	5	610280.62	4205185.9	0.91765	27.17	27.17	0	ANNUAL	ROAD	5
610288.03	4205172.94	1.8175	27.12	27.12	0	ANNUAL	AREA	5	610288.03	4205172.94	0.93356	27.12	27.12	0	ANNUAL	ROAD	5
610295.44	4205159.99	1.85072	26.81	26.81	0	ANNUAL	AREA	5	610295.44	4205159.99	0.94667	26.81	26.81	0	ANNUAL	ROAD	5
610302.84	4205147.03	1.87592	26.58	26.58	0	ANNUAL	AREA	5	610302.84	4205147.03	0.95733	26.58	26.58	0	ANNUAL	ROAD	5
610310.25	4205134.07	1.89268	26.36	26.36	0	ANNUAL	AREA	5	610310.25	4205134.07	0.96514	26.36	26.36	0	ANNUAL	ROAD	5
610317.66	4205121.11	1.90077	26.19	26.19	0	ANNUAL	AREA	5	610317.66	4205121.11	0.96999	26.19	26.19	0	ANNUAL	ROAD	5
610325.07	4205108.15	1.90004	26.03	26.03	0	ANNUAL	AREA	5	610325.07	4205108.15	0.97164	26.03	26.03	0	ANNUAL	ROAD	5
610332.48	4205095.2	1.89952	25.96	25.96	0	ANNUAL	AREA	5	610332.48	4205095.2	0.98562	25.96	25.96	0	ANNUAL	ROAD	5
610339.89	4205082.24	1.86799	24.84	24.84	0	ANNUAL	AREA	5	610339.89	4205082.24	0.9634	24.84	24.84	0	ANNUAL	ROAD	5
610347.29	4205069.28	1.84292	24.71	24.71	0	ANNUAL	AREA	5	610347.29	4205069.28	0.95495	24.71	24.71	0	ANNUAL	ROAD	5
610354.7	4205056.32	1.80542	24.09	24.09	0	ANNUAL	AREA	5	610354.7	4205056.32	0.94223	24.09	24.09	0	ANNUAL	ROAD	5
610362.11	4205043.36	1.76071	23.62	23.62	0	ANNUAL	AREA	5	610362.11	4205043.36	0.92645	23.62	23.62	0	ANNUAL	ROAD	5
610369.52	4205030.41	1.71522	24.13	24.13	0	ANNUAL	AREA	5	610369.52	4205030.41	0.90919	24.13	24.13	0	ANNUAL	ROAD	5
610376.93	4205017.45	1.66047	24.18	24.18	0	ANNUAL	AREA	5	610376.93	4205017.45	0.88815	24.18	24.18	0	ANNUAL	ROAD	5
610384.34	4205004.49	1.59994	24.16	25.29	0	ANNUAL	AREA	5	610384.34	4205004.49	0.86426	24.16	25.29	0	ANNUAL	ROAD	5
610391.74	4204991.53	1.5357	25.46	25.46	0	ANNUAL	AREA	5	610391.74	4204991.53	0.8399	25.46	25.46	0	ANNUAL	ROAD	5
610399.15	4204978.57	1.46548	25.72	25.72	0	ANNUAL	AREA	5	610399.15	4204978.57	0.81177	25.72	25.72	0	ANNUAL	ROAD	5
610406.56	4204965.62	1.39349	24.95	25.64	0	ANNUAL	AREA	5	610406.56	4204965.62	0.78048	24.95	25.64	0	ANNUAL	ROAD	5
610197	4205392.3	0.78752	24.48	24.48	0	ANNUAL	AREA	5	610197	4205392.3	0.53242	24.48	24.48	0	ANNUAL	ROAD	5
610183.45	4205398.04	0.75556	24.2	24.2	0	ANNUAL	AREA	5	610183.45	4205398.04	0.52012	24.2	24.2	0	ANNUAL	ROAD	5
610169.91	4205403.79	0.72636	23.55	23.55	0	ANNUAL	AREA	5	610169.91	4205403.79	0.50706	23.55	23.55	0	ANNUAL	ROAD	5
610156.36	4205409.54	0.69223	23.54	23.54	0	ANNUAL	AREA	5	610156.36	4205409.54	0.49445	23.54	23.54	0	ANNUAL	ROAD	5
610142.82	4205415.29	0.65327	24.14	24.14	0	ANNUAL	AREA	5	610142.82	4205415.29	0.4823	24.14	24.14	0	ANNUAL	ROAD	5
610129.27	4205421.03	0.61884	24.23	24.23	0	ANNUAL	AREA	5	610129.27	4205421.03	0.46947	24.23	24.23	0	ANNUAL	ROAD	5
610115.73	4205427.78	0.58408	24.38	24.38	0	ANNUAL	AREA	5	610115.73	4205427.78	0.45768	24.38	24.38	0	ANNUAL	ROAD	5
610102.18	4205432.53	0.5463	25.43	25.43	0	ANNUAL	AREA	5	610102.18	4205432.53	0.44461	25.43	25.43	0	ANNUAL	ROAD	5
610088.64	4205438.27	0.5144	25.64	25.64	0	ANNUAL	AREA	5	610088.64	4205438.27	0.43181	25.64	25.64	0	ANNUAL	ROAD	5
610075.09	4205444.02	0.48631	25.36	25.36	0	ANNUAL	AREA	5	610075.09	4205444.02	0.41859	25.36	25.36	0	ANNUAL	ROAD	5
610061.55	4205449.77	0.4569	25.68	25.68	0	ANNUAL	AREA	5	610061.55	4205449.77	0.4061	25.68	25.68	0	ANNUAL	ROAD	5
610048	4205455.52	0.43198	25.39	25.39	0	ANNUAL	AREA	5	610048	4205455.52	0.39321	25.39	25.39	0	ANNUAL	ROAD	5
610034.46	4205461.26	0.40733	25.44	25.44													

610217.95	4205373.59	0.87828	24.44	24.44	0	ANNUAL	AREA	5	610217.95	4205373.59	0.56706	24.44	24.44	0	ANNUAL	ROAD	5
610225.36	4205360.63	0.93845	24.26	24.26	0	ANNUAL	AREA	5	610225.36	4205360.63	0.59021	24.26	24.26	0	ANNUAL	ROAD	5
610232.77	4205347.67	0.99906	24.24	24.24	0	ANNUAL	AREA	5	610232.77	4205347.67	0.61374	24.24	24.24	0	ANNUAL	ROAD	5
610240.18	4205334.72	1.06008	24.32	24.32	0	ANNUAL	AREA	5	610240.18	4205334.72	0.63745	24.32	24.32	0	ANNUAL	ROAD	5
610247.58	4205321.76	1.12175	24.38	24.38	0	ANNUAL	AREA	5	610247.58	4205321.76	0.66111	24.38	24.38	0	ANNUAL	ROAD	5
610254.99	4205310.88	1.18530	24.44	24.44	0	ANNUAL	AREA	5	610254.99	4205310.88	0.68548	24.44	24.44	0	ANNUAL	ROAD	5
610262.4	4205295.84	1.24503	24.3	24.3	0	ANNUAL	AREA	5	610262.4	4205295.84	0.70741	24.3	24.3	0	ANNUAL	ROAD	5
610269.81	4205282.88	1.30511	24.19	24.19	0	ANNUAL	AREA	5	610269.81	4205282.88	0.72978	24.19	24.19	0	ANNUAL	ROAD	5
610277.22	4205269.93	1.36266	24.32	24.32	0	ANNUAL	AREA	5	610277.22	4205269.93	0.75179	24.32	24.32	0	ANNUAL	ROAD	5
610284.63	4205256.97	1.41721	24.96	24.96	0	ANNUAL	AREA	5	610284.63	4205256.97	0.77377	24.96	24.96	0	ANNUAL	ROAD	5
610292.03	4205244.01	1.46856	25.86	25.86	0	ANNUAL	AREA	5	610292.03	4205244.01	0.79492	25.86	25.86	0	ANNUAL	ROAD	5
610299.44	4205231.05	1.51716	26.28	26.28	0	ANNUAL	AREA	5	610299.44	4205231.05	0.8142	26.28	26.28	0	ANNUAL	ROAD	5
610306.85	4205218.09	1.56114	26.96	26.96	0	ANNUAL	AREA	5	610306.85	4205218.09	0.83235	26.96	26.96	0	ANNUAL	ROAD	5
610314.26	4205205.14	1.60114	26.86	26.86	0	ANNUAL	AREA	5	610314.26	4205205.14	0.84773	26.86	26.86	0	ANNUAL	ROAD	5
610321.67	4205192.18	1.63562	26.36	26.36	0	ANNUAL	AREA	5	610321.67	4205192.18	0.86067	26.36	26.36	0	ANNUAL	ROAD	5
610329.08	4205179.22	1.66332	25.78	25.78	0	ANNUAL	AREA	5	610329.08	4205179.22	0.87136	25.78	25.78	0	ANNUAL	ROAD	5
610336.48	4205166.26	1.68431	25.58	25.58	0	ANNUAL	AREA	5	610336.48	4205166.26	0.88032	25.58	25.58	0	ANNUAL	ROAD	5
610343.89	4205153.3	1.69814	25.33	25.33	0	ANNUAL	AREA	5	610343.89	4205153.3	0.88671	25.33	25.33	0	ANNUAL	ROAD	5
610351.3	4205140.35	1.70451	25.03	25.03	0	ANNUAL	AREA	5	610351.3	4205140.35	0.89039	25.03	25.03	0	ANNUAL	ROAD	5
610358.71	4205127.39	1.70343	24.75	24.75	0	ANNUAL	AREA	5	610358.71	4205127.39	0.89135	24.75	24.75	0	ANNUAL	ROAD	5
610366.12	4205114.43	1.69523	24.58	24.58	0	ANNUAL	AREA	5	610366.12	4205114.43	0.88964	24.58	24.58	0	ANNUAL	ROAD	5
610373.53	4205101.47	1.67972	24.4	24.4	0	ANNUAL	AREA	5	610373.53	4205101.47	0.88501	24.4	24.4	0	ANNUAL	ROAD	5
610380.93	4205088.51	1.657	24.18	24.18	0	ANNUAL	AREA	5	610380.93	4205088.51	0.87742	24.18	24.18	0	ANNUAL	ROAD	5
610388.34	4205075.55	1.62821	24.09	24.09	0	ANNUAL	AREA	5	610388.34	4205075.55	0.86713	24.09	24.09	0	ANNUAL	ROAD	5
610395.75	4205062.6	1.59225	23.83	23.83	0	ANNUAL	AREA	5	610395.75	4205062.6	0.85377	23.83	23.83	0	ANNUAL	ROAD	5
610403.16	4205049.64	1.55029	23.35	23.35	0	ANNUAL	AREA	5	610403.16	4205049.64	0.8374	23.35	23.35	0	ANNUAL	ROAD	5
610410.57	4205036.68	1.50616	23.77	23.77	0	ANNUAL	AREA	5	610410.57	4205036.68	0.81984	23.77	23.77	0	ANNUAL	ROAD	5
610417.98	4205023.72	1.45707	24.12	24.12	0	ANNUAL	AREA	5	610417.98	4205023.72	0.7998	24.12	24.12	0	ANNUAL	ROAD	5
610425.38	4205010.76	1.4027	24.2	24.2	0	ANNUAL	AREA	5	610425.38	4205010.76	0.77727	24.2	24.2	0	ANNUAL	ROAD	5
610432.79	4204997.81	1.34887	24.34	24.34	0	ANNUAL	AREA	5	610432.79	4204997.81	0.75294	24.34	24.34	0	ANNUAL	ROAD	5
610440.2	4204984.85	1.29399	24.27	24.27	0	ANNUAL	AREA	5	610440.2	4204984.85	0.72675	24.27	24.27	0	ANNUAL	ROAD	5
610230.59	4205411.55	0.74812	23.71	23.71	0	ANNUAL	AREA	5	610230.59	4205411.55	0.50523	23.71	23.71	0	ANNUAL	ROAD	5
610216.99	4205417.32	0.71753	23.85	23.85	0	ANNUAL	AREA	5	610216.99	4205417.32	0.49454	23.85	23.85	0	ANNUAL	ROAD	5
610203.39	4205423.09	0.68881	23.63	23.63	0	ANNUAL	AREA	5	610203.39	4205423.09	0.48315	23.63	23.63	0	ANNUAL	ROAD	5
610189.8	4205428.86	0.65811	23.66	23.66	0	ANNUAL	AREA	5	610189.8	4205428.86	0.47173	23.66	23.66	0	ANNUAL	ROAD	5
610176.2	4205434.63	0.62854	23.53	23.53	0	ANNUAL	AREA	5	610176.2	4205434.63	0.45993	23.53	23.53	0	ANNUAL	ROAD	5
610162.61	4205440.4	0.59824	23.2	23.2	0	ANNUAL	AREA	5	610162.61	4205440.4	0.44776	23.2	23.2	0	ANNUAL	ROAD	5
610149.01	4205446.16	0.56555	23.88	23.88	0	ANNUAL	AREA	5	610149.01	4205446.16	0.43649	23.88	23.88	0	ANNUAL	ROAD	5
610135.42	4205451.93	0.53125	24.02	24.02	0	ANNUAL	AREA	5	610135.42	4205451.93	0.42461	24.02	24.02	0	ANNUAL	ROAD	5
610121.82	4205457.7	0.50675	24	24	0	ANNUAL	AREA	5	610121.82	4205457.7	0.41258	24	24	0	ANNUAL	ROAD	5
610108.22	4205463.47	0.47263	25.19	26.51	0	ANNUAL	AREA	5	610108.22	4205463.47	0.40168	25.19	26.51	0	ANNUAL	ROAD	5
610094.63	4205469.24	0.4415	26.4	26.4	0	ANNUAL	AREA	5	610094.63	4205469.24	0.39084	26.4	26.4	0	ANNUAL	ROAD	5
610081.03	4205475.01	0.41723	26.31	26.31	0	ANNUAL	AREA	5	610081.03	4205475.01	0.37899	26.31	26.31	0	ANNUAL	ROAD	5
610067.44	4205480.78	0.39311	26.61	26.61	0	ANNUAL	AREA	5	610067.44	4205480.78	0.36764	26.61	26.61	0	ANNUAL	ROAD	5
610053.84	4205486.55	0.37036	27.02	27.02	0	ANNUAL	AREA	5	610053.84	4205486.55	0.35657	27.02	27.02	0	ANNUAL	ROAD	5
610040.24	4205492.32	0.35091	26.88	26.88	0	ANNUAL	AREA	5	610040.24	4205492.32	0.34353	26.88	26.88	0	ANNUAL	ROAD	5
610026.65	4205498.09	0.33275	26.84	26.84	0	ANNUAL	AREA	5	610026.65	4205498.09	0.33139	26.84	26.84	0	ANNUAL	ROAD	5
610013.05	4205503.85	0.31558	27.04	27.04	0	ANNUAL	AREA	5	610013.05	4205503.85	0.32394	27.04	27.04	0	ANNUAL	ROAD	5
609999.46	4205509.62	0.30039	27.06	27.06	0	ANNUAL	AREA	5	609999.46	4205509.62	0.31364	27.06	27.06	0	ANNUAL	ROAD	5
609985.86	4205515.39	0.28762	26.59	26.59	0	ANNUAL	AREA	5	609985.86	4205515.39	0.30331	26.59	26.59	0	ANNUAL	ROAD	5
609972.26	4205521.16	0.27742	25.5	25.5	0	ANNUAL	AREA	5	609972.26	4205521.16	0.29285	25.5	25.5	0	ANNUAL	ROAD	5
609958.67	4205526.93	0.26792	24.61	24.61	0	ANNUAL	AREA	5	609958.67	4205526.93	0.28288	24.61	24.61	0	ANNUAL	ROAD	5
609945.07	4205532.7	0.25956	23.74	23.74	0	ANNUAL	AREA	5	609945.07	4205532.7	0.27326	23.74	23.74	0	ANNUAL	ROAD	5
609931.48	4205538.47	0.25029	23.28	23.28	0	ANNUAL	AREA	5	609931.48	4205538.47	0.26428	23.28	23.28	0	ANNUAL	ROAD	5
609917.88	4205544.24	0.24111	22.29	22.29	0	ANNUAL	AREA	5	609917.88	4205544.24	0.25526	22.29	22.29	0	ANNUAL	ROAD	5
609904.29	4205550.01	0.23268	22.01	22.01	0	ANNUAL	AREA	5	609904.29	4205550.01	0.24707	22.01	22.01	0	ANNUAL	ROAD	5
609890.69	4205555.78	0.22491	22.32	22.32	0	ANNUAL	AREA	5	609890.69	4205555.78	0.23959	22.32	22.32	0	ANNUAL	ROAD	5
609877.09	4205561.54	0.21751	22.2	22.2	0	ANNUAL	AREA	5	609877.09	4205561.54	0.23213	22.2	22.2	0	ANNUAL	ROAD	5
609863.5	4205567.31	0.21043	22.13	22.13	0	ANNUAL	AREA	5	609863.5	4205567.31	0.22499	22.13	22.13	0	ANNUAL	ROAD	5
609849.9	4205573.08	0.20359	22.13	22.13	0	ANNUAL	AREA	5	609849.9	4205573.08	0.21819	22.13	22.13	0	ANNUAL	ROAD	5
609836.31	4205578.85	0.19688	22.01	22.01	0	ANNUAL	AREA	5	609836.31	4205578.85	0.21161	22.01	22.01	0	ANNUAL	ROAD	5
609822.71	4205584.62	0.19029	21.91	21.91	0	ANNUAL	AREA	5	609822.71	4205584.62	0.20531	21.91	21.91	0	ANNUAL	ROAD	5
609809.11	4205590.39	0.18376	21.9	21.9	0	ANNUAL	AREA	5	609809.11	4205590.39	0.19933	21.9	21.9	0	ANNUAL	ROAD	5
609795.52	4205596.16	0.17734	22.15	22.15	0	ANNUAL	AREA	5	609795.52	4205596.16	0.19262	22.15	22.15	0	ANNUAL	ROAD	5
609781.92	4205601.93	0.17092	22.29	22.29	0	ANNUAL	AREA	5	609781.92	4205601.93	0.18836	22.29	22.29	0	ANNUAL	ROAD	5
609768.33	4205607.7	0.16456	22.07	22.07	0	ANNUAL	AREA	5	609768.33	4205607.7	0.18302	22.07	22.07	0	ANNUAL	ROAD	5
609754.73	4205613.47	0.15834	22.43	22.43	0	ANNUAL	AREA	5	609754.73	4205613.47	0.17821	22.43	22.43	0	ANNUAL	ROAD	5
609741.14	4205619.23	0.15223	22.5	22.5	0	ANNUAL	AREA	5	609741.14	4205619.23	0.17347	22.5	22.5	0	ANNUAL	ROAD	5
609727.54	4205625	0.14627	22.35	22.35	0	ANNUAL	AREA	5	609727.54	4205625	0.16883	22.35	22.35	0	ANNUAL	ROAD	5
609713.94	4205630.77	0.14052	22.23	22.23	0	ANNUAL	AREA	5	609713.94	4205630.77	0.16441	22.23	22.23	0</			

610384.94	4205159.58	1.53625	24.35	24.35	0	ANNUAL	AREA	5	610384.94	4205159.58	0.82102	24.35	24.35	0	ANNUAL	ROAD	5
610392.35	4205146.62	1.53675	24.46	24.46	0	ANNUAL	AREA	5	610392.35	4205146.62	0.82218	24.46	24.46	0	ANNUAL	ROAD	5
610399.76	4205133.66	1.53078	24.47	24.47	0	ANNUAL	AREA	5	610399.76	4205133.66	0.82076	24.47	24.47	0	ANNUAL	ROAD	5
610407.17	4205120.7	1.5187	24.46	24.46	0	ANNUAL	AREA	5	610407.17	4205120.7	0.81682	24.46	24.46	0	ANNUAL	ROAD	5
610414.57	4205107.75	1.49998	24.26	24.26	0	ANNUAL	AREA	5	610414.57	4205107.75	0.81015	24.26	24.26	0	ANNUAL	ROAD	5
610421.98	4205094.79	1.47582	24.12	24.12	0	ANNUAL	AREA	5	610421.98	4205094.79	0.80109	24.12	24.12	0	ANNUAL	ROAD	5
610429.39	4205081.83	1.46699	24.12	24.12	0	ANNUAL	AREA	5	610429.39	4205081.83	0.78081	24.12	24.12	0	ANNUAL	ROAD	5
610436.8	4205068.87	1.4129	24.05	24.05	0	ANNUAL	AREA	5	610436.8	4205068.87	0.77613	24.05	24.05	0	ANNUAL	ROAD	5
610444.21	4205055.91	1.37294	23.63	23.63	0	ANNUAL	AREA	5	610444.21	4205055.91	0.75983	23.63	23.63	0	ANNUAL	ROAD	5
610451.62	4205042.96	1.33044	23.36	23.36	0	ANNUAL	AREA	5	610451.62	4205042.96	0.74172	23.36	23.36	0	ANNUAL	ROAD	5
610459.03	4205030	1.28488	23.35	23.35	0	ANNUAL	AREA	5	610459.03	4205030	0.7221	23.35	23.35	0	ANNUAL	ROAD	5
610466.43	4205017.04	1.23668	23.68	23.68	0	ANNUAL	AREA	5	610466.43	4205017.04	0.70127	23.68	23.68	0	ANNUAL	ROAD	5
610473.84	4205004.08	1.18586	24.14	24.14	0	ANNUAL	AREA	5	610473.84	4205004.08	0.67914	24.14	24.14	0	ANNUAL	ROAD	5
609952.96	4205078.06	4.95633	23.76	23.76	0	ANNUAL	AREA	5	609952.96	4205078.06	1.16954	23.76	23.76	0	ANNUAL	ROAD	5
609847.46	4205124.46	3.76171	24.93	24.93	0	ANNUAL	AREA	5	609847.46	4205124.46	1.37519	24.93	24.93	0	ANNUAL	ROAD	5
609866.91	4205140.92	3.11212	25.39	25.39	0	ANNUAL	AREA	5	609866.91	4205140.92	1.27936	25.39	25.39	0	ANNUAL	ROAD	5
609805.26	4205137.88	2.94909	24.24	28.45	0	ANNUAL	AREA	5	609805.26	4205137.88	1.24227	24.24	28.45	0	ANNUAL	ROAD	5
609812.67	4205124.92	3.67263	24.41	28.52	0	ANNUAL	AREA	5	609812.67	4205124.92	1.34058	24.41	28.52	0	ANNUAL	ROAD	5
609834.38	4205137.33	3.15792	24.73	24.73	0	ANNUAL	AREA	5	609834.38	4205137.33	1.27646	24.73	24.73	0	ANNUAL	ROAD	5
609856.08	4205149.74	2.78133	25.07	25.07	0	ANNUAL	AREA	5	609856.08	4205149.74	1.21605	25.07	25.07	0	ANNUAL	ROAD	5
609829.06	4205148.56	2.69078	24.48	24.48	0	ANNUAL	AREA	5	609829.06	4205148.56	1.19859	24.48	24.48	0	ANNUAL	ROAD	5
609848.51	4205165.02	2.29159	24.55	24.55	0	ANNUAL	AREA	5	609848.51	4205165.02	1.11863	24.55	24.55	0	ANNUAL	ROAD	5
609780.57	4205159.58	1.85685	23.72	28.19	0	ANNUAL	AREA	5	609780.57	4205159.58	1.07555	23.72	28.19	0	ANNUAL	ROAD	5
609787.98	4205146.62	2.382	23.91	28.34	0	ANNUAL	AREA	5	609787.98	4205146.62	1.16395	23.91	28.34	0	ANNUAL	ROAD	5
609809.68	4205159.03	2.18688	24.04	24.04	0	ANNUAL	AREA	5	609809.68	4205159.03	1.11411	24.04	24.04	0	ANNUAL	ROAD	5
609831.39	4205171.44	2.02587	24	24	0	ANNUAL	AREA	5	609831.39	4205171.44	1.06591	24	24	0	ANNUAL	ROAD	5
609804.37	4205170.26	1.83435	23.8	23.8	0	ANNUAL	AREA	5	609804.37	4205170.26	1.04393	23.8	23.8	0	ANNUAL	ROAD	5
609823.82	4205186.72	1.64923	23.23	23.23	0	ANNUAL	AREA	5	609823.82	4205186.72	0.97657	23.23	23.23	0	ANNUAL	ROAD	5
609758.12	4205181.28	1.18589	23.71	27.75	0	ANNUAL	AREA	5	609758.12	4205181.28	0.93031	23.71	27.75	0	ANNUAL	ROAD	5
609765.53	4205168.32	1.44986	24.03	28.04	0	ANNUAL	AREA	5	609765.53	4205168.32	1.00859	24.03	28.04	0	ANNUAL	ROAD	5
609787.24	4205180.73	1.46041	23.51	27.62	0	ANNUAL	AREA	5	609787.24	4205180.73	0.9682	23.51	27.62	0	ANNUAL	ROAD	5
609808.94	4205193.14	1.42217	22.88	22.88	0	ANNUAL	AREA	5	609808.94	4205193.14	0.92918	22.88	22.88	0	ANNUAL	ROAD	5
609781.92	4205191.96	1.23721	23.35	27.56	0	ANNUAL	AREA	5	609781.92	4205191.96	0.90659	23.35	27.56	0	ANNUAL	ROAD	5
609801.37	4205208.42	1.15488	22.14	23.84	0	ANNUAL	AREA	5	609801.37	4205208.42	0.8501	22.14	23.84	0	ANNUAL	ROAD	5
609734.18	4205209.72	0.79275	23.65	27.45	0	ANNUAL	AREA	5	609734.18	4205209.72	0.77316	23.65	27.45	0	ANNUAL	ROAD	5
609746.08	4205194.51	0.96061	23.73	27.63	0	ANNUAL	AREA	5	609746.08	4205194.51	0.85255	23.73	27.63	0	ANNUAL	ROAD	5
609767.78	4205206.92	0.97807	23.14	27.5	0	ANNUAL	AREA	5	609767.78	4205206.92	0.82284	23.14	27.5	0	ANNUAL	ROAD	5
609788.74	4205217.83	0.9867	21.89	23.51	0	ANNUAL	AREA	5	609788.74	4205217.83	0.79726	21.89	23.51	0	ANNUAL	ROAD	5
609752.74	4205220.39	0.80593	23.05	27.4	0	ANNUAL	AREA	5	609752.74	4205220.39	0.75151	23.05	27.4	0	ANNUAL	ROAD	5
609768.45	4205232.36	0.79125	22.01	22.01	0	ANNUAL	AREA	5	609768.45	4205232.36	0.72156	22.01	22.01	0	ANNUAL	ROAD	5
609723.47	4205228.73	0.65806	23.15	27.38	0	ANNUAL	AREA	5	609723.47	4205228.73	0.68873	23.15	27.38	0	ANNUAL	ROAD	5
609742.92	4205242.94	0.65491	22.5	27.25	0	ANNUAL	AREA	5	609742.92	4205242.94	0.66053	22.5	27.25	0	ANNUAL	ROAD	5
609702.51	4205242.88	0.54858	23.32	27.28	0	ANNUAL	AREA	5	609702.51	4205242.88	0.6209	23.32	27.28	0	ANNUAL	ROAD	5
609721.96	4205257.1	0.54878	22.26	27.28	0	ANNUAL	AREA	5	609721.96	4205257.1	0.59627	22.26	27.28	0	ANNUAL	ROAD	5
609686.66	4205263.13	0.4612	22.72	27.23	0	ANNUAL	AREA	5	609686.66	4205263.13	0.5478	22.72	27.23	0	ANNUAL	ROAD	5
609706.11	4205277.35	0.46166	21.89	27.18	0	ANNUAL	AREA	5	609706.11	4205277.35	0.52817	21.89	27.18	0	ANNUAL	ROAD	5
609659.93	4205278.09	0.4039	22.46	27.09	0	ANNUAL	AREA	5	609659.93	4205278.09	0.49706	22.46	27.09	0	ANNUAL	ROAD	5
609689.39	4205292.31	0.40391	21.92	26.95	0	ANNUAL	AREA	5	609689.39	4205292.31	0.48085	21.92	26.95	0	ANNUAL	ROAD	5
609652.33	4205298.34	0.34928	22.34	26.93	0	ANNUAL	AREA	5	609652.33	4205298.34	0.44196	22.34	26.93	0	ANNUAL	ROAD	5
609671.78	4205312.56	0.34838	21.78	26.89	0	ANNUAL	AREA	5	609671.78	4205312.56	0.42851	21.78	26.89	0	ANNUAL	ROAD	5
609633.84	4205315.07	0.31002	22.11	26.89	0	ANNUAL	AREA	5	609633.84	4205315.07	0.40017	22.11	26.89	0	ANNUAL	ROAD	5
609653.3	4205329.28	0.30834	21.69	26.8	0	ANNUAL	AREA	5	609653.3	4205329.28	0.38889	21.69	26.8	0	ANNUAL	ROAD	5
609613.59	4205330.03	0.2789	22.23	26.97	0	ANNUAL	AREA	5	609613.59	4205330.03	0.366	22.23	26.97	0	ANNUAL	ROAD	5
609633.05	4205344.25	0.2766	21.89	26.87	0	ANNUAL	AREA	5	609633.05	4205344.25	0.35628	21.89	26.87	0	ANNUAL	ROAD	5
609596.87	4205345	0.25484	21.96	27.19	0	ANNUAL	AREA	5	609596.87	4205345	0.33736	21.96	27.19	0	ANNUAL	ROAD	5
609616.32	4205359.22	0.25232	21.96	26.97	0	ANNUAL	AREA	5	609616.32	4205359.22	0.32905	21.96	26.97	0	ANNUAL	ROAD	5
609573.98	4205363.49	0.22887	21.95	34.97	0	ANNUAL	AREA	5	609573.98	4205363.49	0.30605	21.95	34.97	0	ANNUAL	ROAD	5
609593.43	4205377.7	0.22634	21.89	27.19	0	ANNUAL	AREA	5	609593.43	4205377.7	0.29894	21.89	27.19	0	ANNUAL	ROAD	5
609551.97	4205381.09	0.20807	22.24	41.41	0	ANNUAL	AREA	5	609551.97	4205381.09	0.28064	22.24	41.41	0	ANNUAL	ROAD	5
609571.43	4205395.31	0.2057	22.04	27.38	0	ANNUAL	AREA	5	609571.43	4205395.31	0.27426	22.04	27.38	0	ANNUAL	ROAD	5
609527.32	4205399.58	0.1889	22.15	46.54	0	ANNUAL	AREA	5	609527.32	4205399.58	0.2567	22.15	46.54	0	ANNUAL	ROAD	5
609546.78	4205413.79	0.1869	22.11	27.99	0	ANNUAL	AREA	5	609546.78	4205413.79	0.25128	22.11	27.99	0	ANNUAL	ROAD	5
609505.32	4205413.66	0.17522	22	48.11	0	ANNUAL	AREA	5	609505.32	4205413.66	0.23969	22	48.11	0	ANNUAL	ROAD	5
609524.77	4205427.88	0.17359	22	45.52	0	ANNUAL	AREA	5	609524.77	4205427.88	0.23486	22	45.52	0	ANNUAL	ROAD	5
609484.19	4205429.51	0.16241	21.25	49.84	0	ANNUAL	AREA	5	609484.19	4205429.51	0.22307	21.25	49.84	0	ANNUAL	ROAD	5
609503.64	4205443.73	0.1612	21.95	47.39	0	ANNUAL	AREA	5	609503.64	4205443.73	0.21927	21.95	47.39	0	ANNUAL	ROAD	5
609463.06	4205442.71	0.15193	20.56	49.96	0	ANNUAL	AREA	5	609463.06	4205442.71	0.20971	20.56	49.96	0	ANNUAL	ROAD	5
609482.52	4205456.93	0.15107	21.15	47.96	0	ANNUAL	AREA	5	609482.52	4205456.93	0.20626	21.15	47.96	0	ANNUAL	ROAD	5
609424.92	4205453.76	0.13943	22.16	49.84	0	ANNUAL	AREA	5	609424.92	4205453.76	0.19646	22.16	49.84	0	ANNUAL	ROAD	5
609443.99	4205468.81	0.1387	20.3	49.84	0	ANNUAL											

Wild Horse Multifamily Project

Top 50 Concentrations (Out of 2262 RECEPTORS)

Unit Emissions

Size of the construction area source accounted for in AERMOD (grams/sec to grams/sec/m2 included in AERMOD)

AERMOD (19191)

AERMET (14134)

11/29/2020

MODELING OPTIONS USED: Reg DFAULT CONC ELEV URBAN

PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUPS: AREA, ROAD

T: (3(1X,F13.5),3(1X,F8.2),2X,A6,2X,A8,2X,I8.8,2X,A8)

X	Y	Unit Emissions	Unit Emissions	RECEPTOR	ZELEV	ZHILL	ZFLAG	AVE	NUM YRS
		AVERAGE CONC SITEAREA	AVERAGE CONC ROAD1						
609694.68	4204842.52	14.18158	9.33838	Planned	26.63	82.54	0	ANNUAL	5
609694.37	4204828.03	14.12386	11.03786	Planned	27.64	82.54	0	ANNUAL	5
609694.99	4204857.01	14.07222	8.06813	Planned	26.05	82.54	0	ANNUAL	5
609695.31	4204871.50	13.90743	7.04888	Planned	25.52	82.46	0	ANNUAL	5
609695.62	4204885.99	13.67568	6.20896	Planned	25.05	57.14	0	ANNUAL	5
609695.94	4204900.48	13.43714	5.49413	Planned	24.49	57.14	0	ANNUAL	5
609696.25	4204914.97	13.10275	4.88885	Planned	24.08	57.14	0	ANNUAL	5
609694.05	4204813.54	12.85774	13.59849	Planned	29.83	82.54	0	ANNUAL	5
609949.60	4204893.49	12.77556	3.80487	Planned	23.89	33.03	0	ANNUAL	5
609942.19	4204906.45	12.73617	3.66077	Planned	24.06	32.81	0	ANNUAL	5
609957.01	4204880.53	12.71456	3.93081	Planned	23.75	33.11	0	ANNUAL	5
609696.57	4204929.46	12.68365	4.36775	Planned	23.77	57.14	0	ANNUAL	5
609934.78	4204919.41	12.64234	3.49433	Planned	23.57	32.71	0	ANNUAL	5
609964.42	4204867.58	12.54081	4.02761	Planned	23.73	33.17	0	ANNUAL	5
609927.38	4204932.37	12.42795	3.31449	Planned	22.49	32.71	0	ANNUAL	5
609971.83	4204854.62	12.24667	4.07883	Planned	23.78	33.33	0	ANNUAL	5
609696.88	4204943.95	12.18259	3.90871	Planned	23.36	57.14	0	ANNUAL	5
609919.97	4204945.32	12.14696	3.15049	Planned	22.12	32.58	0	ANNUAL	5
609979.23	4204841.66	11.82050	4.07100	Planned	24	33.35	0	ANNUAL	5
609912.56	4204958.28	11.80109	2.98926	Planned	21.75	32.43	0	ANNUAL	5
609693.74	4204799.05	11.45759	17.71123	Planned	32.74	82.04	0	ANNUAL	5
609697.19	4204958.44	11.43271	3.49960	Planned	22.73	57.14	0	ANNUAL	5
609905.15	4204971.24	11.40719	2.83394	Planned	21.52	32.18	0	ANNUAL	5
609986.64	4204828.70	11.24903	3.98762	Planned	24.25	33.35	0	ANNUAL	5
609897.74	4204984.20	10.96985	2.68403	Planned	21.41	32	0	ANNUAL	5
609971.30	4204905.90	10.61275	3.38805	Planned	23.51	32.81	0	ANNUAL	5
609963.90	4204918.86	10.59683	3.28111	Planned	23.65	32.71	0	ANNUAL	5

