

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

Date & Time: Wed, Jul 29, 2020, 06:23:01 PDT
Position: 11 N 503263 3753813 (± 32.8 ft)
Altitude: 2582ft (± 62.3 ft)
Datum: WGS-84
Azimuth/Bearing: 188° S08W 3342mils True ($\pm 12^\circ$)
Elevation Angle: -05.5°
Horizon Angle: -00.2°
Zoom: 0.5X



City of Beaumont – 2nd Street Improvement

**WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES
HABITAT CONSERVATION PLAN CONSISTENCY
ANALYSIS**

**2nd STREET IMPROVEMENT
RIVERSIDE COUNTY, BEAUMONT, CALIFORNIA**

City of Beaumont, California (Permittee/Applicant)

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Table of Contents

1.0 EXECUTIVE SUMMARY.....	1
2.0 INTRODUCTION	2
2.1 Project Area	2
2.2 Project Description.....	2
2.3 Covered Roads	7
2.4 Covered Public Access Facilities.....	7
2.5 General Setting.....	7
3.0 RESERVE ASSEMBLY ANALYSIS.....	8
3.1 Area Plan.....	8
3.2 Public Quasi-Public Lands.....	8
4.0 VEGETATION MAPPING.....	8
5.0 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)	12
5.1 Riparian/Riverine Areas.....	14
5.1.1 Methods.....	14
5.1.2 Existing Conditions and Results	16
5.1.3 Impacts.....	29
5.1.4 Mitigation.....	29
5.2 Vernal Pools.....	29
5.2.1 Methods.....	31
5.2.2 Existing Conditions and Results	31
5.2.3 Impacts.....	31
5.2.4 Mitigation.....	31
5.3 Fairy Shrimp	31
5.3.1 Methods.....	31
5.3.2 Existing Conditions and Results	32
5.3.3 Impacts.....	32
5.3.4 Mitigation.....	32
5.4 Riparian Birds	32
5.4.1 LBVI Background.....	32
5.4.2 Methods.....	34
5.4.2 Existing Conditions and Results	34
5.4.3 Impacts.....	37
5.4.4 Mitigation.....	37
6.0 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3).....	37

6.1 MSHCP Background and Objectives..... 37

 6.1.1 NEPS Assessment Area No. 8 37

 6.1.2 MSHCP Objectives 39

6.2 Methods..... 40

 6.2.1 California Native Plant Society..... 40

 6.2.2 Survey Methods and Protocol 40

 6.2.3 Field Survey Dates and Weather Conditions 41

6.3 Existing Conditions and Results 41

 6.3.1 Query Results..... 41

 6.3.2 NEPS Assessment Results 41

6.4 Impacts..... 44

6.5 Mitigation..... 44

7.0 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)..... 44

 7.1 Criteria Area Plant Species 44

 7.2 Amphibians..... 44

 7.3 Burrowing Owl 44

 7.3.1 Background..... 44

 7.3.2 Methods..... 49

 7.3.2 Existing Conditions and Results 51

 7.3.3 Impacts..... 54

 7.3.4 Mitigation..... 54

 7.4 Mammals..... 54

8.0 INFORMATION ON OTHER SPECIES 54

 8.1 Delhi Sands Flower Loving Fly..... 54

 8.2 Species Not Adequately Conserved..... 54

 8.3 Nesting Birds 55

 8.4.1 Nesting Bird Mitigation 55

9.0 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)... 55

10.0 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C) 56

11.0 REFERENCES 57

12.0 CERTIFICATION 60

List of Tables

Table 1 – Land Covers 11
 Table 2 – MSHCP Section 6.1.2 Assessment Conditions 15
 Table 3 – NRCS Soils 26
 Table 4 – Potential Riparian/Riverine Areas 26
 Table 5 – Potential Riparian/Riverine Areas Impacts 29
 Table 6 – LBVI Assessment Conditions 35
 Table 7 – NEPS Assessment Area No. 8 39
 Table 8 – CRPR Classifications 40
 Table 9 – MSHCP Section 6.1.3 Assessment Conditions 42
 Table 10 – BUOW Assessment Conditions 50

List of Figures

Figure 1 - Regional Map 3
 Figure 2 - Vicinity Map 4
 Figure 3 - USGS Topographic Map 5
 Figure 4 – Project Area 6
 Figure 5 - General Setting Aerial Photograph 9
 Figure 6 – The Pass Area Plan and Subunits 10
 Figure 7 – Land Covers 13
 Figure 8 – Watershed Location 17
 Figure 9 – 1966 Aerial Photograph 18
 Figure 10 – 2003 Aerial Photograph 19
 Figure 11 – 2006 Aerial Photograph 20
 Figure 12 – 2009 Aerial Photograph 21
 Figure 13 – NWI 23
 Figure 14 – MSHCP Section 6.1.2 Query Results 24
 Figure 15 – NRCS Soils 25
 Figure 16 – Potential MSHCP Section 6.1.2 Riparian/Riverine Areas 27
 Figure 17 – Potential MSHCP Section 6.1.2 Riparian/Riverine Areas Impacts 30
 Figure 18 – LBVI Habitat/Survey Area 36
 Figure 19 – NEPS Assessment Area 38
 Figure 20 – NEPS Query Results 43
 Figure 21 – BUOW Assessment Area 45
 Figure 22 – BUOW Query Results 52
 Figure 23 – BUOW Assessment Results 53

List of Appendices

Appendix A – Site Plan A-1
 Appendix B – Plants Observed B-1
 Appendix C – Wildlife Observed C-1
 Appendix D – Assessment Photographs D-1
 Appendix E – Wetlands Climate Tables E-1
 Appendix F – Least Bell’s Vireo Presence/Absence Protocol Survey Report F-1

1.0 EXECUTIVE SUMMARY

This Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis (Analysis) provides the results of the required MSHCP assessments to determine if the City of Beaumont's (City) 2nd Street Improvement project (Project) was consistent with the goals and objectives of the MSHCP. The Project was within MSHCP Section 6.1.3 *Protection of Narrow Endemic Plant Species* (MSHCP Section 6.1.3) (NEPS) Assessment Area No. 8, and MSHCP Section 6.3.2 *Additional Survey Needs and Procedures* (MSHCP Section 6.3.2) assessment area for Burrowing Owl (*Athene cunicularia*) (BUOW). The Project also required a MSHCP Section 6.1.2 *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools* (MSHCP Section 6.1.2) assessment.

Searl Biological Services (SBS) conducted the above assessments in 2020 and 2021 prior to being in receipt of the Project's grading footprint. Due to this, SBS utilized the 2nd Street Right-of-Way (RW) as a baseline and generated two assessment buffers using ESRI ArcGIS (GIS). NEPS, MSHCP Section 6.1.2 water resource field/habitat assessments, and vegetation communities/land covers were assessed within the RW and 100-feet of the RW. BUOW and MSHCP Section 6.1.2 riparian bird species were assessed within the RW and 500-feet of the RW.

The Project was located in Beaumont, Riverside County, California, west of the existing 2nd Street between 1st Street and Interstate 10 (I-10) and east of Pennsylvania Avenue, approximately 0.2-mile aerial mile south/southeast of the Pennsylvania Avenue and I-10 intersection. The Project development footprint totaled 5.08-acres.

The Project was located in The Pass Area Plan (TPAP). The Project was not located within Subunit or a Criteria Cell, and therefore, no portions of the Project were targeted for long-term conservation. Further, a Reserve Assembly Analysis was not required for the Project.

SBS identified and assessed a total of four ephemeral water features within 100-feet of the RW that potentially meet the criteria of a MSHCP Section 6.1.2 Riparian/Riverine Area. The Project proposes the installation of culvert crossings within two of these features. Grading associated with the Project will cross a small portion of a third feature, where a culvert crossing is already present. Based on the Project, the total potential impact to the three features was 0.34-acre. The appropriate regulatory agencies will be consulted on the impacts to the potential Riparian/Riverine Areas. Offsite mitigation through an approved mitigation bank, in-lieu fee program, and/or permittee responsible conservation easement program is anticipated and will be detailed in a MSHCP Determination of Biologically Equivalent or Superior Preservation (DBESP) report.

A habitat suitability assessment for MSHCP Riparian Birds was conducted within 500-feet of the RW. SBS determined that 0.75-acre of marginally suitable habitat for Least Bell's Vireo (*Vireo bellii pusillus*) (LBVI) was present within 500-feet but absent within the Project. LBVI has been documented to occur within 0.5-mile of the Project, and therefore, SBS conducted a protocol survey for LBVI within the marginally suitable habitat in 2021. LBVI was not detected and was determined to be absent.

The RW and area within 100-feet were located in NEPS Assessment Area No. 8. A habitat suitability assessment was conducted for the two targeted NEPS. The area was determined to lack the habitat requirements, specifically clay soils, for the two targeted NEPS.

A habitat suitability assessment for BUOW was conducted within 500-feet of the RW. SBS determined that 67.65-acres of suitable habitat for BUOW was present, and therefore, SBS conducted a BUOW protocol survey within the MSHCP-designated BUOW Assessment Area on the Project and areas within 500-feet.

BUOW was not detected and determined absent from the area; however, the Project will be required to perform a 30-Day Pre-Construction BUOW Survey per the MSHCP prior to ground disturbance due to the presence of suitable BUOW habitat.

The Project, based on the findings described herein and the future implementation of offsite mitigation for the impacts to potential MSHCP Riparian/Riverine Areas, is consistent with the goals and objectives of the MSHCP.

2.0 INTRODUCTION

The purpose of this MSHCP Analysis was to summarize the biological data for the Project, and to document the Project's consistency with the goals and objectives of the MSHCP. According to the RCA's MSHCP Information Application (Regional Conservation Authority, 2021), the Project required a:

1. MSHCP NEPS assessment, and
2. MSHCP BUOW assessment.

In addition, the Project required a MSHCP Section 6.1.2 assessment.

The Project was located in Beaumont, Riverside County, California, west of the existing 2nd Street between 1st Street and Interstate I-10 and east of Pennsylvania Avenue, approximately 0.2-mile aerial mile south/southeast of the Pennsylvania Avenue and I-10 intersection. *Figure 1 - Regional Map* (Page 3) and *Figure 2 - Vicinity Map* (Page 4) depict the location of the Project.

The Project was geographically located in Township 3 South, Range 1 West, Sections 10 and 11 of the Beaumont 7.5 Minute United States Geological Survey (USGS) California Quadrangle as depicted by *Figure 3 - USGS Topographic Map* (Page 5). The Universal Transverse Mercator (UTM) coordinates of the approximate center of the Project was Zone 11; 503,526-meters East; 3,753,648-meters North; North American Datum 1983 (NAD83).

2.1 Project Area

The Project area (i.e., grading footprint) was based on an AutoCAD file prepared by the Project's civil engineer Cozad & Fox that was converted for GIS use by SBS. According to the AutoCAD file, the grading associated with the Project will total 5.08-acres (221,274.37-square feet [SqFt]) with a total length of 2,518.03-linear feet.

SBS conducted the MSHCP assessments in 2020 and 2021 prior to being in receipt of the Project's grading footprint. Due to this, SBS utilized the 2nd Street RW (6.44-acres) as a baseline and generated two assessment buffers using GIS. NEPS, MSHCP Section 6.1.2 water resource field/habitat assessments, and vegetation communities/land covers were assessed within the RW and 100-feet of the RW (20.52-acres). BUOW and MSHCP Section 6.1.2 riparian bird species were assessed within the RW and 500-feet of the RW (91.61-acres).

Figure 4 – Project Area (Page 6) depicts the above-described areas. The Project site plan is attached in Appendix A.

2.2 Project Description

The City plans to alleviate traffic congestion on 1st Street between Highland Springs and Pennsylvania Avenue by extending 2nd Street, from the westerly boundary of the Home Depot shopping center to the proposed intersection at Pennsylvania Avenue. The improvements include widening and extending 2nd Street approximately 2,518-feet from the current terminus at the westerly boundary of First Street Self and

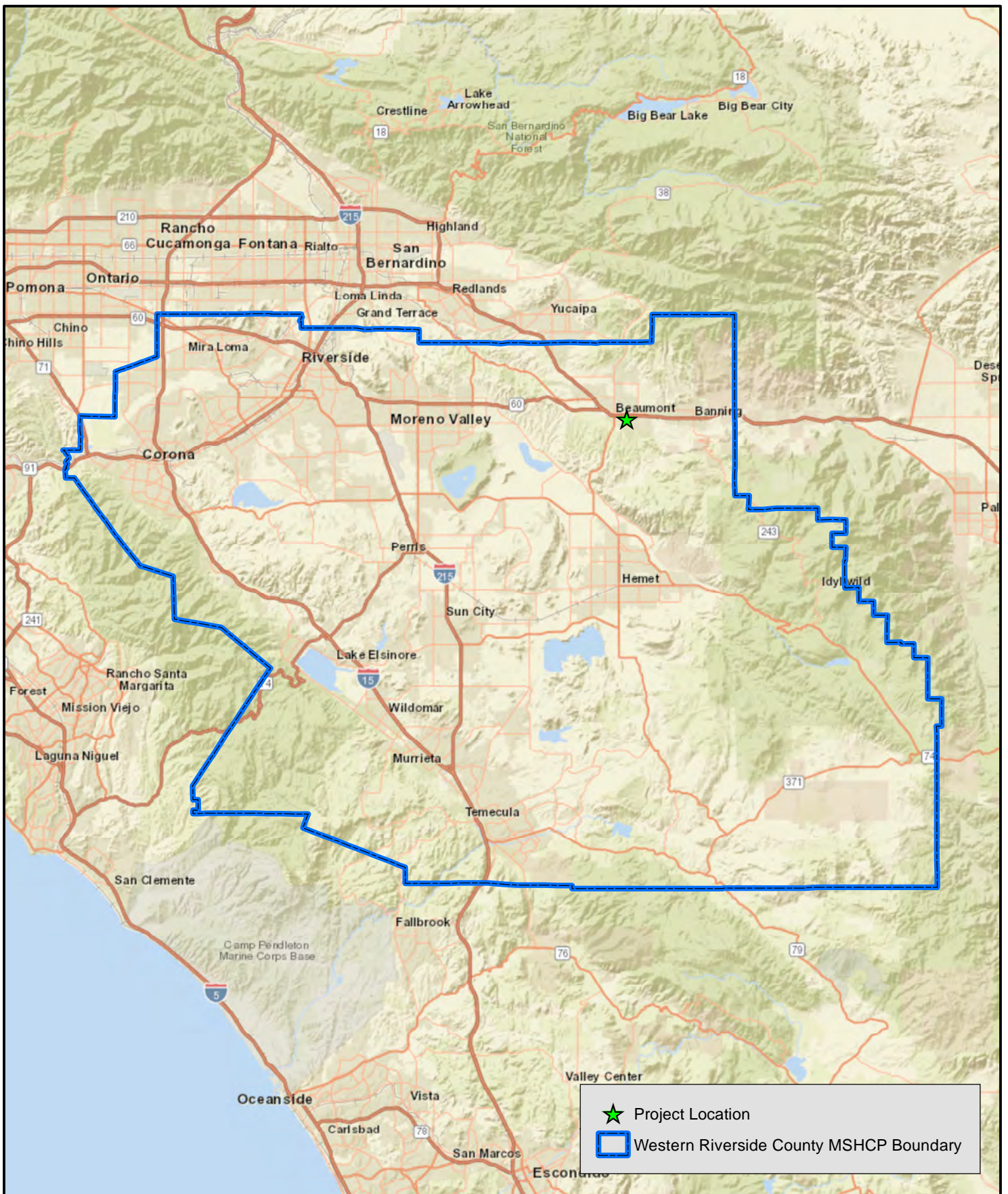
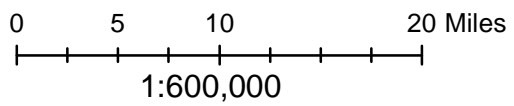
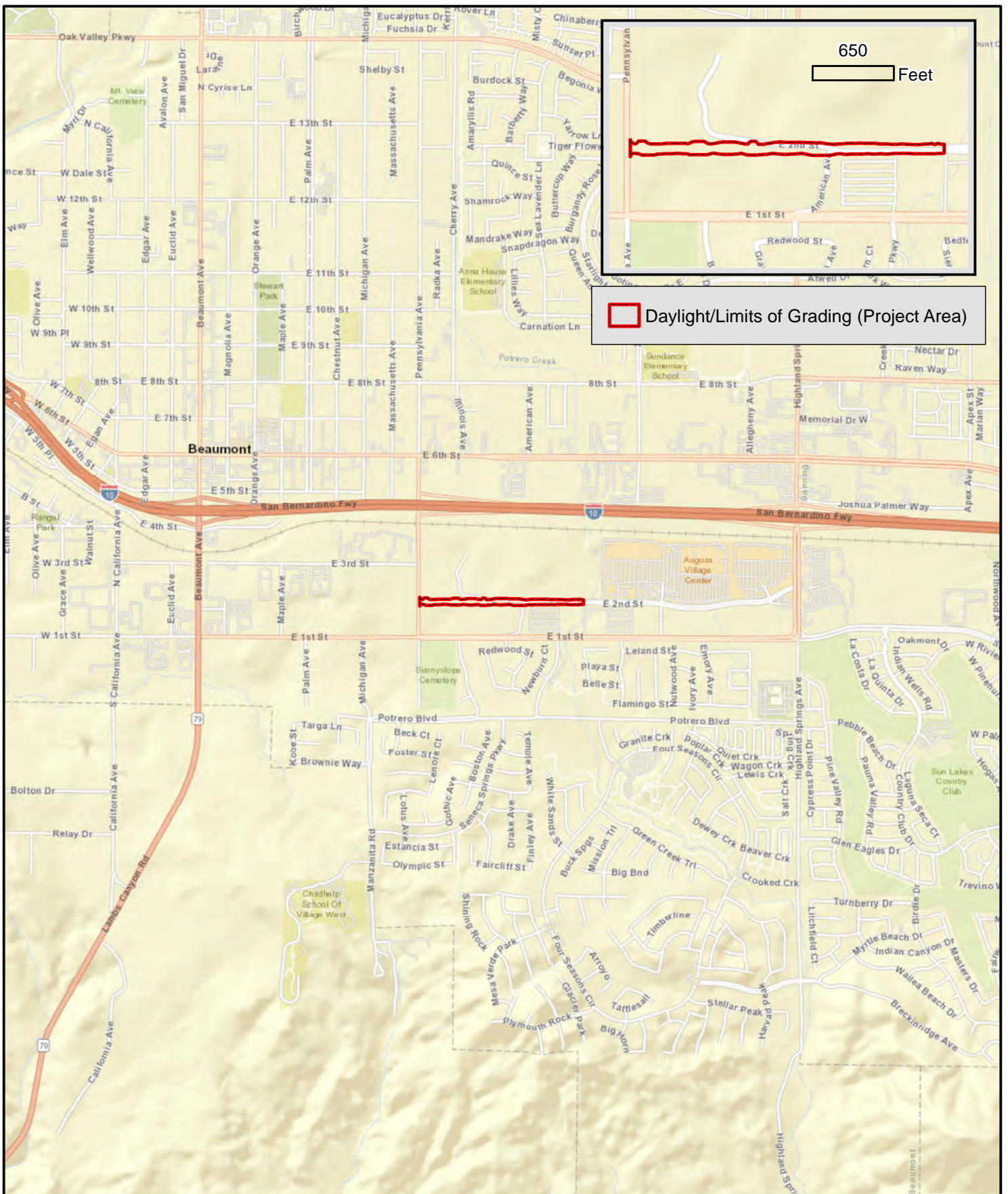

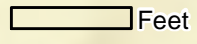


FIGURE 1
Regional Map





 Daylight/Limits of Grading (Project Area)