609978.71	4204892.94	10.54411	3.48068	Planned	23.7	33.03	0	ANNUAL	5
609890.33	4204997.16	10.52491	2.54617	Planned	21.92	31.67	0	ANNUAL	5
609994.05	4204815.74	10.52408	3.81994	Planned	24.36	33.35	0	ANNUAL	5
609956.49	4204931.82	10.51066	3.15734	Planned	23.53	32.53	0	ANNUAL	5
609691.54	4204697.63	10.48593	15.23127	Non-res	34.08	82.54	0	ANNUAL	5
609697.51	4204972.93	10.40325	3.13485	Planned	21.88	57.14	0	ANNUAL	5
609986.12	4204879.98	10.38651	3.54158	Planned	23.76	33.11	0	ANNUAL	5
609949.08	4204944.77	10.30052	2.99601	Planned	21.48	32.71	0	ANNUAL	5
609693.42	4204784.57	10.13439	24.74027	Planned	35.87	57.14	0	ANNUAL	5
609993.53	4204867.03	10.13073	3.56352	Planned	23.86	33.17	0	ANNUAL	5
609941.67	4204957.73	10.06589	2.85964	Planned	21.07	32.58	0	ANNUAL	5
609882.93	4205010.11	9.99951	2.40404	Planned	21.91	31.49	0	ANNUAL	5
609691.85	4204712.12	9.97057	22.31727	Non-res	36.24	82.54	0	ANNUAL	5
609934.26	4204970.69	9.79509	2.72850	Planned	21.02	32.32	0	ANNUAL	5
610000.94	4204854.07	9.76877	3.53602	Planned	23.93	33.25	0	ANNUAL	5
609680.40	4204842.83	9.68461	9.88435	Planned	29.41	57.14	0	ANNUAL	5
609680.08	4204828.34	9.68128	11.72085	Planned	30.15	82.06	0	ANNUAL	5
610001.46	4204802.79	9.63794	3.57612	Planned	24.45	33.35	0	ANNUAL	5
609692.17	4204726.61	9.63579	36.90912	Non-res	37.58	82.54	0	ANNUAL	5
609681.34	4204886.30	9.61948	6.44137	Planned	27.58	57.14	0	ANNUAL	5
609680.71	4204857.32	9.59960	8.48545	Planned	28.81	57.14	0	ANNUAL	5
609697.82	4204987.42	9.55441	2.82648	Planned	21.65	57.14	0	ANNUAL	5
609681.03	4204871.81	9.50398	7.35490	Planned	28.09	57.14	0	ANNUAL	5
609926.85	4204983.65	9.47612	2.59826	Planned	20.99	32.18	0	ANNUAL	5
609875.52	4205023.07	9.43169	2.26584	Planned	21.94	31.1	0	ANNUAL	5
609681.66	4204900.79	9.36096	5.67323	Planned	27.06	57.14	0	ANNUAL	5
609679.77	4204813.85	9.35335	14.44841	Planned	31.75	82.04	0	ANNUAL	5
610008.35	4204841.11	9.29352	3.45270	Planned	23.98	33.35	0	ANNUAL	5
609919.45	4204996.61	9.11226	2.46951	Planned	20.97	31.83	0	ANNUAL	5
609681.97	4204915.28	9.06030	5.01978	Planned	26.56	57.14	0	ANNUAL	5
609993.01	4204918.31	8.98516	3.04067	Planned	23.38	32.43	0	ANNUAL	5
609681.41	4204687.55	8.98198	11.99309	Non-res	33.81	82.54	0	ANNUAL	5
609985.60	4204931.27	8.98053	2.95332	Planned	22.96	32.32	0	ANNUAL	5
610000.42	4204905.35	8.92114	3.10826	Planned	23.77	32.53	0	ANNUAL	5
609978.19	4204944.22	8.91354	2.86396	Planned	23.36	31.82	0	ANNUAL	5
609698.14	4205001.90	8.82829	2.56222	Planned	21.96	56.67	0	ANNUAL	5
609868.11	4205036.03	8.81002	2.12926	Planned	21.78	30.9	0	ANNUAL	5
610007.82	4204892.39	8.78171	3.14583	Planned	23.88	32.67	0	ANNUAL	5
609970.78	4204957.18	8.77381	2.74667	Planned	22.36	32.1	0	ANNUAL	5
609912.04	4205009.56	8.71024	2.34338	Planned	21	31.67	0	ANNUAL	5
610015.75	4204828.15	8.70191	3.31175	Planned	23.99	33.35	0	ANNUAL	5

609682.28	4204929.77	8.69192	4.46347	Planned	26.22	57.14	0	ANNUAL	5
609679.46	4204799.36	8.64607	18.94275	Planned	34.44	57.14	0	ANNUAL	5
610008.87	4204789.83	8.59167	3.27409	Planned	24.67	33.35	0	ANNUAL	5
609963.37	4204970.14	8.56016	2.62242	Planned	21.18	32.18	0	ANNUAL	5
610015.23	4204879.43	8.55980	3.14985	Planned	23.94	32.88	0	ANNUAL	5
609685.81	4204662.88	8.43689	8.23134	FENCEGRD	32.21	82.54	0	ANNUAL	5
609955.97	4204983.10	8.33451	2.51184	Planned	21.22	31.98	0	ANNUAL	5
609682.60	4204944.26	8.30886	3.97553	Planned	25.75	57.14	0	ANNUAL	5
609904.63	4205022.52	8.26830	2.21918	Planned	21.02	31.28	0	ANNUAL	5
610022.64	4204866.48	8.25080	3.11492	Planned	23.96	33	0	ANNUAL	5
609860.70	4205048.99	8.20708	2.01226	Planned	23.15	30.02	0	ANNUAL	5
609698.45	4205016.39	8.12001	2.33057	Planned	22.6	32.08	0	ANNUAL	5
609948.56	4204996.06	8.07266	2.40263	Planned	21.48	31.59	0	ANNUAL	5
610023.16	4204815.19	7.99521	3.11666	Planned	23.94	33.35	0	ANNUAL	5
609677.57	4204712.43	7.98829	21.01788	Non-res	37.68	82.54	0	ANNUAL	5
609679.14	4204784.88	7.94655	27.03913	Planned	37.24	57.14	0	ANNUAL	5
609677.88	4204726.92	7.91894	33.29880	Non-res	38.21	82.54	0	ANNUAL	5
609682.91	4204958.75	7.91461	3.54402	Planned	25.07	57.14	0	ANNUAL	5
610030.05	4204853.52	7.85230	3.03818	Planned	23.97	33.17	0	ANNUAL	5
609897.22	4205035.48	7.79462	2.09859	Planned	21.15	30.9	0	ANNUAL	5
609941.15	4205009.01	7.77275	2.29395	Planned	21.82	31.02	0	ANNUAL	5
610007.30	4204943.67	7.72667	2.68344	Planned	23.19	23.19	0	ANNUAL	5
610014.71	4204930.72	7.72400	2.74799	Planned	23.49	23.49	0	ANNUAL	5
609999.89	4204956.63	7.67311	2.60882	Planned	23.2	23.2	0	ANNUAL	5
610022.12	4204917.76	7.66550	2.79419	Planned	23.75	23.75	0	ANNUAL	5
609992.49	4204969.59	7.56807	2.52517	Planned	23.29	23.29	0	ANNUAL	5
610029.53	4204904.80	7.54158	2.81597	Planned	23.86	23.86	0	ANNUAL	5
609853.29	4205061.95	7.48524	1.89122	Planned	23.86	29.58	0	ANNUAL	5
609683.23	4204973.24	7.46853	3.16807	Planned	24.43	57.14	0	ANNUAL	5
609933.74	4205021.97	7.44102	2.18846	Planned	22.46	22.46	0	ANNUAL	5
609985.08	4204982.55	7.41688	2.43288	Planned	23.2	23.2	0	ANNUAL	5
610016.28	4204776.87	7.41446	2.93271	Planned	24.86	33.35	0	ANNUAL	5

CONCUNIT ug/m^3

DEPUNIT g/m^2

ATTACHMENT C
Additional Supporting Information

Wild Horse Multifamily Project Construction Assumptions

Wild Horse Multifamily Project - Unmitigated Project Construction and Buildout Year Operations
Date: 3/9/2021 3:26 PM

Construction Phase			Num Days	
Phase Name	Start Date	End Date	Week	Num Days
Site Preparation	1/2/2023	1/12/2023	6	10
Grading	1/13/2023	2/16/2023	6	30
Building Construction	2/17/2023	2/1/2024	6	300
Architectural Coating	2/2/2024	2/24/2024	6	20
Paving	2/25/2024	3/19/2024	6	20

OffRoad Equipment				Horse	Load
Phase Name	Offroad Equipment Type	Amount	Usage Hours	Power	Factor
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	158	0.38
Grading	Graders	1	8	187	0.41
Grading	Rubber Tired Dozers	1	8	247	0.40
Grading	Scrapers	2	8	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
Building Construction	Forklifts	3	8	89	0.20
Building Construction	Generator Sets	1	8	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Welders	1	8	46	0.45
Architectural Coating	Air Compressors	1	6	78	0.48
Paving	Pavers	2	8	130	0.42
Paving	Paving Equipment	2	8	132	0.36
Paving	Rollers	2	8	80	0.38

Trips and VMT	Worker Trip	Vendor Trip	Hauling Trip	Worker Trip	Vendor	Hauling
Phase Name	Number	Number	Number	Length	Trip	Trip
Site Preparation	18	0	8	10.8	7.3	20
Grading	20	0	9,308	10.8	7.3	20
Building Construction	215	62	8	10.8	7.3	20
Architectural Coating	43	0	8	10.8	7.3	20
Paving	15	0	8	10.8	7.3	20

Construction activities associated with the proposed project would require demolition, grading, utility connections, building construction, construction of the new streets, and landscaping on the project site. Construction of the proposed project would involve approximately 11,600 cubic yards (CY) of cut and 86,000 CY of fill, of which approximately 74,400 CY of soil would be import fill, as deemed appropriate by the geotechnical engineer. The maximum depth of ground disturbance would be 15 feet.

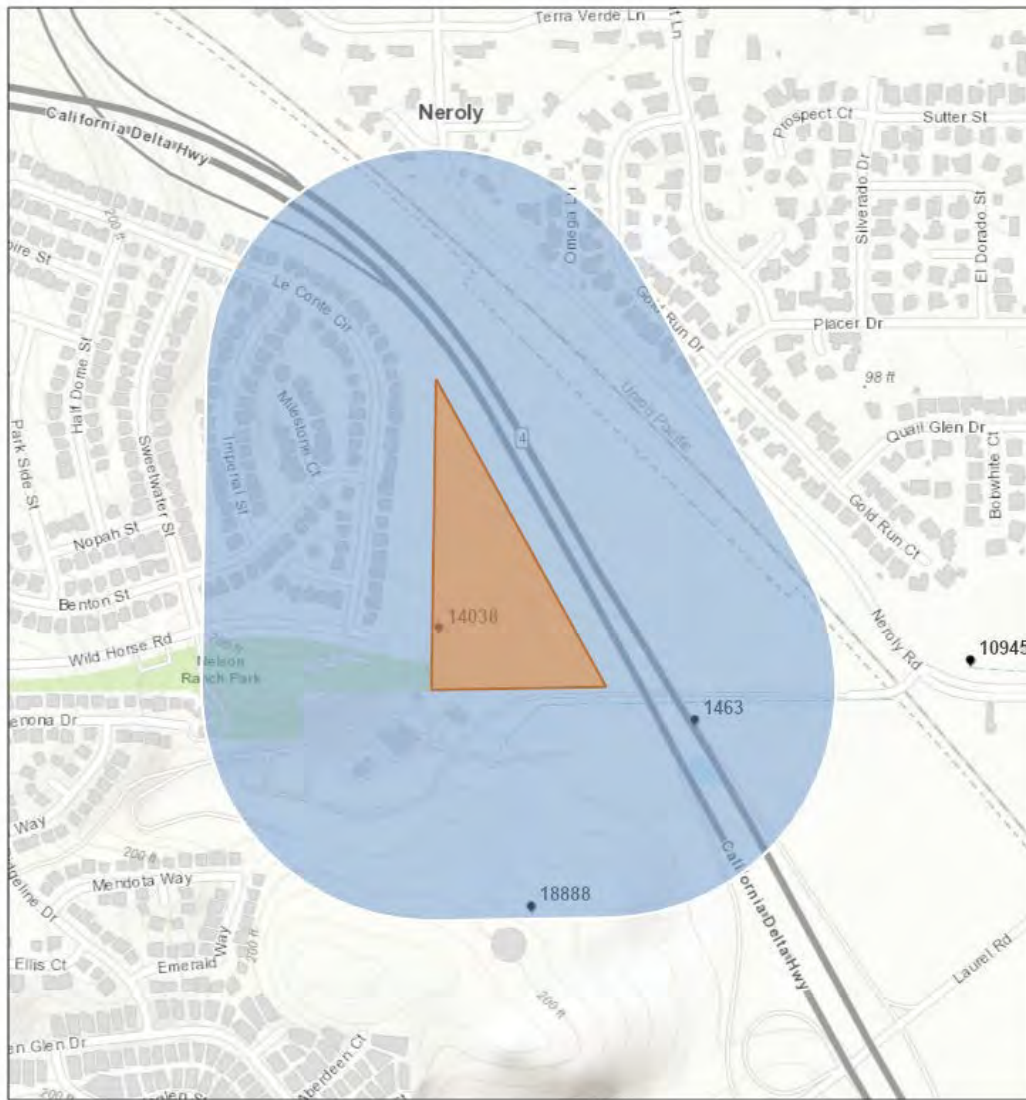


Stationary Source Risk & Hazards Screening Report

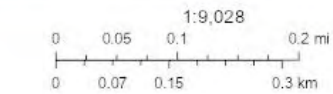
Area of Interest (AOI) Information

Area : 7,277,534.11 ft²

Mar 11 2021 20:14:23 Pacific Standard Time



● Permitted Facilities 2018



City of Antioch, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, MET/NASA, EPA, USDA

Stationary sources within 1,000 feet of the project site.

Summary

Name	Count	Area(ft ²)	Length(ft)
Permitted Facilities 2018	3	N/A	N/A

Permitted Facilities 2018

#	FACID	Name	Address	City	St
1	1463	Ironhouse Sanitary District	Highway 4	Oakley	CA
2	14038	Contra Costa Water District/Antioch Service Center	3965 Neroly Road	Antioch	CA
3	18888	Verizon Wireless (Oakley)	3965 Neroly Road	Oakley	CA

#	Zip	County	Cancer	Hazard	PM_25	Type	Count
1	94561	Contra Costa	33.110	0.110	0.040	Contact BAAQMD	1
2	94509	Contra Costa	5.170	0.010	0.010	Generators	1
3	94561	Contra Costa	1.590	0.000	0.000	Generators	1

Note: The estimated risk and hazard impacts from these sources would be expected to be substantially lower when site specific Health Risk Screening Assessments are conducted.

The screening level map is not recommended for evaluating sensitive land uses such as schools, senior centers, day cares, and health facilities.

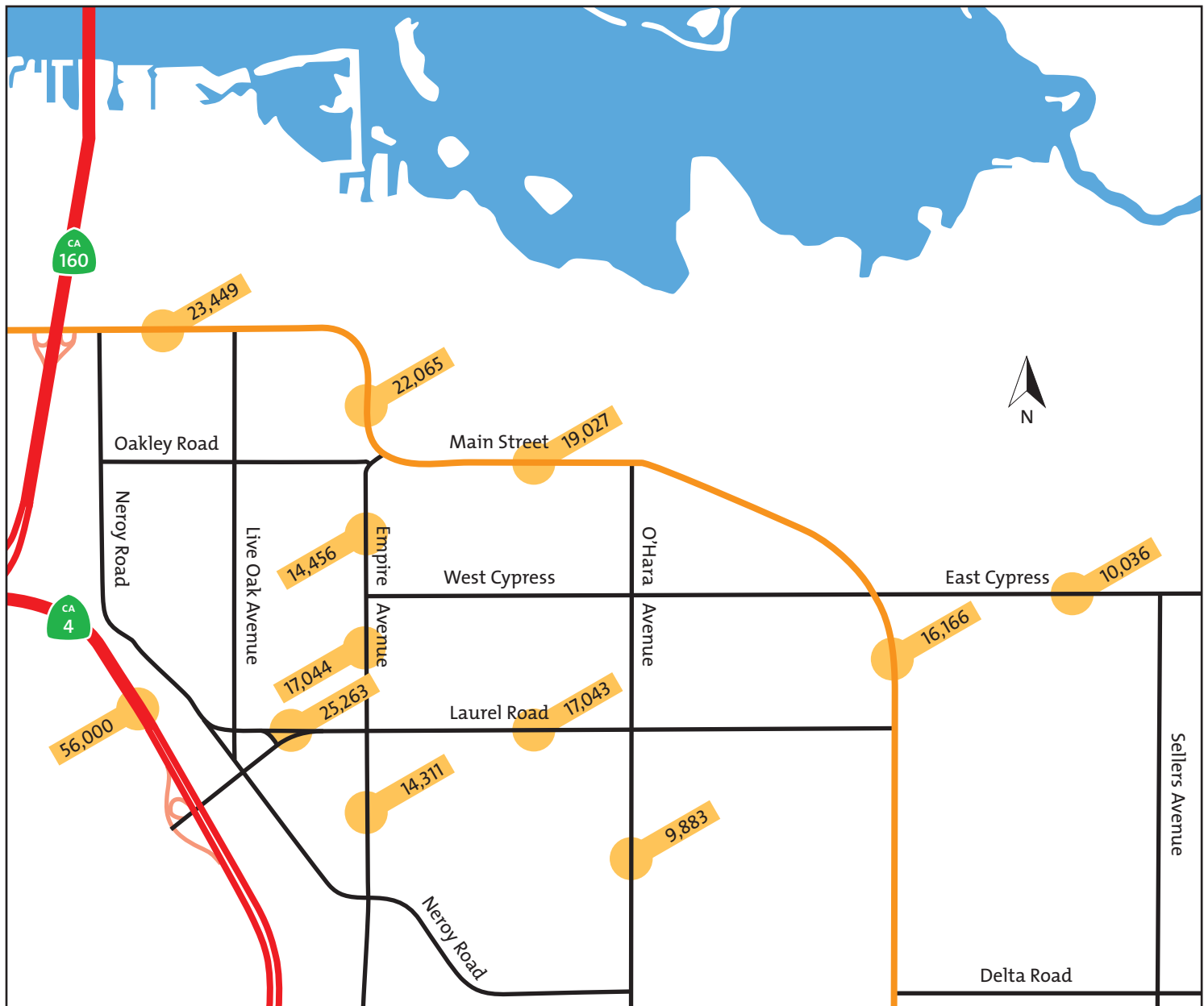
© Copyright 2018 Bay Area Air Quality Management District

**Pages from Oakley and Antioch
Traffic Reports for Roadway Volumes**



Big Time Opportunities...Small Town Feel

AVERAGE DAILY TRAFFIC COUNTS



Sources:
National Data & Surveying Services, Inc., 2013
CalTrans, 2013

Report

Citywide Engineering and Traffic Survey

Antioch, California

February 6, 2015



Transportation
Consultants

2014 Average Daily Traffic (ADT) Volumes

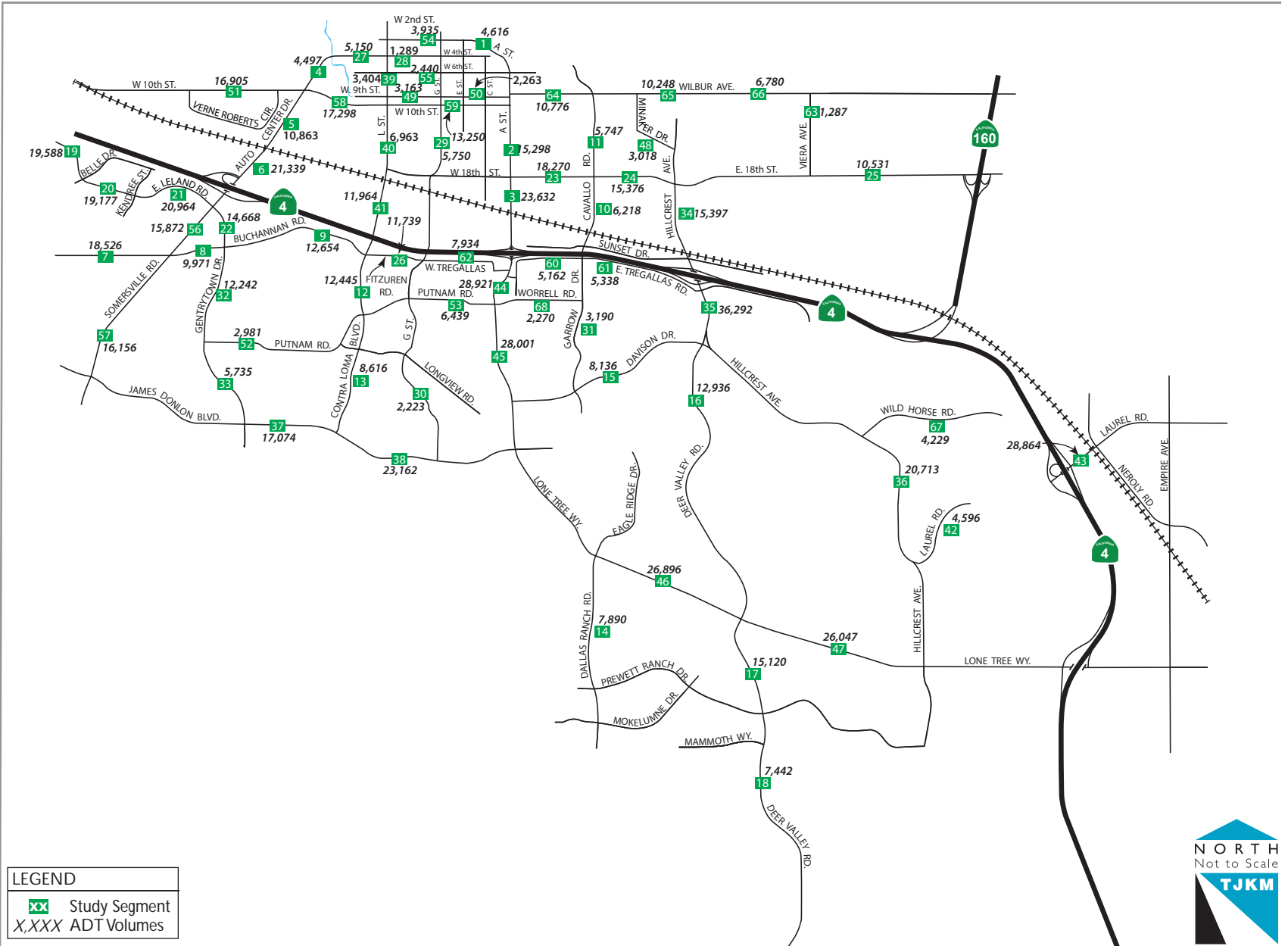


Figure 2

**APPENDIX C: BIOLOGICAL
RESOURCES TECHNICAL REPORTS**

BIOLOGICAL RESOURCES ANALYSIS REPORT

FOR THE

WILD HORSE PROPERTY

CITY OF ANTIOCH, CALIFORNIA



Prepared for:

CCP-CONTRA COSTA INVESTOR, LLC

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April 2021

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ATTACHMENT 2 TABLES

Table 1	Plant and Wildlife Species Observed Within/Adjacent to the Survey Area
Table 2	Special-Status Species Occurring Within/Adjacent to the Survey Area

ATTACHMENT 3 SITE PHOTOGRAPHS

This report should be cited as: Olberding Environmental, Inc. April 2021. *Biological Resources Analysis Report for the Wild Horse Property, Contra Costa County, California*. Prepared for CCP-Contra Costa Investor, LLC.

SUMMARY

On August 21, 2020, Olberding Environmental, Inc. conducted a field reconnaissance survey of the Wild Horse Property (Property) for the purpose of identifying sensitive plant and wildlife species, sensitive habitats, and biological constraints potentially occurring on the Property. The Property surveyed is comprised of approximately 9.6 acres located in the City of Antioch within Contra Costa County, California.

Results of a wetland delineation survey conducted on February 23, 2021 did not identify the presence of waters/wetlands subject to Corps or RWQCB jurisdiction within the survey boundary. The Property contains two artificially created features in the form of a concrete v-ditch with an associated storm drain outlet, and one constructed stormwater detention basin with associated utilities near the northern end of the parcel. Olberding Environmental visited these two areas of the Property and investigated other areas of the Property where wetlands could potentially occur. Sample points were established, and data collected; however, none of the areas had all three parameters (wetland soils, hydrology, and vegetation) that are used to indicate jurisdictional wetlands.

A query of the California Natural Diversity Database (CNDDDB) showed no special-status plant species with an occurrence on or adjacent to the Property. The closest listed plant species, Antioch Dunes evening primrose, is over 1.5 miles away, possibly extirpated from this location, and suitable habitat for this species does not exist on the Property.

Various bird species were identified to have a moderate to high potential to occur on or adjacent to the Property in a nesting or foraging capacity. The American kestrel (*Falco sparverius*), cliff swallow (*Petrochelidon pyrrhonota*), western burrowing owl (*Athene cunicularia*), red-tailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus hudsonius*), and Swainson's hawk (*Buteo swainsoni*) all have a moderate to high potential to occur in a nesting and/or foraging capacity depending on species. Red-tailed hawk and white-tailed kite were observed foraging on the Property. The site has ample ground squirrel burrows suitable for burrowing owls which are abundant in the vicinity. Breeding owls have been observed at the Contra Costa Water District pumping plant immediately south of the Property during multiple surveys, most recently in April 2018. As of the August 2020 survey, the remains of cliff swallow nests were seen under the Highway 4 overpass at the southeast end of the Property just outside the Project footprint. If project construction-related activities such as grading take place during the nesting season (February 1 through August 31), preconstruction surveys for various nesting passerine birds and raptors are recommended.

CNDDDB listed eight occurrences of California red-legged frog (*Rana draytonii*) within a 5-mile radius of the Property. There is no suitable habitat to support breeding due to the lack of any ponds on the Property and a lack of any riparian cover. Upland refuge exists on the Property within the ground squirrel burrows, but it is not likely to support frogs due to the distance to, and isolation from riparian or breeding pond habitat. The closest CNDDDB occurrence of CRLF to the Property is 3.35 miles to the southwest and there is dense urbanization between known occurrences and the Property, precluding dispersal onto the Property. There is no USFWS designated CRLF critical habitat within 5-miles of the Property. For these reasons, CRLF is presumed absent from the Property.

CNDDDB has listed sixteen occurrences of California tiger salamander (*Ambystoma californiense*) (CTS) within five miles of the Property. All the CTS occurrences within the CNDDDB were recorded more than 2.5 miles to the southwest of the Property in the open spaces near Deer Valley Road. The Property does not offer suitable breeding habitat onsite as there are no wetlands that persist long enough for the CTS breeding cycle present. The Property contains suitable upland habitat because of its extensive ground squirrel burrows; however, the site is isolated from any suitable breeding ponds which CTS may disperse from by urban development and Highway 4. The closest USFWS designated critical habitat for CTS is approximately 17 miles to the south in the City of Livermore. For these reasons CTS is presumed absent from the Property.

CNDDDB listed 1 occurrence of Alameda whipsnake (*Masticophis lateralis euryxanthus*) (AWS) within the 5-mile radius of the Property. This occurrence (#68) was approximately 5-miles to the southwest within the Black Diamond Mines Regional Park.

The Primary Constituent Elements (PCEs) of Critical Habitat for the Alameda whipsnake are the habitat components that provide: (1) Scrub/shrub communities with a mosaic of open and closed canopy: Scrub/shrub vegetation dominated by low- to medium-stature woody shrubs with a mosaic of open and closed canopy, as characterized by the chamise, chamise-eastwood manzanita, chaparral whitethorn, and interior live oak shrub vegetation series occurring at elevations from sea level to approximately 3,850 feet (1,170 meters); (2) Woodland or annual grassland plant communities contiguous to lands containing PCE 1: Woodland or annual grassland vegetation series comprised of one or more of the following: Blue oak, coast live oak, California bay, California buckeye, and California annual grassland vegetation series; (3) Lands containing rock outcrops, talus, and small mammal burrows. These areas are used for retreats (shelter), hibernacula, foraging, and dispersal, and provide additional prey population support functions. While there is grassland on the Property, it is not contiguous with PCE 1 and has been maintained via mowing and disking so that it is too short to provide adequate cover from predators, or shade for thermal regulation. There is no scrub/shrub habitat or rock outcrops on or

adjacent to the Property. For these reasons Alameda whipsnake has a low potential to be present on the Property.

No sign of bat use was observed on the Property during the January 2019 or August 2020 survey; however, based on habitat suitability, it was determined that six species of bats have a moderate potential to utilize the site in a foraging capacity only. There was no suitable roosting habitat found within the Project footprint. Construction activities should be limited to daylight hours to avoid any potential foraging bats in the grasslands.

There is a moderate potential for American badger to occur on the Property. American badgers prefer grasslands and open areas with grasslands, which can include parklands, farms, and treeless areas with friable soils and a supply of rodent prey (Quinn 2008). The nearest CNDDDB occurrence of American badger was approximately 2 miles to the south; however, with habitat fragmentation due to urban development, badgers can have foraging ranges up to 4 miles. American badgers are often found as roadkill indicating that they do attempt to cross roads and highways (typically at night) and that roads and highways are not a barrier to dispersal. The Property contains friable soils and numerous active ground squirrel burrows, providing a suitable prey-base for badgers. The Property is also within 4 miles of American badger occurrences with fragmented, but accessible habitat in between. Concurrent with surveys for burrowing owl, a qualified biologist should survey the Property for evidence of the American badger. If large burrows suitable for a badger den are located, trail cameras should be utilized to determine if badger are occupying these potential dens. If American badgers are found during surveys, appropriately sized buffers can be established to protect burrows during construction activities.

There is one CNDDDB occurrence of San Joaquin kit fox within 5-miles of the Project site. This occurrence is from the south end of Contra Loma Regional Park approximately 4.2 miles to the west. This occurrence is from 1995 and there have been numerous developments built between this occurrence and the Project site since then. Though suitable grassland habitat exists on the Property, the site is isolated from any open grassland habitat that could provide a wildlife corridor for San Joaquin kit fox to reach the Property. Three miles of neighborhoods extend to the west between Contra Loma Regional Park and the Property; between 1998 and 2009, State Route 4 was built in Oakley and Brentwood, cutting off wildlife from the east of the Property; and the Contra Costa Canal presents a barrier to entry from the south. For these reasons, San Joaquin kit fox has a low potential to occur on the Property.

1.0 INTRODUCTION

Olberding Environmental, Inc. has conducted a biological resources analysis (biological constraints assessment) of the Wildhorse Property (Property), located in Contra Costa County,

California. This biological resources analysis included a review of pertinent literature on relevant background information and habitat characteristics of the site. Our review included researching existing information in the California Natural Diversity Database (CNDDDB 2021) maintained by the CDFW, the USFWS *Information for Planning and Consultation* (IPaC), and the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* and other sources. Also included was a review of information related to species of plants and animals that could potentially utilize the described habitats identified on and immediately surrounding the Property. To assist in the assessment, a field reconnaissance investigation of the Property was conducted on January 28, 2019 and again on August 21, 2020. This report documents the methods, results, and conclusions for the reconnaissance-level surveys associated with the biological resources analysis for the Property.

2.0 LOCATION

The Property is located within the City of Antioch just south of the Highway 4 and Highway 160 interchange. It lies at the eastern terminus of Wild Horse Road and is situated immediately north of the Contra Costa Water District pump station facility. Attachment 1, Figure 1 depicts the regional location of the Property in Contra Costa County and illustrates the vicinity of the Property in relationship to the City of Antioch. Attachment 1, Figure 3 identifies the location of the Property on the USGS 7.5 Quadrangle Map for Brentwood. An aerial photograph of the Property has been included as Attachment 1, Figure 4.

Access to the Property is provided from Highway 160. Take the Main Street exit east and travel south on Neroly Road. Follow Neroly Road for 1.65 miles to the Delta De Anza Regional Trail where an entrance to the Property is located across the railroad tracks. Alternately, the western side of the Property can be accessed from the terminus of Wild Horse Road off Hillcrest Avenue in Antioch.

3.0 PROPERTY DESCRIPTION

The Property encompasses approximately 9.6 acres in a roughly triangular shape bounded on the east by California State Route 4, to the west by residential neighborhoods, and to the south by the Contra Costa Water District's Pumping Plant 4 and the Contra Costa Canal. The Property supports a single habitat type consisting of annual grassland. Characteristic vegetation includes wild oat (*Avena fatua*), Italian rye grass (*Festuca perennis*), black mustard (*Brassica nigra*), stinkwort (*Datura stramonium*), Russian thistle (*Salsola australis*), bristly oxtongue (*Helminthotheca echioides*), and curly dock (*Rumex crispus*). There are no natural drainages on the Property, however there is a roadside ditch along the Highway 4 embankment just outside the Property boundary that had flowing water during the time of the January 28, 2019 survey. It was

dry during the August 2020 survey. There is also a storm drain located at the north end of the Property that is fed by a concrete V-ditch below the residential neighborhood sound wall to the immediate west of the Property.