 650 Feet

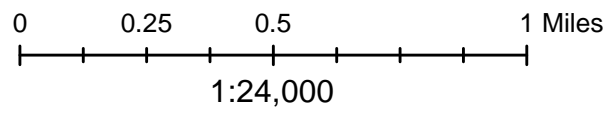
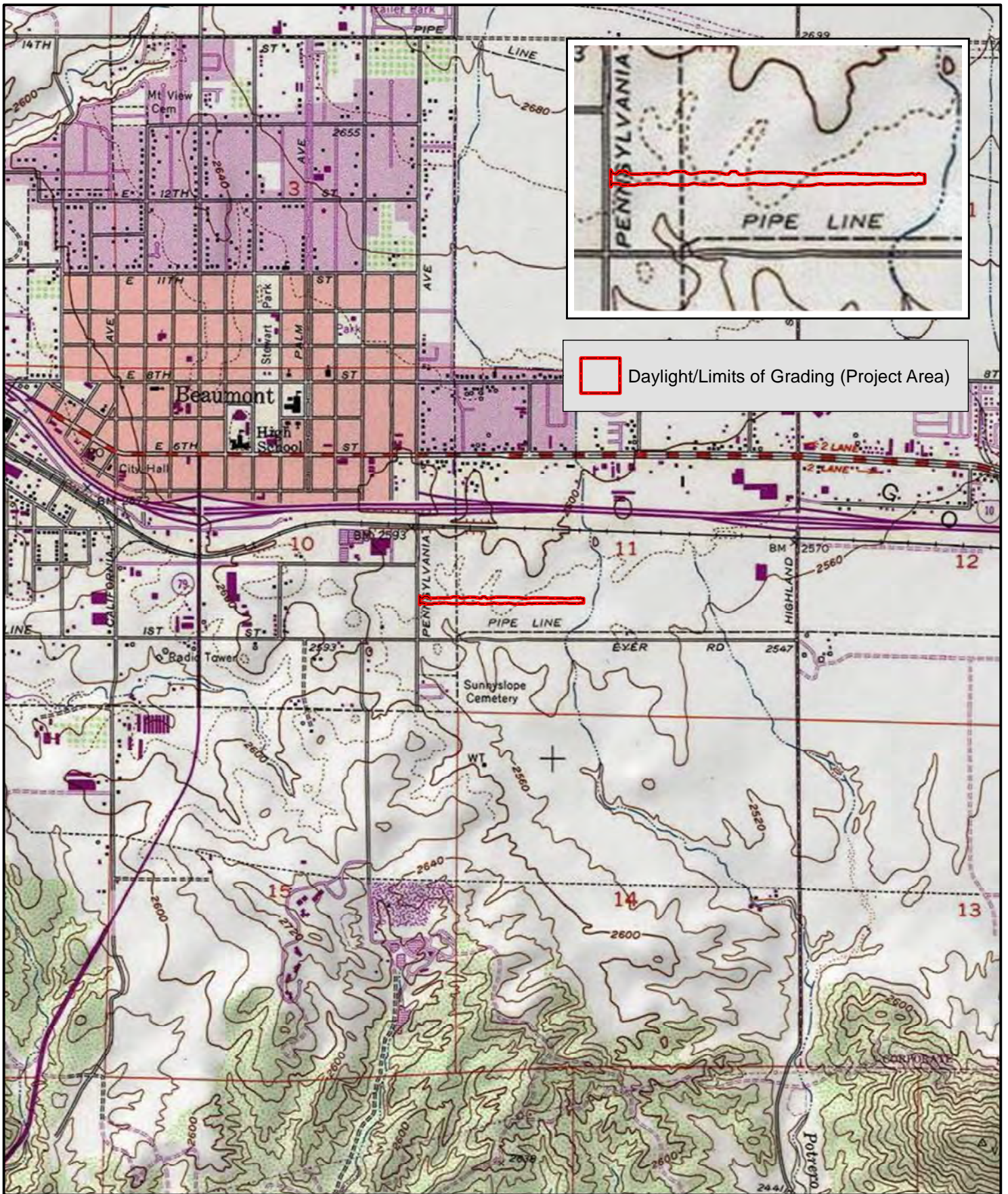



FIGURE 2
Vicinity Map



 Daylight/Limits of Grading (Project Area)

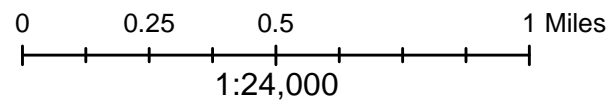
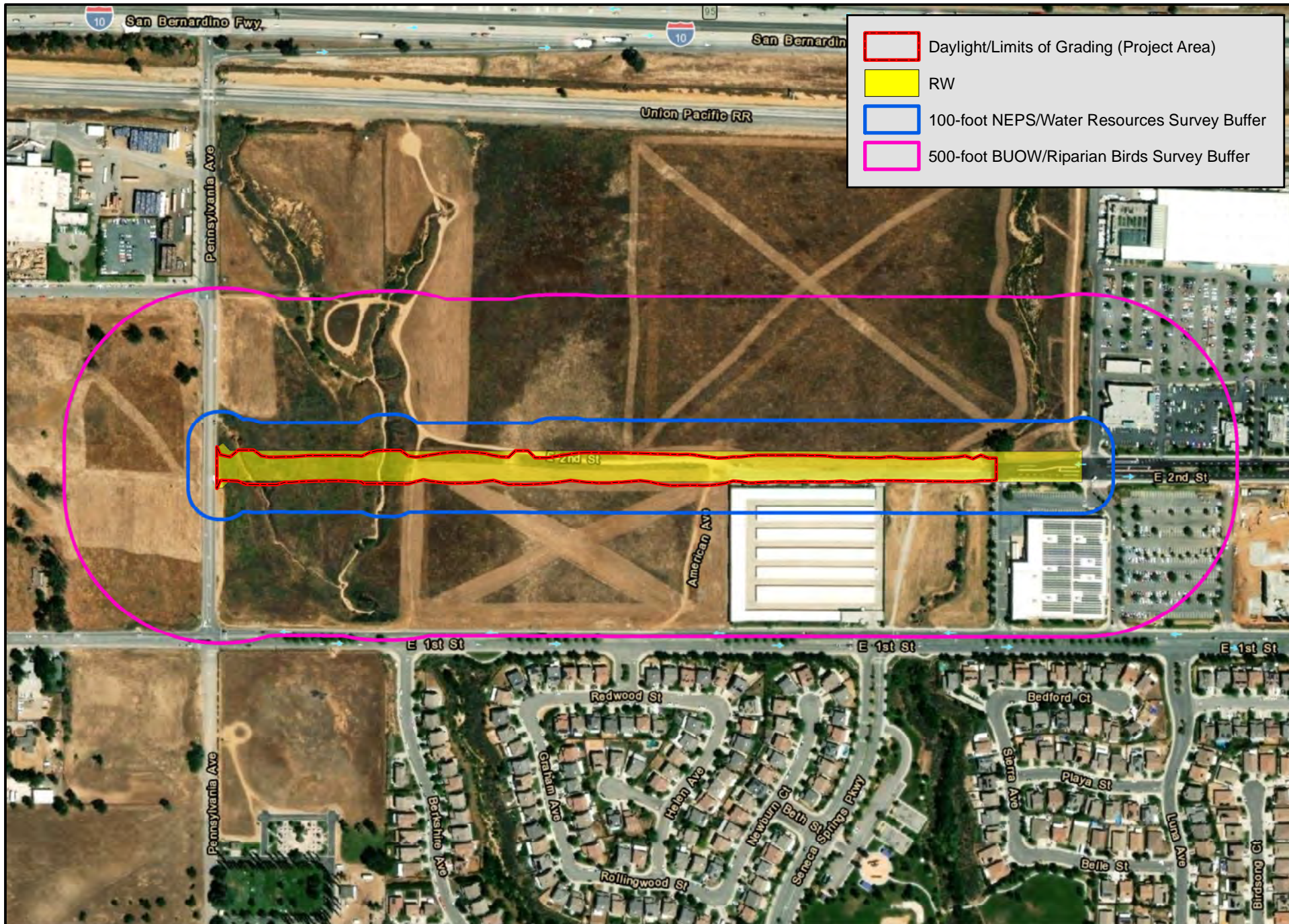


FIGURE 3
USGS Topographic Map



- Daylight/Limits of Grading (Project Area)
- RW
- 100-foot NEPS/Water Resources Survey Buffer
- 500-foot BUOW/Riparian Birds Survey Buffer

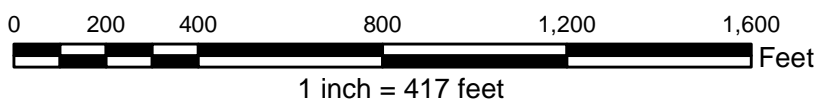


FIGURE 4
Project Area/
Assessment Areas

DATE: June 15, 2022
 COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI
 SOURCE: ESRI World Imagery Basemap, ESRI World Transportation, Cozad & Fox, SBS

PROJECT:
 City of Beaumont
 2nd Street Improvement

RV Storage, to Pennsylvania Avenue. The Project site is relatively flat with elevations ranging from 2,576 feet to 2,593 feet above mean sea level (msl). This Project also entails widening 2nd Street approximately 862-linear feet and extending it linear 1,663-feet from its current terminus to the westerly boundary of the Home Depot shopping center. The Project will require construction of a new storm drain facility and may require improvements to existing drainage. The total potential disturbed Project site area is approximately 5.08 acres. The site is bounded by commercial uses on the east end and to southeast and by vacant land on the north, west, and southwest. The General Plan land use and zoning designations of the adjacent land uses are Industrial.

The new roadway will be an extension of the existing E. 2nd Street on the west boundary of the Home Depot shopping center to the proposed intersection at Pennsylvania Avenue. The new roadway and related improvements will provide safe and ready access to the commercial development for both pedestrians and vehicles from the west. The roadway will be designed to cross over the existing drainage culvert and have new culverts for the water crossings on the west side of the Project site. The new culverts will convey the anticipated water flows based on the requirements set forth by the City and the Riverside County Flood Control and Water Conservation District (RCFCWCD). In addition, the Project will have an effective signage and striping plan for the planned phasing as well as any detour plans needed during construction to minimize the effects on local drivers or pedestrians.

There is also a proposed Pennsylvania Avenue Improvement Project that will widen the existing Pennsylvania Avenue from 1st Street to 6th Street (just west of the proposed Project). This improvement project will include new curb and gutter, a raised median, cross culvert extensions, and improvements at 6th Street intersection. The Pennsylvania project lies to the west of the proposed E. 2nd Street Improvement Project. An additional capital works project is currently being planned to expand the Pennsylvania Avenue interchange including a new westbound on-ramp and eastbound off-ramp to the I-10 Freeway just south of the site. These improvements depend on Caltrans and timing has not yet been determined.

2nd Street is classified as a major roadway in the City's General Plan Mobility Element. The proposed Project will build within the existing right-of-way for a major roadway; however, this Project will be an interim improvement built to secondary roadway standards. The proposed road cross section allows the south-half to meet the curb alignment for a Major (38') while the north-half will need to be widened in the future (at developer's expense) to complete the Major section – this future improvement is not included as part of this proposed Project. The interim condition is essentially a secondary road but shifted from centerline.

The site plan is attached in Appendix A.

2.3 Covered Roads

According to the RCA's MSHCP Information Application (Regional Conservation Authority, 2021), 2nd Street was not a Covered Road. An "arterial" road alignment for American Avenue situated north-south was present in a portion of the Project. It is unknown if the future alignment will ever be built.

2.4 Covered Public Access Facilities

The Project does not entail the construction of, or improvements to, a Covered Public Access Facility.

2.5 General Setting

The Project was located in the western end of the San Gorgonio Pass approximately one aerial mile north of the foothills of the San Jacinto Mountains. The San Bernardino Mountains were located approximately 4.0-aerial miles north of the Project. Primary land uses around the Project included urban areas, vacant lots,

and some agriculture. *Figure 5 – General Setting Aerial Photograph* (Page 9) depicts the setting of a 1:150,000-scale area around the Project.

3.0 RESERVE ASSEMBLY ANALYSIS

The MSHCP "...is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on Conservation of species and their associated Habitats in Western Riverside County" (Dudek & Associates, Inc., 2003). The MSHCP encompasses approximately 1.26 million acres of land that stretches from the crest of the San Jacinto Mountains west to the Orange County boundary. Ultimately, the MSHCP will result in the conservation of more than 500,000-acres (347,000-acres on existing Public/Quasi-Public Lands [PQP] and 153,000-acres of ARL) that focuses on the 146-species covered by the MSHCP (Dudek & Associates, Inc., 2003).

The MSHCP is a criteria-based plan of which the County's General Plan Area Plan boundaries were utilized to provide the broad organizational framework for the criteria (Dudek & Associates, Inc., 2003). A Conceptual Reserve Design (CRD) was sketched for each Area Plan using vegetation, planning species occurrence data, and biological issues and considerations as the primary criteria for the CRD (Dudek & Associates, Inc., 2003). After sketching the CRD, USGS quarter sections (i.e., approximate 160-acre cells) were then overlain on the CRD such that each "Criteria Cell" is an area in real space with a legal description (Dudek & Associates, Inc., 2003). Criteria Cells were then either aggregated into a Criteria Cell Group or retained as individual Criteria Cells based upon the level of conservation and configuration of the Criteria Cell or Criteria Cell Group (Dudek & Associates, Inc., 2003). Criteria Cells were assigned an identification number and each Criteria Cell Group was assigned a letter code. Conservation Criteria was drafted for each Criteria Cell or Criteria Cell Group to provide an explicit description of the areas to be targeted for conservation (Dudek & Associates, Inc., 2003). Those areas located outside of the designated Criteria Cells and/or Criteria Cell Groups are not targeted to be included within the 153,000-acres of ARL.

3.1 Area Plan

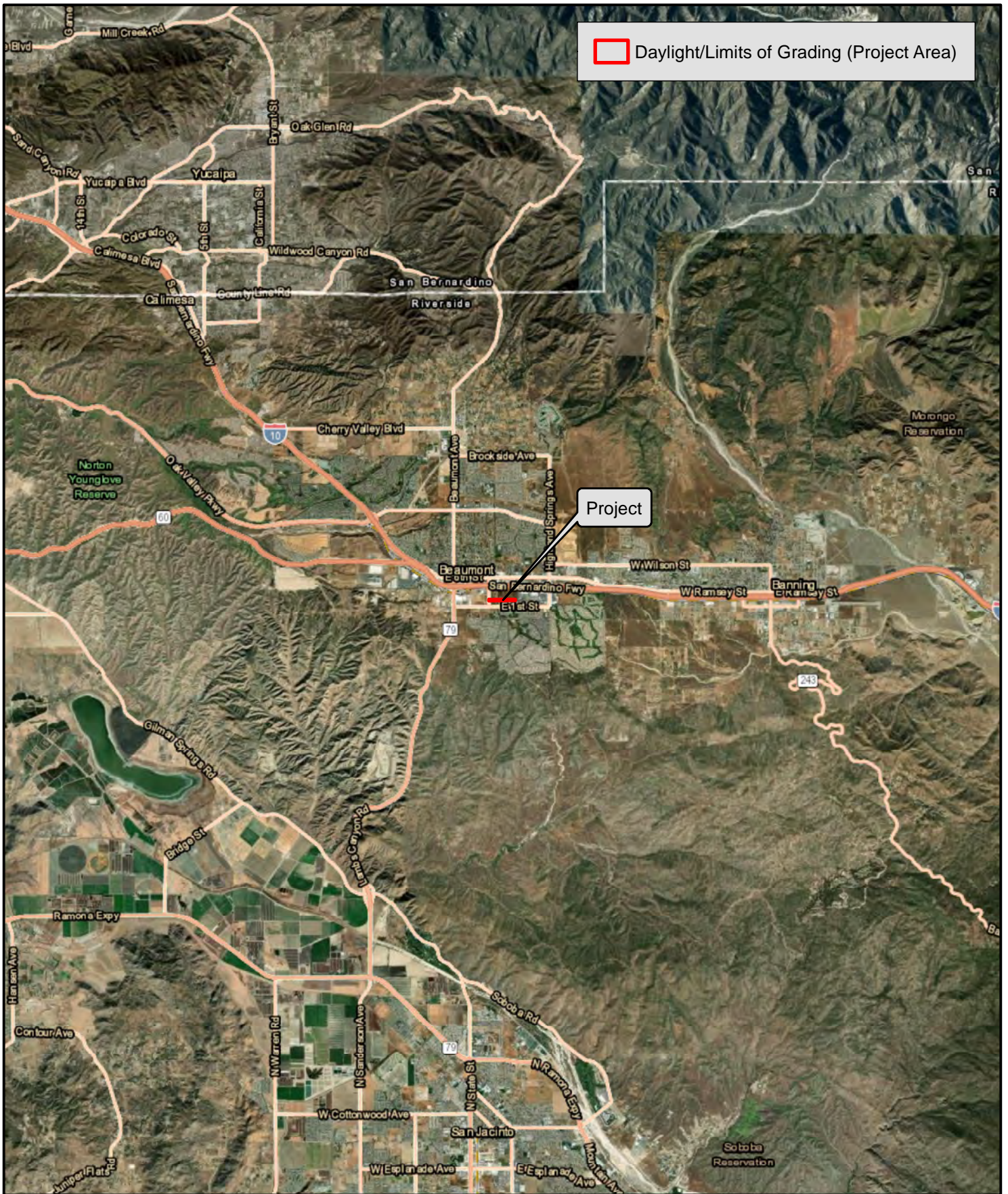
The Project was located in TPAP. The TPAP was approximately 140,144-acres (219-square miles). The TPAP consisted of three Subunits. The Project was not located within Subunit or a Criteria Cell, and therefore, was not targeted for ARL. Further, a Reserve Assembly Analysis was not required for the Project. Criteria Cell 1405 of Cell Group B was the nearest to the Project and was located approximately one aerial mile southwest of the Project. *Figure 6 – The Pass Area Plan and Subunits* (Page 10) depicts the Project's location in relation to those areas described above.

3.2 Public Quasi-Public Lands

The Project will not directly or indirectly impact PQP Lands. The nearest PQP Lands to the Project was Bureau of Land Management (BLM) land located approximately 1.7-miles southeast.

4.0 VEGETATION MAPPING

Vegetation community classifications are typically conducted in accordance with the California Department of Fish and Wildlife's (CDFW) Vegetation Classification and Mapping Program (VegCAMP) *List of Vegetation Alliances and Associations* (Natural Communities List) (California Department of Fish and Wildlife, 2021) and *A Manual of California Vegetation* (Sawyer, Keeler-Wolf, & Evens, 2009). Vegetation communities and land covers are mapped in the field utilizing both Collector for ArcGIS installed on a smart phone connected to an iSXBlue2+ GNSS submeter GPS receiver (Collector) and paper maps (i.e., aerial photographs and USGS topographic maps).



Daylight/Limits of Grading (Project Area)

Project

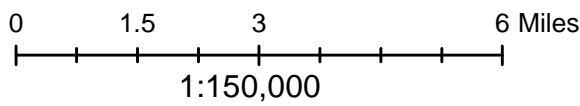
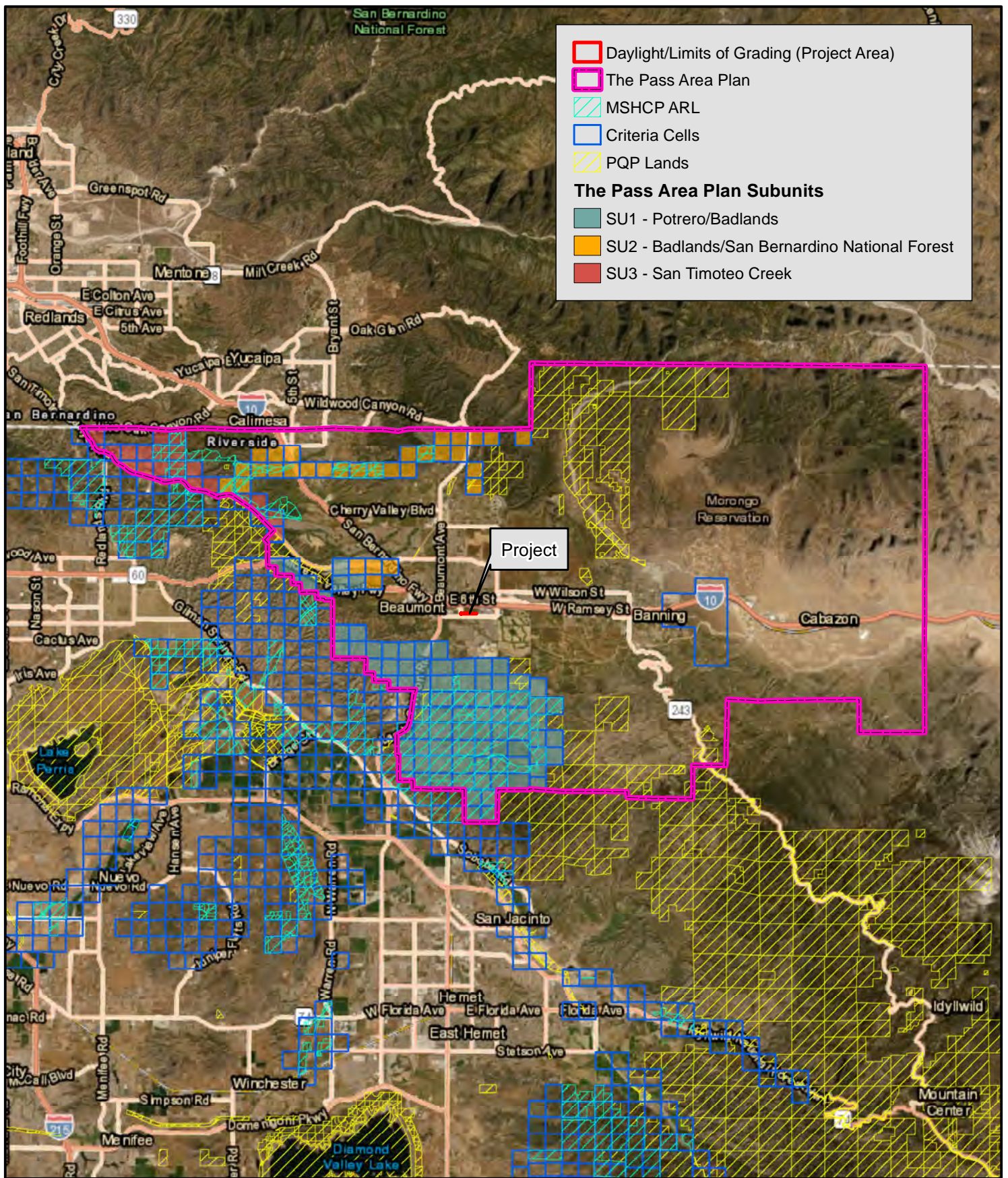


FIGURE 5
General Setting
Aerial Photograph



Daylight/Limits of Grading (Project Area)
 The Pass Area Plan
 MSHCP ARL
 Criteria Cells
 PQP Lands
The Pass Area Plan Subunits
 SU1 - Potrero/Badlands
 SU2 - Badlands/San Bernardino National Forest
 SU3 - San Timoteo Creek

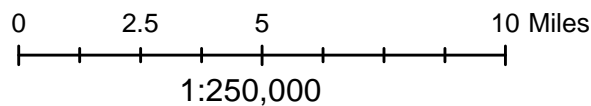


FIGURE 6
The Pass Area Plan and Subunits

Some land cover types are not classified in the above-referenced sources (i.e., developed, ornamental, ruderal, etc.); therefore, each land cover is designated with a common name for the purpose of this report. A brief description of the vegetation communities/land covers present on the Project and within 100-feet of the RW is presented below. Project and assessed acreages are provided in *Table 1 – Land Covers* (below). The distribution of mapped vegetation communities and land covers is depicted on *Figure 7 – Land Covers* (Page 13). A complete list of the flora observed on the Project is provided in Appendix B, and a complete list of the fauna observed on, above, or near the Project is provided in Appendix C.

- **Developed:** This land cover consisted of developed areas and included commercial centers in the eastern end, asphalt/developed portions of 2nd Street, a self-storage facility, and the asphalt/developed portions of Pennsylvania Avenue.
- **Disturbed Willow Scrub:** The disturbed willow scrub was present in two small patches within 100-feet of the RW. The disturbed willow scrub downstream of 2nd Street was present within Potrero Creek and included a mix of sparsely distributed willow species, which included narrow-leaved willow [sandbar willow] (*Salix exigua*), arroyo willow (*Salix lasiolepis*), black willow (*Salix gooddingii*), and red willow (*Salix laevigata*). Mule fat (*Baccharis salicifolia* subsp. *salicifolia*), a common riparian associated shrub, was also present. Although the riparian plant diversity was high, species richness was low throughout the area. The habitat was also mixed with several non-native trees, such as Chinese elm (*Ulmus parvifolia*), Shamel ash (*Fraxinus uhdei*), and tree-of-heaven (*Ailanthus altissima*). Saltcedar (*Tamarix ramosissima*), an invasive species, was also present. The presence and abundance of non-natives was the disturbance factor within the land cover.

The disturbed willow scrub in the northeast corner within 100-feet of the RW was present within a human-created ditch. According to Google Earth, the commercial center, including the drainage ditch, to the east began construction in late 2005/early 2006. Most of the ditch was earthen with a few concrete trapezoid aprons. The human-created ditch supported only a few, scattered black willow and generally lacked an understory though a few mule fat were present. Most of the ditch consisted of non-native, weedy vegetation. Trash was prevalent throughout the ditch and was likely the result of being located adjacent to a commercial parking lot. The downstream terminus of the ditch was near 2nd Street. A large, vertical drainpipe was present at the terminus where ephemeral flow entered the underground drainage system.

- **Ruderal:** The dominant land cover within 100-feet of the RW was ruderal habitat that primarily consisted of non-native, weedy vegetation such as red brome (*Bromus rubens*), riggut grass (*Bromus diandrus*) slender wild oat (*Avena barbata*), and wall barley (*Hordeum murinum*) dominant. Some native upland vegetation was present, with the majority present on the banks of the two ephemeral washes in the western portion and included interior goldenbush (*Ericameria linearifolia*) and California buckwheat (*Eriogonum fasciculatum*).

Table 1 – Land Covers

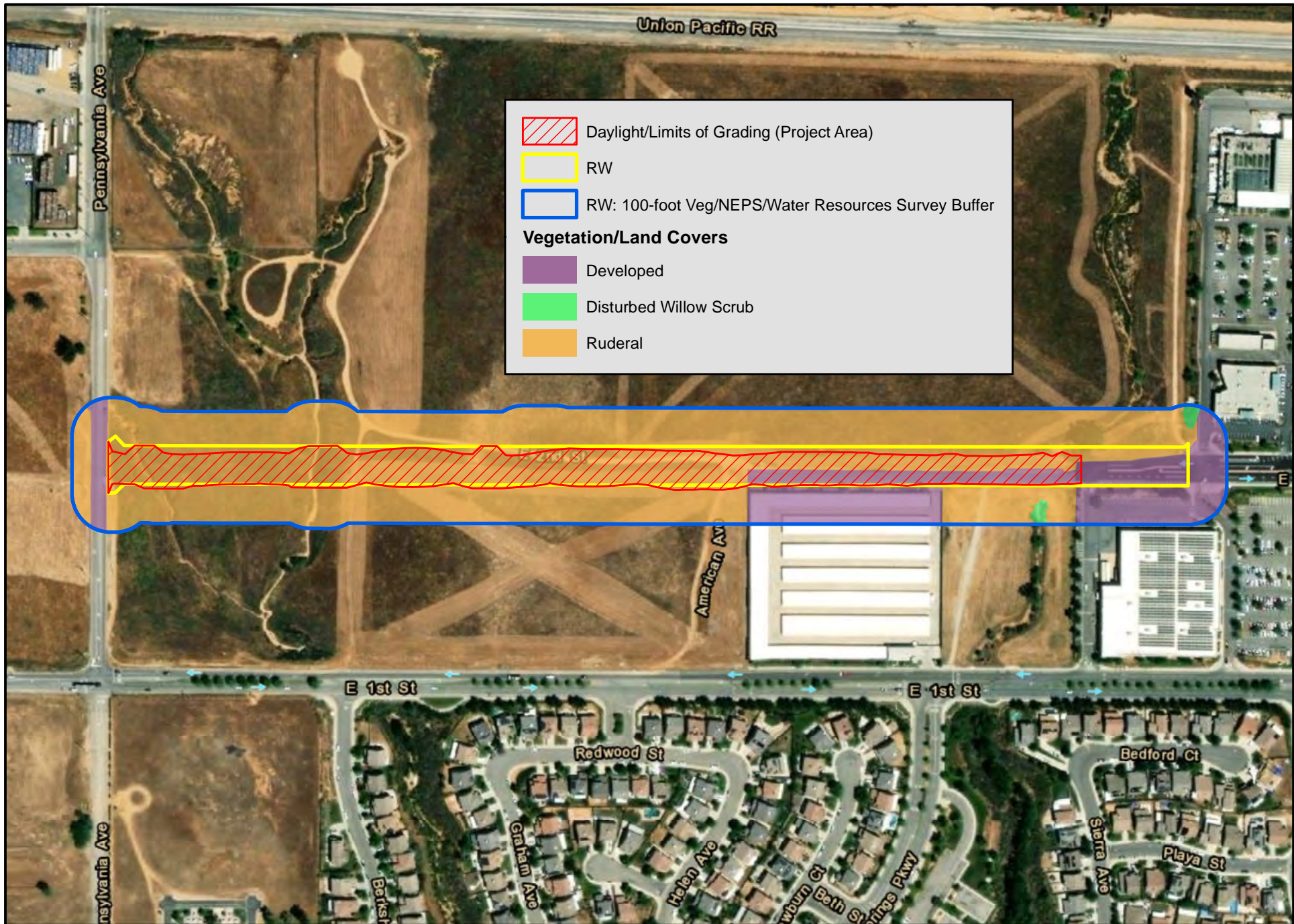
COMMON NAME/VEGCAMP COMMUNITY	PROJECT ACRES	RW ACRES	100-FOOT SURVEY BUFFER ACRES
Developed	0.77	1.25	3.97
No corresponding VegCAMP Alliance			

COMMON NAME/VEGCAMP COMMUNITY	PROJECT ACRES	RW ACRES	100-FOOT SURVEY BUFFER ACRES
Disturbed Willow Scrub VegCAMP Alliance 61.209.00 Sandbar willow thickets			
VegCAMP Semi-Natural Alliance 42.027.00 Wild oats and annual brome grasslands	0	0	0.09
VegCAMP Semi-Natural Alliance 79.100.00 Eucalyptus–tree of heaven–black locust groves Ruderal			
VegCAMP Semi-Natural Alliance 42.027.00 Wild oats and annual brome grasslands	4.31	5.19	16.46
TOTAL	5.08	6.44	20.52

5.0 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

Section 6.1.2 *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools* (MSHCP Section 6.1.2) of the MSHCP requires all subject properties under the jurisdiction of the MSHCP that are proposing a land use change/applying for a discretionary permit to conduct a MSHCP Section 6.1.2 assessment. This includes a habitat assessment for Riparian/Riverine Areas, Vernal Pools, three fairy shrimp species; 1) Riverside fairy shrimp (*Streptocephalus woottoni*) (RFS), 2) vernal pool fairy shrimp (*Branchinecta lynchi*) (VPFS), and 3) Santa Rosa Plateau fairy shrimp (*Lindieriella santarosae*) (SRPFS), and three bird species; 1) LBVI, 2) Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (SWFL), and 3) Western Distinct Population Segment (DPS)¹ Yellow-billed Cuckoo (*Coccyzus americanus*) (YBCU). If the assessment identifies suitable habitat for any of the six-species associated with Riparian/Riverine Areas and Vernal Pools listed above, and the proposed project design does not incorporate avoidance of the identified habitat, focused surveys would be required, and avoidance and minimization measures will be implemented in accordance with the MSHCP’s species-specific objectives for these species.

¹ Distinct Population Segment: In addition to the listing and delisting of species and subspecies, the ESA [Endangered Species Act] allows the listing/delisting of Distinct Population Segments of vertebrate species (i.e., animals with backbones, mammals, birds, fish, reptiles, and amphibians). A Distinct Population Segment is a portion of a species' or subspecies' population or range. The Distinct Population Segment is described geographically instead of biologically, such as "all members of XYZ that occur north of 40 north latitude" (U. S. Fish and Wildlife Service - Pacific Region, 2019).



Daylight/Limits of Grading (Project Area)
 RW
 RW: 100-foot Veg/NEPS/Water Resources Survey Buffer
Vegetation/Land Covers
 Developed
 Disturbed Willow Scrub
 Ruderal

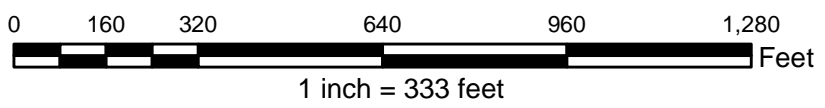


FIGURE 7
Land Covers

5.1 Riparian/Riverine Areas

According to MSHCP Section 6.1.2:

Riparian/Riverine Areas are lands which contain Habitat dominated by tress [trees], shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.

5.1.1 Methods

Office Review

Prior to initiating the field assessment, SBS conducted a review and analysis of the Beaumont 7.5 Minute USGS California Quadrangle, historic aerial photography from Historic Aerials online (Historic Aerials by Netronline, 2021) and Google Earth, the U. S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey.

SBS also conducted a query of both the California Natural Diversity Database (CNDDB) and the USFWS Carlsbad Fish and Wildlife Office (CFWO) “Species Occurrence Data” GIS data to determine if the three-targeted fairy shrimp and/or three-targeted bird species listed above in Section 5.0 have been documented within five miles of the Project. The Cornell Lab of Ornithology’s eBird Hotspots (The Cornell Lab of Ornithology, 2021) was also referenced.

After performing the field assessment, SBS performed a Wetlands Climate Tables (WETs) analysis to determine the precipitation climatic conditions (i.e., drought, dry, normal, etc.) at the time of the assessment.

Riparian/Riverine Area Field Mapping Assessment

A potential Riparian/Riverine Area is walked and mapped with Collector, recording a vertex for every two feet traveled, as either a polyline and/or polygon depending on the habitat type (i.e., Riparian vs. Riverine) and the width of the feature². The jurisdictional extent of a Riparian/Riverine Area is typically the dripline³ of the riparian vegetation associated with the water feature if present, or the top of the streambank in the absence of riparian vegetation⁴. Data collected while walking the potential Riparian/Riverine Area includes characteristics and functions such as hydrology, soils/substrates, dominant plant species/vegetation community, biological functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, habitat suitability for LBVI, SWFL, YBCU, RFS, VPFS, SRPFS, and whether the feature contributes to downstream resources for MSHCP Section 6.1.2 species and/or MSHCP Conservation Areas.

Field Assessment Dates and Weather Conditions

The MSHCP Section 6.1.2 assessment was conducted by biologists Tim Searl and Arthur Davenport on July 20, 2020 with a follow-up survey conducted by Tim Searl and field technician Garrett Fox on July 29, 2020. Detailed survey information and conditions are presented in *Table 2 - MSHCP Section 6.1.2 Assessment Conditions* (Page 15).

² Any feature \leq to three feet in width, or lacking a discernable bed and bank, is mapped as a polyline, and given a mean width. The feature is then calculated and depicted in ArcGIS by utilizing the Buffer tool to represent the mean width.

³ The area defined by the outermost circumference of a tree canopy where water drips from and onto the ground.

⁴ The jurisdictional limits of a Riparian/Riverine Area generally coincide with that of CDFW 1600 streambeds. Though if a feature lacks riparian vegetation, a Riparian/Riverine Area must contribute to downstream resources to meet the criteria, unlike CDFW 1600 streambeds where CDFW may potentially assert jurisdiction over isolated streambeds regardless of it being vegetated or unvegetated.

Table 2 – MSHCP Section 6.1.2 Assessment Conditions⁵

DATE	FIELD PERSONNEL	SURVEY TIME	TEMPERATURE	HUMIDITY	% CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE ⁶
7/20/2020	Tim Searl/Arthur Davenport	0600-1300	72-90	55-30	0-0	2-5	0
7/29/2020	Tim Searl/Garrett Fox	0530-0930	60-84	55-27	0-0	0-1	0

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⁵ Temperature (Degrees Fahrenheit), Humidity (Relative; %), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter.

⁶ Annual Precipitation (July 01 to June 30) To-Date was obtained from PWS Weather Station BNTC1 located near the Project in Beaumont, CA (PWS Weather, 2021). Fieldwork was conducted at the beginning of the 2020-2021 annual precipitation season. The total for BNTC1 for 2019-2020 was 16.48-inches.

5.1.2 Existing Conditions and Results

Watershed Location

The Project was located within the central-eastern portion of the Santa Ana Watershed (HUC6 180702) within the following sub-watersheds: northern portion of the San Jacinto Watershed (HUC8 18070202), in the northern portion of the Middle San Jacinto River Watershed (HUC10 1807020202), in the northern portion of the Potrero Creek Watershed (HUC12 180702020201). *Figure 8 – Watershed Location* (Page 17) depicts the Project’s location within each of these Hydrologic Units.

Office Review

Historic Aerial Photography Analysis

A georeferenced historic aerial photograph from April 16, 1966 was purchased from Netronline. Google Earth images were reviewed from 1985 to 2021 with images downloaded and georeferenced by SBS from October 2003, January 2006, and June 2009. The overall result of the historical analysis indicates that the Project has remained in a relatively similar condition for over 50 years, and residential/commercial development has increased in the vicinity of the Project.

April 1966

In 1966 the Project and its immediate vicinity was similar to the current conditions though the primary difference was no development was present. The three ephemeral washes were present; however, Potrero Creek in the eastern end followed a more north/south alignment and was located a bit further east from the Project. The upland areas in the vicinity were likely utilized for dryland agriculture. Pennsylvania Avenue and 1st Street to the south were unimproved, dirt roads at the time. *Figure 9 – 1966 Aerial Photograph* (Page 18) depicts the Project and the immediate surrounding area.

October 2003

The conditions in 2003 were similar to those in 1966. Potrero Creek appeared wider and veered southwest near the Project. Pennsylvania Avenue and 1st Street were still dirt roads and the planted trees along 1st and perpendicular to the Project were also still present. Dryland agriculture was likely still the primary land use in the vicinity. *Figure 10 – 2003 Aerial Photograph* (Page 19) depicts the Project and the immediate surrounding area.

January 2006

The surrounding area had changed by 2006 with the area undergoing active development. Pennsylvania Avenue and 1st Street were paved, and the eastern portion of 2nd Street was under construction. The commercial center to the east and residential area to the south were also under construction. The ephemeral washes were present and appeared relatively unchanged since 2003 within the Project; however, they were being altered to the south by the development. *Figure 11 – 2006 Aerial Photograph* (Page 20) depicts the Project and the immediate surrounding area.

June 2009

By 2009, conditions similar to the existing conditions were present. The commercial center to the east had been completed and the self-storage facility to the south had been built. Potrero Creek now entered the culvert beneath 2nd Street. The residential area to the south was still being constructed and the “avoided” ephemeral washes appeared to support more vegetation. *Figure 12 – 2009 Aerial Photograph* (Page 21) depicts the Project and the immediate surrounding area.