The topography of the Property is mostly flat with a slight rise to the southwest corner. There is also a man-made circular depression area that makes up a constructed detention basin at the north end of the Property. The topography outside the Property boundary is elevated on both the east and west sides and there are many erosional rills along the SR 4 embankment. Elevations on the Property range from 70 feet above sea level at the north end to 108 feet above sea level at the southern end. The center of the constructed detention basin has an elevation of 66 feet above sea level.

4.0 REGULATORY SETTING

4.1 Federal Regulatory Setting

4.1.1 Plants and Wildlife

The federal Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq., as amended) prohibits federal agencies from authorizing, permitting, or funding any action that would result in biological jeopardy to a plant or animal species listed as Threatened or Endangered under the Act. Listed species are taxa for which proposed and final rules have been published in the Federal Register (U.S. Fish and Wildlife Service [USFWS] 2018a). If a proposed project may jeopardize listed species, Section 7 of the ESA requires consideration of those species through formal consultations with the USFWS. Federal Proposed species (USFWS, 2018b) are species for which a proposed listing as Threatened or Endangered under ESA has been published in the Federal Register. If a proposed project may jeopardize proposed species, Section 7 of the ESA affords consideration of those species through informal conferences with USFWS. The USFWS defines federal Candidate species as “those taxa for which we have on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded by other higher priority listing actions” (USFWS, 2018b). Federal Candidate species are not afforded formal protection, although USFWS encourages other federal agencies to give consideration to Candidate species in environmental planning.

4.1.2 Wetlands/Waters

The federal government, acting through the Corps and the Environmental Protection Agency (EPA), has jurisdiction over all “waters of the United States” as authorized by §404 of the Clean

Water Act (CWA) and §10 of the Rivers and Harbors Act of 1899 (33 CFR Parts 320-330). Properties that cause the discharge of dredged or fill material into waters of the United States require permitting by the Corps. Actions affecting small areas of jurisdictional waters of the United States may qualify for a Nationwide Permit (NWP), provided conditions of the permit are met, such as avoiding impacts to threatened or endangered species or to important cultural sites. Properties that affect larger areas or which do not meet the conditions of an NWP require an Individual Permit. The process for obtaining an Individual Permit requires a detailed alternatives analysis and development of a comprehensive mitigation/monitoring plan. Waters of the United States are classified as wetlands, navigable waters, or other waters. Wetlands are transitional habitats between upland terrestrial areas and deeper aquatic habitats such as rivers and lakes. Under federal regulation, wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR Part 328.3[b]). Swamps, marshes, bogs, fens, and estuaries are all defined as wetlands, as are seasonally saturated or inundated areas such as vernal pools, alkali wetlands, seeps, and springs. In addition, portions of the riparian habitat along a river or stream may be a wetland where the riparian vegetation is at or below the ordinary high-water mark and thus also meets the wetland hydrology and hydric soil criteria.

Navigable waters include all waters subject to the ebb and flow of the tides, including open oceans, tidal bays, and tidal sloughs. Navigable waters also include some large, non-tidal rivers and lakes, which are important for transportation in commerce. The jurisdictional limit over navigable waters extends laterally to the entire water surface and bed of the waterbody landward to the limits of the mean high tide line. For non-tidal rivers or lakes, which have been designated (by the Corps) to be navigable waters, the limit of jurisdiction along the shoreline is defined by the ordinary high-water mark. “Other waters” refer to waters of the United States other than wetlands or navigable waters. Other waters include streams and ponds, which are generally open water bodies and are not vegetated. Other waters can be perennial or intermittent water bodies and waterways. The Corps regulates other waters to the outward limit of the ordinary high-water mark. Streams should exhibit a defined channel, bed, and banks to be delineated as other waters.

The Corps does not generally consider “non-tidal drainage and irrigation ditches excavated on dry land” to be jurisdictional waters of the United States (and such ditches would therefore not be regulated by the Corps (33 CFR Parts 320-330, November 13, 1986). Other areas generally not considered jurisdictional waters include: 1) artificially irrigated areas that would revert to upland habitat if the irrigation ceased; 2) artificial lakes and ponds created by excavating and/or diking of dry land to collect and retain water, used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing; 3) waste treatment ponds; 4) ponds formed by construction activities including borrow pits until abandoned; and 5) ponds created for

aesthetic reasons such as reflecting or ornamental ponds (33 CFR Part 328.3). However, the preamble also states “the Corps reserves the right on a case-by-case basis to determine that a particular waterbody within these categories” can be regulated as jurisdictional water. The EPA also has authority to determine jurisdictional waters of the U.S. on a case-by-case basis. Riparian habitat that is above the ordinary high-water mark and does not meet the three-parameter criteria for a wetland would not be regulated as jurisdictional waters of the United States.

4.1.3 Migratory Bird Treaty Act

Raptors are migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Sections 3503, 3503.5, and 3800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs. Implementation of the take provisions requires that Property-related disturbance at active nesting territories be reduced or eliminated during critical phases of the nesting cycle (generally February 1 – September 1, annually). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or the loss of habitat upon which the birds depend, is considered “taking” and is potentially punishable by fines and/or imprisonment. Such taking would also violate federal law protecting migratory birds (e.g., MBTA).

4.1.4 Federal Bald and Golden Eagle Protection Act

In addition to protection under the MBTA, both the bald eagle and the golden eagle are also protected by the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-668c). The Bald and Golden Eagle Protection Act, and amended several times since being enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald or golden eagles, including their parts, nests, or eggs (USFWS 2007). The Act provides criminal penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof.” The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” (USFWS 2007).

For purposes of these guidelines, “disturb” means: “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal

breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (USFWS 2007).

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment (USFWS 2007).

4.2 State Regulatory Setting

4.2.1 Plants and Wildlife

Property permitting and approval requires compliance with California Environmental Quality Act (CEQA), the 1984 California Endangered Species Act (CESA), and the 1977 Native Plant Protection Act (NPPA). The CESA and NPPA authorize the California Fish and Game Commission to designate Endangered, Threatened and Rare species and to regulate the taking of these species (§§2050-2098, Fish & Game Code). The California Code of Regulations (Title 14, §670.5) lists animal species considered Endangered or Threatened by the State.

The Natural Heritage Division of the CDFW administers the state rare species program. The CDFW maintains lists of designated Endangered, Threatened, and Rare plant and animal species (CDFW 2018b and 2018c). Listed species either were designated under the NPPA or designated by the Fish and Game Commission. In addition to recognizing three levels of endangerment, the CDFW can afford interim protection to candidate species while they are being reviewed by the Fish and Game Commission.

The CDFW also maintains a list of animal species of special concern (CDFW 2018b), most of which are species whose breeding populations in California may face extirpation. Although these species have no legal status, the CDFW recommends considering them during analysis of proposed property impacts to protect declining populations and avoid the need to list them as endangered in the future.

Under provisions of §15380(d) of the CEQA Guidelines, the CEQA lead agency and CDFW, in making a determination of significance, must treat non-listed plant and animal species as equivalent to listed species if such species satisfy the minimum biological criteria for listing. In general, the CDFW considers plant species on List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and elsewhere), or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the CNPS

Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994) as qualifying for legal protection under §15380(d). Species on CNPS Lists 3 or 4 may, but generally do not, qualify for protection under this provision.

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species and CDFW Species of Special Concern, areas of high biological diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the CNDDDB working list of “high priority” habitats (i.e., those habitats that are rare or endangered within the borders of California) (Holland 1986).

4.2.2 Wetlands/Waters

The RWQCB regulates activities in wetlands and other waters through §401 of the Clean Water Act. Section 401 requires a state water quality certification for properties subject to 404 regulations. The RWQCB also utilizes the Corps wetland delineation protocol for defining wetlands not covered under the Clean Water Act. Requirements of the certification include mitigation for loss of wetland habitat. In the San Francisco Bay region, the RWQCB may identify additional wetland mitigation beyond the mitigation required by the Corps through the Porter-Cologne Act and other State laws. All ground and surface waters may fall under the jurisdiction of the RWQCB. California Fish and Game Code §§1600-1607 require the CDFW be notified of any activity that could affect the bank or bed of any stream that has value to fish and wildlife. Upon notification, the CDFW has the discretion to execute a Streambed Alteration Agreement. The CDFW defines a stream as follows:

“... a body of water that flows at least periodically...through a bed or channel having banks and supporting fish and other aquatic life. This includes watercourses having a subsurface flow that supports or has supported riparian vegetation.”

(Source: Streambed Alteration Program, California Department of Fish and Wildlife, 2016).

In practice, CDFW authority is extended to any “blue line” stream shown on a USGS topographic map, as well as unmapped channels with a definable bank and bed. Wetlands, as defined by the Corps, need not be present for CDFW to exert authority.

4.2.3 California Environmental Quality Act

According to Appendix G of the California Environmental Quality Act (CEQA 2021) Guidelines, a proposed project would have a significant impact on biological resources if it would:

- a) 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 CDFW or USFWS?
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS??
- c) 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?
- d) 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?
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5.0 METHODS OF ANALYSIS FOR GENERAL BIOLOGICAL RESOURCES

A special-status plant and wildlife species database search and review was conducted using the CNDDDB, IPaC, and other sources. An additional search was conducted for special-status plants using CNPS *Inventory* on-line. Special-status species reports were accessed by searching the CNDDDB database for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay USGS 7.5-minute quadrangles which surround the Property, and by examining those species that have been identified in the vicinity of the Property. These quadrangles will be henceforth noted as the surrounding quads. The database report identified special-status species known to occur in the region or those that have the potential to occur in the vicinity of the Property. The CNDDDB report was used to focus special-status species analysis of the site prior to the reconnaissance surveys. The IPaC report for the Property site generated a list of endangered species and migratory birds with the potential to occur in the specific location based on the known or expected range of each species. It also considers additional areas of influence (AOI) for species that may be indirectly affected by activities in that area.

An Olberding Environmental biologist conducted a reconnaissance-level survey of the Property on January 28, 2019 and again on August 21, 2020. The survey consisted of walking throughout the Property and evaluating the site and adjacent lands for potential biological resources. Existing conditions, observed plants and wildlife, adjacent land use, soils and potential biological resource constraints were recorded during the visit. Plant and wildlife species observed within and adjacent to the Property during the reconnaissance survey are listed in Attachment 2, Table 1.

The objectives of the field survey were to determine the potential presence or absence of special-status species habitat listed in the CNDDDB database report and to identify any wetland areas that could be potentially regulated by the Corps, RWQCB, and/or CDFW (CNDDDB 2020). In addition, the Olberding Environmental biologist looked for other potential sensitive species or habitats that may not have been obvious from background database reports or research. Surveys conducted after the growing season or conducted outside of the specific flowering period for a special-status plant cannot conclusively determine the presence or absence of such plant species; therefore, site conditions and habitat type were used to determine potential for occurrence. When suitable habitat was observed to support a special-status plant or animal species, it was noted in the discussion for that particular species. Regulatory agencies evaluate the possibility of occurrence based on habitats observed on-site and the degree of connectivity with other special-status animal habitats in the vicinity of the Property. These factors are discussed in each special-status plant or animal section. Potential for occurrence of each special-status or protected plant and animal species was evaluated using the following criteria.

- **Present:** The species has been recorded by CNDDDB or other literature as occurring on the Property and/or was observed on the Property during the reconnaissance survey or protocol surveys.
- **May Occur:** The species has been recorded by CNDDDB or other literature as occurring within five miles of the Property, and/or was observed within five miles of the Property, and/or suitable habitat for the species is present on the Property or its immediate vicinity.
- **Low Potential / Not Likely to Occur:** The species has historically occurred on or within five miles of the Property, but has no current records. The species occurs within five miles of the Property but only marginally suitable habitat conditions are present. The Property is likely to be used only as incidental foraging habitat or as an occasional migratory corridor.
- **Presumed Absent:** The species will not occur on the Property due to the absence of suitable habitat conditions, and/or the species being extirpated from the vicinity.

Alternatively, if directed or protocol-level surveys were done during the proper occurrence period and the species was not found, it is presumed absent.

Sources consulted for agency status information include USFWS (2018a) for federally listed species and CDFW (2018b) for State of California listed species. Based on information from the above sources, Olberding Environmental developed a target list of special-status plants and animals with the potential to occur within or in the vicinity of the Property (Attachment 2, Table 2).

5.1 Soils Evaluation

The soils present on a property may determine if habitat on the site is suitable for certain special-status plants and animals. The host plants of some special-status invertebrates may also require specific soil conditions. In the absence of suitable soil conditions, special-status plants or animals requiring those conditions would be presumed absent. Information regarding soil characteristics for the Property was obtained by viewing the Natural Resources Conservation Service (NRCS) Web Soil Survey report for the Property (NRCS 2017)

5.2 Plant Survey Methods

The purposes of the botanical surveys were (1) to characterize the habitat types (plant communities) of the study area (see Figure 4); (2) to determine whether any suitable habitat for any special-status plant species occurs within the study area; and (3) to determine whether any sensitive habitat types (e.g., dunes, wetlands, etc.) occur within the study area. Site conditions and plant habitat surveys are important tools in determining the potential occurrence of plants not recorded during surveys (e.g., special-status plants) because presence cannot conclusively be determined if field surveys are conducted after the growing season or conducted outside a specific flowering period.

5.2.1 Review of Literature and Data Sources

The biologist conducted focused surveys of literature and special-status species databases in order to identify special-status plant species and sensitive habitat types with potential to occur in the study area. Sources reviewed included the CNDDDB occurrence records (CNDDDB 2021) and CNPS *Inventory* (Skinner and Pavlik 1994) for the surrounding quads; and standard flora (Hickman 1993). From the above sources, a list of special-status plant species with potential to occur in the Property vicinity was developed (Attachment 2, Table 2).

5.2.2 Field Surveys

A biologist from Olberding Environmental conducted a reconnaissance-level survey to determine habitat types and the potential for special-status plants based on the observed habitat types. All vascular plant species that were identifiable at the time of the survey were recorded and identified using keys and descriptions in Hickman (1993).

The habitat types occurring on the Property were characterized according to pre-established categories. In classifying the habitat types on the site, the generalized plant community classification schemes of *A Manual of California Vegetation* (Sawyer, Keeler-Wolf, and Evens 2009) were consulted. The final classification and characterization of the habitat types of the study area were based on field observations.

5.3 Wildlife Survey Methods

The purposes of the wildlife survey were to identify special-status wildlife species and/or potential special-status wildlife habitats within the study area.

5.3.1 Review of Literature and Data Sources

A focused review of literature and data sources was conducted in order to determine which special-status wildlife species had potential to occur in the vicinity of the Property. Current agency status information was obtained from USFWS (2021a) for species listed as Threatened or Endangered, as well as Proposed and Candidate species for listing, under the federal ESA; and from CDFW (2021b, 2021c) for species listed as Threatened or Endangered by the state of California under the CESA, or listed as “species of special concern” by CDFW. From the above sources, a list of special-status wildlife species with potential to occur in the Property vicinity was developed (Attachment 2, Table 2).

5.3.2 Field Surveys

General Wildlife Survey – An Olberding Environmental biologist conducted a survey of species habitat within the entire study area, including visible portions of the adjacent properties. The purpose of the habitat survey was to evaluate wildlife habitats and the potential for any protected species to occur on or adjacent to the Property.

Reconnaissance-Level Raptor Survey – A reconnaissance-level raptor survey was conducted on the Property. Observation points were established on the periphery of the site to view raptor activity over a fifteen- to thirty-minute period. This survey was conducted with the use of

binoculars and notes were taken for each species occurrence. Additionally, utility poles and perch sites in the vicinity of the Property were observed. All raptor activity within and adjacent to the Property was recorded during the reconnaissance-level observation period.

Reconnaissance-Level Burrowing Owl (*Athene cunicularia*) Survey – A reconnaissance-level burrowing owl (*Athene cunicularia*) survey was also conducted on the Property to identify potential burrow sites or burrowing owl use of on-site habitat. The general presence and density of suitable burrow sites (e.g., rodent burrows) was evaluated for the Property.

6.0 RESULTS FOR GENERAL BIOLOGICAL RESOURCES

The search and review of the CNDDDB database reports revealed the occurrence of special-status plant and wildlife species that occur in the habitats found within the vicinity of the Property (CNDDDB 2021). The CNDDDB database and background data were reviewed for the surrounding nine quads (Attachment 2, Table 2). Those animals listed in Attachment 2, Table 2 were reviewed for their potential to occur on the Property based on general habitat types. Most of the plant and several of the animal species identified by the CNDDDB require specific habitat microclimates that were not found to occur within the Property.

6.1 Soil Evaluation Results

The NRCS (2020) reports three soil types within the Property. A map of this soil type can be found in Attachment 1, Figure 8. The soil type mapped included the following:

- **DdE: Diablo Clay, 15 to 30 percent slopes, MLRA 15** – The Diablo series is a member of the fine, smectitic, thermic family of Aridic Haploxererts. Typically, Diablo soils have dark gray, neutral and mildly alkaline, silty clay upper A horizons, gray and olive gray, calcareous, silty clay lower A horizons, and light olive gray, silty clay AC and C horizons that rest on shale. Diablo soils are on complex undulating, rolling to steep uplands with slopes of 5 to 50 percent. Elevations are 25 to 3,000 feet. These soils formed in residuum weathered from shale, sandstone, and consolidated sediments with minor areas of tuffaceous material. The climate is dry subhumid mesothermal with warm, dry summers and cool, moist winters. The mean annual precipitation is 10 to 35 inches. Diablo series soils are well drained with slow runoff when soil is dry and medium to rapid runoff when soils are moist with slow permeability.

Ap-- 0 to 6 inches; dark gray (5Y 4/1) silty clay, very dark gray (5Y 3/1) moist; the immediate very thin surface crust dries gray(5Y 6/1) and light gray (5Y 7/1); the surface 1 to 3 inches has string medium granular structure, the remainder has

strong coarse and medium blocky structure; very hard, very firm, sticky, very plastic; common fine roots mainly along faces of peds; few very fine tubular pores; neutral; clear wavy boundary. (4 to 10 inches thick)

A-- 6 to 15 inches; dark gray (5Y 4/1) silty clay, very dark gray (5Y 3/1) moist; moderate coarse prismatic and moderate coarse blocky structure; very hard, very firm, sticky, very plastic; few fine roots mainly along faces of peds; non effervescent except for an occasional small white lime nodule; mildly alkaline; clear smooth boundary. (8 to 20 inches thick)

Bkss1-- 15 to 26 inches; finely mixed gray (5Y 5/1) and olive gray (5Y 5/2) silty clay, dark gray (5Y 4/1) and olive gray (5Y 4/2) moist; moderate coarse prismatic and medium blocky structure; very hard, very firm, sticky, very plastic; few fine roots along faces of peds; few fine and very fine tubular pores; numerous slickensides; slightly effervescent in matrix, strongly effervescent few white lime nodules; moderately alkaline; clear wavy boundary. (3 to 12 inches thick)

Bkss2-- 26 to 32 inches; finely mixed gray (5Y 5/1) and olive gray (5Y 5/2) silty clay, dark gray (5Y 4/1) and olive gray (5Y 4/2) moist; weak coarse prismatic and weak medium blocky structure; very hard, very firm, sticky, very plastic; few fine roots mainly along faces of peds, roots distinctly flattened in appearance; few fine and very fine tubular pores; numerous slickensides; slightly effervescent matrix, strongly effervescent few small hard white lime nodules; moderately alkaline; diffuse smooth boundary. (4 to 8 inches thick)

Bk-- 32 to 42 inches; light olive gray (5Y 6/2) silty clay, olive gray (5Y 5/2) moist; weak medium subangular blocky structure; very hard, very firm, slightly sticky, plastic; few fine roots; few fine and very fine tubular pores; many white lime films and soft segregations; moderately alkaline; clear wavy boundary. (10 to 16 inches thick)

C-- 42 to 50 inches; fine and medium mottled appearing olive gray (5Y 5/2) and light olive gray (5Y 6/2) silty clay loam, olive gray (5Y 5/2) and olive gray (5Y 4/2) moist; weak fine and medium subangular blocky structure; very hard, very firm, slightly sticky, plastic; few fine roots; few fine and very fine tubular pores; many shale fragments; strongly effervescent soft white filaments; soft and hard lime nodules; moderately alkaline; clear smooth boundary. (8 to 16 inches thick)

Cr-- 50 to 60 inches; light olive gray (5Y 6/2) slightly effervescent shale and fine grained sandstone with white films on facings.

- **CaA: Capay Clay, 0 to 3 percent slopes, MLRA 17** – The Capay series consists of very deep, moderately well and somewhat poorly drained soils that formed in fine textured alluvium derived from mostly sandstone and shale. Capay soils are on flood basins, alluvial fans, interfan basins, and basin rims. Slopes are 0 to 15 percent. The mean annual precipitation is about 21 inches (541 mm) and the mean annual air temperature is about 61 degrees F (16 degrees C). Capay series is moderately well and somewhat poorly drained, has negligible to high runoff, and slow to very slow permeability. Also some pedons have a water table between depth of 4 and 6 feet. Some areas are subject to rare, occasional, or frequent flooding.

Ap--0 to 5 inches (0 to 13 cm); dark grayish brown (2.5Y 4/2) silty clay, very dark grayish brown (10YR 3/2) moist; strong medium granular structure in upper 1 or 2 inches and strong coarse prismatic structure below; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; neutral (pH 7.1); clear smooth boundary (5 to 8 inches thick).

Bk1--5 to 21 inches (13 to 53 cm); dark grayish brown (2.5Y 4/2) silty clay, very dark grayish brown (10YR 3/2) moist; few fine prominent strong brown (7.5YR 5/6) masses of oxidized iron, moist; strong very coarse prismatic structure; very hard, very firm, sticky and very plastic; few fine roots; common very fine tubular pores; strongly effervescent, fine soft masses of lime in lower 4 inches; moderately alkaline (pH 7.9); clear wavy boundary (12 to 16 inches thick).

Bsk1--21 to 32 inches (53 to 81 cm); brown (10YR 5/3) silty clay, dark brown (10YR 3/3) moist; strong coarse prismatic structure; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; prominent intersecting slickensides; strongly effervescent, fine soft masses of lime; moderately alkaline (pH 8.4); clear wavy boundary (8 to 12 inches thick).

Bsk2--32 to 40 inches (81 to 102 cm); brown (10YR 5/3) silty clay, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3) moist; moderate medium prismatic structure; hard, firm, sticky and very plastic; few fine roots; many very fine tubular pores; distinct intersecting slickensides; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.3); gradual smooth boundary (8 to 10 inches thick).

B'k2--40 to 50 inches (102 to 127 cm); pale brown (10YR 6/3) silty clay loam, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); moist; weak coarse angular blocky structure; hard, firm, sticky and very plastic; few fine roots, many very fine tubular pores; slightly effervescent; fine soft masses of lime; moderately alkaline (pH 8.3); diffuse boundary (8 to 10 inches thick).

B'k3--50 to 62 inches (127 to 157 cm); yellowish brown (10YR 5/6) silty clay loam, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); few fine distinct strong brown (7.5YR 5/6) mottles, yellowish brown (10YR 5/6) moist; weak fine and medium angular blocky structure; hard, firm, sticky and very plastic; many very fine tubular pores; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.2); diffuse boundary.

2B'k4--62 to 81 inches (157 to 206 cm); pale brown (10YR 6/3) clay loam, dark yellowish brown (10YR 4/4) moist; 1 percent fine distinct (7.5YR 5/6) and 1 percent fine faint (10YR 5/6) masses of oxidized iron; massive parting to weak fine and medium angular blocky structure; hard, firm, moderately sticky, very plastic; very few roots; many tubular pores; 3 percent carbonate concretions and few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.3).

2B'k5--81 to 88 inches (206 to 224 cm); pale brown (10YR 6/3) sandy clay loam, dark yellowish brown (10YR 4/4) moist; 3 percent medium distinct (7.5YR 6/6) and 3 percent medium distinct (7.5YR 5/6) masses of oxidized iron; massive parting to weak fine and medium angular blocky structure; hard, firm, moderately sticky, moderately plastic; very few roots; very few fine irregular and common very fine tubular pores; few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.3); clear wavy boundary.

2B'k6--88 to 102 inches (224 to 259 cm); yellowish brown (10YR 5/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; massive; few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.1).

6.2 Plant Survey Results

6.2.1 Floristic Inventory and Habitat Characterization

The Property supports non-native annual grassland habitat. In classifying the habitat types on the Property, generalized plant community classification schemes were used (Sawyer, Keeler-Wolf, and Evens 2009). The final classification and characterization of the habitat type of the Property was based on field observations.

The habitat types and a description of the plant species present within each habitat type are provided below. Dominant plant species are also noted. A complete list of plant species observed on the Property can be found within Attachment 2, Table 1.

Non-native Annual Grassland

The extent of the Property, approximately 9.6 acres, is dominated by non-native annual grassland habitat. Dominant vegetation observed within this habitat type includes but is not limited to wild oat, bristly oxtongue, ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow star thistle (*Carduus pycnocephalus*), and Italian rye grass.

Seasonal Wetland

Results of a jurisdictional delineation survey conducted on February 23, 2021 did not identify the presence of waters/wetlands subject to Corps or RWQCB jurisdiction within the survey boundary. The Property contains two artificially created features in the form of a concrete v-ditch with an associated storm drain outlet, and one constructed stormwater detention basin with associated utilities near the northern end of the parcel. Olberding Environmental visited these two areas of the Property and investigated other areas of the Property where wetlands could potentially occur. Sample points were established, and data collected; however, none of the areas had all three parameters (wetland soils, hydrology, and vegetation) that are used to indicate jurisdictional wetlands.

Special-Status Plant Species

Special-status plant species include species listed as Rare, Threatened, or Endangered by the USFWS (2018a) or by the State of California (CDFW 2018c). Federal Proposed and Candidate species (USFWS 2018b) are also considered special-status species. Special-status species also include species listed on List 1A, List 1B, or List 2 of the CNPS Inventory (Skinner and Pavlik, 1994; CNPS 2018). All species in the above categories fall under state regulatory authority under the provisions of CEQA and may also fall under federal regulatory authority through the

FESA. Considered special-status species are species included on List 3 (Plants About Which We Need More Information—A Review List) or List 4 (Plants of Limited Distribution—A Watch List) of the CNPS *Inventary*. These species are considered to be of lower sensitivity and generally do not fall under specific state or federal regulatory authority and are not included in this analysis. Specific mitigation considerations are not generally required for List 3 and List 4 species.

Attachment 2, Table 2 includes a list of special-status plants with the potential to occur within the study area (see Figure 4) based on a review of the surrounding quads. The special-status plant species identified by the CNDDDB as potentially occurring on the Property are known to grow only from specific habitat types. The specific habitats or “micro-climate” necessary for many of the plant species to occur are not found within the boundaries of the Property. The habitats necessary for the CNDDDB reported plant species consist of valley and foothill grassland, cismontane woodlands, chaparral, playas, chenopod scrub, adobe clay soils, alkaline soils, serpentine soils, sandy soils, gravelly soils, coastal prairie, coastal scrub, coastal dunes, coastal bluff scrub, coastal salt marsh, vernal pools, seeps, meadows and sinks, marshes or swamps, riparian woodlands, on slopes near drainages, closed cone coniferous forest, north coast coniferous forest, redwood forest, lower montane coniferous forest, and broad-leafed upland forest.

Occurrences of special-status plants within a five-mile radius of the point roughly representing the center of the Property are described in detail. Occurrence distance from the Property is estimated from this center point (Attachment 1, Figure 6).

There are no List 1A, 1B, or List 2 special-status plant species with occurrences on or adjacent to the Property.

6.3 Wildlife Survey Results

6.3.1 General Wildlife Species and Habitats

A complete list of wildlife species observed within the study area can be found in Attachment 2, Table 1. Wildlife species commonly occurring within habitat types present on the Property are discussed below:

Non-native Annual Grassland

The annual grassland habitat provides many foraging opportunities for a wide range of species. Passerine species observed during the survey included Northern mockingbird (*Mimus*

polyglottos), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), and cliff swallow. Other avian species observed include white-tailed kite and red-tailed hawk, and the grassland habitat could potentially be utilized for foraging by other species including American kestrel and northern harrier (*Circus cyaneus*).

Desert cottontail (*Sylvilagus audubonii*) was observed foraging during the January survey. Coyote (*Canis latrans*), red fox (*Vulpes vulpes*), and raccoon (*Procyon lotor*) droppings were observed on the Property. Extensive burrow colonies created by small mammals including but not limited to Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beecheyi*) were also observed.

The grassland habitat and the extensive burrows available offer suitable habitat for various reptile species. Western fence lizards (*Sceloporus occidentalis*), Pacific gopher snake (*Pituophis catenifer catenifer*), and California king snake (*Lampropeltis californiae*) may also occur on the Property.

BIRDS

General Nesting Birds. MBTA Protected.

The open grassland and surrounding shrubs, bushes, and trees on and immediately adjacent to the Property provide habitat for various nesting birds during the nesting season (generally recognized from February 1 through August 31). Evidence of nesting has been observed within the study boundary, though no nests were found within the project footprint itself. Certain bird species, including raptors and burrowing owl may have buffer sizes that can extend into the project footprint. Other native bird species that may nest within the study area include northern mockingbird, scrub jays, western meadowlarks, American kestrels, and red-winged blackbirds, among others.

Burrowing Owl (*Athene cunicularia*). California Species of Special Concern.

The burrowing owl has no special status designation under federal law but is a "species of special concern" in California. It does receive some legal protection from the U.S. through the Migratory Bird Treaty Act, which forbids the destruction of the birds and active nests.

Burrowing owls are ground dwelling members of the owl family and are small brown to tan colored birds with bold spots and barring. Burrowing owls generally require open annual grassland habitats in which to nest, but can be found on abandoned lots, roads, airports, and other urban areas. Burrowing owls generally use abandoned California ground squirrel holes for their nesting burrow but are also known to use pipes or other debris for nesting purposes. Burrowing

owls prefer annual grassland habitats with low vegetative cover. The breeding season for burrowing owls occurs from March through August. Burrowing owls often nest in loose colonies about 100 yards apart. They lay three to twelve eggs from mid-May to early June. The female incubates the clutch for about 28 days, while the male provides her with food. The young owls begin appearing at the burrow's entrance two weeks after hatching and leave the nest to hunt for insects on their own after about 45 days. The chicks can fly well at six weeks old.

CNDDDB listed fifty-two (52) occurrences of burrowing owl within five miles of the Property. The closest occurrence (Occurrence #981) was observed approximately 0.5 miles south of the Property near the Highway 4 - Laurel Road on-ramp. In addition, breeding burrowing owls have been observed within the Contra Costa Water District pump facility approximately 1,400 feet to the southwest of the Property as recently as April 2018. The Property has suitable grassland habitat which contains short grasses and numerous ground squirrel burrows on site that provides both foraging and nesting habitat. Though no owls or sign were observed on the Property during the either survey, burrowing owls migrate to breeding grounds in early spring and may colonize suitable burrows on the Property. For these reasons the burrowing owl has a high potential to occur on the Property in nesting and foraging capacity.

White-tailed Kite (*Elanus leucurus*). CDFW: Fully Protected.

The white-tailed kite is falcon-shaped with a long white tail. This raptor has black patches on the shoulders that are highly visible while the bird is flying or perching. White-tailed kites forage in annual grasslands, farmlands, orchards, chaparral, and at the edges of marshes and meadows. They are found nesting in trees and shrubs such as willows (*Salix sp.*), California sycamore (*Platanus racemosa*), and coast live oak (*Quercus agrifolia*) often near marshes, lakes, rivers, or ponds. This raptor often hovers while inspecting the ground below for prey. The white-tailed kite eats mainly small mammals, as well as some birds, lizards, and insects. Annual grasslands are considered good foraging habitat for white-tailed kites, which will forage in human-impacted areas.

CNDDDB has five occurrences of white-tailed kite within the vicinity of the Property. The closest occurrence (Occurrence #87) was located approximately 0.6 miles southeast of the Property near the Highway 4 - Laurel Road on-ramp. In addition, foraging opportunities occur throughout the Property in the grassland habitat. A solitary white-tailed kite was observed foraging over the Property during the January 2019 survey. During the August 2020 survey, a pile of white feathers consistent with a dead white-tailed kite was found adjacent to the property. White-tailed kites can nest in trees from 10 to 160 feet tall. As there are nearby trees that are at least 10 feet tall, there is the potential for nesting in the vicinity of the Property. Given the information above

the white-tailed kite has high potential to occur on the Property in a foraging capacity with potential nesting in the immediate vicinity of the Property.

Loggerhead Shrike (*Lanius ludovicianus*). California Species of Special Concern.

The loggerhead shrike is a black and white perching bird with a black face mask that extends over the bill. It is a common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. It occurs only rarely in heavily urbanized areas but is often found in open cropland. This species hunts large insects, small rodents, and even small birds. Loggerhead shrikes are known for their habit of impaling their food on thorns or barb wire for future consumption. The range and habitat for the loggerhead shrike has steadily shrunk due to human development within grasslands; however, this species is often found on lands grazed by cattle that are fenced with barb wire. These birds use shrubs, dense trees, and thickets of vegetation for nesting sites with an average height above ground of 2.5 to 4 feet.

CNDDDB did not list the loggerhead shrike as occurring within the study area; however, the trees and shrubs within and surrounding the Property offer potentially suitable nesting habitat. In addition, foraging opportunities occur across the Property. Given the information above the loggerhead shrike has moderate potential to occur on or adjacent to the Property in a foraging and nesting capacity. The nearest CNDDDB occurrence of a nesting loggerhead shrike (Occurrence #3) was located three miles to the northeast in Oakley, CA.

Swainson's Hawk (*Buteo swainsoni*). State Threatened.

The Swainson's hawk is a raptor that is slightly smaller than the red-tailed hawk with wings that taper slightly toward the outer wing tip. This hawk has a brown bib that covers its head and extends down the chest. The leading portion of the wing is light in color. In flight, this bird has an inverse color pattern in comparison to a red-tailed hawk. This hawk has three potential color morphs---light, intermediate, and dark. Swainson's hawks are summer migrants to the Central Valley and Delta region where they nest within larger-sized trees.

Commonly, the Swainson's hawk builds platform nests in tall mature trees, often in the first fork of the tree---built with sticks, twigs, and branches with green leaves (blue gum, valley oak, live oak, pine, or other tall tree stands). These raptors require nearby foraging habitat such as annual grasslands, alfalfa fields, grain fields, and even row crops.

Males perform aerial acrobatics to impress females. Maneuvers include soaring over nest, diving up to 50ft and rapid wing beats. Breeding occurs late March to late August, with peak activity late May through July (Note: Even minor nest disturbance can cause nest failure).

CNDDDB lists 13 occurrences of Swainson's hawk within a 5-mile radius of the Property. The closest occurrence (Occurrence #1804) was located approximately 1-mile to the northwest along the East Antioch Creek riparian area, between Highway 4 and Oakley Road, west of Highway 160. The nearest suitable nesting trees to the Property are located approximately 1,000 feet south of the Property around a pair of water storage tanks south of the Contra Costa Water District facility. These trees should be surveyed with binoculars or spotting scope prior to any work on the Property as they are within the 1000-foot buffer range for the Swainson's hawk. Additionally, suitable trees within 0.5 miles of the Property should be surveyed for potential Swainson's hawk nesting as this will be required by CDFW. For the reasons listed above, Swainson's hawk has a moderate potential to utilize the Property for foraging and may nest within the vicinity.

MAMMALS

San Joaquin Kit Fox. Federally Endangered. State Threatened.

Kit fox are the smallest canids in the United States. The San Joaquin is the largest of the kit fox subspecies, with adults weighing about 5 pounds. Kit fox are lightly built, with long legs and large ears. Their coat ranges from tan to buffy gray in the summer to silvery gray in the winter. They have a white belly and a black-tipped tail. Kit fox home-range size varies from 642 to 7660 acres and is likely to be affected by stochastic changes in resource abundance. Historical kit fox habitat consists of open grassland areas at or close to valley bottoms, however, due to loss of habitat through agricultural development and other land conversions, kit fox is now known to use foothill habitat.

Kit fox are nocturnal and require dens for temperature regulation, shelter from adverse weather, protection from predators, and pupping. Kit fox prefer gentle slopes of less than 10 degrees for dens; the requirement of gentle slopes for reproductive dens may limit population viability in slopes with greater topographic relief. They are likely to use more than one den; multiple den use is most prevalent during dispersal season (June through December).

Kit fox are subject to competitive exclusion or predation by species such as the non-native red fox (*Vulpes vulpes*), coyote (*Canis latrans*), domestic dog (*Canis familiaris*), bobcat (*Felis rufus*), and large raptors. Although coyote may prey on kit fox, coyote and kit fox are not considered mutually exclusive.

There is one CNDDDB occurrence (#21) of San Joaquin kit fox within 5-miles of the Project site. This occurrence is from the south end of Contra Loma Regional Park approximately 4.2 miles to the west. This occurrence is from 1995 and there have been numerous developments built between this occurrence and the Project site since then. Though suitable grassland habitat exists on the Property, the site is isolated from any open grassland habitat that could provide a wildlife corridor for San Joaquin kit fox to reach the Property. Three miles of neighborhoods extend to the west between Contra Loma Regional Park and the Property; between 1998 and 2009, State Route 4 was built in Oakley and Brentwood, cutting off wildlife from the east of the Property; and the Contra Costa Canal and new developments present barriers to entry from the south. For these reasons, San Joaquin kit fox has a low potential of occurring on the Property and is not likely to occur.

Special-status Bats

Bats (Order - *Chiroptera*) are the only mammals capable of “true” flight. They are nocturnal feeders and locate their prey, which consists of small to medium sized insects, by echolocation. Bats consume vast amounts of insects making them very effective pest control agents. They may eat as much as their weight in insects per night. Maternity roosts comprised of only females, may be found in structures or mine shafts with temperatures up to 40 degrees Celsius and a high percentage of humidity to ensure rapid growth in the young. Female bats give birth to only one or two young annually and roost in small or large numbers. Males may live singly or in small groups, but scientists are still unsure of the whereabouts of most males in summer.

Bat species listed in the CNDDDB with the potential to occur within the study area are listed below:

- Pallid Bat (*Antrozous pallidus*)
- Townsend’s big-eared bat (*Corynorhinus townsendii*)
- Yuma myotis (*Myotis yumanensis*)
- Hoary bat (*Lasiurus cinereus*)
- Western red bat (*Lasiurus blossevillii*)
- Little brown bat (*Myotis lucifugus*)

CNDDDB listed the Western red bat (Occurrence #66) as occurring within a 5-mile radius of the Property. The occurrence is not listed as a specific location and is just listed as “within Antioch”. The Highway 4 overpass could potentially offer suitable roosting sites for multiple bat species including Townsend’s big-eared bat and Yuma myotis. Western red bats, a California species of special concern, and hoary bats are foliage roosters and are therefore not likely to be

present roosting on the Property as there are no appropriate trees on site. All the listed bat species may be present in a foraging capacity as the open grassland habitat and adjacent Contra Costa Canal can provide an array of insects, allowing for abundant foraging opportunities. Given the above information, multiple species of bats have a moderate potential to occur in a foraging capacity only on the Property.

AMPHIBIANS

California Red-Legged Frog (*Rana draytonii*). Federally Threatened, California Species of Special Concern.

California red-legged frog (CRLF) was listed as a Federal threatened species on May 31, 1996 (61 FR 25813) and is considered threatened throughout its range. If a proposed Property may jeopardize listed species, Section 7 of the ESA requires consideration of those species through formal consultations with the USFWS. Federal Proposed species (USFWS 2006) are species for which a proposed listing as Threatened, or Endangered under the ESA has been published in the Federal Register. If a proposed Property may jeopardize proposed species, Section 7 of the ESA affords consideration of those species through informal conferences with USFWS. On April 13, 2006, USFWS designated critical habitat for the CRLF under the ESA. In total, approximately 450,288 acres fell within the boundaries of critical habitat designation. A new ruling by the USFWS on March 17, 2010, revised the designation of critical habitat for CRLF (75 FR 12815 12959). In total, approximately 1,636,609 acres of critical habitat in 27 California counties fall within the boundaries of the final revised critical habitat designation. This rule became effective on April 16, 2010.

The CRLF is a rather large frog, measuring one and a half to five inches in length. They are reddish-brown to gray in color, with many poorly defined dark specks and blotches. Dorsolateral folds are present. The underside of the CRLF is washed with red on the lower abdomen and hind legs. The CRLF has a dark mask bordered by a light stripe on the jaw, smooth eardrums, and not fully webbed toes. The male has enlarged forearms and swollen thumbs. Its vocals consist of a series of weak throaty notes, rather harsh, and lasting two to three seconds. Breeding occurs from December to March with egg masses laid in permanent bodies of water.

The CRLF is found in lowlands, foothill woodland and grasslands, near marshes, lakes, ponds or other water sources. These amphibians require dense shrubby or emergent vegetation closely associated with deep still or slow-moving water. Generally, these frogs favor intermittent streams with water at least two and a half feet deep and where the shoreline has relatively intact emergent or shoreline vegetation. CRLF is known from streams with relatively low gradients and those waters where introduced fish and bullfrogs are absent. CRLF are known to take refuge

upland in small mammal burrows during periods of high-water flow. CRLF occurs west of the Sierra Nevada-Cascade and in the Coast Ranges along the entire length of the state. Historically, they occurred throughout the Central Valley and Sierra Nevada foothills south to northern Baja California. Now they are found from Sonoma and Butte Counties south to Riverside County, but mainly in Monterey, San Luis Obispo, and Santa Barbara Counties.

CNDDDB listed 8 occurrences of the CRLF occurring within five miles of the Property. All these occurrences (Occurrence # 32, 252, 286, 612, 933, 934, 1058, and 1059) are over three miles southwest of the Property. CRLF require (1) standing bodies of fresh water for breeding habitat, (2) fresh water and wetted riparian for non-breeding habitat, foraging and dispersal, (3) upland habitat such as grasslands or woodlands that provide shelter, forage, and predator avoidance, and (4) accessible upland or riparian dispersal habitat within one mile of occupied habitat (USFWS 2006b). There is no suitable habitat to support breeding on the Property as there are no perennial waters or riparian cover. The Property has ground squirrel burrows suitable for upland refuge; however, CRLF are not anticipated to occur as the Property is isolated from suitable breeding ponds by the surrounding urban development and Highway 4. The Property is over 11 miles from any USFWS designated critical habitat for CRLF (Unit CCS-2B). For these reasons CRLF is presumed absent from the site.

California Tiger Salamander (*Ambystoma californiense*). Federally Threatened, State Threatened.

Adult California tiger salamanders (CTS) inhabit rolling grassland and oak savanna. Adults spend most of the year in subterranean retreats such as rodent burrows but may be found on the surface during dispersal to and from breeding sites. The preferred breeding sites are vernal pools and other temporary ponds. However, CTS may use permanent manmade ponds as breeding habitat. CTS adults begin migrating to ponds after the first heavy rains of fall and can be found in or around the breeding ponds during and after winter rainstorm events. In extremely dry years, CTS may not reproduce.

After mating, females lay several small clusters of eggs, which contain from one to over 100 eggs. The eggs are deposited on both emergent and submerged vegetation, as well as submerged detritus. A minimum of ten weeks is required to complete larval development through metamorphosis, at which time the larvae will normally weigh about ten grams. Larvae remaining in pools for a longer time period can grow to much larger sizes. Upon metamorphosis, juvenile CTS migrate in large masses at night from the drying breeding sites to refuge sites. Prior to this migration, the juveniles spend anywhere from a few hours to a few days near the pond margin. Adult CTS are largely opportunistic feeders, preying upon arthropod and annelid species that occur in burrow systems, as well as aquatic invertebrates found within

seasonal pools. The larvae feed on aquatic invertebrates and insects, showing a distinct preference for larvae of the Pacific tree frog.

On August 4, 2004, the U.S. Fish and Wildlife Service (USFWS) announced the listing of the CTS as threatened throughout its range with the exception of the Sonoma and Santa Barbara County populations which are listed as endangered (USFWS 2004). On March 3, 2010, the California Fish and Game Commission designated CTS as threatened under the California Endangered Species Act. On August 23, 2005, the Service designated 199,109 acres of critical habitat in 19 counties for the central California population of the CTS. On August 2, 2005, they proposed 74,223 acres of critical habitat for CTS in Sonoma County, California. This habitat is located in the Santa Rosa Plain in central Sonoma and includes lands bordered on the west by Laguna de Santa Rosa, to the south by Skillman Road, northwest of Petaluma, to the east by foothills, and to the north by Windsor Creek. On December 14, 2005, in a final decision, USFWS designated and excluded 17,418 acres of critical habitat for CTS, so that no critical habitat is being designated for the Sonoma County population.

CNDDDB has listed sixteen (16) occurrences of CTS occurring within five miles of the Property. The nearest presumed extant CNDDDB occurrence (Occurrence #479) is located approximately 2.6 miles southwest of the Property from 1998. This occurrence location is now developed. The most recent occurrence (Occurrence #677) was in 2013 4.8 miles southwest of the Property along the Starmine Trail in the unincorporated community of West Hartley. At this location, fifteen larval CTS were recorded within two stock ponds on April 27, 2013. The closest USFWS designated critical habitat for CTS is approximately 16 miles south in the City of Livermore. CTS require (1) aquatic breeding habitat of standing fresh water that supports inundation for a minimum of 12 weeks, (2) upland habitat adjacent to, and accessible from, breeding ponds that contain suitable mammal burrows or other underground habitat, and (3) dispersal habitat between occupied locations that allow for movement between sites within 1 mile (Austin and Shafer 1992) (USFWS 2006). As the Property does not contain suitable breeding habitat, and it is isolated and distant from any CTS occurrences, they are presumed absent from the Property.

REPTILES

Alameda Whipsnake (*Masticophis lateralis euryxanthus*). Federally Threatened, State Threatened.

The Alameda whipsnake is one of two subspecies of the California whipsnake. It is distinguished from the chaparral whipsnake (*M. l. lateralis*) by the broad orange striping on its sides. Adults reach approximately three to five feet in length and show a sooty black to dark brown back, cream-colored undersides and pinkish tail. This species is typically found in

chaparral, northern coastal sage scrub, and coastal sage habitats. Annual grasslands, oak woodlands, and oak savanna serve as a secondary habitat during the breeding season. Egg-laying occurs near scrub habitat on ungrazed grasslands with scattered shrub cover. The known distribution for Alameda whipsnake includes Sobrante Ridge, Oakland Hills, Mount Diablo, the Black Hills, and Wauhab Ridge.

Male and female snakes are active from April to November finding mates. During the breeding season from late March through mid-June, male snakes exhibit more movement throughout their home range, while female snakes remain sedentary from March until egg laying. Females lay a clutch of 6 to 11 eggs, usually in loose soil or under logs or rocks.

CNDDDB listed 1 occurrences of the Alameda whipsnake within 5-miles of the Property. This occurrence (#68) was located approximately 5 miles to the southwest and was from 2003. Refer to Attachment 1 Figure 5 to see approximate range of listed occurrences. The Property is approximately 9-miles from the nearest USFWS designated critical habitat (Unit: 4). The PCEs of Critical Habitat for the Alameda whipsnake are the habitat components that provide: (1) Scrub/shrub communities with a mosaic of open and closed canopy: Scrub/shrub vegetation dominated by low- to medium-stature woody shrubs with a mosaic of open and closed canopy, as characterized by the chamise, chamise-eastwood manzanita, chaparral whitethorn, and interior live oak shrub vegetation series occurring at elevations from sea level to approximately 3,850 feet (1,170 meters); (2) Woodland or annual grassland plant communities contiguous to lands containing PCE 1: Woodland or annual grassland vegetation series comprised of one or more of the following: Blue oak, coast live oak, California bay, California buckeye, and California annual grassland vegetation series; (3) Lands containing rock outcrops, talus, and small mammal burrows. These areas are used for retreats (shelter), hibernacula, foraging, and dispersal, and provide additional prey population support functions. While there is grassland on the Property, it is not contiguous with PCE 1 and has been maintained via mowing and disking so that it is too short to provide adequate cover from predators, or shade for thermal regulation. There is no scrub/shrub habitat or rock outcrops on the Property. For these reasons Alameda whipsnake has a low potential to be present on the Property. For these reasons Alameda whipsnake has a low potential to occur on the Property and are not likely to occur.

Western Pond Turtle (*Emys marmorata*). California Species of Special Concern.

The western pond turtle is an aquatic turtle that may be found in marshes, ponds, streams, and irrigation ditches where aquatic vegetation is present. The turtles, which range from nine to ten inches in size, require basking sites and suitable upland habitat for egg laying. Suitable breeding upland habitats may consist of sandy banks or grassy open fields. The western pond turtle has a dark brown to olive-colored carapace with hexagonal scales that lack prominent markings.

Nesting and incubation occur from April to September, with the peak time for mating and egg laying occurring from March to May. After a 73 to 80-day gestation or incubation period, 5 to 13 eggs will be laid from July to October. Eggs are produced either once or twice a year. Females may travel some distance from water for egg-laying, moving as much as 0.8 kilometers (a half mile) away from and up to 90 meters (300 feet) above the nearest source of water. Most nests are with 90 meters (300 feet) of water. The female usually leaves the water in the evening and may wander far before selecting a nest site, often in an open area of sand or hardpan that is facing southwards. The nest is flask-shaped with an opening of about five centimeters (two inches). Females spend considerable time covering up the nest with soil and adjacent low vegetation, making it difficult for a person to find unless it has been disturbed by a predator.

Activity slows from November to February. During the winter when water and air temperatures cool, usually from September to March, the turtles begin to hibernate. During hibernation, turtles either bury themselves in the mud at the bottom of ponds or will bury themselves on land in duff (top layer of decomposing vegetation and soil). Some turtles travel more than a half mile to over-winter on land, though many select the nearest wooded or shrubby area they can bury in. Turtles then emerge from hibernation in the spring to start the yearly cycle again.

CNDDDB listed 6 occurrences (Occurrence #135, 145, 279, 282, 340, and 1339) of the western pond turtle within 5-miles of the Property. The closest occurrence (Occurrence #279) was located approximately 3.2 miles northeast of the Property along Marsh Creek under Cypress Road. One adult turtle was observed basking on an exposed log in August 2003. There are no suitable creeks or riparian habitat in the immediate vicinity of the Property; therefore, western pond turtle are presumed absent from the site.

7.0 CONCLUSIONS

7.1 Wetlands

Results of the jurisdictional delineation survey conducted on February 23, 2021 did not identify the presence of waters/wetlands subject to Corps or RWQCB jurisdiction within the survey boundary. The Property contains two artificially created features in the form of a concrete v-ditch with an associated storm drain outlet, and one constructed stormwater detention basin with associated utilities near the northern end of the parcel. Olberding Environmental visited these two areas of the Property and investigated other areas of the Property where wetlands could potentially occur. Sample points were established, and data collected; however, none of the areas had all three parameters (wetland soils, hydrology, and vegetation) that are used to indicate jurisdictional wetlands.

7.2 Special-status Plants

There are no Rare, Threatened, or Endangered; List 1A, 1B, or List 2 special-status plant species with occurrences in the study area. Nor are there any sensitive habitat types that can support special-status plant species (e.g., dunes, wetlands, etc.). A special-status plant survey is not needed.

7.3 Special-status Wildlife

Foraging or Nesting Raptor/Passerine Species – Several bird species were identified as having a potential to occur on the Property. Five species including American kestrel, cliff swallow, western burrowing owl, loggerhead shrike, and white-tailed kite had a high potential to occur in a foraging and/or nesting capacity onsite or in the immediate vicinity of the Property. Swainson’s hawk had a moderate potential to occur in a foraging and nesting capacity within 1,000-feet of the Property. Red-tailed hawk and white-tailed kite were observed foraging on the Property during the time of the survey ..

Special-Status Mammals – Given the presence of suitable onsite habitat, the Townsend’s big-eared bat, hoary bat, and Yuma myotis have a moderate potential to occur within the project boundary in a foraging capacity above the grassland. There are no structures within the Project footprint where these bats could potentially roost.. Western red bat has a moderate potential to utilize the Property for foraging only as no suitable trees are present for roosting. No immediate signs were present during the initial surveys.

The American badger may utilize the project footprint for foraging or denning as the site maintains a sufficient pre-base of ground squirrels, has suitable friable soils, and the nearest CNDDDB occurrence is within the foraging range of this species. There is a moderate potential for American badger to be present.

San Joaquin kit fox have a low potential to occur within the project boundary as there are no suitable wildlife corridors for this species to access the site from known past historical occurrences in Contra Costa County. The Property is bound by State Route 4 to the east, three miles of developed neighborhoods to the west, and the Contra Costa Canal and further development to the south. However, due to suitable grassland habitat, prey base, and friable soils, a SJKF den survey should take place.

Special-Status Amphibians – CRLF and CTS are presumed absent from the Property due to (1) a lack of suitable breeding habitat within the vicinity of the Property, (2) a lack of wetted riparian

habitat for non-breeding, foraging, and/or dispersal, and (3) the Property is distant and isolated from CNDDDB occurrences of these species where suitable habitat exists.

Special-Status Reptiles – The Alameda whipsnake was identified by the CNDDDB as occurring within 5-miles of the Property. An assessment of the Property concluded that the site supports the secondary habitat types for Alameda whipsnake, grassland (without the associated oak woodland), but not the primary habitat types of chaparral or scrub. Additionally, the Property does not feature rock crevices or talus, which provides important refuge, foraging, and nesting opportunities for Alameda whipsnake; therefore, the Property has marginal habitat to support Alameda whipsnake in a breeding or foraging capacity, and instead may only serve as an area for dispersal. However, due to the low vegetation height within the grassland and consequent lack of cover protection from predators, there is a low potential for Alameda whipsnake in a dispersal capacity and this species may be present within the project boundary.

RECOMMENDATIONS

- **Pre-Construction Avian Survey** – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting passerine birds and raptors (birds of prey) within the Property and the large trees to the south of the Property should be conducted by a competent biologist 14 days prior to the commencement of site grading activities. If any bird listed under the Migratory Bird Treaty Act is found to be nesting within the project site or within the area of influence, an adequate protective buffer zone should be established by a qualified biologist to protect the nesting site. This buffer shall be a minimum of 75 feet from the project activities for passerine birds, and a minimum of 250 feet for most raptors (1,000 feet for Swainson’s hawk). The distance shall be determined by a competent biologist based on the site conditions (topography, if the nest is within line of sight of the construction and the sensitivity of the birds nesting). The nest site(s) shall be monitored by a competent biologist periodically to see if the birds are stressed by the construction activities and if the protective buffer needs to be increased. Once the young have fledged and are flying well enough to avoid project construction zones (typically by August), the project can proceed without further regard to the nest site(s).
- **Pre-construction Swainson’s Hawk Survey** – If project construction-related activities would take place during the nesting season (February through August), preconstruction surveys for nesting Swainson’s hawks within ½ mile radius of the project should be conducted. Surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson’s hawks, as well as the nest/chicks second. To meet the California Department of Fish and Game’s (CDFG) recommendations for mitigation and

protection of Swainson's hawks, surveys should be conducted for a ½ mile radius around all project activities, and if active nesting is identified within the ½ mile radius, consultation is required. Methodology for surveys can be found in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys In California's Central Valley – Swainson's Hawk Technical Advisory Committee (2000).

- **Pre-construction Burrowing Owl Surveys** – A burrowing owl pre-construction survey utilizing the methods in the Revised Staff Report on Burrowing Owl Mitigation (CDFW 2012) should take place before any construction activities commence. It is recommended that they be conducted whenever burrowing owl habitat or sign is encountered on or adjacent to (within 150 meters) a project site. Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl or its sign at or near a burrow entrance is observed within the last three years. If a burrowing owl or sign is present on the Property three additional protocol level surveys will be initiated. Once these surveys have been completed to identify the owl's location, disturbance buffers should be placed around each active burrow. No disturbance should occur within 200 meters (approximately 655 feet) of occupied burrows during the breeding season (February 1 through August 31) and/or within 50 meters (approximately 165 feet) of occupied burrows during non-breeding season (September 1 through January 31). Pre-construction surveys shall be completed 14 days prior to initiating activities.

Passive relocation of owls shall be implemented prior to construction only at the direction of the CDFW, and only if the above-described occupied burrow disturbance absolutely cannot be avoided (e.g., due to physical or safety constraints). Relocation of owls shall only be implemented during the non-breeding season (September 1 through January 31). A Burrowing Owl Mitigation and Monitoring Plan shall be submitted to the CDFW for review and approval prior to passive relocation.

- **Pre-construction American Badger Surveys** – A qualified biologist shall survey for American badger concurrent with the pre-construction survey for burrowing owl. If badgers are detected, the biologist shall passively relocate badgers out of the work area prior to construction if feasible. If an active den is detected within the work area, the project proponent shall avoid the den, if feasible, until the qualified biologist determines the den is no longer active. Dens that are determined to be inactive by the qualified biologist shall be collapsed by hand to prevent occupation of the burrow between the time of the survey and construction activities.
- **Pre-construction San Joaquin Kit Fox Surveys** – Preconstruction/preactivity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning

of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox. Surveys should identify kit fox habitat features on the project site and evaluate use by kit fox and, if possible, assess the potential impacts to the kit fox by the proposed activity. The status of all dens should be determined and mapped (see U.S. Fish and Wildlife Service Standardized Recommendations for Protection of The Endangered San Joaquin Kit Fox Prior To Or During Ground Disturbance January 2011). Written results of preconstruction/preactivity surveys must be received by the Service within five days after survey completion and prior to the start of ground disturbance and/or construction activities. If a natal/pupping den is discovered within the project area or within 200-feet of the project boundary, the Service shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization. If the preconstruction/preactivity survey reveals an active natal pupping or new information, the project applicant should contact the Service immediately to obtain the necessary take authorization/permit.

- **Alameda Whipsnake** – In order to prevent AWS from entering construction areas during Project development, it is recommended a wildlife exclusion fence be placed along the property boundary. The fence should be at least three feet high and should be entrenched three to six inches into the ground. It is recommended that exclusion funnels are included in the fence design so that terrestrial species are able to vacate the Project Area prior to disturbance. Monofilament netting, which is commonly used in straw wattle and other erosion preventatives, should not be used on the Project Site in order to prevent possible entrapment of both common and special status terrestrial wildlife species. Trenches should be backfilled, covered or left with an escape ramp at the end of each work day. Trenches left open overnight should be inspected each morning for trapped wildlife species. Prior to initial ground disturbance, a qualified biologist should perform a preconstruction survey in order to ensure no AWS are present. The biologist may remain on site for initial ground disturbance if suitable AWS refugia will be disturbed, e.g. small mammal burrows, foundations, large woody debris. Prior to the initiation of work activities, the qualified biologist should also provide worker education regarding AWS. The training should cover identification of AWS and what to do should one be discovered in the Project Area.
- **Erosion Control** – Grading and excavation activities could expose soil to increased rates of erosion during construction periods. During construction, runoff from the Property could adversely affect aquatic life within the adjacent water features. Surface water runoff could remove particles of fill or excavated soil from the site, or could erode soil down-gradient, if the flow were not controlled. Deposition of eroded material in adjacent water features could increase turbidity, thereby endangering aquatic life, and reducing

wildlife habitat. Implementation of appropriate mitigation measures would ensure that impacts to aquatic organisms would be avoided or minimized. Mitigation measures may include best management practices (BMP's) such as hay bales, silt fencing, placement of straw mulch and hydro seeding of exposed soils after construction as identified in the Storm Water Pollution Prevention Plan (SWPPP).

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ATTACHMENTS

ATTACHMENT 1 FIGURES

- | | |
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| Figure 1 | Regional Map |
| Figure 2 | Vicinity Map |
| Figure 3 | USGS Quadrangle Map |
| Figure 4 | Aerial Photograph |
| Figure 5 | CNDDDB Map of Special Status Wildlife |
| Figure 6 | CNDDDB Map of Special Status Plants |
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Figure 1
Regional Map



**Figure 1: Regional Map
Antioch Property
City of Antioch, California**



193 Blue Ravine Rd., Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

Figure 2
Vicinity Map



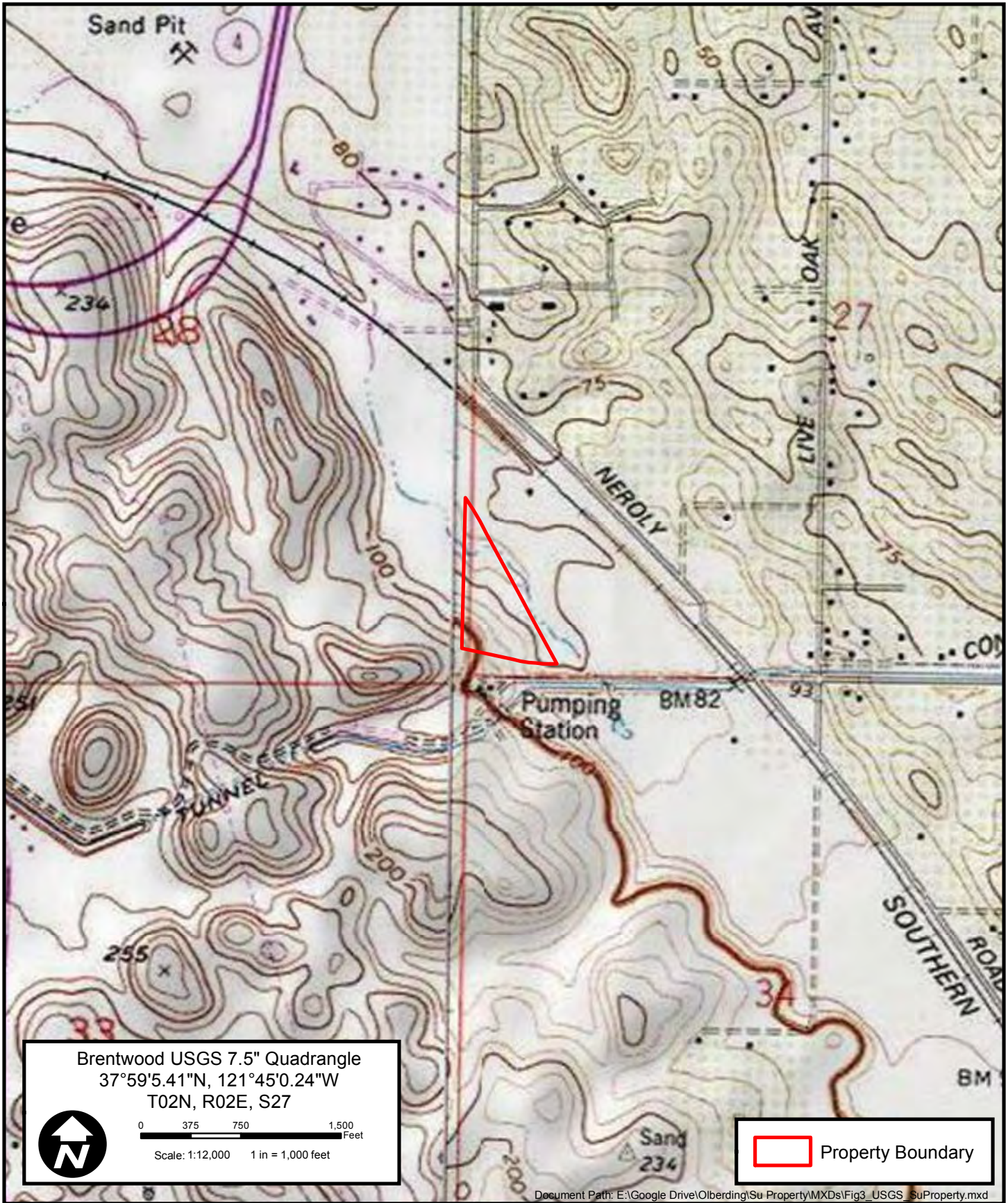
Property Boundary



193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
 Phone: (916) 985-1188

**Figure 2: Vicinity Map
 Antioch Property
 City of Antioch, California**

Figure 3
USGS Quadrangle Map

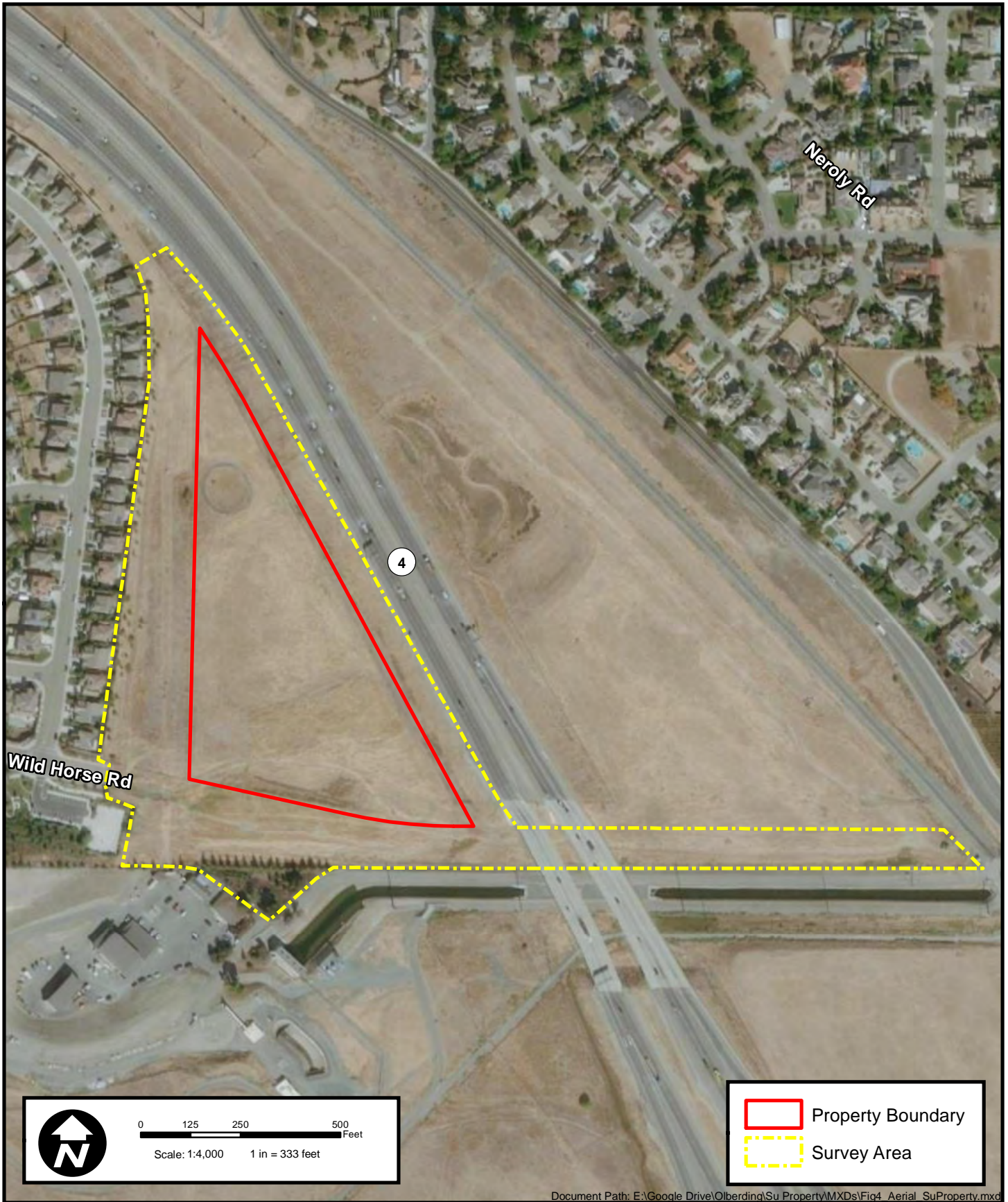


**Figure 3: USGS Topographic Map
 Antioch Property
 City of Antioch, California**



193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
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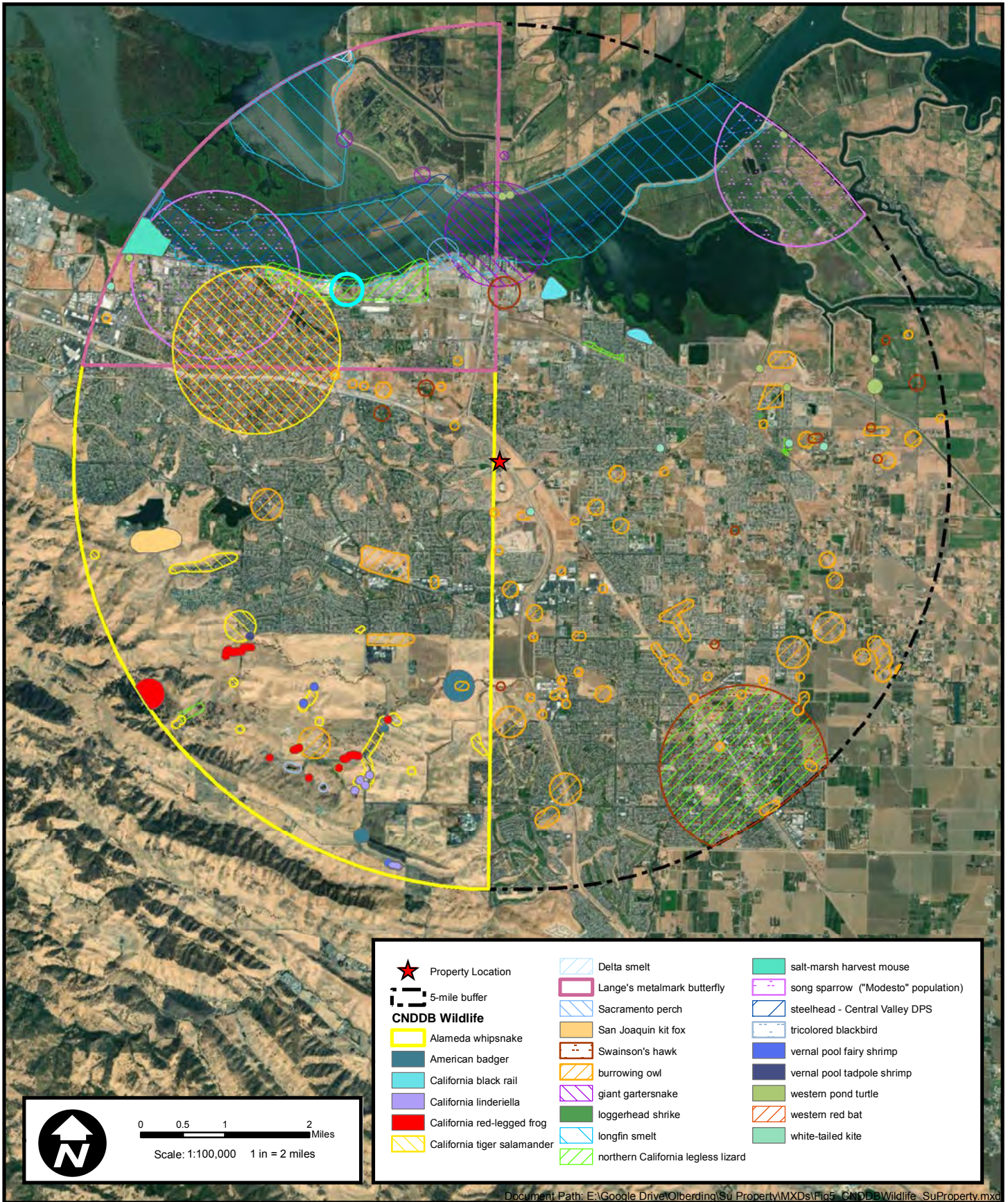
Figure 4
Aerial Photograph