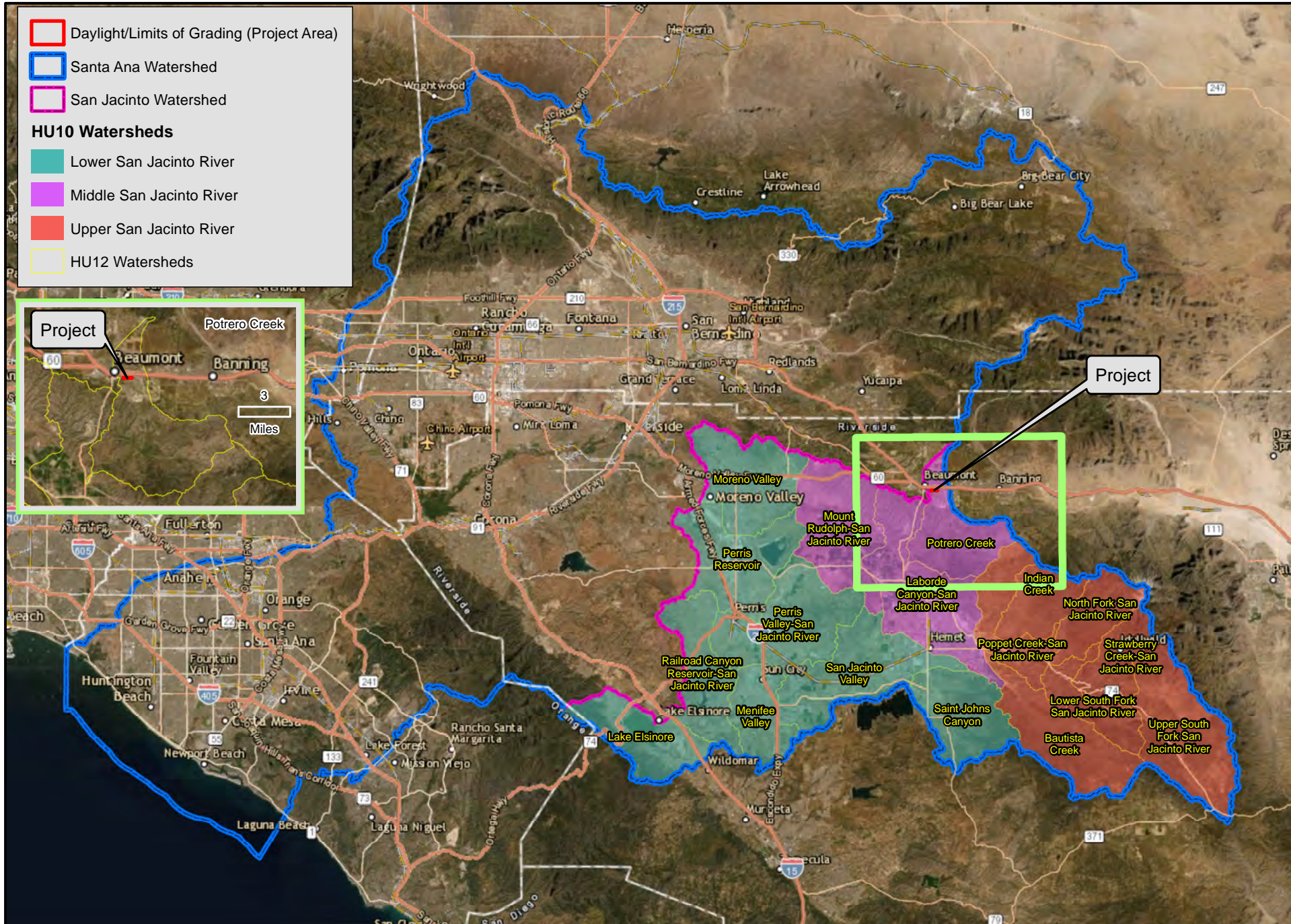
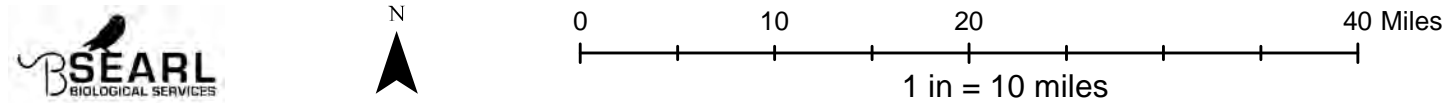


FIGURE 8
Watershed Location



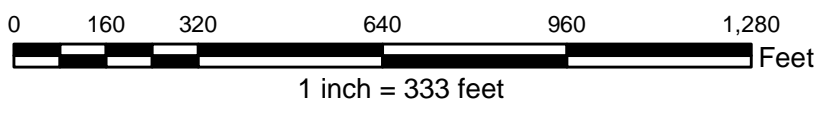
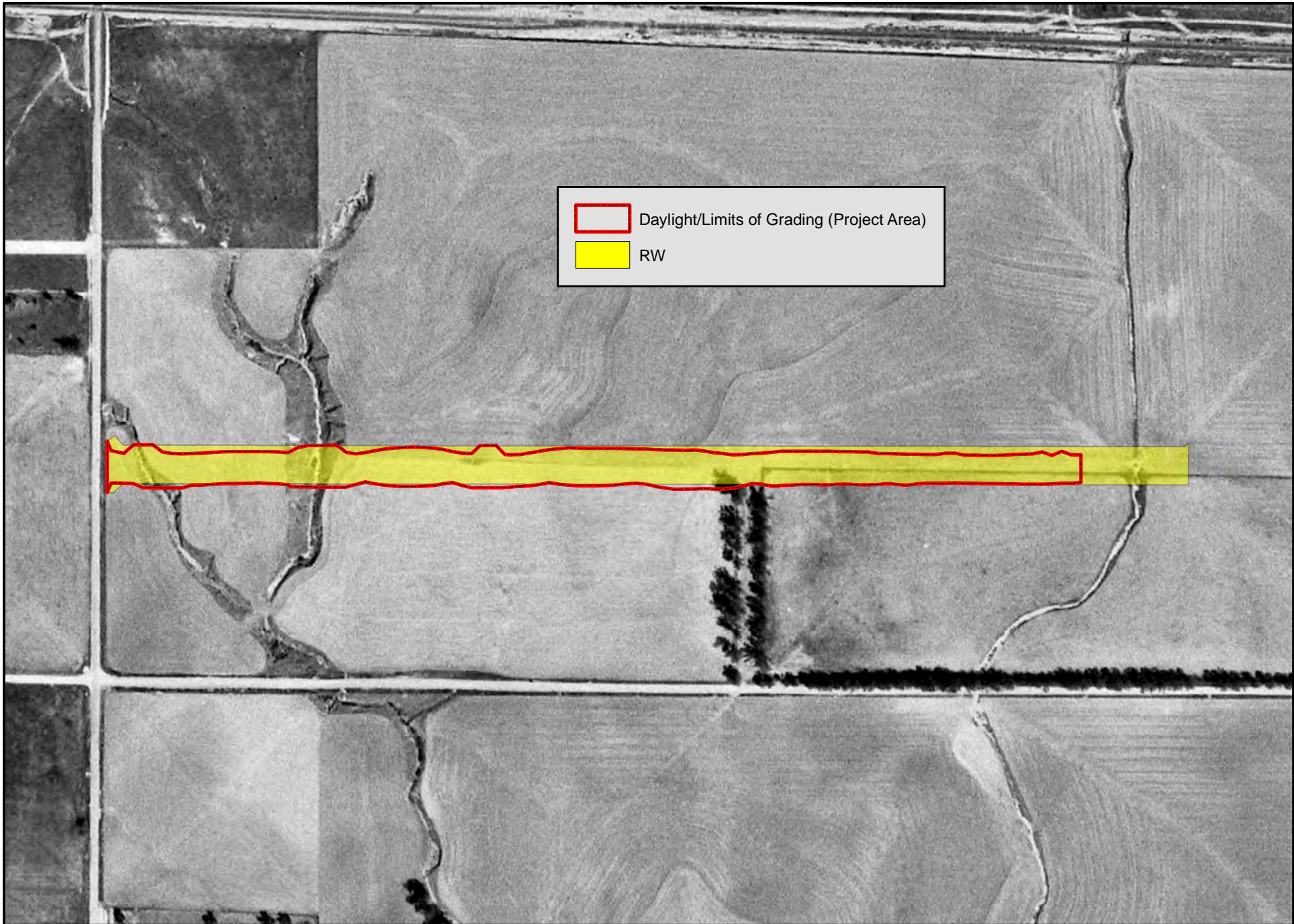
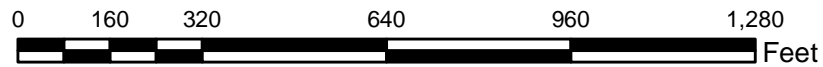
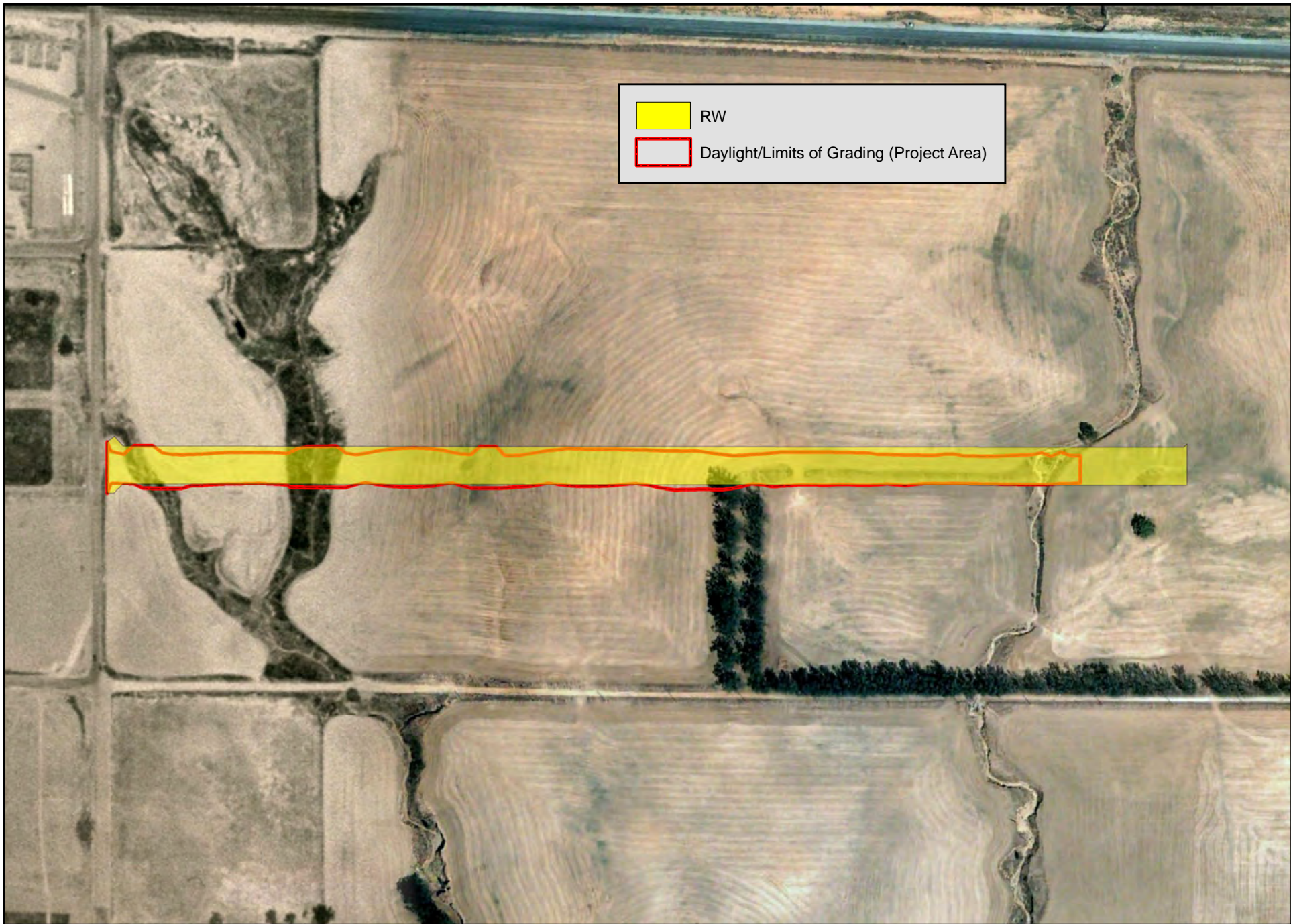


FIGURE 9
1966 Aerial
Photograph

DATE: June 7, 2022
COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI
SOURCE: Netronline Historic Aerials, Cozad & Fox



PROJECT:
City of Beaumont
2nd Street Improvement

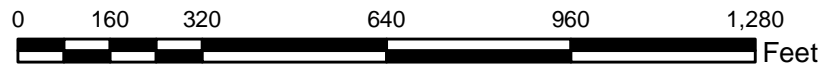


1 inch = 333 feet

FIGURE 10
2003 Aerial
Photograph

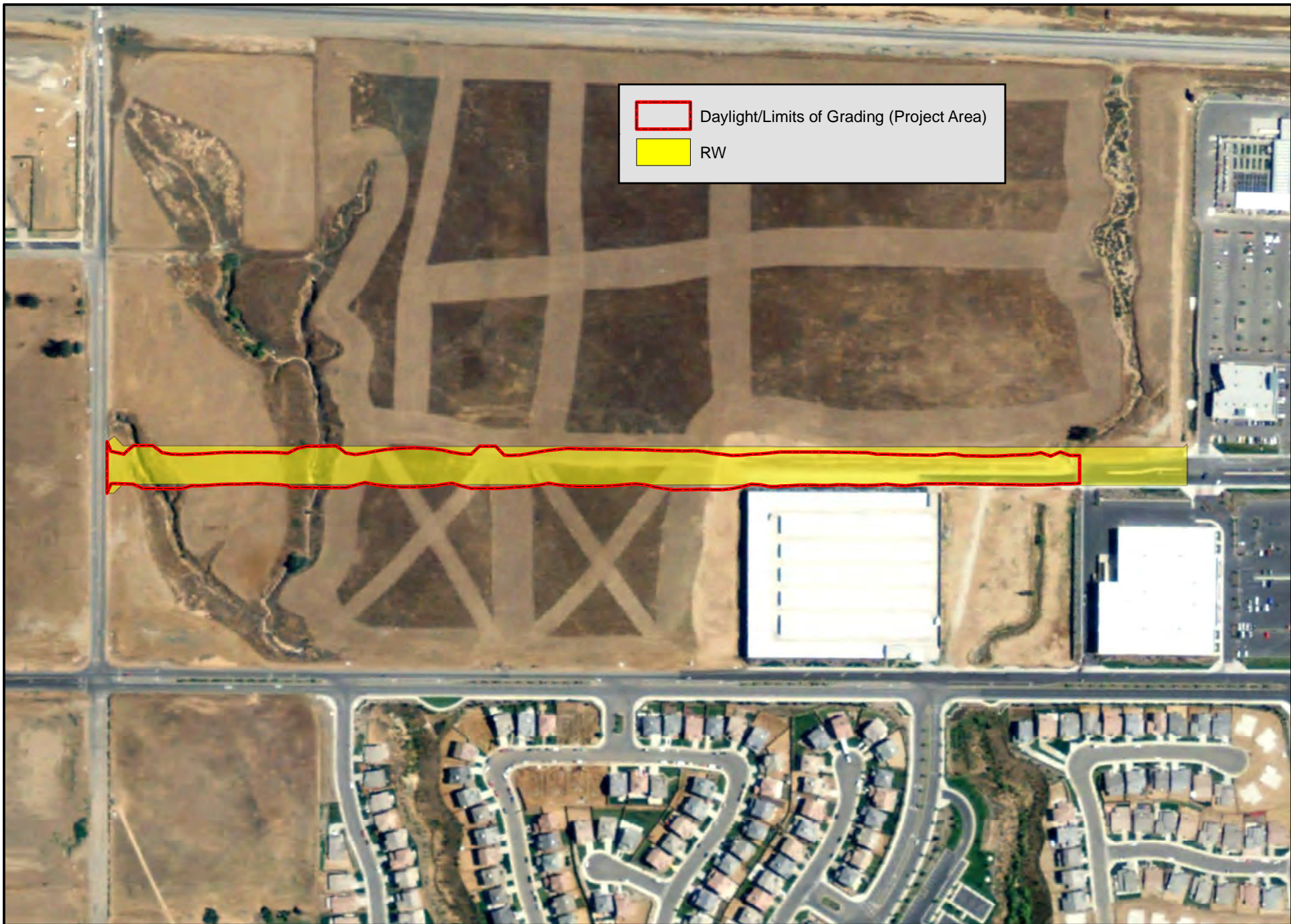


 Daylight/Limits of Grading (Project Area)
 RW



1 inch = 333 feet

FIGURE 11
2006 Aerial
Photograph



Daylight/Limits of Grading (Project Area)
RW

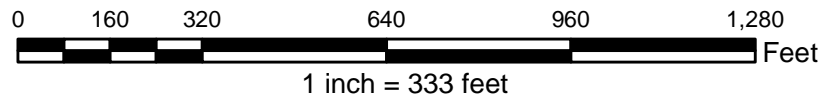


FIGURE 12
2009 Aerial
Photograph

NWI

According to the NWI, which utilized an aerial photograph from 1985 as its base to map potential wetland resources, Potrero Creek was mapped as Riverine habitat. The other two ephemeral washes were only mapped downstream of the confluence as Riverine habitat. *Figure 13 – NWI* (Page 23) depicts the NWI data. The *Classification of Wetlands and Deepwater Habitats of the United States* (Federal Geographic Data Committee (FGDC), 2013) defines Riverine as:

- **Riverine**

“The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is “an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.”

Query Results

According to the CFWO and CNDDDB, 39 records (CFWO 33, CNDDDB 6) of MSHCP Section 6.1.2 targeted species have been reported within 5-miles of the Project over the past 30 years with the most recent record reported in 2016. The species reported included LBV, SWFL, and RFS. The nearest documented record to the Project was LBV in 2015 approximately 0.7-mile southeast in Potrero Creek. *Figure 14 – MSHCP Section 6.1.2 Query Results* (Page 24) depicts the 39 records within five miles of the Project.

An eBird hotspot, *Potrero Creek at Four Seasons Beaumont* (The Cornell Lab of Ornithology, 2021), was located approximately 0.5-mile south/southeast of the Project within the gated community of Four Seasons. LBV was reported and documented through photographs and sound recordings at the hotspot in April 2019. In addition to LBV, Yellow-billed Cuckoo (*Coccyzus americanus*) (YBCU) and Willow Flycatcher (*Empidonax traillii*) (WIFL) have been reported at this location. The YBCU, listed as Endangered through the California Endangered Species Act (CESA) and Threatened through the federal Endangered Species Act (ESA), was documented in July 2020. An immature bird was observed dead as a result of a window strike. The WIFL, with all subspecies listed as Endangered by the CESA, and the Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (SWFL), a subspecies that nests in the southwestern U. S., is listed as Endangered through the ESA. The WIFL was reported in October 2018. The subspecies was not reported.

Natural Resources Conservation Service Soils

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (United States Department of Agriculture Natural Resources Conservation Service, 2021), the Project and areas within 100-feet of the Project consisted of five soil series as depicted by *Figure 15 – NRCS Soils* (Page 25). A brief description, as described by the NRCS, is presented below. Acreages are provided in *Table 3 – NRCS Soils* (Page 26). No hydric, clay, or saline-alkali soils series were present on the Project.

- **Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2):** A well-drained alluvium soil derived from granite. The depth to the restrictive feature and water table is more than 80-inches. The frequency of ponding, according to the NRCS, is none.
- **Ramona sandy loam, 2 to 5 percent slopes, eroded (RaB2):** A well-drained alluvium soil derived from granite. The depth to the restrictive feature and water table is more than 80-inches. The frequency of ponding, according to the NRCS, is none.