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 Phone: (916) 985-1188

**Figure 4: Aerial Map
 Wild Horse Property
 City of Antioch, California**

Figure 5
CNDDDB Map of Special Status Wildlife



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Figure 5: CNDDB Wildlife Map
Antioch Property
City of Antioch, California

Figure 6
CNDDDB Map of Special Status Plants

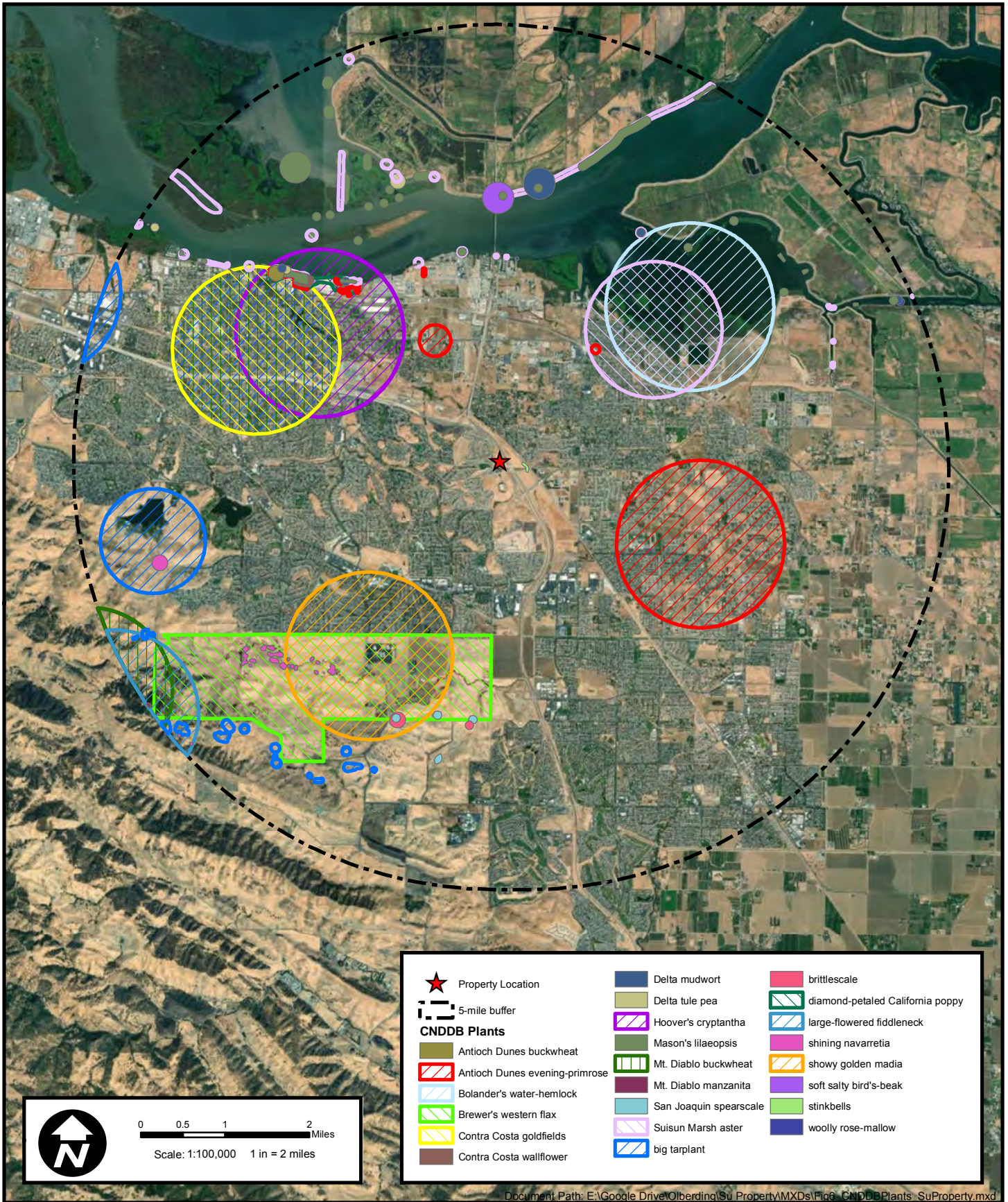
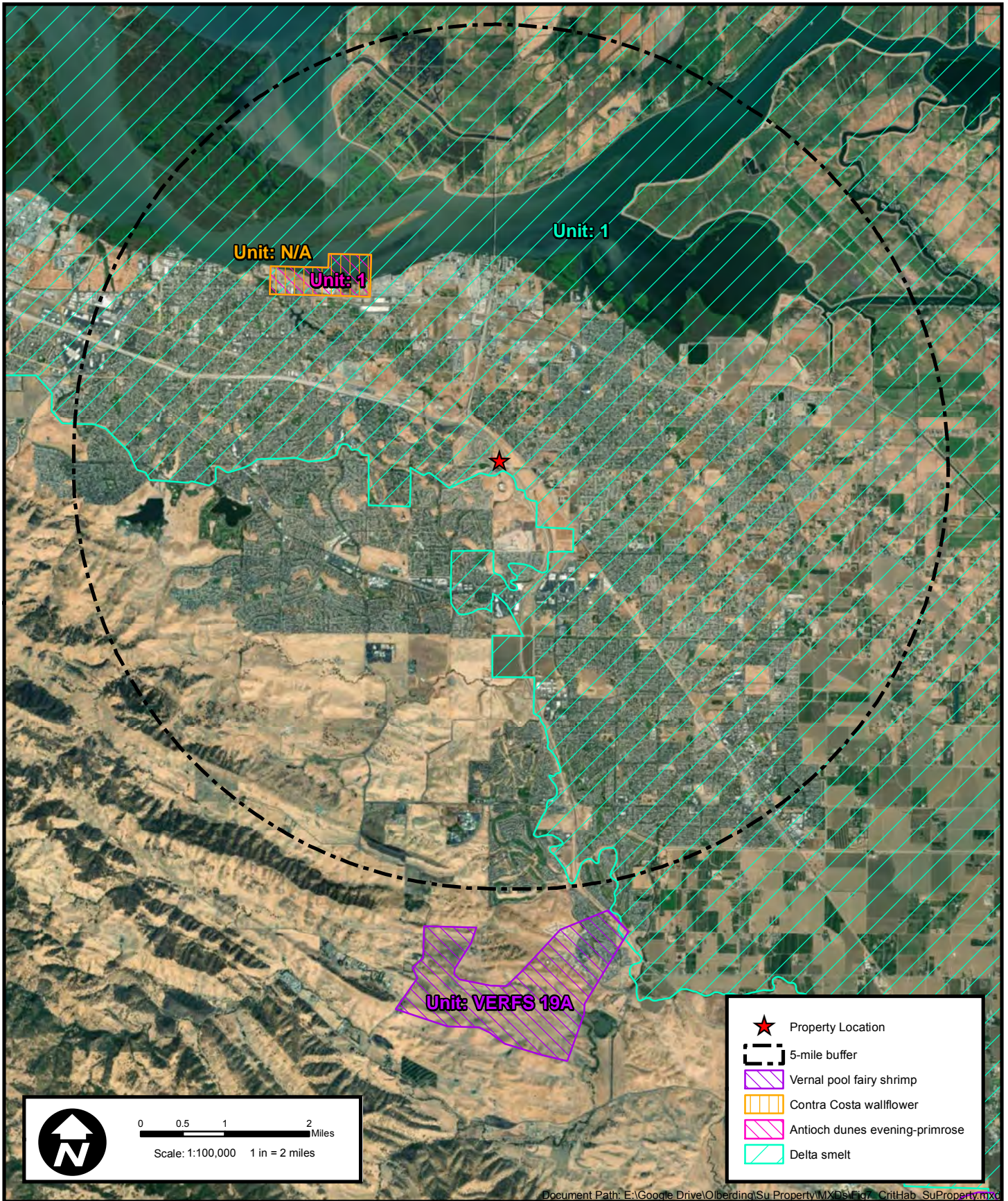


Figure 6: CNDDB Plants Map
Antioch Property
City of Antioch, California



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Figure 7
USFWS Designated Critical Habitat



**Figure 7: USFWS Designated Critical Habitat Map
Antioch Property
City of Antioch, California**



193 Blue Ravine Rd., Ste. 165
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Phone: (916) 985-1188

Figure 8
Soils Map



193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
 Phone: (916) 985-1188

Figure 8: Soil Map
Antioch Property
City of Antioch, California

Map Revision Date: 2/14/2019

Figure 9
Photo Location Map




Figure 9: Photo Points Map
Antioch Property
City of Antioch, California




193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
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Figure 10
Habitat Map



 Property Boundary

Habitat Type

 Annual Grassland

**Figure 10: Habitats Map
Antioch Property
City of Antioch, California**



193 Blue Ravine Rd., Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

ATTACHMENT 2

TABLES

Table 1

Plant and Wildlife Species Observed

Within/Adjacent to the Survey Area

Table 1**Wildlife Species Observed Within/Adjacent to the Survey Area**

Scientific Name	Common Name
Plant Species Observed	
<i>Acacia pycnantha</i>	Golden wattle acacia
<i>Amsinckia menziesii</i>	Common fiddleneck
<i>Avena fatua</i>	Wild oat
<i>Baccharis pilularis</i>	Coyote brush
<i>Brassica nigra</i>	Black mustard
<i>Brassica rapa</i>	Field mustard
<i>Bromus diandrus</i>	Ripgut brome
<i>Bromus hordeaceus</i>	Soft chess
<i>Carduus pycnocephalus</i>	Italian thistle
<i>Cedrus deodara</i>	Deodar cedar
<i>Centaurea solstitialis</i>	Yellow star-thistle
<i>Cercis occidentalis</i>	Western redbud
<i>Dittrichia graveolens</i>	Stinkwort
<i>Erodium botrys</i>	Broadleaf filaree
<i>Festuca perennis</i>	Italian rye grass
<i>Helminthotheca echioides</i>	Bristly oxtongue
<i>Hordeum murinum</i>	Wall barley
<i>Lactuca serriola</i>	Prickly lettuce
<i>Medicago polymorpha</i>	California burclover
<i>Quercus agrifolia</i>	Coast live oak
<i>Rumex crispus</i>	Curly dock
<i>Salix lasiolepis</i>	Arroyo willow
<i>Salsola australis</i>	Russian thistle
<i>Vicia sativa</i>	Common vetch
Animal Species Observed	
Birds	
<i>Anas platyrhynchos</i>	Mallard
<i>Aphelocoma californica</i>	California scrub jay
<i>Branta canadensis</i>	Canada goose
<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Calypte anna</i>	Anna's hummingbird
<i>Charadrius vociferous</i>	Killdeer

Table 1**Wildlife Species Observed Within/Adjacent to the Survey Area**

Scientific Name	Common Name
<i>Colomba livia</i>	Rock pigeon
<i>Corvus brachyrhynchos</i>	American crow
<i>Elanus leucurus</i>	White tailed kite
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Falco sparverius</i>	American kestrel
<i>Melospiza crissalis</i>	California towhee
<i>Mimus polyglottos</i>	Northern mockingbird
<i>Petrochelidon pyrrhonota</i>	Cliff swallow
<i>Sayornis nigricans</i>	Black phoebe
<i>Sayornis saya</i>	Say's phoebe
Mammals	
<i>Canis latrans</i>	Coyote
<i>Otospermophilus beecheyi</i>	California ground squirrel
<i>Procyon lotor</i>	Raccoon
<i>Sylvilagus audubonii</i>	Desert cottontail
<i>Thomomys bottae</i>	Botta's pocket gopher
<i>Vulpes vulpes</i>	Red fox
Reptiles & Amphibians	
<i>Anaxyrus boreas</i>	Western toad
<i>Pituophis catenifer catenifer</i>	Pacific gopher snake
<i>Sceloporus occidentalis bocourtii</i>	Coast Range fence lizard

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
PLANTS					
Large-Flowered Fiddleneck (<i>Amsinckia grandiflora</i>)	E/E/1B	April – May	Cismontane woodland, valley and foothill grassland, annual grassland in various soils.	Low Suitable Habitat Present	Not Likely to Occur
Mt. Diablo Manzanita (<i>Arctostaphylos auriculata</i>)	-/-/1B.3	January – March	Chaparral and cismontane woodland with sandstone substrate.	No Suitable Habitat Present	Presumed Absent
Brittlescale (<i>Atriplex depressa</i>)	-/-/1B.2	May – October	Chenopod scrub, meadows and seeps, playas, valley and foothill grasslands, and alkaline vernal pools with clay substrate.	No Suitable Habitat Present	Presumed Absent
Big Tarplant (<i>Blepharizonia plumosa</i>)	-/-/1B.1	July – October	Valley grassland, foothill woodland, chaparral.	Low Suitable Habitat Present	Not Likely to Occur
Soft Salty Bird's Beak (<i>Chloropyron molle ssp. molle</i>)	E/R/1B.2	July – November	Coastal salt marsh, wetland-riparian.	No Suitable Habitat Present	Presumed Absent
Bolander's Water-Hemlock (<i>Cicuta maculata var. bolanderi</i>)	-/-/2B.1	July – September	Coastal, salt marsh and wetland riparian.	No Suitable Habitat Present	Presumed Absent
Hoover's Cryptantha (<i>Cryptantha hooveri</i>)	-/-/1A	April – May	Inland dunes, valley grasslands (sandy).	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Antioch Dunes Buckwheat (<i>Eriogonum nudum</i> var. <i>psychicola</i>)	-/-/1B.1	July – October	Inland dunes.	No Suitable Habitat Present	Presumed Absent
Mount Diablo Buckwheat (<i>Eriogonum truncatum</i>)	-/-/1B.1	April – November	Chaparral, coastal scrub, and valley and foothill grasslands in sandy soils.	No Suitable Habitat Present	Presumed Absent
Contra Costa Wallflower (<i>Erysimum capitatum</i> var. <i>angustatum</i>)	E/E/1B.1	March – July	Inland dunes.	No Suitable Habitat Present	Presumed Absent
Diamond-Petaled California Poppy (<i>Eschscholzia rhombipetala</i>)	-/-/1B.1	March – April	Valley and foothill grassland, alkaline, clay slopes and flats.	No Suitable Habitat Present	Presumed Absent
San Joaquin Spearscale (<i>Extriplex joaquinana</i>)	-/-/1B.2	April – October	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland in seasonal alkali wetlands or alkali sink scrub with <i>Distichlis spicata</i> , <i>Frankenia</i> , etc.	No Suitable Habitat Present	Presumed Absent
Brewer's Western Flax (<i>Hesperolinon breweri</i>)	-/-/1B.2	May – July	Chaparral, cismontane woodland, valley and foothill grassland. Often in rocky serpentine soils.	No Suitable Habitat Present	Presumed Absent
Wooly Rose-mallow (<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>)	-/-/1B.2	June – September	Freshwater marshes, edges of ponds and streams, roadside ditches, farm ponds	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Contra Costa Goldfields (<i>Lasthenia conjugens</i>)	E/-/1B.1	March – June	Valley and foothill grassland, cismontane woodland, and vernal pools, swales, and low depressions in open grassy areas.	No Suitable Habitat Present	Presumed Absent
Delta Tule Pea (<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>)	-/-/1B.2	May – July	Freshwater wetlands, wetland-riparian, freshwater marsh, brackish marsh/	No Suitable Habitat Present	Presumed Absent
Mason’s Lilaepsis (<i>Lilaepsis masonii</i>)	-/R/1B.1	April – November	Freshwater wetland, wetland-riparian, freshwater or brackish marsh.	No Suitable Habitat Present	Presumed Absent
Delta Mudwort (<i>Limosella australis</i>)	-/-/2B.1	May – August	Marshes and swamps (freshwater or brackish), riparian scrub. Usually found on mud banks.	No Suitable Habitat Present	Presumed Absent
Showy Golden Madia (<i>Madia radiata</i>)	-/-/1B.1	March – May	Cismontane woodland, valley and foothill grasslands.	Suitable Habitat Present	Not Likely to Occur
Shining Navarretia (<i>Navarretia nigelliformis</i> ssp. <i>radians</i>)	-/-/1B.2	April – July	Sometimes clay, cismontane woodland, valley and foothill grasslands, vernal pools.	No Suitable Habitat Present	Presumed Absent
Antioch Dunes Evening Primrose (<i>Oenothera deltoides</i> ssp. <i>howellii</i>)	E/E/1B.1	March – September	Inland dunes.	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Suisun Marsh Aster (<i>Symphotrichum lentum</i>)	-/-/1B.2	March – November	Freshwater and brackish marsh.	No Suitable Habitat Present	Presumed Absent
INVERTEBRATES					
Lange's metalmark butterfly (<i>Apodemia mormo langei</i>)	E/-/-	Resident	Stabilized dunes along San Joaquin River. Endemic to Antioch Dunes in Contra Costa County.	No Suitable Habitat Present	Presumed Absent
Vernal Pool Fairy Shrimp (<i>Branchinecta lynchi</i>)	T/-/-	Resident	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabits small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	No Suitable Habitat Present	Presumed Absent
Vernal Pool Tadpole Shrimp (<i>Lepidurus packardii</i>)	E/-/-	Once every two weeks within two weeks of pool inundation, continuing until pool has been inundated for 120 continuous days (usually December – May)	Turbid vernal pools and swales in Sacramento Valley. Grass bottomed swales of unplowed grasslands.	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
BIRDS					
Tricolored Blackbird (<i>Agelaius tricolor</i>)	-/T/-	February – August	Nesting within seasonal wetland marshes, blackberry brambles or other protected substrates. Forages in annual grassland and wetland habitats.	No Suitable Habitat Present	Presumed Absent
Grasshopper Sparrow (<i>Ammodramus savannarum</i>)	-/SSC/-	February – August	Open grasslands and prairies with patches of bare ground. More likely to be found in large tracts of habitat than in small ones.	Marginally Suitable Habitat Present	Not Likely to Occur
Lesser Sandhill Crane ()	-/SSC/-	Late Fall – Winter	Winter migrant in California found roosting on shallow lakes or rivers at night and spending the day in irrigated croplands, pastures, grasslands, or wetlands.	No Suitable Habitat Present	Presumed Absent
Greater Sandhill Crane (<i>Antigone canadensis tabida</i>)	-/T/-	Late Fall – Winter	Winter migrant in California found roosting on shallow lakes or rivers at night and spending the day in irrigated croplands, pastures, grasslands, or wetlands.	No Suitable Habitat Present	Presumed Absent
Golden Eagle (<i>Aquila chrysaetos</i>)	-/FP/-	February – August	Nests in cliff-walled canyons and tall trees in open areas. (Nesting and wintering) Rolling foothills mountain areas, sage-juniper flats, and desert.	Low Foraging Habitat Present	Not Likely to Occur

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Burrowing Owl (<i>Athene cunicularia</i>)	-/SSC/-	February – August	Dry open annual or perennial grassland, desert, and scrubland. Uses abandoned mammal burrows for nesting.	High Suitable Habitat Present	May Occur
Swainson's Hawk (<i>Buteo swainsoni</i>)	-/T/-	February – October	Nests in riparian areas and in oak savanna near foraging areas. Forages in alfalfa and grain fields with rodent populations.	Moderate Suitable Foraging Habitat Present	May Occur
Western Snowy Plover (<i>Charadrius alexandrinus nivosus</i>)	T/SSC/-	February – August	Sandy beaches, salt pond levees, shores of large alkali lakes. Requires sandy, gravelly, or friable soils for nesting.	No Suitable Habitat Present	Presumed Absent
Mountain Plover (<i>Charadrius montanus</i>)	-/SSC/-	Late Fall – Winter	Winters in California on short-grass plains and fields, plowed fields, and sandy deserts.	No Suitable Habitat Present	Presumed Absent
Northern Harrier (<i>Circus cyaneus</i>)	-/SSC/-	February – August	Nests in grasslands and marshlands, ground nesting bird. (Nesting) Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain ciénegas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Moderate Suitable Habitat Present	May Occur
White-tailed Kite (<i>Elanus leucurus</i>)	-/FP/-	February – August	Various grassland habitats, urban land, oak woodlands with grassland for foraging.	High Suitable Foraging Habitat Present	Present

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
San Francisco Common Yellowthroat (<i>Geothlypis trichas sinuosa</i>)	-/SSC/-	February – August	Fresh and saltwater marshes of the San Francisco Bay area. Forages in thick, continuous vegetation down to water surface. Nests in tall grasses, tule patches, and willows.	No Suitable Habitat Present	Presumed Absent
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	-/E, FP/-	January – July	Wetland habitats such as coasts, rivers, lakes or marshes. Uses large mature conifers or hardwood trees for nesting.	No Suitable Habitat Present	Presumed Absent
Yellow-breasted Chat (<i>Icteria virens</i>)	-/SSC/-	February – August	Breeds in areas of dense shrubbery, including abandoned farm fields, clearcuts, powerline corridors, fencerows, forest edges and openings, swamps, and edges of streams and ponds. Its habitat often includes blackberry bushes.	No Suitable Habitat Present	Presumed Absent
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	-/SSC/-	February – August	Open grassland habitats, grazed grasslands. Uses shrubs for nesting.	Moderate Suitable Habitat Present	May Occur
California Black Rail (<i>Laterallus jamaicensis coturniculus</i>)	-/T,FP/-	February – July	Inhabits shallow salt and freshwater marshes. Nests in upland areas of salt marshes, shallow freshwater marshes, wet meadows and flooded grassy vegetation.	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Song Sparrow (Modesto Population) (<i>Melospiza melodia</i>)	-/SSC/-	February – August	Resides only in the north-central portion of the Central Valley. Inhabits emergent freshwater marshes, dominated by tules and cattails as well as riparian willow thickets.	No Suitable Habitat Present	Presumed Absent
Suisun Song Sparrow (<i>Melospiza melodia maxillaris</i>)	-/SSC/-	February – August	Inhabits tidal salt and brackish marshes fringing the Carquinez Strait and Suisun Bay. Requires tall, dense vegetation for nesting sites, song perches, and cover from predators.	No Suitable Habitat Present	Presumed Absent
Samuels (San Pablo) Song Sparrow (<i>Melospiza melodia samuelis</i>)	-/SSC/-	February – August	Tidal and muted tidal salt marshes fringing San Pablo Bay. Requires tall, dense vegetation for nesting, song perches, and as cover from predators.	No Suitable Habitat Present	Presumed Absent
American White Pelican (<i>Pelecanus erythrorhynchos</i>)	-/SSC/-	Late Fall – Winter	In the winter, they favor coastal bays, inlets, estuaries, and sloughs where they can forage in shallow water and rest on exposed spots like sandbars.	No Suitable Habitat Present	Presumed Absent
Bank Swallow (<i>Riparia riparia</i>)	-/T/-	February – August	Nests in colonies in riparian or other lowland habitats. Nest is constructed in vertical bank or cliff with fine sandy soils near streams, rivers, lakes, or ocean.	No Suitable Habitat Present	Presumed Absent
California Least Tern (<i>Sternula antillarum browni</i>)	E/E, FP/-	May – June	Forages in shallow estuaries and lagoons. Nests are situated on barren to sparsely vegetated places near water, such as salt flats, on sandy or gravelly substrates.	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Yellow-Headed Blackbird (<i>Xanthocephalus xanthocephalus</i>)	-/SSC/-	February – August	Breed in wetlands in prairies, mountain meadows, and shallow areas of marshes, ponds and rivers. Nest in cattails, bulrush, or reeds often alongside red-winged blackbirds. Forage in grasslands, croplands, or savanna.	No Suitable Habitat Present	Presumed Absent
MAMMALS					
Pallid Bat (<i>Antrozous pallidus</i>)	-/SSC/-	Resident	Forages in grasslands, shrublands, deserts, forests, and woodlands. Most common in open, dry habitats. Roosts in rock crevices, caves, tree hollows, and buildings. Roosts must protect bats from high temperatures; very sensitive to disturbance of roosting sites.	Moderate Suitable Habitat Present	May Occur
Townsend's Big-Eared Bat (<i>Corynorhinus townsendii</i>)	-/SSC/-	Resident	Throughout California in a wide variety of habitats; roosts in the open, hanging from walls and ceilings. Needs sites free from human disturbance. Most common in mesic sites.	Moderate Suitable Habitat Present	May Occur
Western Red Bat (<i>Lasiurus blossevillii</i>)	-/SSC/-	Resident	Winter in western lowlands and coastal regions of the San Francisco Bay. Roosts in forests and woodlands. Feed in grasslands, shrublands, open woodlands and forests and croplands.	Moderate Suitable Foraging Habitat Present	May Occur

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
San Francisco Dusky-Footed Woodrat (<i>Neotoma fuscipes annectens</i>)	-/SSC/-	Resident	Forest habitats of moderate canopy and moderate to dense understory, may prefer chaparral and redwood habitats. Nests constructed of grass, leaves, sticks, feathers, etc. Population may be limited by availability of nest materials.	No Suitable Habitat Present	Presumed Absent
San Joaquin Pocket Mouse (<i>Perognathus inornatus</i>)	-/-/-	Resident	Inhabits grassland, semi-desert, or desert environments with loose, sandy soils.	No Suitable Habitat Present	Presumed Absent
Salt Marsh Harvest Mouse (<i>Reithrodontomys raviventris</i>)	E/E, FP/-	Resident	Salt marshes with dense stands of pickleweed and other dense wetland vegetation such as cattails or bulrush.	No Suitable Habitat Present	Presumed Absent
American Badger (<i>Taxidea taxus</i>)	-/SSC/-	Resident	Open areas with grasslands, which can include parklands, farms, and treeless areas with friable soil and a supply of rodent prey.	Moderate Suitable Habitat Present	May Occur
San Joaquin Kit Fox (<i>Vulpes macrotis mutica</i>)	E/T/-	Resident	Annual grasslands and various scrub and subscrub communities. Prefers loose-textured soils for burrowing, though can modify burrows of other animals to facilitate denning in other soil types. Can inhabit agricultural and some urban areas provided minimal disturbance and sufficient prey-base.	Isolated Habitat Present	May Occur
AMPHIBIAN					

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR) ²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
California Tiger Salamander <i>(Ambystoma californiense)</i>	T/T/-	Aquatic Surveys - Once each in March, April, and May with at least 10 days between surveys. Upland Surveys - 20 nights of surveying under proper conditions beginning October 15 and ending March 15.	Vernal pools, swales and depressions for breeding, needs underground refugia.	No Suitable Habitat Present	Presumed Absent
Foothill Yellow-Legged Frog <i>(Rana boylei)</i>	-E, SSC/-	Year-round resident	Partially-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need cobble for egg-laying.	No Suitable Habitat Present	Presumed Absent
California Red-Legged Frog <i>(Rana draytonii)</i>	T/SSC/-	May 1 – November 1	Lowlands and foothills in or near permanent deep water with dense, shrubby, or emergent riparian habitat. Requires 11-20 weeks of permanent water for breeding and larval development. Must have access to aestivation habitat.	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR)²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
REPTILE					
Northern California Legless Lizard <i>(Anniella pulchra)</i>	-/SSC/-	Year-round resident	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks.	No Suitable Habitat Present	Presumed Absent
California Glossy Snake <i>(Arizona elegans occidentalis)</i>	-/SSC/-	Year-round resident	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Appears to prefer microhabitats of open areas and areas with soil loose enough for easy burrowing.	No Suitable Habitat Present	Presumed Absent
Western Pond Turtle <i>(Emys marmorata)</i>	-/SSC/-	March – October	Aquatic turtle needs permanent water in ponds, streams, irrigation ditches. Nests on sandy banks or grassy fields.	No Suitable Habitat Present	Presumed Absent
San Joaquin Coachwhip <i>(Masticophis flagellum ruddocki)</i>	-/SSC/-	Year-round Resident	Open, dry habitats with little or no tree cover; found in valley grassland and saltbush scrub in the San Joaquin Valley; needs mammal burrows for refuge and oviposition sites.	Isolated Habitat Present	Low Potential

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR) ²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
Alameda Whipsnake (<i>Masticophis lateralis euryxanthus</i>)	T/T/-	Year-round resident	Open areas in canyons, rocky hillsides, chaparral scrublands, open woodlands, pond edges, stream courses within Alameda and Contra Costa counties, and parts of Santa Clara and San Joaquin counties.	Isolated Marginal Habitat Present	Low Potential
Coast Horned Lizard (<i>Phrynosoma blainvillii</i>)	-/SSC/-	Year-round resident	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills.	No Suitable Habitat Present	Presumed Absent

Table 2

Special-Status Species for the Antioch North, Jersey Island, Bouldin Island, Antioch South, Brentwood, Woodward Island, Tassajara, Byron Hot Springs, and Clifton Court Forebay 7.5 Minute Quadrangle Maps¹

Common Name/Scientific Name	Status (Fed/State/CRPR) ²	Blooming or Survey Period	Habitats of Occurrence	Potential on Site	Status on Site**
<p>1. Special-status plants and animals as reported by the California Natural Diversity Data Base, California Native Plant Society, and other background research January 2019</p> <p>2. Order of Codes for Plants - Fed/State/CNPS</p> <p>Codes:</p> <p>SSC - California Species of Special Concern</p> <p>E - Federally/State Listed as an Endangered Species</p> <p>T - Federally/State Listed as a Threatened Species</p> <p>C - Species listed as a Candidate for Federal Threatened or Endangered Status</p> <p>R - Rare</p> <p>D - Delisted</p> <p>FP - State Fully Protected</p> <p>1B - California Native Plant Society considers the plant Rare, Threatened, or Endangered in California and elsewhere.</p> <p>0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)</p> <p>0.2-Moderately threatened in California (20 – 80% occurrences threatened / moderate degree and immediacy of threat)</p> <p>0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)</p> <p>1A - CNPS Plants presumed extirpated or extinct in California.</p> <p>2 - CNPS Plants Rare, Threatened, or Endangered in California, but more common elsewhere.</p>					

ATTACHMENT 3
SITE PHOTOGRAPHS



1. Overview of the Property facing north. The elevated Highway 4 is visible in the background. Taken August 2020.



2. Ground squirrels were present on site and each burrow was inspected for evidence of burrowing owl habitation. No whitewash, prey remains, feathers, or decorations were evident. Taken August 2020.



3. Currently inactive cliff swallow nests situated on the Highway 4 overpass supports. Taken August 2020.



4. Concrete v-ditch enters the northern end of the Property and flows to this stormdrain. Taken August 2020.



5. Overview of the annual grassland habitat on the Property which had been recently mowed/disked. Taken January 2019.



6. An elevated plateau was present on the southwest corner of the Property (left side of photo). Taken August 2020.



7. This constructed detention basin is present at the north end of the Property, but it does not appear to ever hold water - determined by a lack of wetland vegetation, lack of standing water, and historical aerial imagery. Taken August 2020.



8. Native and non-native ornamental trees flank the western side of the Property along the adjacent development's sound wall. Trees are approximately 100 - 150 feet from the Property boundary. There are no trees within the Property itself. Taken January 2019.



9. View towards the southeast with the elevated plateau visible on the right. Taken August 2020.



10. The terminus of Wild Horse Road as seen from the southwest corner of the Property. Taken August 2020.

U.S. ARMY CORPS OF ENGINEERS
JURISDICTIONAL DELINEATION
FOR THE
WILD HORSE ROAD PROPERTY
CITY OF ANTIOCH, CALIFORNIA



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ATTACHMENT 2 PLANT LIST

ATTACHMENT 3 WETLAND DELINEATION DATA FORMS

ATTACHMENT 4 SITE PHOTOGRAPHS

ATTACHMENT 5 SOILS DATA

This report should be cited as: Olberding Environmental, Inc. March 2021. *U.S. Army Corps of Engineers Wetland Delineation for the Wild Horse Road Property, Contra Costa County, California*. Prepared for CCP-Contra Costa Investor, LLC. Fremont, California.