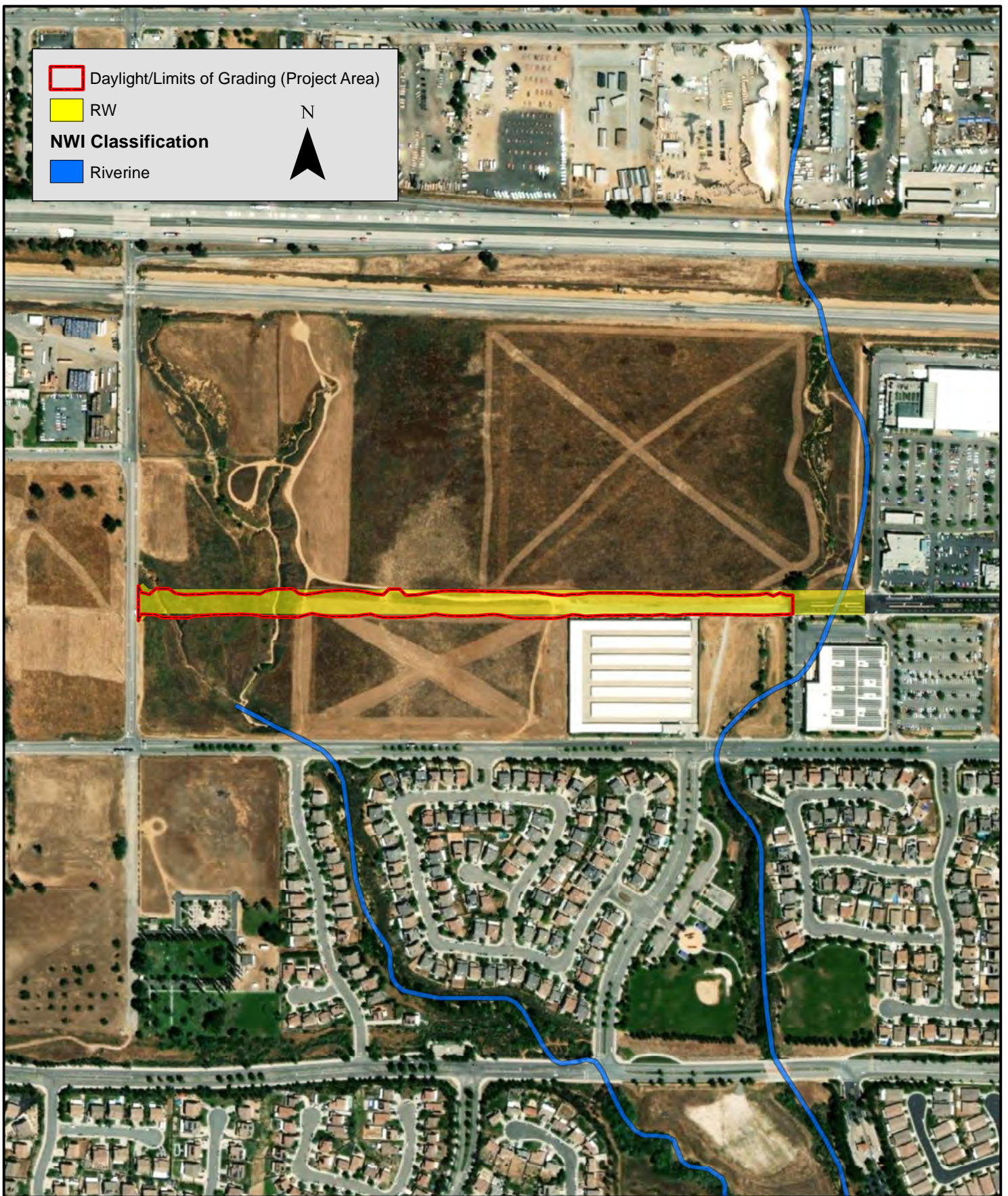


FIGURE 13
NWI



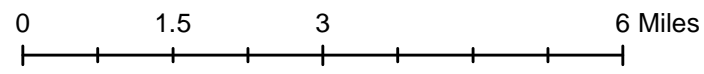
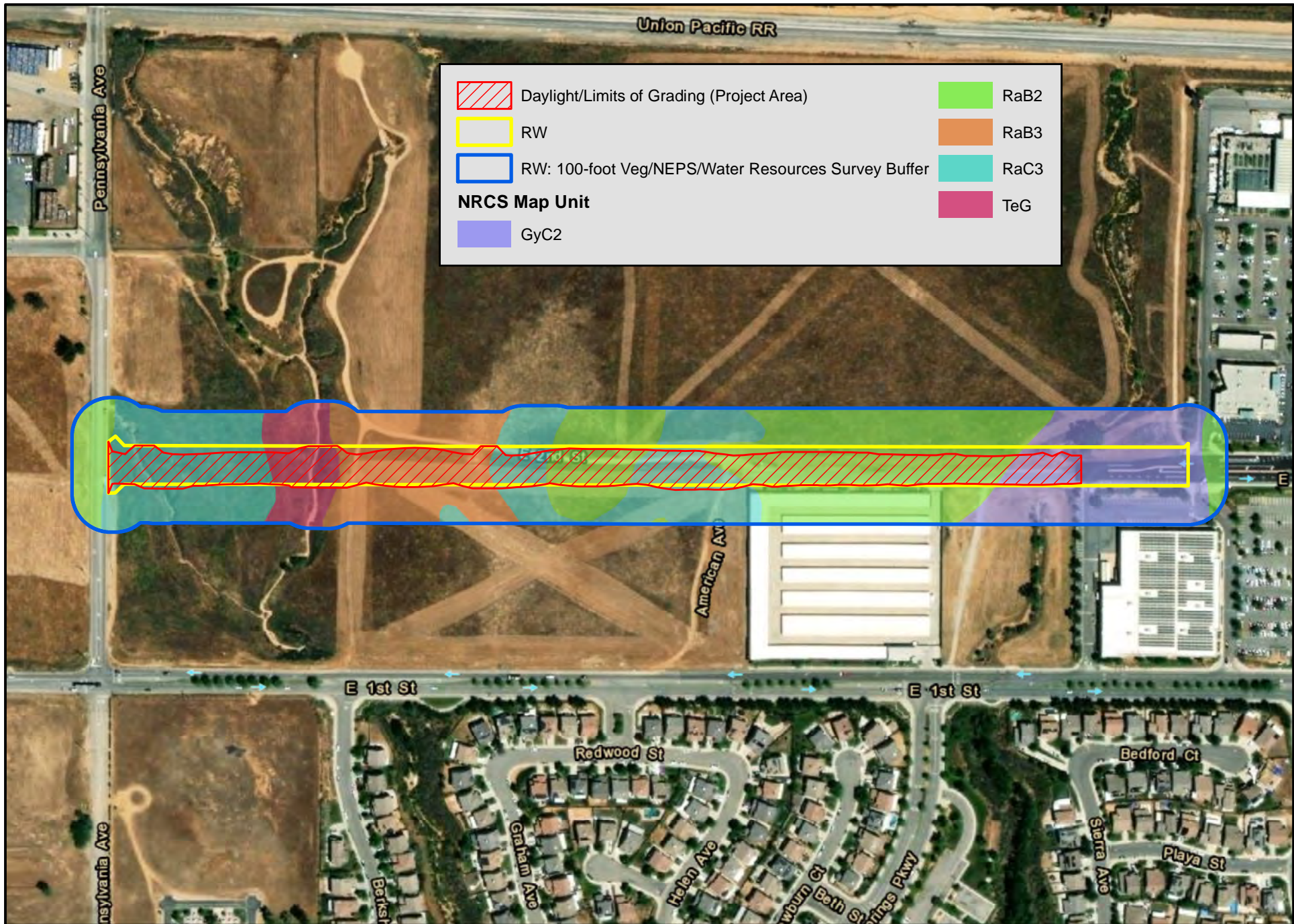


FIGURE 14
MSHCP Section 6.1.2
Query Results

DATE: June 14, 2022
 COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI
 SOURCE: ESRI World Imagery Basemap, ESRI World Transportation,
 Cozad & Fox, CFWO, CNDDB

PROJECT:
 City of Beaumont
 2nd Street Improvement











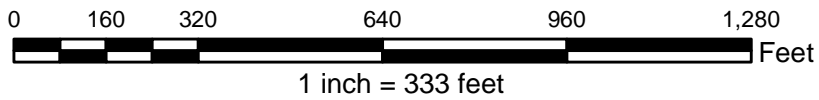
	Daylight/Limits of Grading (Project Area)		RaB2
	RW		RaB3
	RW: 100-foot Veg/NEPS/Water Resources Survey Buffer		RaC3
NRCS Map Unit			TeG
	GyC2		

FIGURE 15
NRCS Soils



- **Ramona sandy loam, 0 to 5 percent slopes, severely eroded (RaB3):** RaB3 was also a well-drained alluvium soil derived from granite with identical features to RaB2. The frequency of ponding, according to the NRCS, is none.
- **Ramona sandy loam, 5 to 8 percent slopes, severely eroded (RaC3):** RaC3 was also a well-drained alluvium soil derived from granite with identical features to RaB2 and RaB3. The frequency of ponding, according to the NRCS, is none.
- **Terrace escarpments (TeG):** Consists of variable alluvium that typically occurs on steep terraced slopes.

Table 3 – NRCS Soils

SOIL	PROJECT ACRES	RW ACRES	100-FOOT SURVEY BUFFER ACRES
GyC2	0.34	1.07	3.49
RaB2	1.85	2.26	7.20
RaB3	0.84	0.90	2.85
RaC3	1.65	1.80	5.78
TeG	0.40	0.41	1.20
TOTAL	5.08	6.44	20.52

Riparian/Riverine Areas Results

SBS identified and assessed a total of four features, designated as Features A, B, C, and D, within 100-feet of the RW that potentially meet the criteria of a Riparian/Riverine Area based on the definition provided above in Section 5.1. *Table 4 – Potential Riparian/Riverine Areas* (below) provides each features area in square feet and acres. *Figure 16 – Potential MSHCP Section 6.1.2 Riparian/Riverine Areas* (Page 27) depicts the location and extent of the areas listed above. Appendix D depicts photographic key maps and a collection of assessment photographs.

An analysis of the WETs, with the results provided in Appendix E, indicated that the Project’s location was not experiencing drought conditions during the July field assessment, and the field work was conducted during normal conditions.

Table 4 – Potential Riparian/Riverine Areas

FEATURE ID ⁷	PROJECT		RW		100-FOOT SURVEY BUFFER	
	SqFt	Acres	SqFt	Acres	SqFt	Acres
A	6,080.55	0.14	5,105.00	0.12	14,981.94	0.34
B	7,114.76	0.16	6,699.66	0.15	20,829.95	0.48
C	1,232.42	0.03	2,490.33	0.06	12,851.92	0.30
D	0	0	0	0	2,799.29	0.06
TOTAL	14,427.73	0.33	14,294.99	0.33	51,463.09	1.17

Feature A

This feature was a deeply incised gully and the result of storm runoff from Pennsylvania Avenue. A vertical drainpipe was located in the shoulder on the westside of Pennsylvania Avenue and was connected to a 5-foot-wide cement culvert that discharged on the eastside where Feature A originated.

⁷ The areas for Features A and C include the existing culverts depicted on Figure 16. Feature A culvert width was 5-foot with an area of 188.20-SqFt (0.004-acre) and Feature C culverts (box culvert with 3 cement culverts beneath 2nd Street) totaled a width of 13-feet with an area of 1,640.98-SqFt (0.04-acre).



	Daylight/Limits of Grading (Project Area)
	RW
	RW: 100-foot Veg/NEPS/Water Resources Survey Buffer
Features	
	A
	B
	C
	D
	Culvert (Total Width)

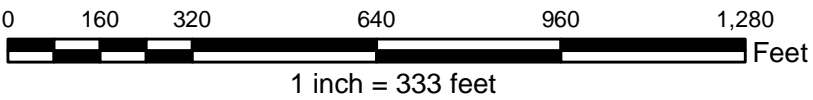


FIGURE 16
Potential MSHCP Section 6.1.2
Riparian/Riverine Areas



No drainage course was present on the westside indicating that all the flow originated from road runoff during storm events. Feature A primarily consisted of ruderal habitat with non-native, weedy vegetation such as red brome, ripgut grass, slender wild oat, and wall barley dominant. Some native upland vegetation was present, with the majority occurring on the banks, and included interior goldenbush and California buckwheat. No riparian vegetation was present. As noted above, Feature A was a deeply incised gully with an approximate depth of 20-feet from the bed of the channel to the top of the bank at some of its deepest locations. Soils throughout primarily consisted of coarse sandy loams. Feature A converged with Feature B downstream of the 100-foot survey buffer assessment area. Feature A would be expected to be subject to MSHCP Section 6.1.2 Riparian/Riverine Areas' policies.

Feature B

Feature B was similar to Feature A in that it was a deeply incised gully and possibly the result of storm runoff from Pennsylvania Avenue and the Union Pacific Railroad (UPR) located to the north. Two drainages converged approximately 110-feet north of the 100-foot survey buffer assessment area. Feature B primarily consisted of ruderal habitat with non-native, weedy vegetation such as red brome, ripgut grass, slender wild oat, and wall barley dominant. Some native upland vegetation was present, with the majority occurring on the banks, and included interior goldenbush and California buckwheat. No riparian vegetation was present within the 100-foot survey buffer assessment area; however, a patch of black willow to the northwest and a patch of arroyo willow was present to the south. As noted above, Feature B was a deeply incised gully with an approximate depth of 30-feet from the bed of the channel to the top of the bank at some of its deepest locations. Soils throughout primarily consisted of Terrace Escarpments and coarse sandy loams. Feature B would be expected to be subject to MSHCP Section 6.1.2 Riparian/Riverine Areas' policies.

Feature C (Potrero Creek)

Potrero Creek was present in the eastern end of the 100-foot survey buffer assessment area. The headwaters were located approximately 2.0-miles north according to the USGS Topographic Map. The headwaters were located in an area that has since been developed, and according to aerial photography, enters a series of human-created channels and underground storm drain systems before ultimately discharging from a culvert located beneath I-10 and the UPR approximately 900-feet north of the 100-foot survey buffer assessment area.

The ephemeral drainage was divided by a box culvert with three cement culverts located under a paved portion of 2nd Street within the assessment area. The two outside culverts measured 5-feet in width and the center culvert measured 3-feet. The entirety of Potrero Creek upstream of 2nd Street consisted of upland habitat with a homogenous stand of California buckwheat in the upstream end north of the assessment area then transitioned to ruderal habitat with non-native, weedy vegetation such as red brome, ripgut grass, slender wild oat, and wall barley dominant. A single, large blue gum (*Eucalyptus globulus*) was present near 2nd Street. Some native upland vegetation was present, with the majority occurring on the banks, and consisted almost entirely of California buckwheat. Feature C consisted of a narrow channel with an approximate depth of 10-feet from the bed of the channel to the top of the bank at some of its deepest locations north of 2nd Street. Soils throughout primarily consisted of coarse sandy loams.

Potrero Creek downstream of 2nd Street included a mix of sparsely distributed willow species mixed with several non-native trees as described in Section 4.0 of this Analysis. Potrero Creek would be expected to be subject to MSHCP Section 6.1.2 Riparian/Riverine Areas' policies.

Feature D

Feature D was a human-created earthen ditch with a few concrete trapezoid aprons that totaled approximately 560-feet in length including the areas outside of the 100-foot survey buffer assessment area. The feature received surface flow from the commercial center to the east via drainage grates near the curb. Feature D was also irrigated via pop-up sprinklers. The feature supported a few, scattered black willow and generally lacked an understory though a few mule fat were present. Most of the ditch consisted of non-native, weedy vegetation. Trash was prevalent throughout the ditch and was likely the result of being located adjacent to a commercial parking lot. The downstream terminus of the ditch was near 2nd Street. A large, vertical drainpipe was present at the terminus where ephemeral flow entered the underground drainage system. Feature D, a human-created drainage ditch, may be subject to MSHCP Section 6.1.2 Riparian/Riverine Areas’ policies.

5.1.3 Impacts

According to the site plan attached in Appendix A, construction of the road will include the installation of new culverts and a headwall in Features A and B. Portions of the Project extend beyond the limits of the RW. Due to this, SBS used GIS to merge the Project and RW to calculate the potential impacts associated. The culverts present in Potrero Creek will remain in place; however, a minor amount of additional grading will occur outside of the existing culvert area in the north end. *Table 5 – Potential Riparian/Riverine Areas Impacts* (below) provides the potential impact area in square feet and acres and excludes the existing culverts in Feature C as this is proposed to remain in place as-is. *Figure 17 – Potential MSHCP Section 6.1.2 Riparian/Riverine Areas Impacts* (Page 30) depicts the location and extent of the potential impact area.

Table 5 – Potential Riparian/Riverine Areas Impacts

FEATURE ID ⁸	DISTURBANCE AREA	
	SqFt	Acres
A	6,083.32	0.14
B	7,136.45	0.16
C	1,366.18	0.03
D	0	0
TOTAL	14,585.95	0.33

5.1.4 Mitigation

The appropriate regulatory agencies will be consulted on the impacts to the potential Riparian/Riverine Areas. Offsite mitigation through an approved mitigation bank, in-lieu fee program, and/or permittee responsible conservation easement program is anticipated and will be detailed in a DBESP report.

5.2 Vernal Pools

According to MSHCP Section 6.1.2:

Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics,

⁸ The area for Feature C excludes the culverts within the Disturbance Area.

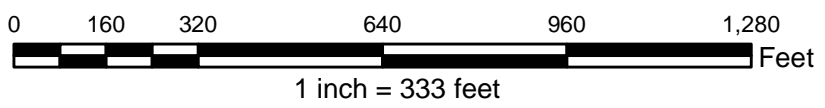
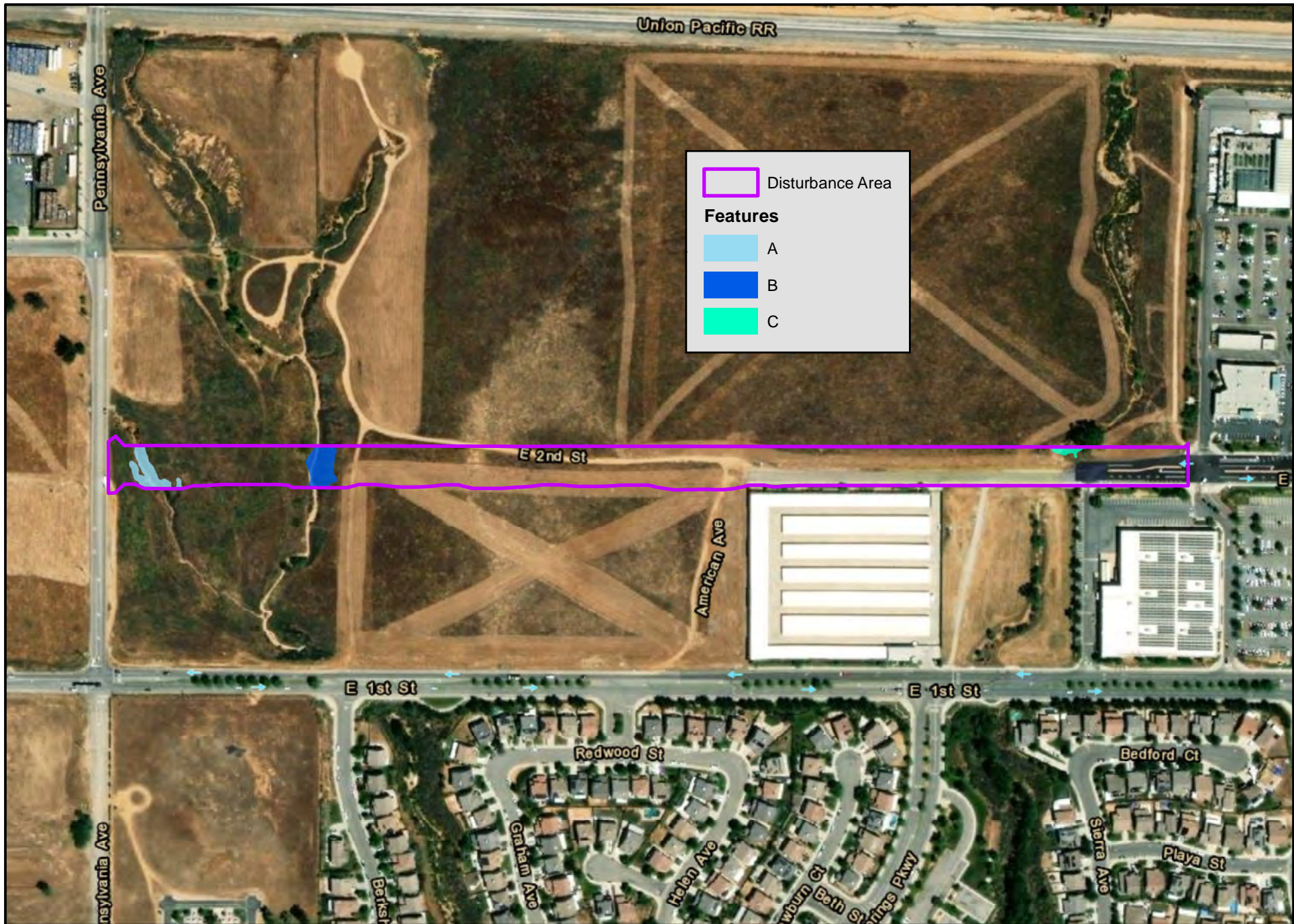


FIGURE 17
Potential MSHCP Section 6.1.2
Riparian/Riverine Areas' Impacts

and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

5.2.1 Methods

The perimeter of a potential Vernal Pool is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Vernal Pool feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.2.2 Existing Conditions and Results

No evidence of vernal pools was recorded on the Project. Vernal pools are depressions in areas where a hard-underground layer prevents rainwater from draining downward into the subsoils. When rain fills the pools in the winter and spring, the water collects and remains in the depressions. In the springtime, the water gradually evaporates away, until the pools become completely dry in the summer and fall. Vernal pools tend to have an impermeable layer that results in ponded water. The soil texture (i.e., the amount of sand, silt, and clay particles) typically contains higher amounts of fine silts and clays with lower percolation rates. Pools that retain water for a sufficient length of time will develop hydric cells. Hydric cells form when the soil is saturated from flooding for extended periods of time and anaerobic conditions (i.e., lacking oxygen or air) develop. None of these conditions (i.e., no depressions, hydric soils, etc.) were observed on the Project and the soils consisted of sandy/loams that do not retain water.