SUMMARY

Olberding Environmental, Inc. (Olberding Environmental) conducted an investigation of the geographic extent of areas potentially subject to U.S. Army Corps of Engineers (Corps) jurisdiction under Section 404 of the Clean Water Act (wetlands and other waters) within the designated boundaries of the approximately 9.6-acre Wild Horse Road Property (Property), located in the City of Antioch, within Contra Costa County, California.

Results of the jurisdictional delineation survey did not identify the presence of waters/wetlands subject to Corps jurisdiction within the survey boundary. The Property contains two artificially created features in the form of a concrete v-ditch with an associated storm drain outlet, and one constructed stormwater detention basin with associated utilities near the northern end of the parcel. Olberding Environmental visited these two areas of the Property and investigated other areas of the Property where wetlands could potentially occur. Sample points were established, and data was collected; however, none of the sample points contained any of the three parameters (wetland soils, hydrology, and vegetation) that are used to indicate jurisdictional wetlands. Therefore, there are no features within the survey boundary that are subject to Corps jurisdiction.

1.0 INTRODUCTION

1.1 Scope

Olberding Environmental conducted an investigation of the geographic extent of areas potentially subject to U.S. Army Corps of Engineers (Corps) jurisdiction under Section 404 of the Clean Water Act (wetlands and other waters) within the identified boundaries of the Wild Horse Road Property (Property). The area surveyed is comprised of approximately 9.6 acres located in the City of Antioch within Contra Costa County, California.

On February 23, 2021, a field survey was performed for the purposes of determining the presence and possible extent of Corps jurisdiction within predetermined boundaries identifying the Property. The Property was investigated in order to make a technical evaluation as to the extent of Corps jurisdiction based on current and historic land use conditions. Visual observations as to the presence or absence of indicators of wetland soil, vegetation, and hydrology conditions were made during the investigation of the Property. The boundaries of all potential wetland/water features observed were mapped and further defined in accordance with the Corps regulations and the required methodology described in the 1987 Corps Wetlands Delineation Manual (1987 Manual) and Arid West Supplement to the 1987 Manual (Arid West Supplement, 2008).

1.2 Location

The Property is located within the City of Antioch just south of the Highway 4 and Highway 160 interchange. It lies at the eastern terminus of Wild Horse Road and is situated immediately north

of the Contra Costa Water District pump station facility. Attachment 1, Figure 1 depicts the regional location of the Property in Contra Costa County, while Attachment 1, Figure 2 illustrates the vicinity of the Property in relationship to the City of Antioch. Attachment 1, Figure 3 identifies the location of the Property on the USGS 7.5" Quadrangle Map for Brentwood. An aerial photograph of the Property has been included as Attachment 1, Figure 4.

Access to the Property is provided from Highway 160. Take the Main Street exit east and travel south on Neroly Road. Follow Neroly Road for 1.65 miles to the Delta De Anza Regional Trail where an entrance to the Property is located across the railroad tracks. Alternately, the western side of the Property can be accessed from the terminus of Wild Horse Road off Hillcrest Avenue in Antioch.

1.3 Property Description

The Property encompasses approximately 9.6 acres in a roughly triangular shape bounded on the east by California State Route 4, to the west by residential neighborhoods, and to the south by the Contra Costa Water District's Pumping Plant 4 and the Contra Costa Canal. The Property supports a single habitat type consisting of annual grassland. Characteristic vegetation includes wild oat (*Avena fatua*), Italian rye grass (*Festuca perennis*), black mustard (*Brassica nigra*), stinkwort (*Datura stramonium*), Russian thistle (*Salsola australis*), bristly oxtongue (*Helminthotheca echioides*), and curly dock (*Rumex crispus*). No natural drainages were observed on the Property; however, there is an off-site roadside ditch along the Highway 4 embankment just outside of the eastern boundary of the Property. This off-site feature did not contain water during the time of the survey. During the time of the survey, construction was occurring just south of the Property to extend Wild Horse Road to the east. Due to nearby construction activities, the southernmost boundary of the site appears to have been recently graded and hydroseeded.

One concrete-lined v-ditch occurs at the northern tip of the Property. This v-ditch was approximately 3 ft wide, and enters the Property from the west below the existing sport fence, where it terminates at a storm drain grate located at the northernmost tip of the Property. Approximately 7 linear feet (lnft) (less than 0.001 acres) of the concrete v-ditch is located on the Property, and this feature did not contain water during the time of the survey. The Property also contains one constructed detention basin near the northern end of the Property. This detention basin is round in shape and edged with a ten-foot section of rock gravel along the rim of the basin. This feature contained an earthen basin with permeable substrate, and was constructed to detain stormwater run-off from the adjacent housing development to the west. This feature also contained a metal stormwater overflow drainage pipe, surrounded by gravel. No water was present in the basin during the time of the survey. Additional stormwater infrastructure was present along the western edge of the Property in the form of a storm drain manhole cover, along with a concrete storm drain base near the center of the Property.

The topography of the Property is mostly flat with a slight rise to the southwest corner, along with some stockpiled mounds of soil near the southern end of the Property. The topography outside the Property boundary is elevated on both the east and west sides. Elevations on the Property range from 70 feet above sea level at the north end to 114 feet above sea level at the southwestern corner. The center of the constructed detention basin has an elevation of 66 feet above sea level.

2.0 METHODOLOGY

2.1 Overview

Potential wetlands were delineated using Corps' methodology during site investigations conducted on February 23, 2021. The existing landforms as well as associated vegetation, hydrology, and soil conditions were studied to identify areas that would likely contain wetland/waters and/or aquatic habitats. Potential jurisdictional areas were identified on field maps and compared to available aerial photography and topographical maps.

Prior to completing the site survey for this report, site maps, topographic maps, and aerial photographs of the Property were obtained from several sources and reviewed. This information was used in association with the detailed delineation survey to determine the extent and boundaries of wetland features. Resource materials used for the site analysis were as follows:

- *U. S. Geological Survey 7.5-Minute Quadrangle Map for Brentwood, California*
- Google Earth aerial images; and
- Soils map information contained in the *Soil Survey of Contra Costa County, California* (Soil Conservation Service 1972).

The extent or boundary of wetland habitats was further defined using the 1987 "Corps Wetlands Delineation Manual" (1987 Manual)¹, the "Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region" (Arid West Supplement)², routine on-site wetland determination protocol currently in use by the Corps, published Corps of Engineers regulatory guidance letters, and Sacramento District regulatory policy.

¹ Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual." U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi. 100 pp. plus appendices.

² Environmental Laboratory. 2008. "Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)." U.S. Army Engineer Research and Development Center. Vicksburg, Mississippi. 123 pp.

2.2 Corps Definitions

Pursuant to the 1987 Manual, key criteria for determining the presence of wetlands are:

- a) the presence of inundated or saturated soil conditions resulting from permanent or periodic inundation by ground water or surface water, and
- b) a prevalence of vegetation typically adapted for life in saturated soil conditions (hydrophytic vegetation).

Explicit in the definition is the consideration of three environmental parameters: hydrology, soil, and vegetation. Positive wetland indicators of all three parameters are normally present in wetlands. The assessment of all three parameters enhances the technical accuracy, consistency, and credibility of wetland determination and is required per the 1987 Corps Manual.

Aquatic habitats other than wetlands that are considered to be waters of the United States were also investigated as part of this study. On January 23, 2020 the EPA and the Corps enacted the Navigable Waters Protection Rule (NWPR) to redefine “waters of the United States” to include four categories. Their landward extent was defined following the definitions provided in the Corps of Engineers regulations [33 CFR §328.3]:

(a) *Jurisdictional waters*. The Clean Water Act defines “waters of the United States” as:

- (1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
- (2) Tributaries;
- (3) Lakes and ponds, and impoundments of jurisdictional waters; and
- (4) Adjacent wetlands.

(b) *Non-jurisdictional waters*. The following are not “waters of the United States”:

- (1) Waters or water features that are not identified in (a)(1) through (4) above;
- (2) Groundwater, including groundwater drainage through subsurface drainage systems;
- (3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
- (4) Diffuse stormwater run-off and direction sheet flow over upland;

- (5) Ditches that are not territorial seas or traditional navigable waters, or tributaries, and those portions constructed in adjacent wetlands that do not satisfy the conditions of adjacent wetlands;
- (6) Prior converted cropland;
- (7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
- (8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and clog cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of lakes and ponds, and impoundments of jurisdictional waters;
- (9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- (10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- (11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
- (12) Waste treatment systems.

(c) *Definitions.* In this section, the following definitions apply:

- (1) *Adjacent wetlands.* Wetlands that (i) abut, meaning to touch at least at one point or side of territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters; (ii) are inundated by flooding from territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters in a typical year; (iii) are physically separated from a water defined territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters only by a natural berm, bank, dune, or similar natural feature; or (iv) are physically separated from territorial seas or traditional navigable waters, tributaries, or lakes, ponds, and impoundments of jurisdictional waters only by an artificial dike, barrier, or similar artificial structure so long as that structure allows for a direct hydrologic surface connection between the wetlands and territorial seas or traditional navigable waters,

tributaries, or lakes, ponds, and impoundments of jurisdictional waters in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature.

- (2) *Ditch*. A constructed or excavated channel used to convey water.
- (3) *Ephemeral*. Surface water flowing or pooling only in direct response to precipitation (e.g., rain or snow fall).
- (4) *High tide line*. The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along the shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings of characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide.
- (5) *Intermittent*. Surface water flowing continuously during certain times of the year and more than in direct response to precipitation (e.g., seasonally when the groundwater table is elevated or when snowpack melts).
- (6) *Lakes and ponds, and impoundments of jurisdictional waters*. Standing bodies of open water that contribute surface water flow to territorial seas or traditional navigable waters in a typical year either directly or through one or tributaries, lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands. A lake, pond, or impoundment of a jurisdictional water does not lose its jurisdictional status if it contributes to surface water flow to a downstream jurisdictional water in a typical year through a channelized non-jurisdictional surface water feature, through a culvert, dike, spillway, or similar artificial feature, or through a debris pile, boulder field, or similar natural feature. A lake or pond, or impoundment of a jurisdictional waters is also jurisdictional if it is inundated by flooding from territorial seas or traditional navigable waters, tributaries, lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands in a typical year.
- (7) *Ordinary high water mark*. That line on the shore established by the fluctuations 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.
- (8) *Perennial*. Surface water flowing continuously year-round.

- (9) *Prior converted cropland.* Any area that prior to December 23, 1985, was drained or otherwise manipulated for the purpose, or having the effect, of making production of an agricultural product possible. An area is no longer considered prior converted cropland for purposes of the CWA when the area is abandoned and has reverted to wetlands, as defined in paragraph (c)(16) of this section. Abandonment occurs when prior converted cropland is not used for, or in support of, agricultural purposes at least one in the immediately preceding five years.
- (10) *Snowpack.* Layers of snow that accumulate over extended periods of time in certain geographic regions or at high elevation.
- (11) *Tidal waters and waters subject to the ebb and flow of the tide.* Those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters and waters subject to the ebb and flow of the tide end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.
- (12) *Tributary.* A river, stream, or similar naturally occurring surface water channel that contributes surface water flow to the territorial seas or traditional navigable waters in a typical year either directly or through one of more tributaries, lakes, ponds, and impoundments of jurisdictional waters, or adjacent wetlands. A tributary must be perennial or intermittent in a typical year.
- (13) *Typical year.* When precipitation and other climatic variables are within the normal periodic range (e.g., seasonally, annually) for the geographic area of the applicable aquatic resource based on a rolling thirty-year period.
- (14) *Upland.* Any land area that under normal circumstances does not satisfy all three wetland factors (i.e., hydrology, hydrophytic vegetation, hydric soils) identified in paragraph (c)(16) of this section, and does not lie below the ordinary high water mark or the high tide line of a jurisdictional water.
- (15) *Waste treatment system.* Includes all components, including lagoons and treatment ponds (such as settling or cooling ponds), designed to either convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge).
- (16) *Wetlands.* Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances

do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

The Property was also reviewed to assess the potential for qualifying for Section 10 jurisdiction as a navigable water of the United States. Navigable waters of the U.S. are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce (33 CFR 329, Section 329.4). Section 10 jurisdiction extends to the lateral extent of the ordinary high water marks on opposing channel banks. Ultimately, the determination of navigability is made by the division engineer (33 CFR, Part 329, Section 329.14).

2.3 Data Collection for Potential Jurisdictional Wetlands/Waters

Data was collected by Olberding Environmental biologist Lora Roame for the determination of wetlands/waters on February 23, 2021, as outlined in the methods section. Specific information on the OHW line, vegetation, soils and hydrology were gathered during this survey. Attachment 1, Figure 5 depicts the jurisdictional delineation map of the Property. The purpose of this investigation was to identify and delineate potential jurisdictional waters, including wetlands. The survey area was examined for topographic features, drainages, alterations to site hydrology and areas of recent disturbance. All vascular plant species that were identifiable at the time of the survey were recorded in Attachment 2 of this report, and identified using keys and descriptions in The Jepson Manual (2nd ed., 2012).

The habitat types occurring on the Property were characterized according to pre-established categories. In classifying the habitat types on the site, the generalized plant community classification schemas of *A Manual of California Vegetation* (Sawyer, Keeler-Wolf and Evens 2009) were consulted. The final classification and characterization of the habitat types found on the Property were based on field observations.

Data was collected on vegetation, soils, and hydrology using wetland determination protocol as described in the 1987 Manual. Both upland and wetland data were collected to distinguish wetland boundaries from the adjacent upland; in some cases, single descriptive waypoints were taken to characterize the existing vegetation, soils, and hydrology of an area. No soil test pits were taken within potential aquatic features that were confined to channels, thus conforming to the definition of “other waters” of the U.S. (i.e., exhibits a distinct bed and bank, with an ordinary high water mark (OHWM)).

A total of seven sample points were established within the boundaries of the Property; a majority of the time the upland points are distinguished by “A” and the wetland positions “B.” Multiple points were taken along some transect lines to distinguish the extent of large drainage areas.

Precipitation amounts during the 2020-2021 rainy season have been below-average. Weather conditions on February 23, 2021 were clear, with mid-day temperatures approximately 75 degrees Fahrenheit.

The approximate location and extent of potentially jurisdictional wetlands/waters as well as other relevant data were transferred on to a 1" = 100' scale topographical map of the survey area while in the field. Information obtained at the sample point locations was recorded on modified Corps data sheets included in this report (Attachment 3). Representative photographs of the Property can be viewed in Attachment 4.

3.0 TECHNICAL FINDINGS

The following discussion reports the hydrology, soil and vegetation conditions observed at the survey area during the course of the investigation.

3.1 Vegetation Conditions

The 1987 Manual states that the diagnostic environmental characteristics indicating wetland vegetation conditions are met when the prevalent vegetation (more than 50%) consists of macrophytes that are typically adapted to areas having hydrologic and soil conditions described above. In addition, hydrophytic species, due to morphological, physiological, and/or reproductive adaptation(s), have the ability to grow, effectively compete, reproduce, and/or persist in anaerobic soil conditions. Indicators of vegetation associated with wetlands include:

1. more than 50% of the dominant species are rated as Obligate ("OBL"), Facultative Wet ("FACW") or Facultative ("FAC") on lists of plant species that occur in wetlands;³
2. visual observations of plant species growing in areas of prolonged inundation or soil saturation; and
3. reports in the technical literature indicating the prevalent vegetation is commonly found in saturated soils" (1987 Manual).

In addition, hydrophytic indicators are applied to plant communities using the Arid West Supplement (December 2006) in the following sequence:

³ Lichvar, R.W. 2012. The National Wetland Plant List. Indicator Rating Definitions (ERDC/CRREL TR-12-11). U.S. Army Engineer Research and Development Center Cold Regions Research and Engineering Laboratory, Hanover, NH.

1. Apply the dominance test – more than 50% of the dominant species are rated as OBL, FACW, or FAC on lists of plant species that occur in wetlands.
 - a. If the plant community passes the dominance test, then the vegetation is hydrophytic and no further vegetation analysis is required.
 - b. If the plant community fails the dominance test, but indicators of hydric soil and wetland hydrology are both present, proceed to step 2.
2. Apply the prevalence index – a weighted average wetland indicator status of all plant species (OBL=1, FACW=2, FAC=3, FACU=4, UPL=5). Weighting is by abundance (percent cover). A hydrophytic plant community will result in a prevalence index of 3.0 or less.
 - c. If the plant community satisfies the prevalence index, then the vegetation is hydrophytic. No further vegetation analysis is required.
 - d. If plant community fails prevalence index, proceed to step 3.
3. Apply morphological adaptations – morphological features which help plants survive prolonged inundation or saturation in the root zone, must occur on more than 50% of the FACU species living in an area where indicators of hydric soil and wetland hydrology are present.

Since 2006, the Corps has assumed administrative responsibility for the National Wetland Plant List (NWPL). The Corps initiated a national effort, led by a National Panel (NP) made up of representatives of the four agencies responsible for the NWPL, to update the NWPL indicator status categories, nomenclature, and geographic regions.⁴ To more accurately reflect the existing information on plant frequencies, the NP dropped the 1988 numeric rating categories and revised the narrative definitions to be based on ecological descriptions; the plus (+) and minus (–) indicators were also eliminated. The following are the final refined wetland indicator definitions:

OBL (Obligate Wetland Plants) - Almost always occur in wetlands. With few exceptions, these plants (herbaceous or woody) are found in standing water or seasonally saturated soils (14 or more consecutive days) near the surface.

⁴ Lichvar, R., and P. Minkin. 2008. Concepts and Procedures for Updating the National Wetland Plant List. ERDC/CRREL TN-08-03. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. <http://libweb.erdg.usace.army.mil/Archimages/2295.PDF>.

These plants are of four types:

- Submerged (plants that conduct virtually all of their growth and reproductive activity under water);
- Floating (plants that most often grow with the leaves and other vegetative and reproductive organs floating on the water surface);
- Floating-leaved (plants that are rooted in sediment but also have leaves that float on the water surface); and
- Emergent (herbaceous and woody plants that grow with their bases submerged and rooted in inundated sediment or seasonally saturated soil and their upper portions, including most of the vegetative and reproductive organs, growing above the water level).

FACW (Facultative Wetland Plants) - Usually occur in wetlands, but may occur in non-wetlands. These plants predominately occur with hydric soils, often in geomorphic settings where water saturates the soils or floods the soil surface at least seasonally.

FAC (Facultative Plants) - Occur in wetlands and non-wetlands. These plants can grow in hydric, mesic⁵, or xeric⁶ habitats. The occurrence of these plants in different habitats represents responses to a variety of environmental variables other than just hydrology, such as shade tolerance, soil pH, and elevation, and they have a wide tolerance of soil moisture conditions.

FACU (Facultative Upland Plants) - Usually occur in non-wetlands, but may occur in wetlands. These plants predominately occur on drier or more mesic sites in geomorphic settings where water rarely saturates the soils or floods the soil surface seasonally.

UPL (Upland Plants) - Almost never occur in wetlands. These plants occupy mesic to xeric non-wetland habitats. They almost never occur in standing water or saturated soils. Typical growth forms include herbaceous, shrubs, woody vines, and trees.

⁵ The mesic habitat description is essentially defined as occurring in a variety of habitats, typically with dense vegetation that shades “damp or moist” soils that are not hydric. In these settings, organic matter, which accumulates as plants decay, moderates soil temperatures and increases the soil’s water-holding capacity.

⁶ Nationally, the habitat description “xeric” is based in two different concepts. The xeric habitats of the Arid West typically occur in areas of low rainfall and in what are referred to as desert conditions. The other concept of xeric occurs throughout the remainder of the country in habitats often, but not always, located on hilltops and ridges, on south- or west-facing slopes, or on flatlands with sandy, porous soils. Vegetative cover in xeric habitats is sparser than the vegetation associated with mesic soils. As such, more sunlight reaches the soil surface, creating warmer, drier conditions in the rooting zone. Surface runoff and wind often erode topsoil, maintaining a shallow, excessively well drained to dry soil profile with a low water- holding capacity.

Table 1 provides a summary of the wetland plant indicator status categories used to determine if a particular plant species qualifies as a macrophyte which has adapted to areas having hydrologic and soil conditions.

Table 1. Wetland Plant Indicator Status Categories		
Indicator Category	Symbol	Ecological Description
OBLIGATE WETLAND PLANTS	OBL	Almost always occur in wetlands
FACULTATIVE WETLAND PLANTS	FACW	Usually occur in wetlands, but may occur in non-wetlands
FACULTATIVE PLANTS	FAC	Occur in wetlands and non-wetlands
FACULTATIVE UPLAND PLANTS	FACU	Usually occur in non-wetlands, but may occur in wetlands
UPLAND PLANTS	UPL	Almost never occur in wetlands
*Based upon revised information contained in Army Corps of Engineers 2012 The National Wetland Plant List. Indicator Rating Definitions (ERDC/CRREL TR-12-11)		

It is important to note that, although there is a high probability that one would expect to find obligate, facultative wet and facultative plants growing in wetlands, there is also a significant possibility that the obligate, facultative wet, and facultative species will occur in areas that do not exhibit wetland soil and/or wetland hydrology conditions.

3.2 Vegetation Analysis of the Property

The Property supports one habitat type consisting of non-native annual grassland. In classifying the habitat types on the Property, generalized plant community classification schemes were used (Sawyer, Keeler-Wolf, and Evens 2009). The final classification and characterization of the habitat type of the Property was based on field observations. A complete list of plant species observed on the Property can be found in Attachment 2.

3.2.1 Non-native Annual Grassland

The grassland habitat on the Property is characterized by dominant grass and forb species such as wild oat (*Avena fatua*), rip gut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), Italian ryegrass (*Festuca perennis*), California bur clover (*Medicago polymorpha*), common vetch (*Vicia sativa*), and black mustard (*Brassica nigra*). No vegetation occurs within the concrete v-ditch, and the detention basin consisted of similar species as the surrounding grassland habitat. Additional

species observed within the basin include gum plant (*Grindelia camporum*), and curly dock (*Rumex crispus*). Vegetation cover varies across the site and grasses and forbs are between few inches tall to over one foot in height.

3.3 Hydrology Conditions

The Corps 1987 Manual states that the diagnostic environmental characteristics indicative of wetland hydrology conditions are: "the area is inundated either permanently or periodically at mean water depths less than or equal to 6.6 feet, or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation" (1987 Manual, p. 14). According to the Manual, indicators of hydrologic conditions that occur in wetlands may include features provided in Table 2.

Table 2. Hydrology Indicators	
Primary Indicators	Secondary Indicators
Inundation, Saturation	Oxidized Rhizospheres Associated with Living Roots
Watermarks	Water-Stained Leaves
Drift Lines	FAC-Neutral Test
Water-Borne Sediment Deposits	Local Soil Survey Data
Drainage Patterns Within Wetlands (With Caution)	

Department of the Army, U.S. Army Corps of Engineers, Washington, D.C., *Memorandum - Subject: Clarification and Interpretation of the 1987 Manual*, dated March 8, 1992, provides further clarification that:

"Areas which are seasonally inundated and/or saturated to the surface for a consecutive number of days for more than 12.5 percent of the growing season are wetlands, provided the soil and vegetation parameters are met. Areas wet between 5 percent and 12.5 percent of the growing season in most years (see Table 5, page 36 of the 1987 Manual) may or may not be wetlands. Areas saturated to the surface for less than 5 percent of the growing season are non-wetlands. Wetland hydrology exists if field indicators are present as described herein and in the enclosed data sheet."

The presence of wetland hydrology using the Arid West Supplement (December, 2006) is dependent on the presence of any one primary indicator or two or more secondary indicators included in Table 3.

Table 3. Arid West Region - Hydrology Indicators	
Primary Indicators	Secondary Indicators
Surface Water	Water Marks (riverine)
High Water Table	Sediment Deposits (riverine)
Saturation	Drift Deposits (riverine)
Water Marks (nonriverine)	Drainage Patterns
Sediment Deposits (nonriverine)	Dry-Season Water Table
Drift Deposits (nonriverine)	Thin Muck Surface
Surface Soil Cracks	Crayfish Burrows
Inundation Visible on Aerial Imagery	Saturation Visible on Aerial Imagery
Water-Stained Leaves	Shallow Aquitard
Salt Crust	FAC-Neutral Test
Biotic Crust	
Aquatic Invertebrates	
Hydrogen Sulfide Odor	
Oxidized Rhizospheres along Living Roots	
Presence of Reduced Iron	
Recent Iron Reduction in Plowed Soils	

3.4 Hydrologic Analysis of the Property

A total of seven sample points were examined for positive field indicators of wetland hydrology. During the February 23, 2021 survey, primary indicators were used to determine the wetland/upland boundary on the Property. None of the sample points showed positive hydrological indicators.

At the time of the survey, sample points 4B and 5B taken within the detention basin did not show any indicators of hydrology. In addition, historical analysis of aerial imagery shows no indication of ponding within the detention basin, even during the wet months or during high rainfall years (i.e., 2016- 2017). Deep cracks were observed within the soils within the basin as well as in upland areas throughout the Property; however, these cracks were likely due to the shrink-swell action in the clay soil, as opposed to surface soil cracks due to hydrology.

Additional sample points (1A and 2A) were taken in slight depressional areas in the southeastern corner of the Property where topography was favorable to potential ponding. None of these sample points showed indication of hydrology.

The National Wetland Inventory (NWI) shows a freshwater emergent wetland in this location on the property; however, this NWI data may be out of date and indicate a feature that existed prior to the construction of this detention basin feature. An investigation of historical aerial imagery indicated that wetlands were present on the Property in May of 2005, before Highway 4 was constructed east of the Property (Google Earth, 2021). By June 2007, aerial imagery indicated that the detention basin was constructed within the Property, and during the time span of 2007 to the 2020 the detention basin does not appear to hold water, even in wet months.

3.5 Soils Conditions

The Corps' 1987 Manual states that the diagnostic environmental characteristics indicative of wetland soil conditions are met where "soils are present and have been classified as hydric, or they possess characteristics that are associated with reducing soil conditions" (1987 Manual, p. 14). According to the Manual, indicators of soils developed under reducing conditions may include:

1. Organic soils (Histosols);
2. Histic epipedons;
3. Sulfidic material;
4. Aquic or peraquic moisture regime;
5. Reducing soil conditions;
6. Soil colors (chroma of 2 or less);
7. Soil appearing on hydric soils list; and
8. Iron and manganese concretions.

According to the most recent version of the National Technical Committee for Hydric Soils, the criteria to be used by the Corps for what constitutes current hydric soil/wetland soil conditions for the soils found at the Site are:

1. Minimum Saturation at 12" to the surface: 14 consecutive days during the growing season.
2. Minimum Inundation (Flooded or Ponged): Soils that are frequently "ponged" for long duration (\exists 15 to 30 consecutive days) or very long duration ($>$ 30 consecutive days) during the growing season, or soils that are frequently "flooded" for long duration or very long duration during the growing season.

According to the Arid West Supplement (September 2008), indicators for hydric soils are presented in three groups. Indicators for "all soils" (A) are used in any soil regardless of texture. Indicators for "sandy soils" (S) are used in soil layers with USDA textures of loamy fine sand or coarser. Indicators for "loamy or clayey soils" (F) are used with soil layers of loamy very fine sand

and finer (2006 Arid West Supplement, p.32). Hydric soils can be identified by the following indicators:

1. Histosol (A)
2. Histic Epipedon (A)
3. Black Histic (A)
4. Hydrogen Sulfide (A)
5. Stratified Layers (A)
6. 1 cm Muck (A)
7. Depleted Below Dark Surface (A)
8. Thick Dark Surface (A)
9. Sandy Mucky Mineral (S)
10. Sandy Gleyed Matrix (S)
11. Sandy Redox (S)
12. Stripped Matrix (S)
13. Loamy Mucky Mineral (F)
14. Loamy Gleyed Matrix (F)
15. Depleted Matrix (F)
16. Redox Dark Surface (F)
17. Depleted Dark Surface (F)
18. Redox Depressions (F)
19. Vernal Pools (F)

Where possible, the top 12 inches of the soil profile was examined for hydric characteristics. Such characteristics include the presence of organic soils (Histisols), histic epipedons, aquic or peraquic moisture regime, presence of soil on hydric soil list, mottling indicated by the presence of gleyed or bright spots of color within the soil horizons observed. Mottling of soils usually indicates poor aeration and lack of good drainage. A Munsell soil color charts (Kollmorgen Instr. Corp. 1990) were reviewed to obtain the soil color matrix for each soil sample. The last digit of the Munsell Soil Notation refers to the chroma of the sample. This notation consists of numbers beginning with zero for neutral grays and increasing at equal intervals to a maximum of about 20. Chroma values of the soil matrix which are one or less, or of two or less when mottling is present, are typical of soils which have developed under anaerobic conditions.

In sandy soils, such as alluvial deposits in the bottom of drainage channels, hydric soil indicators include high organic matter content in the surface horizon and streaking of subsurface horizons by organic matter.

3.6 Soil Analysis of the Property

The NRCS (2021) reports three soil types within the Property. A detailed map of the soils for the Property can be found in Attachment 1, Figure 6. More detailed information about soil types located on the Property can be found in Attachment 5. The soils mapped include the following types:

- **DdE: Diablo Clay, 15 to 30 percent slopes, MLRA 15** – The Diablo series is a member of the fine, smectitic, thermic family of Aridic Haploxererts. Typically, Diablo soils have dark gray, neutral and mildly alkaline, silty clay upper A horizons, gray and olive gray, calcareous, silty clay lower A horizons, and light olive gray, silty clay AC and C horizons

that rest on shale. Diablo soils are on complex undulating, rolling to steep uplands with slopes of 5 to 50 percent. Elevations are 25 to 3,000 feet. These soils formed in residuum weathered from shale, sandstone, and consolidated sediments with minor areas of tuffaceous material. The climate is dry subhumid mesothermal with warm, dry summers and cool, moist winters. The mean annual precipitation is 10 to 35 inches. Diablo series soils are well drained with slow runoff when soil is dry and medium to rapid runoff when soils are moist with slow permeability.

Ap-- 0 to 6 inches; dark gray (5Y 4/1) silty clay, very dark gray (5Y 3/1) moist; the immediate very thin surface crust dries gray (5Y 6/1) and light gray (5Y 7/1); the surface 1 to 3 inches has string medium granular structure, the remainder has strong coarse and medium blocky structure; very hard, very firm, sticky, very plastic; common fine roots mainly along faces of peds; few very fine tubular pores; neutral; clear wavy boundary. (4 to 10 inches thick)

A-- 6 to 15 inches; dark gray (5Y 4/1) silty clay, very dark gray (5Y 3/1) moist; moderate coarse prismatic and moderate coarse blocky structure; very hard, very firm, sticky, very plastic; few fine roots mainly along faces of peds; non effervescent except for an occasional small white lime nodule; mildly alkaline; clear smooth boundary. (8 to 20 inches thick)

Bkss1-- 15 to 26 inches; finely mixed gray (5Y 5/1) and olive gray (5Y 5/2) silty clay, dark gray (5Y 4/1) and olive gray (5Y 4/2) moist; moderate coarse prismatic and medium blocky structure; very hard, very firm, sticky, very plastic; few fine roots along faces of peds; few fine and very fine tubular pores; numerous slickensides; slightly effervescent in matrix, strongly effervescent few white lime nodules; moderately alkaline; clear wavy boundary. (3 to 12 inches thick)

Bkss2-- 26 to 32 inches; finely mixed gray (5Y 5/1) and olive gray (5Y 5/2) silty clay, dark gray (5Y 4/1) and olive gray (5Y 4/2) moist; weak coarse prismatic and weak medium blocky structure; very hard, very firm, sticky, very plastic; few fine roots mainly along faces of peds, roots distinctly flattened in appearance; few fine and very fine tubular pores; numerous slickensides; slightly effervescent matrix, strongly effervescent few small hard white lime nodules; moderately alkaline; diffuse smooth boundary. (4 to 8 inches thick)

Bk-- 32 to 42 inches; light olive gray (5Y 6/2) silty clay, olive gray (5Y 5/2) moist; weak medium subangular blocky structure; very hard, very firm, slightly sticky, plastic; few fine roots; few fine and very fine tubular pores; many white lime films

and soft segregations; moderately alkaline; clear wavy boundary. (10 to 16 inches thick)

C-- 42 to 50 inches; fine and medium mottled appearing olive gray (5Y 5/2) and light olive gray (5Y 6/2) silty clay loam, olive gray (5Y 5/2) and olive gray (5Y 4/2) moist; weak fine and medium subangular blocky structure; very hard, very firm, slightly sticky, plastic; few fine roots; few fine and very fine tubular pores; many shale fragments; strongly effervescent soft white filaments; soft and hard lime nodules; moderately alkaline; clear smooth boundary. (8 to 16 inches thick)

Cr-- 50 to 60 inches; light olive gray (5Y 6/2) slightly effervescent shale and fine-grained sandstone with white films on facings.

- **CaA: Capay Clay, 0 to 3 percent slopes, MLRA 17** – The Capay series consists of very deep, moderately well and somewhat poorly drained soils that formed in fine textured alluvium derived from mostly sandstone and shale. Capay soils are on flood basins, alluvial fans, interfan basins, and basin rims. Slopes are 0 to 15 percent. The mean annual precipitation is about 21 inches (541 mm) and the mean annual air temperature is about 61 degrees F (16 degrees C). Capay series is moderately well and somewhat poorly drained, has negligible to high runoff, and slow to very slow permeability. Also, some pedons have a water table between depth of 4 and 6 feet. Some areas are subject to rare, occasional, or frequent flooding.

Ap--0 to 5 inches (0 to 13 cm); dark grayish brown (2.5Y 4/2) silty clay, very dark grayish brown (10YR 3/2) moist; strong medium granular structure in upper 1 or 2 inches and strong coarse prismatic structure below; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; neutral (pH 7.1); clear smooth boundary (5 to 8 inches thick).