5.2.3 Impacts

No Vernal Pool impacts will occur due to the lack of Vernal Pools on the Project.

5.2.4 Mitigation

No Vernal Pool mitigation is required. The Project is consistent with the Vernal Pool section of MSHCP Section 6.1.2.

5.3 Fairy Shrimp

According to Section 6.1.2 of the MSHCP:

***Fairy Shrimp** For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.*

5.3.1 Methods

The perimeter of a potential Fairy Shrimp Habitat feature is walked and mapped by creating a polygon utilizing Collector. Data collected while walking each potential Fairy Shrimp feature includes plant species composition, presence/absence of standing water, evidence of potential ponding (i.e., cracked mud), functions and values, presence/absence regarding the species listed in MSHCP Section 6.1.2, and habitat suitability for RFS, VPFS, SRPFS.

5.3.2 Existing Conditions and Results

No suitable habitat for fairy shrimp was detected on the Project. Similar to the vernal pool assessment, no features were detected that would support fairy shrimp. The soils within the Project consisted entirely of sandy loams, and no evidence of seasonal ponding was detected throughout.

5.3.3 Impacts

No Fairy Shrimp impacts will occur due to the lack of Fairy Shrimp habitat on the Project.

5.3.4 Mitigation

No Fairy Shrimp mitigation is required. The Project is consistent with the Fairy Shrimp section of MSHCP Section 6.1.2.

5.4 Riparian Birds

Areas within 500-feet of the RW were determined to support marginal⁹ habitat for LBVI. The LBVI habitat was considered unlikely to support LBVI; however, due to LBVI being documented recently at numerous locations within 0.5 to 1.4-miles of the Project, SBS determined LBVI protocol surveys were warranted. Protocol surveys were performed by Tim Searl in 2021 and LBVI was confirmed to be absent from the areas within 500-feet of the RW. A brief summary of the LBVI and the surveys is provided below. Details are provided in the protocol survey report prepared by SBS attached in Appendix F.

5.4.1 LBVI Background

According to the MSHCP, LBVI is relatively well distributed throughout the MSHCP Plan Area within suitable habitat in the Riverside Lowland and San Jacinto Foothills Bioregions. It is well known for using riparian scrub, forest, and woodland habitat, and it is well documented for its habitat requirements. LBVI occurs within specified and known Bioregions but has specific locations that are Core Areas. Because of these factors, it will require conservation on a landscape level with site specific considerations for Core Areas.

MSHCP LBVI Objectives

LBVI is a Group 2¹⁰ species. The MSHCP conservation goals and objectives for LBVI are as follows:

Objective 1

Include within the MSHCP Conservation Area at least 9,430 acres of suitable habitat including riparian forest, woodland and scrub habitat within the Riverside Lowlands and San Jacinto Foothills Bioregions.

Objective 2

Include within the MSHCP Conservation Area at least 8 Core Areas and interconnecting linkages. Core areas could include the following areas: 1) the Prado Basin/Santa Ana River (9,670 acres); 2) Temescal Wash including Alberhill Creek (includes Subunit 3 of the Temescal Canyon Area Plan plus Proposed Linkage 2 and Proposed Constrained Linage 6; 4,290 acres); 3) Murrieta Creek (Subunit 1 of the Southwest Area Plan; 2,060

⁹ The habitat is structurally suitable with sparse riparian habitat; however, factors such as the presence of non-native vegetation, habitat loss and fragmentation, small habitat patch size, fire regime, human activity (i.e., disking, mowing, grazing, historical use), etc. have degraded the quality of the habitat.

¹⁰ Take coverage is warranted based on regional or landscape level considerations with the addition of site-specific conservation and management requirements that are clearly identified in the MSHCP for species that are generally well-distributed, but that have Core Areas that require Conservation (Dudek & Associates, Inc., 2003).

acres); 4) Temecula Creek (Subunit 2 of the Southwest Area Plan; 850 acres); 5) Lake Skinner/Diamond Valley Lake area (including Rawson Canyon) (Existing Core C, Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); 6) Vail Lake (Subunit 3 of the Southwest Area Plan; 12,320 acres); 7) Wilson Valley (Subunit 2 of the REMAP Area Plan; 33,540 acres) and 8) San Timoteo Canyon (Subunit 3 of The Pass Area Plan; 2,290 acres). Each Core Area will include at least 100 meters of undeveloped landscape adjacent to the riparian woodland and scrub habitat where it occurs within the Criteria Area.

Objective 3

Include within the MSHCP Conservation Area additional areas within the Criteria Area identified as important to the least Bell's vireo. This Objective shall be met through implementation of the Riparian/Riverine Areas and Vernal Pools Policy presented in Section 6.1.2 of the MSHCP, Volume I. Wetland mapping assembled as part of that policy shall be reviewed as part of the project review process and if riparian scrub and/or woodland is identified on the wetland maps and the habitat will not be avoided as part of the project, a focused survey for least Bell's vireo shall be conducted by a qualified biologist in accordance with accepted protocol. If survey results are positive, 90 percent of the occupied portions of the property that provide for long-term conservation value for the vireo shall be conserved in a manner consistent with conservation of the vireo. This will involve including 100 meters of undeveloped landscape adjacent to the habitat conserved.

Objective 4

Within the MSHCP Conservation Area, maintain (once every 3 years) the continued use of, and successful reproduction at 75 percent of the known vireo occupied habitat (including any nesting locations identified in the MSHCP Conservation Area in the future). Successful reproduction is defined as a nest which fledged at least one known young.

Life History

The LBVI subspecies breeds within California and northern Baja California, Mexico. The wintering range of the subspecies includes southern Baja California, Mexico. Breeding habitats may include willow (*Salix* spp.) woodlands, stands of mule fat, brushy fields, scrub oak (*Quercus berberidifolia*), coastal chaparral, and mesquite (*Prosopis* spp.) patches with dense, early successional understories. Although it inhabits riparian woodlands, it was found that individuals benefited from using both riparian and non-riparian ecosystems (Kus, Hopp, Johnson, & Brown, 2020).

LBVI is a small, active songbird approximately 4.5 to 5 inches in length with a wingspan of 6.7 to 7.5 inches (U.S. Fish and Wildlife Service, 2021). It generally has drab gray plumage throughout, two pale wing bars, and a faint white eye ring. Males and females are sexually monomorphic in plumage coloration.

The breeding season for LBVI ranges from late March to the beginning of August, with the peak of nesting activity from the beginning of April through the end of July. Incubation takes 14 days, and young fledge 10 to 12 days after hatching.

LBVI is an insectivore that forages at all vegetative levels from the ground to approximately 60 feet above ground level but concentrated in lower to mid-level canopies. LBVI exhibit preferences for black willow (*Salix gooddingii*) relative to its cover within territories, but forage on other plant species depending on availability (Kus, Hopp, Johnson, & Brown, 2020).

The two major factors in the decline of LBVI populations are loss of habitat and nest parasitism by the Brown-headed Cowbird (*Molothrus ater*) (BHCO) (Kus, Hopp, Johnson, & Brown, 2020). Habitat restoration through removal of invasive non-native plants such as giant reed (*Arundo donax*) and re-planting of native riparian species, and brown-headed cowbird control have been the two primary measures to conserve LBVI populations (Kus, Hopp, Johnson, & Brown, 2020).

5.4.2 Methods

Field Survey Dates and Conditions

A habitat assessment was conducted by biologists Tim Searl and Arthur Davenport on July 20, 2020. A protocol-level LBVI survey was performed per the USFWS January 19, 2001 *Least Bell's Vireo Survey Guidelines* (U. S. Department of the Interior Fish and Wildlife Service, 2001) (LBVI Survey Protocol). Eight focused surveys were conducted on April 19, April 30, May 10, May 24, June 1, June 11, July 6, and July 21, 2021. Tim Searl was accompanied by field technician Colin Chapin during the May 10 survey. The surveys were conducted during weather conditions conducive for detecting LBVI while avoiding inclement weather such as excessive heat, high winds, and dense fog. Data collected on each of the surveys included start and stop times, start and stop weather conditions, survey routes, and a complete list of the wildlife detected. *Table 6 – LBVI Assessment Conditions* (Page 35) provides the survey conditions.

Habitat Assessment

Potentially suitable habitat for LBVI, SWFL, and/or YBCU are mapped in the field utilizing Collector. Habitat assessments are conducted by SWFL and YBCU permitted biologist Tim Searl (Permit Number: TE02351A-1). A polygon is created in the field utilizing Collector while walking the perimeter of potentially suitable habitat for riparian birds. Data collected while assessing the potential habitat includes characteristics such as vegetation community, dominant plant species present, plant densities, and presence or absence of surface water. Habitat suitability for LBVI is typically classified by SBS as Not Suitable¹¹, Low/Marginal¹², Moderate¹³, or High¹⁴.

Focused Surveys

The focused surveys are performed per the LBVI Survey Protocol. All suitable habitat, including adjacent upland areas, were surveyed by slowly walking along the margins while stopping often to scan the area with binoculars and listen for calls from LBVI. If LBVI was detected, the location is mapped with Collector and data recorded that includes behavior (i.e., singing, foraging, etc.), habitat, nesting or nesting behavior observed (i.e., carrying nesting material, carrying food, etc.), and whether BHCO was present.

5.4.2 Existing Conditions and Results

Habitat Assessment

The area within 500-feet of the RW was determined to support 0.75-acre of marginal habitat for LBVI which is depicted by *Figure 18 – LBVI Habitat/Survey Area* (Page 36). The marginal habitat consisted of

¹¹ The habitat lacks the required characteristics to support LBVI. Examples include developed land, land that completely lacks riparian areas, etc.

¹² The habitat is structurally suitable with sparse riparian habitat; however, factors such as the presence of non-native vegetation, habitat loss and severe fragmentation, very small habitat patch size, fire regime, human activity (i.e., disking, mowing, grazing, historical use), etc. have degraded the quality of the habitat.

¹³ The habitat is structurally suitable with less of the above degrading factors, and the presence of more contiguous riparian habitat.

¹⁴ This habitat is the preferred habitat of LBVI with dense riparian habitat with multi-structured canopy levels (i.e., forb/shrub/tree layers) and provides larger blocks of contiguous habitat.

Table 6 – LBVI Assessment Conditions

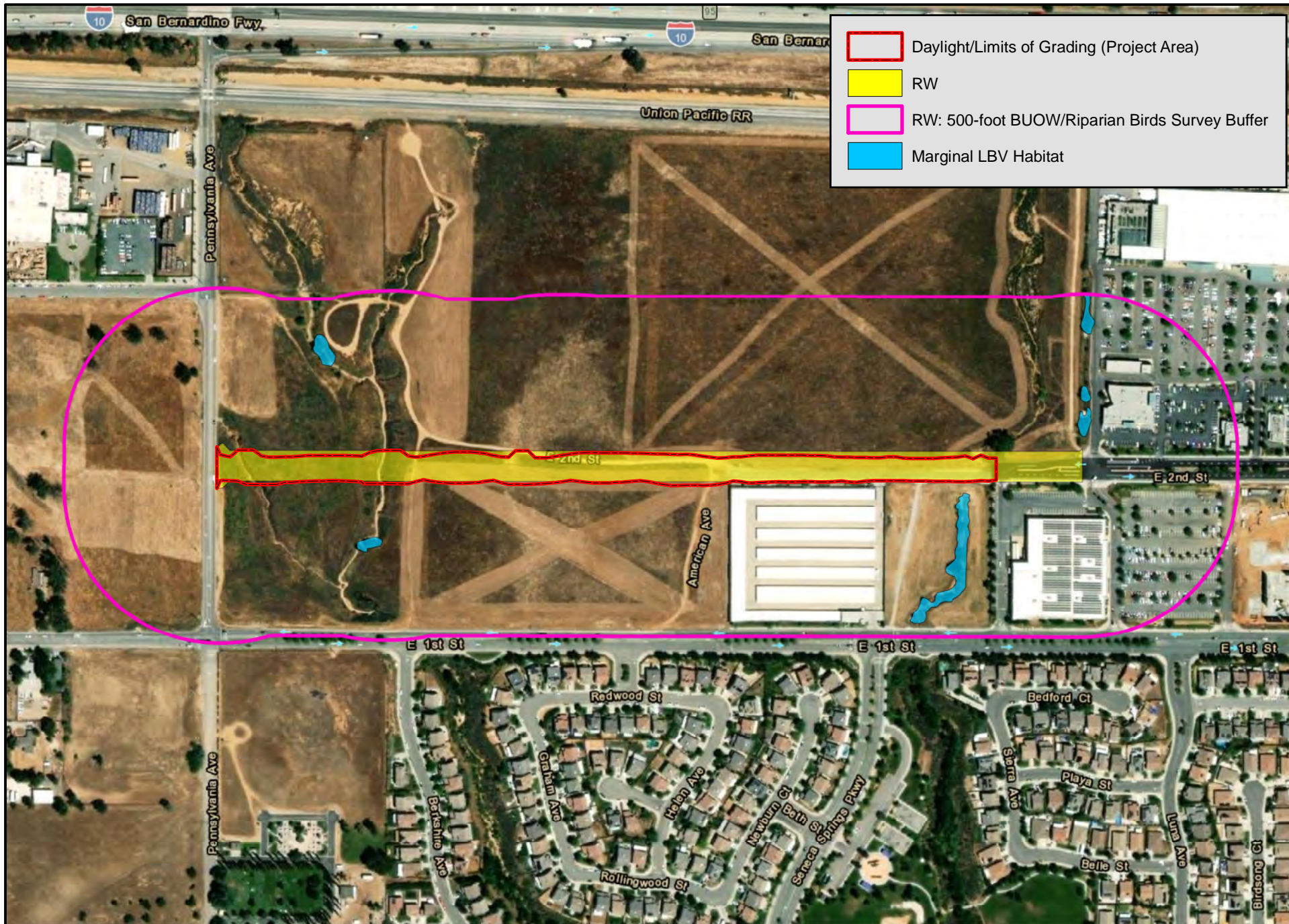
PROTOCOL SURVEY NUMBER	SURVEY TYPE ¹⁵	DATE	BIOLOGIST	SURVEY TIME (24hr)	SUNRISE	TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	CLOUD COVER (%)	WIND SPEED (mph)	PRECIP. ¹⁶ (Yes/No)	MOON PHASE
N/A	HA	7/20/2020	Tim Searl/Arthur Davenport	0600-1300	N/A	72-90	55-30	0-0	2-5	No	New Moon
1	HA/FS	4/19/2021	Tim Searl	0545-0700	0612	51-55	28-21	0-0	1-4	No	First Quarter
2	FS	4/30/2021	Tim Searl	0540-0745	0600	61-72	38-34	0-0	0-0	No	Waning Gibbous
3	FS	5/10/2021	Tim Searl/Colin Chapin	0600-0715	0551	58-62	78-68	100-100*	1-2	No	New Moon
4	FS	5/24/2021	Tim Searl	0555-0700	0542	51-64	48-33	30-20	4-5	No	Waxing Gibbous
5	FS	6/1/2021	Tim Searl	0530-0645	0539	62-73	47-35	40-40	4-2	No	Last Quarter
6	FS	6/11/2021	Tim Searl	0530-0730	0537	57-64	47-53	0-0	1-0	No	New Moon
7	FS	7/6/2021	Tim Searl	0530-0645	0544	67-73	38-31	90-50	1-1	No	Waning Crescent
8	FS	7/21/2021	Tim Searl	0545-0715	0553	70-79	47-40	10-10	2-4	No	Waxing Gibbous

*High fog w/good visibility

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¹⁵ HA: Habitat Assessment; FS: Focused Survey

¹⁶ If measurable rain occurred during the survey



- Daylight/Limits of Grading (Project Area)
- RW
- RW: 500-foot BUOW/Riparian Birds Survey Buffer
- Marginal LBV Habitat

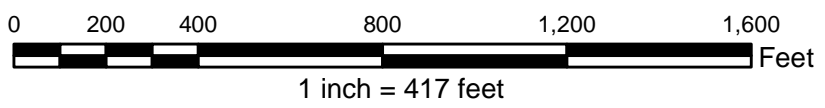


FIGURE 18
LBVI Habitat/
Survey Area

open willow thickets that largely lacked an understory, and a mix of open willow thickets and non-native trees such as Chinese elm (*Ulmus parvifolia*), Shamel ash (*Fraxinus uhdei*), and tree-of-heaven. The marginal habitat was considered unlikely to support LBVI; however, due to LBVI being documented recently at numerous locations within 0.5 to 1.4-miles of the RW, SBS determined LBVI protocol surveys were warranted.

Focused Surveys

LBVI was not detected within 500-feet of the RW during the 2021 focused surveys.

5.4.3 Impacts

No impacts will occur to Riparian Birds due to the absence of suitable habitat for SWFL and YBCU, and the absence of LBVI. Although 0.75-acre of marginal riparian habitat was present within 500-feet of the RW, the Project's proposed culvert crossings will avoid the Riparian Bird habitat.

5.4.4 Mitigation

No Riparian Bird mitigation is required. The Project is consistent with MSHCP Section 6.1.2.

6.0 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

6.1 MSHCP Background and Objectives

The MSHCP specifically covers 63 rare plant species through the implementation of the species-specific objectives outlined by the MSHCP. The NEPS are those species that information regarding the distribution and presence throughout western Riverside County was considered insufficient to ensure their long-term conservation. Therefore, the MSHCP established 10 NEPS "survey areas" based on historic records, soils, and habitats where these 14-plant species could potentially occur. All public and private projects located within any of these survey areas must, in the least, conduct a habitat assessment. If suitable habitat is determined to be present, then focused surveys must be performed.

According to the MSHCP:

For Narrow Endemic Plant Species populations identified as part of the survey process described above, impacts to 90% of those portions of the Project that provide for long-term conservation value of the identified Narrow Endemic Plant Species shall be avoided until it is demonstrated that conservation goals for the particular species are met. Avoidance shall not be considered to be Conservation contributing to Reserve Assembly unless the avoided populations are acquired and managed as Additional Reserve Lands. Individual species conservation goals are presented in Section 9.0 of this document. Findings of equivalency shall be made as outlined below to demonstrate that the 90% standard has been met.

If it is determined that the 90% threshold cannot be met and achievement of overall MSHCP conservation goals for the particular species have not yet been demonstrated, the Permittee(s) must make a Determination of Biologically Equivalent or Superior Preservation..."