Bk1--5 to 21 inches (13 to 53 cm); dark grayish brown (2.5Y 4/2) silty clay, very dark grayish brown (10YR 3/2) moist; few fine prominent strong brown (7.5YR 5/6) masses of oxidized iron, moist; strong very coarse prismatic structure; very hard, very firm, sticky and very plastic; few fine roots; common very fine tubular pores; strongly effervescent, fine soft masses of lime in lower 4 inches; moderately alkaline (pH 7.9); clear wavy boundary (12 to 16 inches thick).

Bssk1--21 to 32 inches (53 to 81 cm); brown (10YR 5/3) silty clay, dark brown (10YR 3/3) moist; strong coarse prismatic structure; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; prominent intersecting slickensides; strongly effervescent, fine soft masses of lime; moderately

alkaline (pH 8.4); clear wavy boundary (8 to 12 inches thick).

Bssk2--32 to 40 inches (81 to 102 cm); brown (10YR 5/3) silty clay, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3) moist; moderate medium prismatic structure; hard, firm, sticky and very plastic; few fine roots; many very fine tubular pores; distinct intersecting slickensides; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.3); gradual smooth boundary (8 to 10 inches thick).

B'k2--40 to 50 inches (102 to 127 cm); pale brown (10YR 6/3) silty clay loam, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); moist; weak coarse angular blocky structure; hard, firm, sticky and very plastic; few fine roots, many very fine tubular pores; slightly effervescent; fine soft masses of lime; moderately alkaline (pH 8.3); diffuse boundary (8 to 10 inches thick).

B'k3--50 to 62 inches (127 to 157 cm); yellowish brown (10YR 5/6) silty clay loam, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); few fine distinct strong brown (7.5YR 5/6) mottles, yellowish brown (10YR 5/6) moist; weak fine and medium angular blocky structure; hard, firm, sticky and very plastic; many very fine tubular pores; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.2); diffuse boundary.

2B'k4--62 to 81 inches (157 to 206 cm); pale brown (10YR 6/3) clay loam, dark yellowish brown (10YR 4/4) moist; 1 percent fine distinct (7.5YR 5/6) and 1 percent fine faint (10YR 5/6) masses of oxidized iron; massive parting to weak fine and medium angular blocky structure; hard, firm, moderately sticky, very plastic; very few roots; many tubular pores; 3 percent carbonate concretions and few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.3).

2B'k5--81 to 88 inches (206 to 224 cm); pale brown (10YR 6/3) sandy clay loam, dark yellowish brown (10YR 4/4) moist; 3 percent medium distinct (7.5YR 6/6) and 3 percent medium distinct (7.5YR 5/6) masses of oxidized iron; massive parting to weak fine and medium angular blocky structure; hard, firm, moderately sticky, moderately plastic; very few roots; very few fine irregular and common very fine tubular pores; few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.3); clear wavy boundary.

2B'k6--88 to 102 inches (224 to 259 cm); yellowish brown (10YR 5/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; massive; few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.1).

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anoxic conditions in the upper part.

3.6.1 Soil Analysis within Potential Wetlands

The soils were analyzed for color within the Survey Area. A total of 7 soil pits were dug by shovel to a maximum depth of 12 inches at locations representative of various hydrogeomorphic surface conditions of the potential wetlands.

All points sampled within the Survey Area lacked indicators of hydric soils. Soil colors across the Survey Area were 2.5 YR 4/4 and 7.5 YR 3/2. These upland points contained no redox features and each soil sample was generally sandy, loamy-clay, or clay texture.

Sample points 2A and 3A contained matrix colors of 2.5 YR 5/3, and 5/4 with faint redox concentrations (less than 1%) that were 7.5 YR 5/8 and 10 YR 5/8 in color. These points did not contain high enough concentrations of redoximorphic features to be considered hydric soils. In addition, neither of these points, nor any other point sampled on the Property during the survey met all three criteria for wetland conditions.

Sample points taken within the detention basin (4B and 5B) showed uniform soil colors of 2.5 YR 4/4, and were clay texture. These points lacked redoximorphic features and lacked indication of wetland soils. Sample points 4A and 5A taken in upland areas outside of the retention basin were 10YR 4/4 and 3/3 and contained a clay loam texture.

4.0 AREAS POTENTIALLY REGULATED BY THE CORPS OF ENGINEERS

4.1 Areas Potentially Subject to Regulation (Wetlands/Waters of the U.S.)

The EPA and Corps regulations define wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (40 C.F.R. §230.3(t); 33 C.F.R. §328.3(c)(16)).

The term "waters of the United States" are defined in 33 C.F.R. §328.3(a) as:

- (1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
- (2) Tributaries;

- (3) Lakes and ponds, and impoundments of jurisdictional waters; and
- (4) Adjacent wetlands.

4.1.1 Potential Wetlands

Based on information obtained during the February 23, 2021, field delineation, it was determined that there are no jurisdictional wetland features within the boundaries of the Property. (See Attachment 1, Figure 5).

4.1.2 Potential Waters

Based on the information obtained during the February 23, 2021, field delineation, it was determined that the Property does not contain any jurisdictional water features. (See Attachment 1, Figure 5).

4.1.3 Section 10 Navigable Waters

There are no Section 10 Navigable Waters on the Property.

4.2 Areas Potentially Excluded from Regulation under Section 404

4.2.1 Non-Jurisdictional Waters

According to the revised definition of waters of the United States provided in the 2020 Navigable Waters Protection Rule, the following are not “waters of the United States” and therefore non-jurisdictional:

- (1) Waters or water features that are not territorial seas or traditionally navigable waters, tributaries, lands and ponds, and impoundments of jurisdictional waters, or adjacent wetlands;
- (2) Groundwater, including groundwater drainage through subsurface drainage systems;
- (3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
- (4) Diffuse stormwater run-off and direction sheet flow over upland;
- (5) Ditches that are not territorial seas or traditional navigable waters, or tributaries, and those portions constructed in adjacent wetlands that do not satisfy the conditions of adjacent wetlands;
- (6) Prior converted cropland;

- (7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
- (8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and clog cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of lakes and ponds, and impoundments of jurisdictional waters;
- (9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- (10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater run-off;
- (11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
- (12) Waste treatment systems.

4.2.2 Application of Discretionary Exemptions

There are no wetland/water features on the Property, therefore discretionary exemption is not applicable.

4.2.3 Isolated Wetlands

The U.S. Supreme Court ruled that isolated, non-navigable wetlands and other waters are not subject to federal regulation even if they provide habitat for migratory birds and endangered species. Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (hereinafter SWANCC) (No. 99-1178). The Corps has attempted to define isolated as “not having hydrological connectivity to other jurisdictional features.” Based on this determination, the Court has eliminated the need to secure fill permits from the Corps under Section 404 of the Clean Water Act when isolated wetlands are encountered. Nevertheless, the decision is by no means a blanket repeal of Section 404. Every landowner’s on-the-ground situation is unique, and must be analyzed individually. In the aftermath of this decision, each landowner must still carefully assess its situation to determine whether its survey area contains features which qualify as “waters of the U.S.” It is therefore recommended that a jurisdictional delineation be verified by the Corps rather than making an assumption regarding the potential regulation of a specific wetland/water feature.

The RWQCB has indicated that they intend to continue regulation of isolated wetlands under the Porter-Cologne Act (Water Code Section 13260). Their interpretation of the Court ruling indicates that the SWANCC decision has no bearing on the RWQCB's regulation of "waters of the state" and as such they will continue to issue waste discharge requirements (WDRs) in lieu of a Section 401 Certification which is required when the Corps issues a Section 404 permit.

4.2.4 Application of Isolated Waters Exemptions

There are no wetland/water features on the Property, therefore isolated waters determination is not applicable.

4.2.5 Significant Nexus

The geographic extent of jurisdiction under the Clean Water Act was further refined based on the U.S. Supreme Court's interpretation of the Act in *Rapanos v. United States*, 126 S. Ct. 2208 (2006) (Rapanos Case). In the EPA and Corps joint guidance of the Rapanos Case, issued in December of 2008, it was determined that the Corps generally will not assert jurisdiction over (1) swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) and (2) ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water. Non-navigable tributaries that are not relatively permanent and wetlands adjacent to such tributaries will be assessed on a case-by-case basis to determine whether they have a "significant nexus" to traditional navigable water. A "significant-nexus" will be determined through assessment of 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.

According to the guidance, the Corps will continue to assert jurisdiction over 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); and wetlands that directly abut such tributaries.

4.2.6 Application of Significant Nexus

Based on the 2020 Navigable Waters Protection Rule, the significant nexus determination is no longer applicable.

5.0 CONCLUSIONS

Results of the field delineation conducted by Olberding Environmental on February 23, 2021, did not identify any wetlands or waters within the Property.

6.0 LITERATURE CITED

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ATTACHMENTS

ATTACHMENT 1

FIGURES

- Figure 1. Property Regional Map**
- Figure 2. Property Vicinity Map**
- Figure 3. USGS Topographic Map**
- Figure 4. Aerial Map**
- Figure 5. Jurisdictional Wetland Delineation**
- Figure 6. Soils Map**



**Figure 1: Regional Map
Wild Horse Road Property
City of Antioch, California**



193 Blue Ravine Rd., Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188

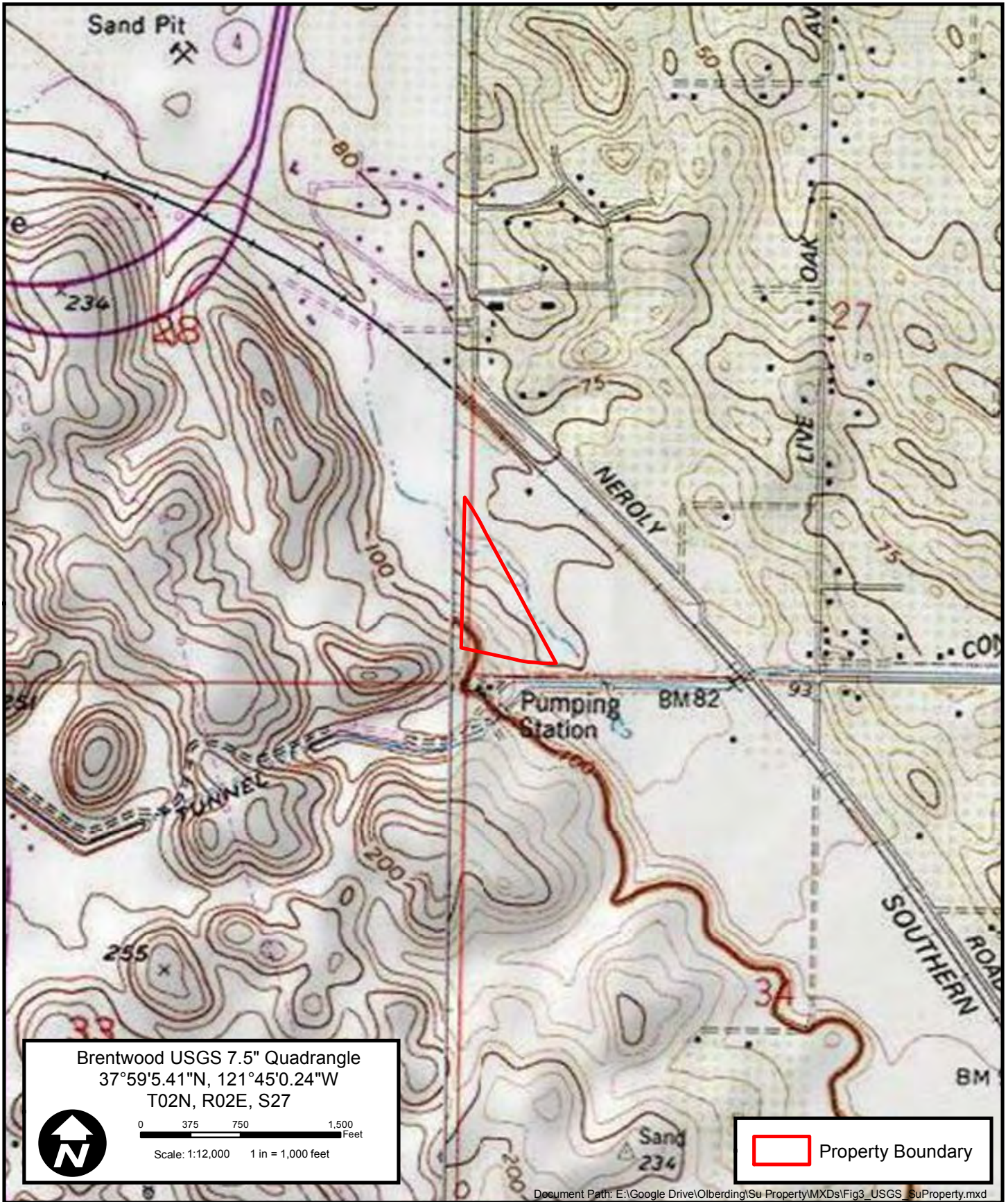


 Property Boundary

**Figure 2: Vicinity Map
Wild Horse Road Property
City of Antioch, California**



193 Blue Ravine Rd., Ste. 165
Folsom, CA 95630
Phone: (916) 985-1188




**Figure 3: USGS Topographic Map
 Wild Horse Road Property
 City of Antioch, California**



193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
 Phone: (916) 985-1188



 Property Boundary

Document Path: E:\Google Drive\Olberding\Su_Property\MXD\Fig4_Aerial_SuProperty.mxd



193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
 Phone: (916) 985-1188

**Figure 4: Aerial Map
 Wild Horse Road Property
 City of Antioch, California**

Map Revision Date: 2/14/2019



193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
 Phone: (916) 985-1188

**Figure 5: Jurisdictional Delineation Map
 For the Wild Horse Road Property City
 of Antioch, California**



193 Blue Ravine Rd., Ste. 165
 Folsom, CA 95630
 Phone: (916) 985-1188

**Figure 6: Soil Map
 Wild Horse Road Property
 City of Antioch, California**

Map Revision Date: 2/14/2019

ATTACHMENT 2
PLANT LIST

Attachment 2: Wild Horse Road Property

Plant Species Observed (February 2021)

Taxon	Common Name	Indicator Status
<i>Acacia pycnantha</i>	Golden wattle acacia	-
<i>Amsinckia menziesii</i>	Common fiddleneck	-
<i>Avena fatua</i>	Wild oat	UPL
<i>Baccharis pilularis</i>	Coyote brush	-
<i>Brassica nigra</i>	Black mustard	-
<i>Brassica rapa</i>	Field mustard	FACU
<i>Bromus diandrus</i>	Ripgut brome	-
<i>Bromus hordeaceus</i>	Soft chess	FACU
<i>Centaurea solstitialis</i>	Yellow star thistle	-
<i>Cercis occidentalis</i>	Western redbud	-
<i>Dittrichia graveolens</i>	Stinkwort	-
<i>Erodium botrys</i>	Heron bill filaree	FACU
<i>Festuca perennis</i>	Italian rye grass	FAC
<i>Geranium molle</i>	Crane's bill geranium	-
<i>Grindelia camporum</i>	Common gumplant	FACW
<i>Helminthotheca echioides</i>	Bristly oxtongue	FAC
<i>Hirschfeldia incana</i>	Skeleton weed	-
<i>Hordeum murinum</i>	Wall barley	-
<i>Lactuca serriola</i>	Prickly lettuce	FACU
<i>Medicago polymorpha</i>	Bur clover	FACU
<i>Quercus agrifolia</i>	Coast live oak	-
<i>Rumex crispus</i>	Curly dock	FAC
<i>Salsola australis</i>	Russian thistle	-
<i>Vicia sativa</i>	Common vetch	FACU

ATTACHMENT 3
WETLAND DELINEATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wildhorse Road Property City/County: Antioch/Contra Costa Sampling Date: 2/23/21
 Applicant/Owner: _____ State: CA Sampling Point: 1A
 Investigator(s): Olberding Environmental Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks: Soil may have been disturbed in this location due to nearby road re-grading.					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	_____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	_____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	_____ (A/B)
4. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
Sapling/Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Prevalence Index worksheet:	
2. _____	_____	_____	_____	Total % Cover of:	Multiply by:
3. _____	_____	_____	_____	OBL species _____	x1 = _____
4. _____	_____	_____	_____	FACW species _____	x2 = _____
5. _____	_____	_____	_____	FAC species _____	x3 = _____
50% = _____, 20% = _____	_____	= Total Cover		FACU species _____	x4 = _____
Herb Stratum (Plot size: _____)					
1. <u>Avena fatua</u>	<u>25</u>	<u>yes</u>	<u>UPL</u>	UPL species _____	x5 = _____
2. <u>Medicago polymorpha</u>	<u>10</u>	<u>no</u>	<u>FACU</u>	Column Totals: _____ (A)	_____ (B)
3. <u>Amsinckia menziesii</u>	<u>10</u>	<u>no</u>	<u>NI</u>	Prevalence Index = B/A = _____	
4. <u>Hirschfeldia incana</u>	<u>5</u>	<u>no</u>	<u>NI</u>	Hydrophytic Vegetation Indicators:	
5. _____	_____	_____	_____	<input type="checkbox"/> Dominance Test is >50%	
6. _____	_____	_____	_____	<input type="checkbox"/> Prevalence Index is ≤3.0 ¹	
7. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
8. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
50% = _____, 20% = _____	<u>45</u>	= Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
2. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
% Bare Ground in Herb Stratum <u>50</u>	% Cover of Biotic Crust _____				
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-12	2.5 YR 4/4	100	_____	_____	_____	_____	sandy	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (Inches): _____	Hydric Soils Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
--	--

Remarks: Area appears to have been re-contoured recently. Top layer contained organic debris from hydro-seed and mulch.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water Marks (B1) (Riverine)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Sediment Deposits (B2) (Riverine)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Drift Deposits (B3) (Riverine)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Drainage Patterns (B10)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Crayfish Burrows (C8)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Shallow Aquitard (D3)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:	
Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: _____

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wild Horse Road Property City/County: Antioch/Contra Costa Sampling Date: 2/23/21
 Applicant/Owner: _____ State: CA Sampling Point: 2A
 Investigator(s): Olberding Environmental Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Avena fatua</u>	<u>5</u>	<u>no</u>	<u>UPL</u>																	
2. <u>Medicago polymorpha</u>	<u>40</u>	<u>yes</u>	<u>FACU</u>																	
3. <u>Dittrichia graveolens</u>	<u>5</u>	<u>no</u>	<u>NI</u>																	
4. <u>Hirschfeldia incana</u>	<u>5</u>	<u>no</u>	<u>NI</u>																	
5. <u>Vicia sativa</u>	<u>5</u>	<u>no</u>	<u>FACU</u>																	
6. <u>Brassica nigra</u>	<u>15</u>	<u>no</u>	<u>NI</u>																	
7. <u>Geranium molle</u>	<u>5</u>	<u>no</u>	<u>NI</u>																	
8. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>80</u>	= Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum <u>20</u>	% Cover of Biotic Crust _____																			
Hydrophytic Vegetation Present?																				
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																				
Remarks:																				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-12	2.5 YR 5/4	99	10 YR 5/8	1	C	M	clay-sand	
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wild Horse Road Property City/County: Antioch/Contra Costa Sampling Date: 2/23/21
 Applicant/Owner: _____ State: CA Sampling Point: 3A
 Investigator(s): Olberding Environmental Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
Sapling/Shrub Stratum (Plot size: _____)																				
1. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Avena fatua</u>	<u>95</u>	<u>yes</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Brassica nigra</u>	<u>5</u>	<u>no</u>	<u>NI</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>100</u>	= Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present?																
2. _____	_____	_____	_____		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>															
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____																			
Remarks:																				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-12	2.5 YR 5/3	99	7.5 YR 5/8	1	C	M	sandy	
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present?

Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wild Horse Road Property City/County: Antioch/Contra Costa Sampling Date: 2/23/21
 Applicant/Owner: _____ State: CA Sampling Point: 4A
 Investigator(s): Olberding Environmental Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Avena fatua</u>	<u>95</u>	<u>yes</u>	<u>UPL</u>																	
2. <u>Brassica nigra</u>	<u>5</u>	<u>no</u>	<u>NI</u>																	
3. <u>Medicago polymorpha</u>	<u>5</u>	<u>no</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>100</u>	= Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____																			
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																				
Remarks:																				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-12	7.5 YR 3/2	100	_____	_____	_____	_____	loamy-clay	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (Inches): _____

Hydric Soils Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wild Horse Road Property City/County: Antioch/Contra Costa Sampling Date: 2/23/21
 Applicant/Owner: _____ State: CA Sampling Point: 4B
 Investigator(s): Olberding Environmental Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks: Soil may have been disturbed in this location due to nearby road re-grading.					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:	
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC:	_____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata:	_____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC:	_____ (A/B)
4. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
Sapling/Shrub Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Prevalence Index worksheet:	
2. _____	_____	_____	_____	Total % Cover of:	Multiply by:
3. _____	_____	_____	_____	OBL species _____	x1 = _____
4. _____	_____	_____	_____	FACW species _____	x2 = _____
5. _____	_____	_____	_____	FAC species _____	x3 = _____
50% = _____, 20% = _____	_____	= Total Cover		FACU species _____	x4 = _____
Herb Stratum (Plot size: _____)					
1. <u>Medicago polymorpha</u>	<u>60</u>	<u>yes</u>	<u>FACU</u>	UPL species _____	x5 = _____
2. <u>Erodium botrys</u>	<u>5</u>	<u>no</u>	<u>FACU</u>	Column Totals: _____ (A)	_____ (B)
3. <u>Hordeum murinum</u>	<u>20</u>	<u>yes</u>	<u>NI</u>	Prevalence Index = B/A = _____	
4. <u>Grindelia camporum</u>	<u>5</u>	<u>no</u>	<u>FACW</u>	Hydrophytic Vegetation Indicators:	
5. <u>Bromus hordeaceus</u>	<u>5</u>	<u>no</u>	<u>FACU</u>	<input type="checkbox"/> Dominance Test is >50%	
6. <u>Avena fatua</u>	<u>5</u>	<u>no</u>	<u>UPL</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 ¹	
7. _____	_____	_____	_____	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
8. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
50% = _____, 20% = _____	<u>100</u>	= Total Cover		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (Plot size: _____)					
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
2. _____	_____	_____	_____		
50% = _____, 20% = _____	_____	= Total Cover			
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____				
Remarks:					

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-12	2.5 YR 4/4	100	_____	_____	_____	_____	clay	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (Inches): _____

Hydric Soils Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wild Horse Road Property City/County: Antioch/Contra Costa Sampling Date: 2/23/21
 Applicant/Owner: _____ State: CA Sampling Point: 5A
 Investigator(s): Olberding Environmental Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Avena fatua</u>	<u>95</u>	<u>yes</u>	<u>UPL</u>																	
2. <u>Brassica nigra</u>	<u>5</u>	<u>no</u>	<u>NI</u>																	
3. <u>Medicago polymorpha</u>	<u>5</u>	<u>no</u>	<u>FACU</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>100</u>	= Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____																			
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																				
Remarks:																				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-12	7.5 YR 3/2	100	_____	_____	_____	_____	clay	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (Inches): _____

Hydric Soils Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project Site: Wild Horse Road Property City/County: Antioch/Contra Costa Sampling Date: 2/23/21
 Applicant/Owner: _____ State: CA Sampling Point: 5B
 Investigator(s): Olberding Environmental Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): C Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:																
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Total % Cover of:</td> <td style="text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
Sapling/Shrub Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
Herb Stratum (Plot size: _____)																				
1. <u>Medicago polymorpha</u>	<u>60</u>	<u>yes</u>	<u>FACU</u>																	
2. <u>Erodium botrys</u>	<u>5</u>	<u>no</u>	<u>FACU</u>																	
3. <u>Hordeum murinum</u>	<u>20</u>	<u>yes</u>	<u>NI</u>																	
4. <u>Grindelia camporum</u>	<u>5</u>	<u>no</u>	<u>FACW</u>																	
5. <u>Bromus hordeaceus</u>	<u>5</u>	<u>no</u>	<u>FACU</u>																	
6. <u>Avena fatua</u>	<u>5</u>	<u>no</u>	<u>UPL</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>100</u>	= Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum _____	% Cover of Biotic Crust _____																			
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																				
Remarks:																				

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (Moist)	%	Type ¹	Loc ²		
0-12	2.5 YR 4/4	100	_____	_____	_____	_____	clay	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (Inches): _____

Hydric Soils Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

ATTACHMENT 4
SITE PHOTOGRAPHS



1. Facing north, the photo depicts an overview of the Survey Area. Road extension work was actively occurring during the time of the survey, and the adjacent area just south of the Property has been recontoured as seen in the foreground, delineated by erosion control wattles.



2. Facing northeast, the photo depicts upland sample point 1A. This sample point was located in the southeastern corner of the Property where the soils may have been disturbed due to adjacent road construction.



3. Soil from sample point 1A. The soils were sandy in texture with a matrix color of 2.5 YR 4/4.



4. Facing northeast, the photo depicts sample point 2A.



5. Facing southwest, the photo shows upland sample point 3A.



6. Facing north, the photo shows upland sample point 4A. This sample was taken near the detention basin.



7. Sample point 4B, taken within the detention basin. This point did not contain primary indicators of wetland soils, hydrology, or vegetation. Deep cracks were observed within the soils in the basin, however these cracks were likely due to the shrink-swell action in the clay soil, as opposed to surface soil cracks due to hydrology.



8. Facing southwest, the photo shows sample point 5B taken within the detention basin. A storm drain overflow structure within the basin can be seen in the background.



9. Facing south, the photo depicts an overview of the detention basin. In the foreground, the gravel and rock layer that surrounds the basin perimeter can be seen. The shovel in the lower right corner marks the upland sample point 5A.



10. The photo shows one of the stormwater manhole covers present along the western boundary of the Property.



11. Facing west, the photo depicts a concrete storm drain base located in the center of the Property.



12. Facing south from the northernmost tip of the Property, the photo shows the concrete v-ditch and storm drain present at the northern end of the Property.



13. Facing southeast, the photo depicts the offsite roadside ditch just east of the Property, which flows parallel to Highway 4. This feature did not contain water during the time of the survey.

ATTACHMENT 5
SOILS DATA

LOCATION CAPAY CA

Established Series
Rev. GWH/CAF/JJJ/KP/SBS/AEC
03/2018

CAPAY SERIES

The Capay series consists of very deep, moderately well and somewhat poorly drained soils that formed in fine textured alluvium derived from mostly sandstone and shale. Capay soils are on flood basins, alluvial fans, interfan basins and basin rims. Slopes are 0 to 15 percent. The mean annual precipitation is about 21 inches (541 mm) and the mean annual air temperature is about 61 degrees F (16 degrees C).

TAXONOMIC CLASS: Fine, smectitic, thermic Typic Haploxererts

TYPICAL PEDON: Capay silty clay, cultivated. (Colors are for dry soil unless otherwise stated.)

Ap--0 to 5 inches (0 to 13 cm); dark grayish brown (2.5Y 4/2) silty clay, very dark grayish brown (10YR 3/2) moist; strong medium granular structure in upper 1 or 2 inches and strong coarse prismatic structure below; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; neutral (pH 7.1); clear smooth boundary. (5 to 8 inches thick).

Bk1--5 to 21 inches (13 to 53 cm); dark grayish brown (2.5Y 4/2) silty clay, very dark grayish brown (10YR 3/2) moist; few fine prominent strong brown (7.5YR 5/6) masses of oxidized iron, moist; strong very coarse prismatic structure; very hard, very firm, sticky and very plastic; few fine roots; common very fine tubular pores; strongly effervescent, fine soft masses of lime in lower 4 inches; moderately alkaline (pH 7.9); clear wavy boundary. (12 to 16 inches thick).

Bssk1--21 to 32 inches (53 to 81 cm); brown (10YR 5/3) silty clay, dark brown (10YR 3/3) moist; strong coarse prismatic structure; very hard, very firm, sticky and very plastic; many fine roots; common very fine tubular pores; prominent intersecting slickensides; strongly effervescent, fine soft masses of lime; moderately alkaline (pH 8.4); clear wavy boundary. (8 to 12 inches thick).

Bssk2--32 to 40 inches (81 to 102 cm); brown (10YR 5/3) silty clay, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3) moist; moderate medium prismatic structure; hard, firm, sticky and very plastic; few fine roots; many very fine tubular pores; distinct intersecting slickensides; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.3); gradual smooth boundary. (8 to 10 inches thick).

B'k2--40 to 50 inches (102 to 127 cm); pale brown (10YR 6/3) silty clay loam, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); moist; weak coarse angular blocky structure; hard, firm, sticky and very plastic; few fine roots, many very fine tubular pores; slightly effervescent; fine soft masses of lime; moderately alkaline (pH 8.3); diffuse boundary. (8 to 10 inches thick).

B'k3--50 to 62 inches (127 to 157 cm); yellowish brown (10YR 5/6) silty clay loam, dark yellowish brown (10YR 4/4) moist; faces of peds dark brown (10YR 3/3); few fine distinct strong brown (7.5YR 5/6) mottles, yellowish brown (10YR 5/6) moist; weak fine and medium angular blocky structure; hard, firm, sticky and very plastic; many very fine tubular pores; slightly effervescent, fine soft masses of lime; moderately alkaline (pH 8.2); diffuse boundary.

2B'k4--62 to 81 inches (157 to 206 cm); pale brown (10YR 6/3) clay loam, dark yellowish brown (10YR 4/4)

moist; 1 percent fine distinct (7.5YR 5/6) and 1 percent fine faint (10YR 5/6) masses of oxidized iron; massive parting to weak fine and medium angular blocky structure; hard, firm, moderately sticky, very plastic; very few roots; many tubular pores; 3 percent carbonate concretions and few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.3); clear smooth boundary.

2B'k5--81 to 88 inches (206 to 224 cm); pale brown (10YR 6/3) sandy clay loam, dark yellowish brown (10YR 4/4) moist; 3 percent medium distinct (7.5YR 6/6) and 3 percent medium distinct (7.5YR 5/6) masses of oxidized iron; massive parting to weak fine and medium angular blocky structure; hard, firm, moderately sticky, moderately plastic; very few roots; very few fine irregular and common very fine tubular pores; few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.3); clear wavy boundary.

2B'k6--88 to 102 inches (224 to 259 cm); yellowish brown (10YR 5/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; massive; few fine masses of lime; slightly effervescent; moderately alkaline (pH 8.1).

TYPE LOCATION: Solano County, California; about 2 1/2 miles northeast of Elmira; about 200 feet east and 50 feet north of the SW corner of section 16, T.6 N., R.1 E., MDB&M. 38 degrees 21 minutes 33 seconds North, 121 degrees 52 minutes 38 seconds West, NAD83.

RANGE IN CHARACTERISTICS: The mean annual soil temperature is estimated to range from 60 degrees to 66 degrees F. Some pedons are saline-sodic throughout. The soils have 1 to 2 cm wide cracks that open and close at least once each year and remain open for 150 days or less in the summer.

The A horizon is 10YR 5/2, 4/2, 3/2, 5/3, 4/3; 7.5YR 5/2, 5/4, 4/2; 2.5Y 5/2, 4/2 or 3/2, moist values are commonly one unit lower. Texture is clay, silty clay, silty clay loam or clay loam. Reaction is moderately acid to moderately alkaline becoming more alkaline with increasing depth. Some pedons have a few mottles in the A horizon. These are commonly associated with rice culture. The lower part of the A horizon may have intersecting slickensides.

The Bssk and B'k horizons are 10YR 7/2, 6/4, 6/3, 5/4, 4/2, 4/3, 4/4, 5/2, 5/3; 2.5Y 6/2, 5/2, 5/4, 5/6, 4/4; 5Y 6/4, 6/3, 5/3, 5/2 or 4/3. Moist values are the same or 1 to 2 units darker. Texture is clay, silty clay, silty clay loam or clay loam. Some pedons have loam textures in the lower part of the profile. Reaction is neutral to strongly alkaline. Lime is in concretions, soft masses and disseminated throughout the horizon.

COMPETING SERIES: These are the [Ayar](#), [Bosquejo](#) and [Maxwell](#) series. Ayar soils are well drained and have slopes of more than 9 percent. Bosquejo soils have redoximorphic features and no secondary carbonates below the lithologic discontinuity. Maxwell soils are 24 to 56 inches deep to carbonates and have a chroma of 1.5 in the A horizon.

GEOGRAPHIC SETTING: Capay soils are on flood basins, alluvial fans, interfan basins at elevations below 1,200 feet. They formed in fine textured alluvium derived from sandstone and shale or other mixed rock sources. Slopes are 0 to 15 percent. The soils are in a dry climate of relatively hot dry summers and cool moist winters. Mean annual precipitation ranges from 9 to 28 inches. Mean January temperature is 47 degrees F, mean July temperature is 72 degrees F, mean annual temperature ranges from 58 degrees to 63 degrees F. Frost-free season is 185 to 300 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the [Clear Lake](#), [Myers](#), [San Ysidro](#), [Yolo](#) and [Zamora](#) soils. Clear Lake soils are on lower positions and have chroma of less than 1.5. Myers soils have dry value of more than 5.5. San Ysidro and Zamora soils have argillic horizons. Yolo soils have less than 35 percent clay in the series control section.

DRAINAGE AND PERMEABILITY: Moderately well and somewhat poorly drained; negligible to high runoff, slow to very slow permeability. Also some pedons have a water table between depth of 4 and 6 feet. Some areas are subject to rare, occasional or frequent flooding.

USE AND VEGETATION: Used for growing irrigated crops such as tomatoes, sugar beets, beans or grain sorghum, dry farmed to small grains, and irrigated and dryland pasture. Native vegetation is a dense stand of annual grasses and forbs.

DISTRIBUTION AND EXTENT: Western edge of the Sacramento Valley and intermountain valleys of the Coast Range of northern California. The soil is extensive in MLRA-17 and has been mapped in MLRA 15 in some places

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Woodland Area, California, 1909.

REMARKS: Redoximorphic features in the A horizon are associated with rice culture.

Diagnostic horizons and features recognized in this pedon are:

Ochric epipedon - the zone from the surface to a depth of 21 inches (Ap, Bssk1).

Cracking - it is assumed from the cracking statement in the RIC that the soil does not meet Aridic subgroup criteria.

Series reclassified May 1996.

Runoff terminology adjusted 5/96 to the adjective criteria of the Soil Survey Manual, 10/93.