6.1.1 NEPS Assessment Area No. 8

The RW and area within 100-feet were located in NEPS Assessment Area No. 8 as depicted by *Figure 19 – NEPS Assessment Area* (Page 38) which targets two NEPS. A brief description of each species, based on

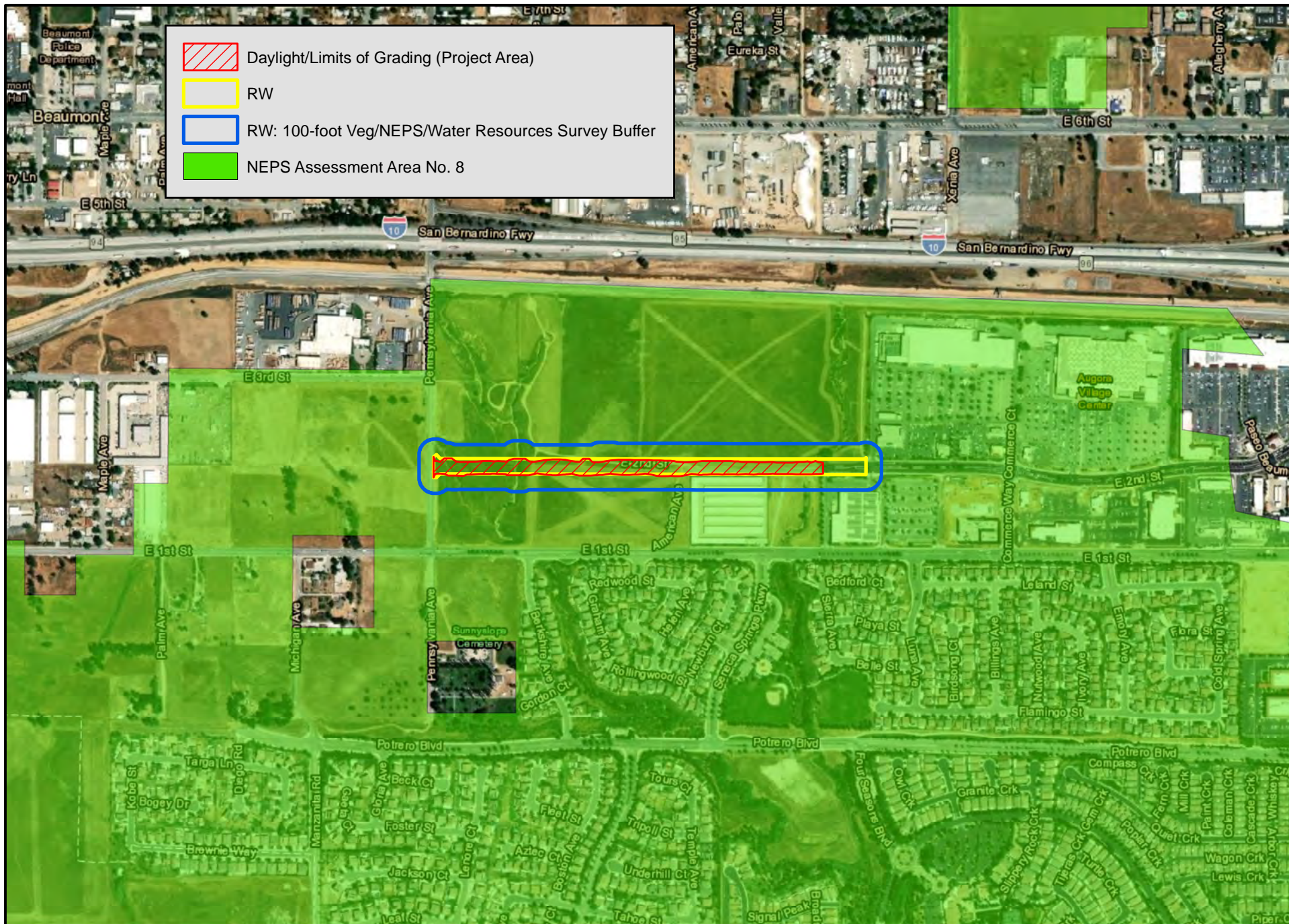
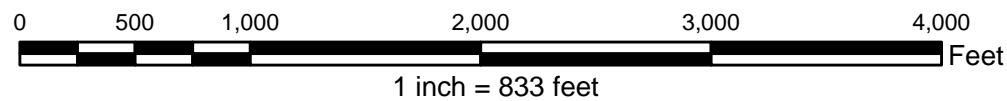


FIGURE 19
NEPS Assessment Area



information detailed in the MSHCP, CNPS, and the Jepson Online Interchange is provided in *Table 7 – NEPS Assessment Area No. 8* (below).

Table 7 – NEPS Assessment Area No. 8

SPECIES/REGULATORY STATUS	SOILS	HABITAT	BLOOMING PERIOD	ECOLOGICAL NOTES
many-stemmed dudleya <i>(Dudleya multicaulis)</i> CRPR 1B.2 No federal or state listing status	Clay soils	Ridgelines, rocky places, and open areas within chaparral, coastal sage scrub, and grasslands.	March to June	Perennial produced from a corm that may not be detectable from year to year.
Yucaipa onion <i>(Allium marvinii)</i> CRPR 1B.2 No federal or state listing status	Clay soils	Clay soil openings in chaparral often on dry slopes and ridgelines.	March to May	Perennial bulbiferous herb occurring at elevations of 2,495-feet to 3,495-feet (760-meters to 1,065-meters).

6.1.2 MSHCP Objectives

The MSHCP objectives for each of the targeted NEPS in Table 6 above are presented below.

Many-Stemmed Dudleya

Objective 1

Include within the MSHCP Conservation Area at least 142,680 acres of suitable habitat (chaparral, coastal sage scrub and grassland below 700 m in the Riverside Lowlands and Santa Ana Mountain Bioregions) in the Plan Area, including 1,575 acres of clay soils: 190 acres of Altamont, 210 acres of Auld, 490 acres of Bosanko, 100 acres of Claypit soils and 585 acres of Porterville soils.

Objective 2

Include within the MSHCP Conservation Area at least 26 of the known occurrences of many-stemmed dudleya, including the occurrences at Estelle Mountain, Temescal Canyon, the Santa Ana Mountains, Gavilan Hills, Alberhill Creek, and Prado Basin.

Objective 3

Surveys for many-stemmed dudleya will be conducted as part of the project review process for public and private projects within the Narrow Endemic Plant Species survey area where suitable habitat is present (see Narrow Endemic Plant Species Survey Area Map, Figure 6-1 of the MSHCP, Volume I). many-stemmed dudleya located as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.1.3, MSHCP, Volume I.

Yucaipa Onion

Objective 1

Include within the MSHCP Conservation Area at least 1,200 acres of suitable habitat (chaparral between 760 and 1065 m in the San Bernardino Mountains Bioregion).

Objective 2

Surveys for the Yucaipa onion will be conducted as part of the project review process for public and private projects within the Narrow Endemic Plant Species survey area where

suitable habitat is present (see *Narrow Endemic Plant Species Survey Area Map, Figure 6-1 of the MSHCP, Volume I*). *Yucaipa onion* located as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.1.3 of the MSHCP, Volume I.

6.2 Methods

6.2.1 California Native Plant Society

The California Native Plant Society (CNPS) is a statewide non-profit organization whose mission is to "...conserve California native plants and their natural habitats, and increase understanding, appreciation, and horticultural use of native plants" (California Native Plant Society, 2021). The CNPS has created a "California Rare Plant Ranking System" (CRPR) to categorize degrees of endangerment and/or concern (California Native Plant Society, 2021). Additionally, the CNPS has created a "Threat Rank" which "...is an extension added onto the CRPR and designates the level of endangerment by a 1 to 3 ranking, with 1 being the most endangered and 3 being the least endangered (California Native Plant Society, 2021). The "California Rare Plant Ranking System" and "Threat Ranks" are presented in *Table 8 - CRPR Classifications* (below).

Table 8 – CRPR Classifications

CRPR
1A - Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B - Plants Rare, Threatened, or Endangered in California and Elsewhere
2A - Plants Presumed Extirpated in California, But More Common Elsewhere
2B - Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3 - Plants About Which More Information is Needed - A Review List
4 - Plants of Limited Distribution - A Watch List
THREAT RANK
0.1-Seriously threatened in California (high degree/immediacy of threat)
0.2-Fairly threatened in California (moderate degree/immediacy of threat)
0.3-Not very threatened in California (low degree/immediacy of threats or no current threats known)

6.2.2 Survey Methods and Protocol

Rare plant assessments are conducted in accordance with the CDFW’s *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Wildlife, 2018) (Rare Plant Protocol), while maintaining consistency with the MSHCP.

According to the MSHCP, habitat assessments, in general, can be conducted year-round except for those species associated with vernal pools. Habitat assessments for those species must be conducted during the rainy season. Additionally, plant species with known reliance on rainfall and hydrology affinities, completion of a habitat suitability assessment and/or focused survey with negative results shall only be sufficient to satisfy survey requirements for those species during years with at least normal rainfall. Generally, habitat assessments are conducted year-round using the methods described below, particularly in times of severe drought.

Prior to conducting a field habitat assessment, historic and recent aerial photography is reviewed. A soil analysis is also conducted utilizing ArcGIS and shapefiles created and provided by the USDA’s NRCS Web Soil Survey. The research data is utilized to generate a “potential species” list based on the results of the queries. A field habitat assessment is then conducted.

Focused rare plant surveys are conducted following the Rare Plant Protocol. The protocol provides methods to facilitate a consistent and systematic approach so that reliable information is produced and the potential of detecting a special-status plant or natural community is maximized (California Department of Fish and Wildlife, 2018).

Focused rare plant surveys are typically conducted to coincide with species' blooming period. This is generally required to accurately identify potential special-status plant species. In Southern California, generally the optimal time to conduct focused surveys for rare plants is spring and early summer depending on rainfall and other weather conditions.

Reference sites are those sites where targeted rare plants have been documented to occur. These sites are visited prior to conducting a focused survey to determine if the targeted plant species is viable and identifiable. The CNDDDB, CFWO and CNPS were queried to locate suitable reference sites and determine if the targeted species have been reported within five miles of the Project.

Field transects are conducted to ensure 100% visual coverage in all habitats of a site. All rare plant surveys are "floristic in nature, meaning that every plant taxon that occur onsite is identified to the taxonomic level necessary to determine rarity and listing status" (California Department of Fish and Wildlife, 2018). Many plant specimens are collected in the field and taken to the UCR Herbarium or other Consortium of California Herbaria (CCH)-approved herbaria to be vouchered. This process provides evidence to confirm a plant's identity, and to document it was found in a particular location.

Though not specifically described in the Rare Plant Protocol, all rare plant detections are recorded in the field utilizing Collector. Either a GIS "point" or "polygon" is created depending on the extent of the rare plant detection. Data recorded for each rare plant detection mirrors that of the CNDDDB's *California Native Species Field Survey Form*, and includes information such as total number of individuals, plant phenology (i.e., vegetative, flowering, fruiting), habitat description, and site information.

6.2.3 Field Survey Dates and Weather Conditions

The NEPS habitat assessment was conducted by biologist Tim Searl on July 20, 2020. Focused surveys were not conducted due to the lack of suitable habitat. Detailed survey information and conditions are presented in *Table 9 - MSHCP Section 6.1.3 Assessment Conditions* (Page 42).

6.3 Existing Conditions and Results

6.3.1 Query Results

According to the CNDDDB, many-stemmed dudleya was not reported within five miles of the Project. A total of four records of Yucaipa onion were reported from 2010, 2012, 2013, and 2020. The nearest record was 2.4-miles southeast of the Project in 2010. This Yucaipa onion population was located in the Potrero Unit area of the San Jacinto Wildlife Area which is owned and managed by CDFW. The substrates supporting the population were reported as "cobbly clay soil." *Figure 20 – NEPS Query Results* (Page 43) depicts the CNDDDB record locations of Yucaipa onion.

6.3.2 NEPS Assessment Results

The RW and area within 100-feet were determined to lack suitable habitat for many-stemmed dudleya and Yucaipa onion. The area did not provide the habitat characteristics described in Table 7, and specifically, lacked clay soils.

Table 9 – MSHCP Section 6.1.3 Assessment Conditions¹⁷

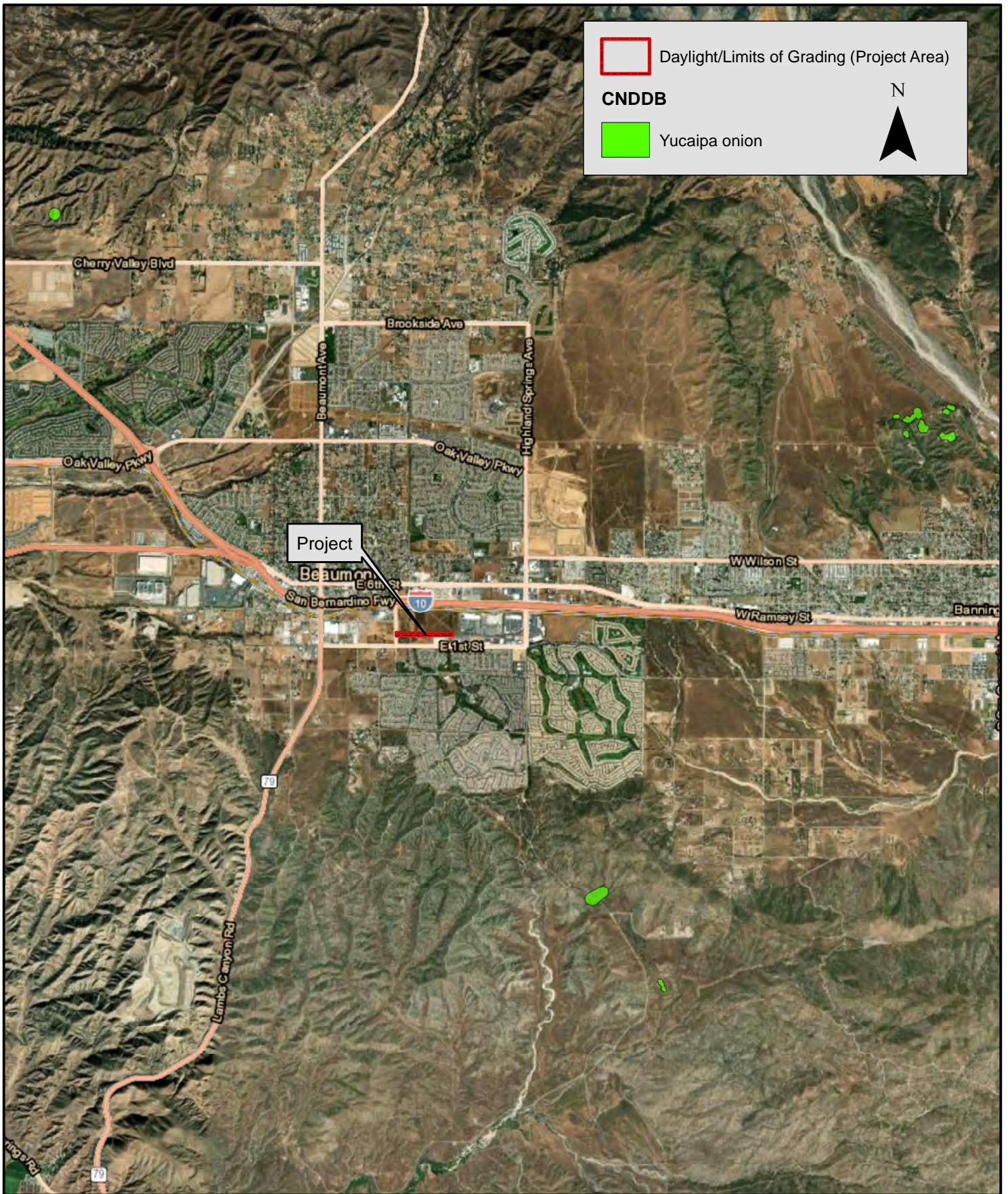
DATE	FIELD PERSONNEL	SURVEY TYPE ¹⁸	SURVEY TIME (24hr)	TEMPERATURE (°F)	HUMIDITY (%)	CLOUD COVER (%)	WIND SPEED (mph)	ANNUAL PRECIPITATION TO-DATE ¹⁹ (inches)
7/20/2020	Tim Searl	HA	0600-1300	72-90	55-30	0-0	2-5	0

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¹⁷ Temperature, Humidity, and Wind Speed were obtained in the field with a Kestrel handheld weather meter.

¹⁸ HA – Habitat Assessment

¹⁹ Annual Precipitation (July 01 to June 30) To-Date was obtained from PWS Weather Station BNTC1 located near the Project in Beaumont, CA (PWS Weather, 2021). Fieldwork was conducted at the beginning of the 2020-2021 annual precipitation season. The total for BNTC1 for 2019-2020 was 16.48-inches.



Daylight/Limits of Grading (Project Area)
CNDDB
 Yucaipa onion

N

Project

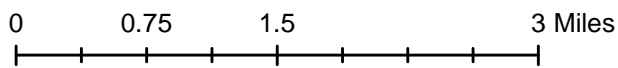


FIGURE 20
NEPS Query
Results



6.4 Impacts

No NEPS impacts will occur due to the lack of suitable habitat on the Project.

6.5 Mitigation

No NEPS mitigation is required. The Project is consistent with MSHCP Section 6.1.3.

7.0 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The MSHCP covers 146 species of plants and animals of which 40 species have specific survey requirements (Dudek & Associates, Inc., 2003). 34 of the 40 species have an associated survey area map that designates areas where surveys may be required if suitable habitat is present (Dudek & Associates, Inc., 2003).

According to the MSHCP:

For locations with positive survey results, 90% of those portions of the Project that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species are met. Avoidance shall not be considered to be Conservation contributing to Reserve Assembly unless the avoided populations are acquired and managed as Additional Reserve Lands.

7.1 Criteria Area Plant Species

The Project was not located within a designated assessment area for Criteria Area Plant Species.

7.2 Amphibians

The Project was not located within a designated assessment area for Amphibians.

7.3 Burrowing Owl

The RW and area within 500-feet was located within a designated assessment area for BUOW as depicted by *Figure 21 – BUOW Assessment Area* (Page 45). A description of the MSHCP Objectives and BUOW assessment process are provided below.

7.3.1 Background

MSHCP Objectives

The MSHCP objectives for BUOW include the following:

Objective 1

Include within the MSHCP Conservation Area at least 27,470 acres of suitable primary habitat for the burrowing owl including grasslands.