The previous horizonation Ap, Ak, Bssk1, Bssk2, Bssk3, Bk is updated. The suffix k indicated an accumulation of carbonates making the Ak a B horizon. The RIC stated that "The lower part of the A horizon has intersecting slickensides" but the Type Location does not have them. Thus Ak is changed to Bk and the last horizon is changed to B'k. (KP) 6/2003

Edits made after SDJR projects and additional horizons and lab textures and pH were incorporated from lab pedon ID S1964CA095002. The additional horizons show a lithologic discontinuity at 157 cm that is likely due to sea level rise between 20 to 6 thousand years ago and the associated stream gradient change.-AEC

ADDITIONAL DATA: NSSL pedons: S64CA-095-002 (40A-385); S64CA-113-013 (40A-3086); S91CA-099-003 (91P-344); S67CA-065-001; S64CA-113-013; S91CA-099-003 and -004 (partial pedons); S92CA-099-005 (county type location).

National Cooperative Soil Survey
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LOCATION DIABLO CA

Established Series
Rev. LEW/RCH/JJJ/SBS/KP
06/2017

DIABLO SERIES

The Diablo series is a member of the fine, smectitic, thermic family of Aridic Haploxererts. Typically, Diablo soils have dark gray, neutral and mildly alkaline, silty clay upper A horizons, gray and olive gray, calcareous, silty clay lower A horizons, and light olive gray, silty clay AC and C horizons that rest on shale.

TAXONOMIC CLASS: Fine, smectitic, thermic Aridic Haploxererts

TYPICAL PEDON: Diablo silty clay, grain field. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 6 inches; dark gray (5Y 4/1) silty clay, very dark gray (5Y 3/1) moist; the immediate very thin surface crust dries gray(5Y 6/1) and light gray (5Y 7/1); the surface 1 to 3 inches has string medium granular structure, the remainder has strong coarse and medium blocky structure; very hard, very firm, sticky, very plastic; common fine roots mainly along faces of peds; few very fine tubular pores; neutral; clear wavy boundary. (4 to 10 inches thick)

A--6 to 15 inches; dark gray (5Y 4/1) silty clay, very dark gray (5Y 3/1) moist; moderate coarse prismatic and moderate coarse blocky structure; very hard, very firm, sticky, very plastic; few fine roots mainly along faces of peds; noneffervescent except for an occasional small white lime nodule; mildly alkaline; clear smooth boundary. (8 to 20 inches thick)

Bkss1--15 to 26 inches; finely mixed gray (5Y 5/1) and olive gray (5Y 5/2) silty clay, dark gray (5Y 4/1) and olive gray (5Y 4/2) moist; moderate coarse prismatic and medium blocky structure; very hard, very firm, sticky, very plastic; few fine roots along faces of peds; few fine and very fine tubular pores; numerous slickensides; slightly effervescent in matrix, strongly effervescent few white lime nodules; moderately alkaline; clear wavy boundary. (3 to 12 inches thick)

Bkss2--26 to 32 inches; finely mixed gray (5Y 5/1) and olive gray (5Y 5/2) silty clay, dark gray (5Y 4/1) and olive gray (5Y 4/2) moist; weak coarse prismatic and weak medium blocky structure; very hard, very firm, sticky, very plastic; few fine roots mainly along faces of peds, roots distinctly flattened in appearance; few fine and very fine tubular pores; numerous slickensides; slightly effervescent matrix, strongly effervescent few small hard white lime nodules; moderately alkaline; diffuse smooth boundary. (4 to 8 inches thick)

Bk--32 to 42 inches; light olive gray (5Y 6/2) silty clay, olive gray (5Y 5/2) moist; weak medium subangular blocky structure; very hard, very firm, slightly sticky, plastic; few fine roots; few fine and very fine tubular pores; many white lime films and soft segregations; moderately alkaline; clear wavy boundary. (10 to 16 inches thick)

C--42 to 50 inches; fine and medium mottled appearing olive gray (5Y 5/2) and light olive gray (5Y 6/2) silty clay loam, olive gray (5Y 5/2) and olive gray (5Y 4/2) moist; weak fine and medium subangular blocky structure; very hard, very firm, slightly sticky, plastic; few fine roots; few fine and very fine tubular pores; many shale fragments; strongly effervescent soft white filaments; soft and hard lime nodules; moderately alkaline; clear smooth boundary. (8 to 16 inches thick)

Cr--50 to 60 inches; light olive gray (5Y 6/2) slightly effervescent shale and fine grained sandstone with white films on facings.

TYPE LOCATION: Alameda County, California; approximately 3 miles northeast of Livermore; 1,325 feet east and 275 feet north of the SW corner of section 25, T.2 S., R.1 E.

RANGE IN CHARACTERISTICS: Depth to the Cr ranges from 40 to 80 inches. Slopes are complex and more than 9 percent. The mean annual soil temperature is about 60 to 64 degrees F. Dry soils have cracks 1/2 to 2 inches wide from the surface to a depth of 20 to 40 inches. Cracks close with soil wetting beginning in late October to late November and cracks remain closed until the soils dries in April to early June. Cracks remain open the rest of the year.

The A horizons, the Bss horizons and all but some of the lower C horizons have more than 30 percent clay; most horizons have 45 to 60 percent clay. Slickensides are present in the Bss horizons. The A horizon or the soil from the surface to a depth of 12 to 30 inches is gray, dark gray or very dark gray. It is heavy clay loam, silty clay or clay and is slightly acid to moderately alkaline, but is noncalcareous except in the lower most part of a few pedons. The lower part of the A horizon has mixed colors. Chroma in some part is less than 1.5 and ranges from 2 to 4 in other parts. The A horizons are moderately alkaline and calcareous in some part.

The C horizon is grayish brown, dark grayish brown, brown, light yellowish brown or light olive brown. It is clay loam, silty clay or clay and contains fragments of shale and rock in some pedons in amounts up to 30 percent, particularly just above the rock contact. The C horizon is calcareous and in most pedons most of the lime is small segregations. A few pedons have small lime concretions.

COMPETING SERIES: These are the [Alo](#), [Altamont](#), [Ayar](#), [Bosanko](#), [Cibo](#), [Climara](#), [Cropley](#), [Linne](#), and [Zaca](#) series. Alo, Altamont, Ayar, and Cibo soils are brownish in the upper A horizons with chroma of 2 or more. Bosanko soils have a paralithic contact at depths of less than 40 inches. Climara soils have a lithic contact of hard igneous rock at depths of less than 40 inches. Cropley soils have smooth slopes of less than 9 percent and lack a paralithic contact at depths of less than 40 inches. Linne soils lack wide cracks and slickensides. Zaca soils are strongly calcareous in the A horizon.

GEOGRAPHIC SETTING: Diablo soils are on complex undulating, rolling to steep uplands with slopes of 5 to 50 percent. Elevations are 25 to 3,000 feet. These soils formed in residuum weathered from shale, sandstone, and consolidated sediments with minor areas of tuffaceous material. The climate is dry subhumid mesothermal with warm, dry summers and cool, moist winters. The mean annual precipitation is 10 to 35 inches. The average January temperature is 45 to 53 degrees F.; the average July temperature is 65 to 75 degrees F.; and the mean annual temperature is about 57 to 62 degrees F. The average frost free season is about 220 to 320 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing [Alo](#), [Altamont](#), and [Linne](#) soils and the [Azule](#), [Los Osos](#), Nacimiento, [San Benito](#), and [Shedd](#) soils. Azule and Los Osos soils have argillic horizons. Nacimiento and San Benito soils have less than 35 percent clay. Shedd soils have dry value of 6 or less.

DRAINAGE AND PERMEABILITY: Well drained; slow runoff when soil is dry, medium to rapid when soils are moist; slow permeability.

USE AND VEGETATION: Used for grazing and for production of dry farmed grain, mainly barley. Uncultivated areas have a cover of annual grasses and forbs.

DISTRIBUTION AND EXTENT: Soils are extensive in central and southern Coast Ranges of California.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Davis, California

SERIES ESTABLISHED: Livermore Valley Area, California, 1910.

REMARKS: The Diablo soils were formerly classified as Grumusols and then "Fine, montmorillonitic, thermic Chromic Pelloxererts"

Series reclassified April, 1996. Competing series not reviewed at that time.

Using the range of the months for open cracks in the Range of Characteristics, one could argue that there is a possibility that the soil could be both open or closed for 180 consecutive days. That is, it could classify as Aridic or Typic. Looking at the extent of where Diablo has been mapped and the climate at those locations, we may likely have two clayey soils with similar properties of Diablo but with different cracking patterns. An investigation of a more detailed look at the climatic data would help to resolve this or be more explicit in the OSED when the soil dries or cracks and swells upon wetting and cracks close.

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**APPENDIX D: CULTURAL RESOURCES
INVENTORY REPORT
(Confidential Appendix)**

APPENDIX E: ENERGY CONSUMPTION SUMMARY

Wild Horse Multifamily Project

Date: March 15, 2021

Subject: Energy Consumption Summary

1.0 PROJECT-SPECIFIC ENERGY ANALYSIS

This Energy Consumption Summary documents the results of the project-specific energy consumption estimates prepared for the Wild Horse Multifamily Project (proposed project) located in Antioch, CA. Energy consumption calculations are included as Attachment A to this memorandum. As noted in Attachment A, the energy consumption calculations are based on project-specific data obtained from the California Emissions Estimator Model (CalEEMod) files presented in the Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary dated March 15, 2021.

1.1 PROJECT CONSTRUCTION

Off-Road Equipment

The proposed project is anticipated to be constructed in a single phase, with construction breaking ground January 2, 2023 and construction completed approximately 15 months later in March 2024. Table 1 provides estimates of the project's construction fuel consumption from off-road construction equipment.

Table 1: Construction Off-Road Fuel Consumption

Project Component	Total Annual Fuel Consumption (gallons)
Total Construction Off-Road Fuel Consumption	21,467.12
Source: Attachment A.	

As shown in Table 1, construction activities associated with the proposed project would be estimated to consume 21,467.12 gallons of diesel fuel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. Table 2 provides an estimate of the total on-road vehicle fuel usage during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Table 2: Construction On-Road Fuel Consumption

Project Component	Average Fuel Economy (miles/gallon)	Total VMT	Total Fuel Consumption (gallons)
Worker Trips	28.41	717,552	25,256.20
Vendor Trips	9.46	135,780	14,359.77
Haul Trips	6.18	186,800	30,221.18
Total Construction On-Road Trips		1,040,132	69,837
Notes: Calculations use unrounded numbers; totals may not appear to sum exactly due to rounding. VMT = vehicle miles traveled Source: Attachment A.			

Other Construction Energy Consumption

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. As on-site construction activities would be restricted to permissible construction hours, it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. Table 3 shows the energy consumption estimated for a typical 720-square-foot during construction.

Table 3: Construction Trailer

Project Component	Kilowatt hours per year (kWh/yr)
Construction	12,838
Source: Attachment A.	

1.2 PROPOSED PROJECT OPERATIONS

Transportation Energy Demand

Table 4 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the project site. These estimates were derived using the same assumptions used in the operational air quality analysis for the proposed project. For details relating assumptions used in the calculations, please refer to Attachment A of this summary and the Criteria Pollutants and Greenhouse Gas Emissions Estimation Summary dated March 15, 2021.

**Wild Horse Multifamily Project
Project Energy Consumption Summary**

March 15, 2021

Table 4: Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips	Daily VMT	Annual VMT	Average Fuel Economy (miles/gallon)¹	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	59.4%	3,453	1,260,398	33.14	104.2	38,035
Light Trucks and Medium Duty Vehicles (LDT1, LDT2, MDV)	33.8%	1,964	716,852	23.26	84.4	30,819
Light-Heavy to Heavy-Heavy Diesel Trucks (LHD1, LHD2, MHDT, HHDT)	5.6%	323	118,066	9.46	34.2	12,482
Motorcycles (MCY)	0.7%	31	11,244	36.88	0.8	305
Other (OBUS, UBUS, SBUS, MH)	0.5%	40	14,491	6.73	5.9	2,153
Total	100%	5,811	2,121,051	-	229.5	83,794

As shown in Table 4, annual vehicular fuel consumption is estimated to be 83,794 gallons of a combination of gasoline and diesel fuel.

Building Energy Demand

As shown in Attachment A, the proposed project is estimated to demand 1,222,632 kilowatt hours of electricity and 2,359,099.26 kilo-British Thermal Units of natural gas, respectively, on an annual basis.

ATTACHMENT A

Energy Calculations

Wild Horse Multifamily Project—Energy Consumption Summary

Date of Last Revision: March 14, 2021

Summary of Energy Use During Construction

(Annually)

Construction vehicle fuel	69,837 gallons (gasoline, diesel)
Construction equipment fuel	21,467 gallons (diesel)
Construction office trailer electricity	15,546 kilowatt hours

Summary of Energy Use During Proposed Operations

(Annually)

Operational vehicle fuel consumption	83,793 gallons (gasoline, diesel)
Operational natural gas consumption	2,359,100 kilo-British Thermal Units
Operational electricity consumption	1,222,632 kilowatt hours

Construction Vehicle Fuel Calculations (Page 1 of 2)

California Air Resource Board (ARB). 2021. EMFAC2014 Web Database. Website: <https://www.arb.ca.gov/emfac/2014/>. Accessed March 6, 2021.

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: Sub-Area

Region: Contra Costa (SF)

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled

FE = Fuel Economy

Given							Calculations			
Region	Calendar Year	Vehicle Class	Model Year	Speed	Fuel	Population	VMT (mi/day)	Fuel Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
Contra Costa (SF)	2023	HHDT	Aggregated	Aggregated	GAS	37.6150949	5223.501	1.077856849	4.84619179	25314.09
Contra Costa (SF)	2023	HHDT	Aggregated	Aggregated	DSL	4418.44028	631969.32	102.0600966	6.19212934	3913236
Contra Costa (SF)	2023	LDA	Aggregated	Aggregated	GAS	389263.524	14156393	442.2641263	32.0089112	4.53E+08
Contra Costa (SF)	2023	LDA	Aggregated	Aggregated	DSL	4641.43	171648.82	4.222914934	40.6469991	6977009
Contra Costa (SF)	2023	LDT1	Aggregated	Aggregated	GAS	27194.1328	964757.21	35.47658782	27.1941939	26235795
Contra Costa (SF)	2023	LDT1	Aggregated	Aggregated	DSL	25.4315851	631.81637	0.020013168	31.5700321	19946.46
Contra Costa (SF)	2023	LDT2	Aggregated	Aggregated	GAS	120540.327	4753181.8	195.7083872	24.2870622	1.15E+08
Contra Costa (SF)	2023	LDT2	Aggregated	Aggregated	DSL	227.679007	9675.6236	0.304478451	31.777696	307469
Contra Costa (SF)	2023	LHDT1	Aggregated	Aggregated	GAS	6346.64513	184360.37	18.95741407	9.72497468	1792900
Contra Costa (SF)	2023	LHDT1	Aggregated	Aggregated	DSL	6422.44681	217307.37	12.21868361	17.7848433	3864778
Contra Costa (SF)	2023	LHDT2	Aggregated	Aggregated	GAS	1012.94298	38305.24	4.264880431	8.98155063	344040.4
Contra Costa (SF)	2023	LHDT2	Aggregated	Aggregated	DSL	2312.94001	90669.218	5.602449883	16.1838517	1467377
Contra Costa (SF)	2023	MDV	Aggregated	Aggregated	GAS	84762.8948	2979648.7	168.6988176	17.6625348	52628149
Contra Costa (SF)	2023	MDV	Aggregated	Aggregated	DSL	1498.1469	64023.643	2.642165564	24.2315031	1551389
Contra Costa (SF)	2023	MHDT	Aggregated	Aggregated	GAS	741.84873	41032.267	6.250953667	6.56416116	269342.4
Contra Costa (SF)	2023	MHDT	Aggregated	Aggregated	DSL	4943.18308	236030.86	28.06056014	8.41148057	1985369

Worker

Weighted Average Fuel Economy 28.41093

Vendor

Weighted Average Fuel Economy 9.455584

Haul

Weighted Average Fuel Economy 6.181096

Construction Vehicle Fuel Calculations (Page 2 of 2)

Construction Schedule

Source: CalEEMod Output

Wild Horse Multifamily Project Construction

CalEEMod Run	Phase Name	Start Date	End Date	Num Days	
				Week	Num Days
Project Construction	Site Preparation	1/2/2023	1/12/2023	6	10
Project Construction	Grading	1/13/2023	2/16/2023	6	30
Project Construction	Building Construction	2/17/2023	2/1/2024	6	300
Project Construction	Architectural Coating	2/2/2024	2/24/2024	6	20
Project Construction	Paving	2/25/2024	3/19/2024	6	20

Construction Trips and VMT

Phase Name	Trips per Day		Total Trips	Construction Trip Length in Miles			Number of Days per Phase	Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length		Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
Site Preparation	18	0	8	10.8	7.3	20	10	180	0	8	1,944	0	160	68.42	0.00	25.89
Grading	20	0	9,308	10.8	7.3	20	30	600	0	9,308	6,480	0	186,160	228.08	0.00	30,117.64
Building Construction	215	62	8	10.8	7.3	20	300	64,500	18,600	8	696,600	135,780	160	24,518.73	14,359.77	25.89
Architectural Coating	43	0	8	10.8	7.3	20	20	860	0	8	9,288	0	160	326.92	0.00	25.89
Paving	15	0	8	10.8	7.3	20	20	300	0	8	3,240	0	160	114.04	0.00	25.89

Total Project Construction VMT (miles)
1,040,132

Total Project Fuel Consumption (gallons)
69,837

Construction Equipment Fuel Calculation (Page 1 of 2)

Source: CalEEMod Output
 Wild Horse Multifamily Project Construction
Construction Schedule

Construction Area	Phase Type	Start Date	End Date	Num Days	Num
				Week	Days
Project Construction	Site Preparation	1/2/2023	1/12/2023	6	10
Project Construction	Grading	1/13/2023	2/16/2023	6	30
Project Construction	Building Construction	2/17/2023	2/1/2024	6	300
Project Construction	Architectural Coating	2/2/2024	2/24/2024	6	20
Project Construction	Paving	2/25/2024	3/19/2024	6	20

Construction Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Fuel (gallons/HP-	Diesel Fuel Usage
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	10	23,712.00	0.020	485.68
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	10	11,484.80	0.019	218.10
Grading	Excavators	2	8	158	0.38	30	28,819.20	0.020	569.51
Grading	Graders	1	8	187	0.41	30	18,400.80	0.021	390.53
Grading	Rubber Tired Dozers	1	8	247	0.40	30	23,712.00	0.020	485.68
Grading	Scrapers	2	8	367	0.48	30	84,556.80	0.025	2,107.49
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37	30	17,227.20	0.019	327.15
Building Construction	Cranes	1	7	231	0.29	300	140,679.00	0.015	2,108.86
Building Construction	Forklifts	3	8	89	0.20	300	128,160.00	0.021	2,667.56
Building Construction	Generator Sets	1	8	84	0.74	300	149,184.00	0.032	4,767.05
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	300	226,107.00	0.019	4,293.81
Building Construction	Welders	1	8	46	0.45	300	49,680.00	0.042	2,086.06
Architectural Coating	Air Compressors	1	6	78	0.48	20	4,492.80	0.026	116.02
Paving	Pavers	2	8	130	0.42	20	17,472.00	0.022	376.14
Paving	Paving Equipment	2	8	132	0.36	20	15,206.40	0.018	278.65
Paving	Rollers	2	8	80	0.38	20	9,728.00	0.019	188.84

Total Construction Equipment Fuel Consumption (gallons) 21,467.12

Notes:
 Equipment assumptions are provided in the CalEEMod output files.
 Source of usage estimates: California Air Resource Board (ARB). 2021. OFFROAD2017 (v1.0.1) Emissions Inventory
 Website: <https://www.arb.ca.gov/orion/>. Accessed March 9, 2021.

Construction Equipment Fuel Calculation (Page 2 of 2)

OFFROAD2017 (v1.0.1) Emissions Inventory

Region Type: Sub-Area

Region: Contra Costa (SF)

Calendar Year: 2023

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2017 Equipment Types

Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

Region	CalYr	Vehicle Class	Model Year	HP_Bin	Fuel	Fuel (gallons/year)	Horsepower Hours (HP- hours/year)	Fuel (gallons/HP- hour)
Solano (SF)	2021	ConstMin - Cranes	Aggregated	75	Diesel	206.2177	13756.50131	0.014990567
Solano (SF)	2021	ConstMin - Excavators	Aggregated	175	Diesel	191022.9451	9666442.07565	0.019761453
Solano (SF)	2021	ConstMin - Graders	Aggregated	175	Diesel	116102.9888	5470452.23039	0.021223655
Solano (SF)	2021	ConstMin - Pavers	Aggregated	175	Diesel	25245.8603	1172690.18101	0.021528159
Solano (SF)	2021	ConstMin - Paving Equipment	Aggregated	175	Diesel	10682.9508	582991.79989	0.018324359
Solano (SF)	2021	ConstMin - Rollers	Aggregated	100	Diesel	60929.0170	3138772.52784	0.019411734
Solano (SF)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	100	Diesel	156870.3441	7536664.80425	0.020814292
Solano (SF)	2021	ConstMin - Rubber Tired Dozers	Aggregated	300	Diesel	8511.9241	415570.77441	0.02048249
Solano (SF)	2021	ConstMin - Scrapers	Aggregated	300	Diesel	71097.1231	2852562.44175	0.02492395
Solano (SF)	2021	ConstMin - Tractors/Loaders/Backhoes	Aggregated	175	Diesel	163710.9151	8620823.02549	0.018990172
Solano (SF)	2021	OFF - ConstMin - Cement and Mortar Mixers	Aggregated	300	Diesel	102736.2000	5401945.43171	0.019018371
Solano (SF)	2021	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	100	Diesel	13561.7178	520648.28542	0.026047753
Solano (SF)	2021	OFF - Light Commercial - Generator Sets	Aggregated	25	Diesel	2909.0500	91038.30000	0.031954134
Solano (SF)	2021	OFF - Light Commercial - Welders	Aggregated	50	Diesel	1481.9000	35291.85000	0.041989865
Solano (SF)	2021	ConstMin - Trenchers	Aggregated	50	Diesel	70926.8000	1675459.50000	0.042332745
Solano (SF)	2021	OFF - Light Commercial - Air Compressors	Aggregated	50	Diesel	118157.8000	4575442.90000	0.025824342

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer
 Typical Construction Trailer - Contra Costa County, Annual

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	1.1996	1.7000e-004	3.0000e-005	1.2142
Total		1.1996	1.7000e-004	3.0000e-005	1.2142

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual 12,838 kWh/yr
Total Over Construction 15,546 kWh

Total Construction Schedule

Start 1/2/2023
 End 3/19/2024
 Total Calendar Days 442
 Years 1.21

Operational Fuel Calculation—Project-generated Operational Trips (Page 1 of 2)

California Air Resource Board (ARB). 2021. EMFAC2014 Web Database. Website: <https://www.arb.ca.gov/emfac/2014/>. Accessed March 6, 2021.

EMFAC2014 (v1.0.7) Emissions Inventory

Region Type: Sub-Area

Region: Contra Costa (SF)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VMT = Vehicle Miles Traveled

FE = Fuel Economy

Region	Calendar Year	Vehicle Class	Given			Fuel	Population	VMT	Fuel	Calculations	
			Model Year	Speed	Aggregated				Consumption	FE	VMT*FE
Contra Costa (SF)	2024	LDA	Aggregated	Aggregated	GAS	393625.1546	14205347.02	430.0842875	33.02921644	469191481.4	
Contra Costa (SF)	2024	LDA	Aggregated	Aggregated	DSL	4792.34496	175962.4878	4.196646084	41.92397593	7377986.254	
Weighted Average Fuel Economy										33.13811356	
Contra Costa (SF)	2024	LDT1	Aggregated	Aggregated	GAS	26928.77275	958636.6619	33.91320326	28.26735813	27098125.84	
Contra Costa (SF)	2024	LDT1	Aggregated	Aggregated	DSL	24.60611217	620.7650713	0.018959695	32.74130033	20324.65563	
Contra Costa (SF)	2024	LDT2	Aggregated	Aggregated	GAS	122058.9098	4794103.583	189.7538443	25.26485616	121122337.4	
Contra Costa (SF)	2024	LDT2	Aggregated	Aggregated	DSL	238.8986269	9963.290167	0.303446977	32.83371037	327131.7837	
Contra Costa (SF)	2024	MDV	Aggregated	Aggregated	GAS	84111.16323	2951928.214	161.2725139	18.30397593	54032022.98	
Contra Costa (SF)	2024	MDV	Aggregated	Aggregated	DSL	1581.491785	66308.26364	2.648749731	25.03379721	1659947.626	
Weighted Average Fuel Economy										23.26008958	
Contra Costa (SF)	2024	LHDT1	Aggregated	Aggregated	GAS	6025.808733	173705.1984	17.79303557	9.762538701	1695803.722	
Contra Costa (SF)	2024	LHDT1	Aggregated	Aggregated	DSL	6359.011944	213921.0313	11.93812365	17.91915024	3833283.1	
Contra Costa (SF)	2024	LHDT2	Aggregated	Aggregated	GAS	1008.173029	38122.20741	4.220619404	9.032372683	344333.9849	
Contra Costa (SF)	2024	LHDT2	Aggregated	Aggregated	DSL	2336.905436	91089.22171	5.581350423	16.32028359	1486601.93	
Contra Costa (SF)	2024	MHDT	Aggregated	Aggregated	GAS	759.2136247	42082.28319	6.381863907	6.594042713	277492.3728	
Contra Costa (SF)	2024	MHDT	Aggregated	Aggregated	DSL	5138.436094	237804.2715	28.19859594	8.433195468	2005449.905	
Contra Costa (SF)	2024	HHDT	Aggregated	Aggregated	GAS	38.91827493	5427.614385	1.111616064	4.882633995	26501.05451	
Contra Costa (SF)	2024	HHDT	Aggregated	Aggregated	DSL	4571.338357	644239.859	103.4479001	6.227674593	4012116.201	
Weighted Average Fuel Economy										9.459112904	
Contra Costa (SF)	2024	MCY	Aggregated	Aggregated	GAS	18331.52239	137738.8613	3.73511025	36.87678598	5079366.508	
Weighted Average Fuel Economy										36.87678598	
Contra Costa (SF)	2024	MH	Aggregated	Aggregated	GAS	1823.569806	15460.96399	2.301153573	6.718788425	103878.9459	
Contra Costa (SF)	2024	MH	Aggregated	Aggregated	DSL	531.8204632	4581.013111	0.4716322	9.713105066	44495.86166	
Contra Costa (SF)	2024	OBUS	Aggregated	Aggregated	GAS	432.0997018	24797.25226	3.705461456	6.692082094	165945.2478	
Contra Costa (SF)	2024	OBUS	Aggregated	Aggregated	DSL	223.9196894	17808.26458	2.408849532	7.392850549	131653.8386	
Contra Costa (SF)	2024	SBUS	Aggregated	Aggregated	GAS	99.30917763	4882.288382	0.407881599	11.96986672	58440.34121	
Contra Costa (SF)	2024	SBUS	Aggregated	Aggregated	DSL	1734.517915	65665.27027	9.003692702	7.29314876	478906.5844	
Contra Costa (SF)	2024	UBUS	Aggregated	Aggregated	GAS	151.4328428	22095.33075	4.401038074	5.020481618	110929.2019	
Contra Costa (SF)	2024	UBUS	Aggregated	Aggregated	DSL	152.4722179	22246.98436	4.916857659	4.524634616	100659.4755	
Weighted Average Fuel Economy										6.730467577	

Operational Fuel Calculation—Project-generated Operational Trips (Page 2 of 2)

Total Operational VMT

Wild Horse Multifamily Project - Buildout Year Operations

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	922.32	1,025.64	791.28	2,121,051	2,121,051
Enclosed Parking Structure	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	922.32	1,025.64	791.28	2,121,051	2,121,051

**Annual VMT
(miles)**

Total VMT 2,121,051

By Vehicle Type

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.594233	0.036933	0.184882	0.116155	0.014918	0.004973	0.010771	0.025002	0.001640	0.001706	0.005301	0.002715	0.000771

	Fraction of 1	Percent of Vehicle Trips	Annual VMT	Daily VMT	Average Fuel Economy (miles/gallon)	Total Daily Fuel Consumption (gallons)	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	0.5942	59.4	1,260,398	3,453	33.14	104.2	38,035
Light Trucks and Medium Vehicles (LDT1, LDT2, and MDV)	0.3380	33.8	716,852	1,964	23.26	84.4	30,819
Light-Heavy to Heavy-Heavy Diesel Trucks	0.0557	5.6	118,066	323	9.46	34.2	12,482
Motorcycles	0.0053	0.5	11,244	31	36.88	0.8	305
Other	0.0068	0.7	14,491	40	6.73	5.9	2,153
Total	—	100	2,121,051	5,811	—	—	83,793

Project Operations Natural Gas Use

Source: CalEEMod Output

Wild Horse Multifamily Project - Buildout Year Operations

kBTU/yr = kilo-British Thermal Units/year

	Natural Gas Use (kBTU/yr)
Condo/Townhouse	2,359,100
Enclosed Parking Structure	0
Other Asphalt Surfaces	0
Other Non-Asphalt Surfaces	0
Parking Lot	0
Total	2,359,100 kBTU/yr

Project Operations Electricity Use

Source: CalEEMod Output

Wild Horse Multifamily Project - Buildout Year Operations

kWh/yr = kilowatt hours per year

	Electricity Use (kWh/yr)	
Condo/Townhouse	635,724	
Enclosed Parking Structure	580,608	
Other Asphalt Surfaces	0	
Other Non-Asphalt Surfaces	0	
Parking Lot	6,300	
Total	1,222,632	kWh/yr

Typical Construction Trailer - Contra Costa County, Annual

**Typical Construction Trailer
Contra Costa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.72	1000sqft	0.02	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	206	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Adjusted CO2e to reflect updated factors and compliance with RPS (see the CO2e Intensity Factor Adjustments sheet for source and calculations).

Land Use - Upper range of typical single-wide mobile office trailer = 720 square feet.

Construction Phase - Typical construction trailer for energy use estimates - estimates would be included in the operational component of the results

Off-road Equipment - Zeroed out construction equipment

Off-road Equipment - Zeroed out construction equipment

Vehicle Trips - Run for energy estimation only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	206
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00

5.0 Energy Detail

Historical Energy Use: N

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	1.1996	1.7000e-004	3.0000e-005	1.2142
Total		1.1996	1.7000e-004	3.0000e-005	1.2142

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12837.6	1.1996	1.7000e-004	3.0000e-005	1.2142
Total		1.1996	1.7000e-004	3.0000e-005	1.2142

APPENDIX F: CONSTRUCTION NOISE CALCULATIONS

Report date: 3/10/2021
 Case Description: Wild Horse Multifamily - Site Preparation

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential at Monterra	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Dozer	No	40		81.7	165	0
Dozer	No	40		81.7	165	0
Dozer	No	40		81.7	165	0
Tractor	No	40	84		165	0
Tractor	No	40	84		165	0
Haul Truck	No	40		76.5	165	0
Front End Loader	No	40		79.1	165	0
Backhoe	No	40		77.6	165	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Dozer	71.3	67.3
Dozer	71.3	67.3
Dozer	71.3	67.3
Tractor	73.6	69.7
Tractor	73.6	69.7
Haul Truck	66.1	62.2
Front End Loader	68.7	64.8
Backhoe	67.2	63.2
Total	80.1	76.2

Report date: 3/10/2021
 Case Description: Wild Horse Multifamily - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential at Monterra	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Excavator	No	40		80.7	165	0
Excavator	No	40		80.7	165	0
Grader	No	40	85		165	0
Dozer	No	40		81.7	165	0
Tractor	No	40	84		165	0
Scraper	No	40		83.6	165	0
Scraper	No	40		83.6	165	0
Front End Loader	No	40		79.1	165	0
Haul Truck	No	40		76.5	165	0
Haul Truck	No	40		76.5	165	0
Haul Truck	No	40		76.5	165	0
Haul Truck	No	40		76.5	165	0
Haul Truck	No	40		76.5	165	0
Haul Truck	No	40		76.5	165	0
Haul Truck	No	40		76.5	165	0
Haul Truck	No	40		76.5	165	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Excavator	70.3	66.4
Excavator	70.3	66.4
Grader	74.6	70.7
Dozer	71.3	67.3
Tractor	73.6	69.7
Scraper	73.2	69.2
Scraper	73.2	69.2
Front End Loader	68.7	64.8
Haul Truck	66.1	62.2
Haul Truck	66.1	62.2
Haul Truck	66.1	62.2
Haul Truck	66.1	62.2
Haul Truck	66.1	62.2
Haul Truck	66.1	62.2
Haul Truck	66.1	62.2
Haul Truck	66.1	62.2
Total	82.3	78.3

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 3/10/2021
 Case Description: Wild Horse Multifamily - Building Construction

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential at Monterra	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	165	0
Generator	No	50		80.6	165	0
Welder / Torch	No	40		74	165	0
Front End Loader	No	40		79.1	165	0
Forklift	No	40		79.1	165	0
Forklift	No	40		79.1	165	0
Forklift	No	40		79.1	165	0
Tractor	No	40	84		165	0
Backhoe	No	40		77.6	165	0
Haul Truck	No	40		76.5	165	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Crane	70.2	62.2
Generator	70.3	67.2
Welder / Torch	63.6	59.7
Front End Loader	68.7	64.8
Forklift	68.7	64.8
Forklift	68.7	64.8
Forklift	68.7	64.8
Tractor	73.6	69.7
Backhoe	67.2	63.2
Haul Truck	66.1	62.2
Total	79.3	75.2

Report date: 3/10/2021
 Case Description: Wild Horse Multifamily - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential at Monterra	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Paver	No	50	77.2	77.2	165	0
Paver	No	50	77.2	77.2	165	0
Paver	No	50	77.2	77.2	165	0
Paver	No	50	77.2	77.2	165	0
Roller	No	20	80	80	165	0
Roller	No	20	80	80	165	0
Haul Truck	No	40	76.5	76.5	165	0

Results

Equipment	Calculated (dBA)	
	Lmax	Leq
Paver	66.8	63.8
Paver	66.8	63.8
Paver	66.8	63.8
Paver	66.8	63.8
Roller	69.6	62.6
Roller	69.6	62.6
Haul Truck	66.1	62.2
Total	76.2	71.8

Report date: 3/10/2021
 Case Description: Wild Horse Multifamily - Architectural Coating

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Single-Family Residential at Monterra	Residential	60	60	60

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	165	0
Haul Truck	No	40		76.5	165	0

Results

Calculated (dBA)

Equipment	Lmax	Leq
Compressor (air)	67.3	63.3
Haul Truck	66.1	62.2
Total	69.8	65.8