Objective 2

Include within the MSHCP Conservation Area at least 5 Core Areas and interconnecting linkages. Core areas may include the following: (1) Lake Skinner/Diamond Valley Lake area (Existing Core C plus Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); (2) playa west of Hemet (Proposed Noncontiguous Habitat Block 7; 1,250 acres); (3) San Jacinto Wildlife Area/Mystic Lake area including Lake Perris area (Existing Core H; 17,470 acres); (4) Lake Mathews (Existing Core C plus Proposed Extension of Existing Cores 2; 23,710 acres); and (5) along the Santa Ana River (9,670 acres). The Core Areas

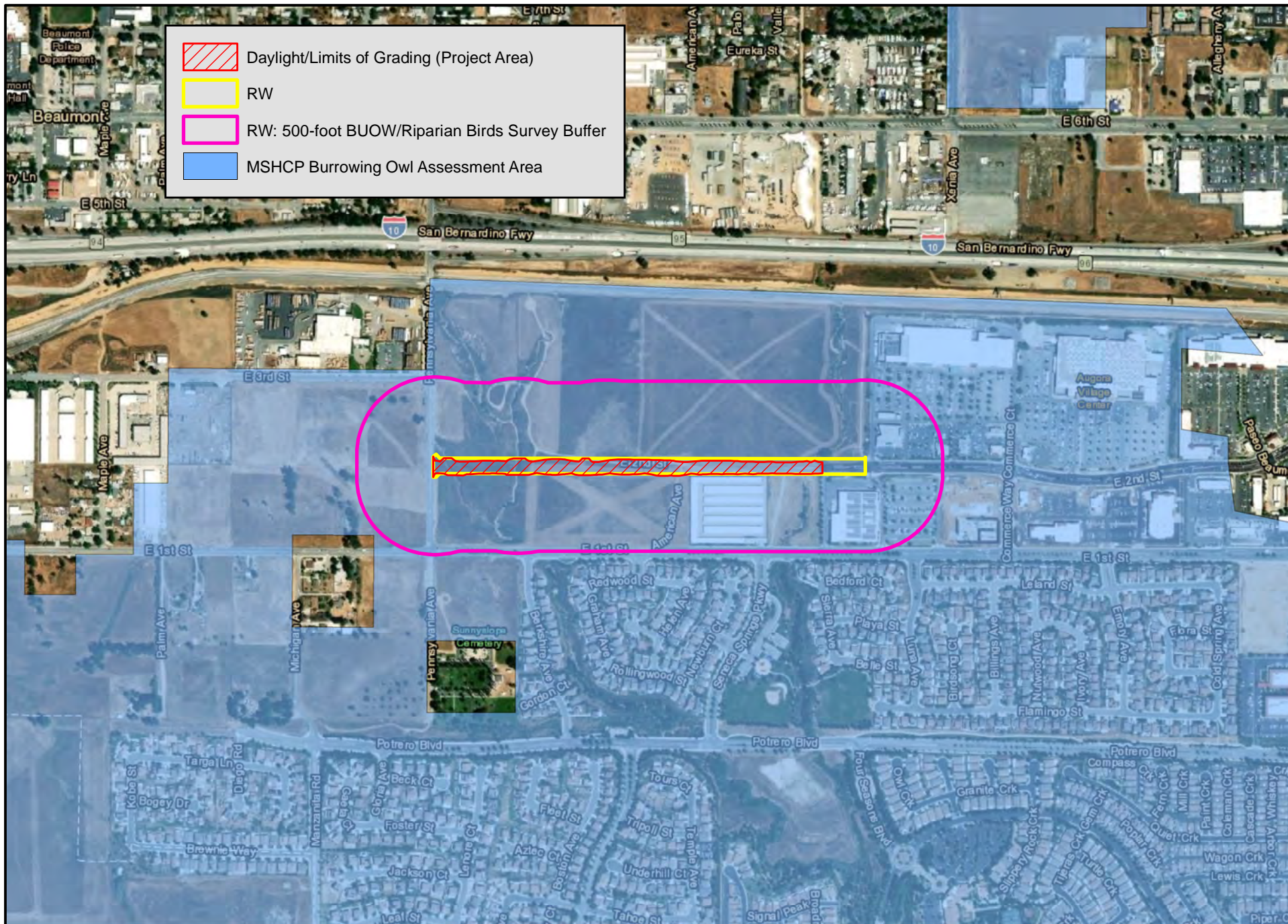
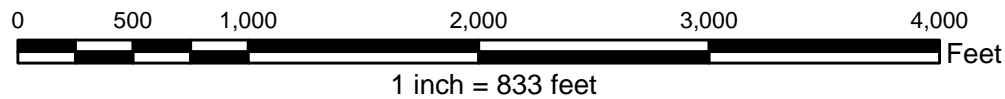


FIGURE 21
BUOW Assessment
Area



should support a combined total breeding population of approximately 120 burrowing owls with no fewer than five pairs in any one Core area.

Objective 3

Include within the MSHCP Conservation Area at least 22,120 acres of suitable secondary habitat for the burrowing owl including playas and vernal pools, and agriculture outside of the Core Areas identified above. Areas where additional suitable habitat could be conserved include west of the Jurupa Mountains, near Temescal Wash (i.e., vicinity of Alberhill), near Temecula Creek, within the Lakeview Mountains, Banning, the Badlands, Gavilan Hills, and Quail Valley.

Objective 4

Include within the MSHCP Conservation Area the known nesting locations of the burrowing owl at Lake Perris, Mystic Lake/San Jacinto Wildlife area, Lake Skinner area, the area around Diamond Valley Lake, playa west of Hemet, Lakeview Mountains, Lake Mathews/Estelle Mountain Reserve and Sycamore Canyon Regional Park.

Objective 5

Surveys for burrowing owl will be conducted as part of the project review process for public and private projects within the burrowing owl survey area where suitable habitat is present (see Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The locations of this species determined as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.3.2, MSHCP, Volume I and the guidance provided below:

Burrowing owl surveys shall be conducted utilizing accepted protocols as follows. If burrowing owls are detected on the project site, then the action(s) taken will be as follows:

If the site is within the Criteria Area, then at least 90 percent of the area with long-term conservation value will be included in the MSHCP Conservation Area. Otherwise:

- 1. If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.*
- 2. If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.*

The survey and conservation requirements stated in this objective will be eliminated when it is demonstrated that Objectives 1 – 4 have been met.

Objective 6

Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of

active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season.

Objective 7

Translocation sites for the burrowing owl will be created in the MSHCP Conservation Area for the establishment of new colonies. Translocation sites will be identified, taking into consideration unoccupied habitat areas, presence of burrowing mammals to provide suitable burrow sites, existing colonies and effects to other Covered Species. Reserve Managers will consult with the Wildlife Agencies regarding site selection prior to translocation site development.

Life History

The BUOW is a priority 2 California Species of Special Concern (SSC) (Gervais, 2008), and is a Covered species under the MSHCP. In California, the BUOW is a year-round resident throughout much of the state (Gervais, 2008); however, migrants from other regions of western North America may augment resident lowland populations in winter (Gervais, 2008). Habitat for the BUOW primarily consists of open grasslands, but it also occurs in some human-altered landscapes such as agricultural environments (Gervais, 2008). Nest and roost burrows of the BUOW are most commonly dug by the California ground squirrel (*Spermophilus beecheyi*) (CGS) in California, but it will also utilize burrows and dens constructed by the American badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (*Urocyon cinereoargenteus* and *Vulpes* spp.) (Gervais, 2008).

The diet of the BUOW consists primarily of insects (i.e., centipedes, spiders, beetles, crickets, and grasshoppers) (Gervais, 2008), but it will also take small mammals, reptiles, birds, and carrion (i.e., dead flesh) (Polite, 1999). BUOW hunt from a perch, hover, hawk, dive, and hop after prey on the ground (Polite, 1999). Although insects dominate the BUOW diet numerically, recent research has suggested that in California, rodent populations, particularly those of the California vole (*Microtus californicus*), may greatly influence BUOW survival and reproductive success (Gervais, 2008).

The BUOW breeding season is typically March through August with peak breeding activity occurring in April and May (Polite, 1999). Male BUOW give courtship displays and notes in front of the burrow (Polite, 1999). Clutch size is relatively large with a range of two to ten eggs and a mean of five to six eggs per clutch (Polite, 1999). Young BUOW emerge from the burrow at about two weeks old and can fly by about four weeks old (Polite, 1999).

Burrowing Owl Survey Protocols

Habitat assessments and focused surveys for BUOW in the MSHCP Plan Area are conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (Environmental Programs Department, 2006) (BUOW Survey Instructions). The MSHCP references the California Burrowing Owl Consortium's *Burrowing Owl Survey Protocol and Mitigation Guidelines* (California Burrowing Owl Consortium, 1993), which was adopted by CDFW in 1995. On March 7, 2012, CDFW provided a revised *Staff Report on Burrowing Owl Mitigation* (California Department of Fish and Wildlife, 2012) that provides more current scientific methods. The survey methods described in the BUOW Survey Instructions and CDFW's revised staff report are similar. However, the BUOW Survey Instructions provide additional detail to ensure consistency with specific conservation requirements of the MSHCP. Surveys are conducted with an attempt to incorporate CDFW guidance, where appropriate such as the *Time of Day* specifically stating that surveys can be conducted until 10:00 AM. The BUOW Survey Instructions are detailed below.

The BUOW Survey Instructions describe Step I as follows:

"The first step in the assessment process is to walk the property to identify the presence of burrowing owl habitat on the project site. If habitat is found on the site, then walk a 150-meter (approximately 500 feet) buffer zone around the project boundary. If permission to access the buffer area cannot be obtained, do not trespass on adjacent property but visually inspect the adjacent habitat areas with binoculars and/or spotting scopes."

If a habitat assessment reveals that BUOW habitat occurs on a site, then, in the least, a *Step II Part A: Focused Burrow Surveys* and *Pre-construction Survey* are required. If BUOW habitat is not present, then no further surveys are required.

Step II surveys consist of two parts; *Part A: Focused Burrow Surveys* and *Part B: Focused Burrowing Owl Surveys*. All Step II surveys must be conducted during the BUOW breeding season (March 1 to August 31), generally between the hours of one hour before sunrise and two hours after sunrise, and/or two hours before sunset and one hour after sunset. Further, Step II surveys cannot be conducted within five days of rain, during rain, high winds (>20mph), dense fog, or temperatures exceeding 90 °F.

Part A surveys are conducted to detect natural potential BUOW burrows (i.e., CGS burrows), suitable human-created structures (i.e., culverts), and/or occupied BUOW burrows. The BUOW Survey Instructions describe the methods for conducting a Part A survey and those are presented below.

"1. A systematic survey for burrows including burrowing owl sign should be conducted by walking through suitable habitat over the entire survey area (i.e., the project site and within 150 meters). Pedestrian survey transects need to be spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approximately 100 ft.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys."

"2. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed should be recorded and mapped, including GPS coordinates. If the survey area contains natural or man-made structures that could potentially support burrowing owls, or owls are observed during the burrow surveys, the systematic surveys should continue as prescribed in Part B. If no potential burrows are detected, no further surveys are required. A written report including photographs of the project site, location of burrowing owl habitat surveyed, location of transects, and burrow survey methods should be prepared. If the report indicates further surveys are not required, then the report should state the reason(s) why further focused burrowing owl surveys are not necessary."

Part B surveys are conducted on four separate field survey dates, and the first survey may be conducted concurrent with the Part A survey. These four focused surveys are conducted to adequately determine the presence or absence of BUOW when those structures or features it inhabits, as described above, are present on a subject property. The BUOW Survey Instructions describe the methods for conducting Part B surveys and those are presented below.

"1. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors using binoculars and/or spotting scopes should scan all suitable habitat, location of

mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. This is particularly important if access has not been granted for adjacent areas with suitable habitat."

"2. A survey for owls and owl sign should then be conducted by walking through suitable habitat over the entire project site and within the adjacent 150 m (approx. 500 feet). These "pedestrian surveys" should follow transects (i.e., Survey transects that are spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx 100 feet.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys.) It is important to minimize disturbance near occupied burrows during all seasons."

"3. If access is not obtained, then the area adjacent to the project site shall also be surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to project site. This 150-meter buffer zone is included to fully characterize the population. If the site is determined not to be occupied, no further surveys are required until 30 days prior to grading (see Pre-construction Surveys below)."

After the completion of the proper surveys, a final report shall be submitted to the appropriate Lead Agency (i.e., City or County). The final report shall contain and discuss the necessary information (i.e., survey methods, transect widths, duration, conditions, results, etc.), and the appropriate maps (i.e., transect location map, burrow location map, etc.).

All subject properties containing suitable habitat and/or potential BUOW burrows must conduct a Pre-Construction Survey within 30 days prior to ground disturbance. This includes sites where BUOW were determined to be absent.

7.3.2 Methods

CNDDDB Query

SBS conducted a query of the CNDDDB GIS data to determine if BUOW have been reported to occur within five miles of the Property. The results of the query are presented below.

Field Survey Date and Weather Conditions

The Step I: Habitat Assessment was conducted by biologist Tim Searl on July 20, 2020. The Step II surveys were conducted by Tim Searl on April 19, May 10, June 1, and July 6, 2021 with Colin Chapin assisting on May 10. Survey information and conditions are presented in *Table 10 - BUOW Assessment Conditions* (Page 50).

Field Assessment

Step I: Habitat Assessment

Initially, the Site and surrounding area was observed from a vehicle while parked (i.e., windshield survey) to observe general habitat conditions. After performing the "windshield survey," a pedestrian survey of the Project area was conducted. Transects were spaced at approximately 50 to 100-feet to allow for 100% visual

Table 10 – BUOW Assessment Conditions²⁰

DATE	BIOLOGIST	SURVEY TYPE ²¹	TIME (24hr)	SUNRISE	TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	CLOUD COVER (%)	WIND SPEED (mph)	ANNUAL PRECIPITATION TO-DATE ²² (inches)	MOON PHASE
7/20/2020	Tim Searl	HA	0600-1300	N/A	72-90	55-30	0-0	2-5	0	New Moon
4/19/2021	Tim Searl	BS, FS	0700-1030	0612	51-55	28-21	0-0	1-4	6.42	First Quarter
5/10/2021	Tim Searl/ Colin Chapin	BS, FS	0715-1030	0551	58-62	78-68	100-100*	1-2	6.51	New Moon
6/1/2021	Tim Searl	BS, FS	0645-1000	0539	62-73	47-35	40-40	4-2	6.53	Last Quarter
7/6/2021	Tim Searl	BS, FS	0645-1000	0544	67-73	38-31	90-50	1-1	0	Waning Crescent

*High fog w/good visibility

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²⁰ Temperature, Humidity, and Wind Speed were obtained in the field with a Kestrel 3500 weather meter.

²¹ HA: Habitat Assessment; BS: Burrow Survey; FS: Focused Survey

²² Annual Precipitation (July 01 to June 30) To-Date was obtained from PWS Weather Station BNTC1 located near the Project in Beaumont, CA (PWS Weather, 2021).

coverage. Field observations such as plant communities, vegetation height and density, topography, and soil suitability were noted. Habitat suitability for BUOW was classified and mapped as Low²³, Moderate²⁴, or High²⁵. Areas not mapped were determined Not Suitable for BUOW.

Step II Part A: Focused Burrow Survey

Pedestrian transects were spaced at approximately 50 to 100-feet to allow for 100% visual coverage and inspect each burrow or burrow surrogate. Potential BUOW burrows (i.e., CGS burrows) and burrow surrogates (i.e., cement culverts, asphalt piles, rock piles, and openings underneath cement or asphalt pavement) detected as part of a focused burrow survey are mapped in the field utilizing Collector. Data collected for each burrow location includes type of burrow or burrow surrogate, a range of the number of burrows (i.e., single burrow vs. burrow complex), number of burrows, presence or absence of BUOW sign (i.e., feathers, wash, pellets, etc.), and pertinent ecological notes.

Step II Part B: Focused Burrowing Owl Surveys

Pedestrian transects were spaced at approximately 50 to 100-feet to allow for 100% visual coverage. If BUOW are detected the location is recorded using Collector. Additional data recorded includes the number of adults and juveniles, detection location (i.e., burrow site, perch, etc.), and any pertinent ecological and/or behavioral observations.

7.3.2 Existing Conditions and Results

CNDDDB Query

According to the CNDDDB, a total of three records of BUOW have been reported within five miles of the Property. Two of the three records were designated as “Sensitive” by the CNDDDB, and therefore, the specific location data for those records were suppressed and only the Lakeview 7.5 Minute USGS Quad Name was given. The lone record with location data occurred 3.6-miles southeast of the Property in 2006 in the Potrero Unit of the San Jacinto Wildlife Area which is owned and managed by CDFW. *Figure 22 - BUOW Query Results* (Page 52) depicts the location of the lone record.

Assessment Results

The results of the BUOW assessment are detailed below. The assessment results (i.e., suitable habitat, potential owl burrows, transects) are depicted on *Figure 23 – BUOW Assessment Results* (Page 53). BUOW was not observed. Representative photographs of the Site and surrounding area are presented in the previously referenced Appendix D.

Step I: Habitat Assessment

The 91.61-acre MSHCP-designated BUOW Assessment Area within 500-feet of the RW supported 67.65-acres of suitable habitat. This included 3.22-acres of Low suitability habitat and 64.43-acres of Moderate suitability habitat.

The Low-quality habitat area consisted of a ruderal lot with compacted soils that was routinely disked. Moderate-quality habitat consisted of ruderal fields and the ephemeral washes. Non-native grasses

²³ The habitat was structurally suitable; however, factors such as compacted soils, several trees present, dense/tall vegetation, human activity (i.e., disking, historical use), domesticated dogs/cats, etc. have degraded the quality of the habitat.

²⁴ The habitat was structurally suitable with less of the above degrading factors, but still not “preferred” BUOW habitat.

²⁵ The habitat was open, treeless to nearly treeless, with low growing/sparse vegetation supporting high densities of fossorial mammals.

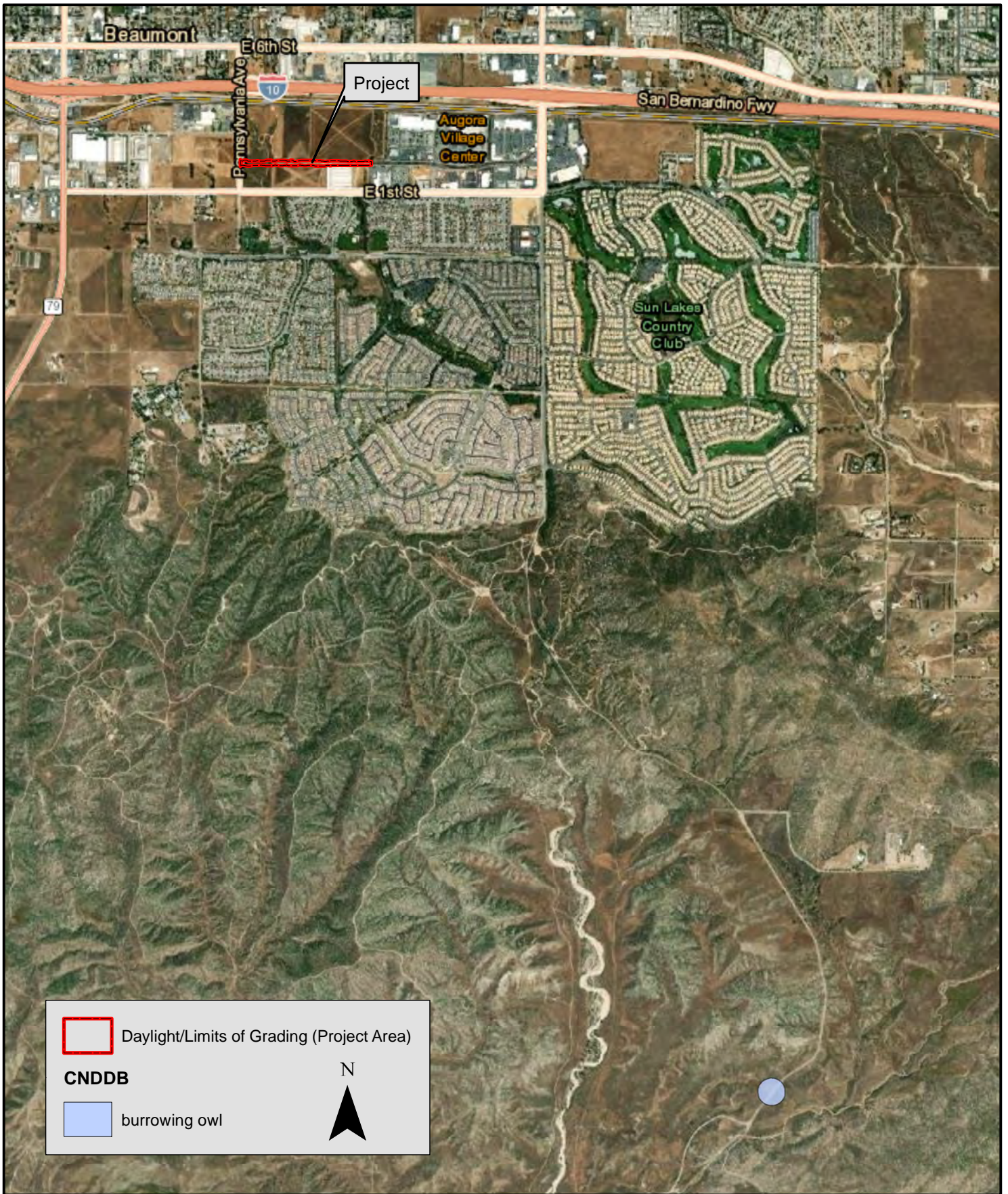
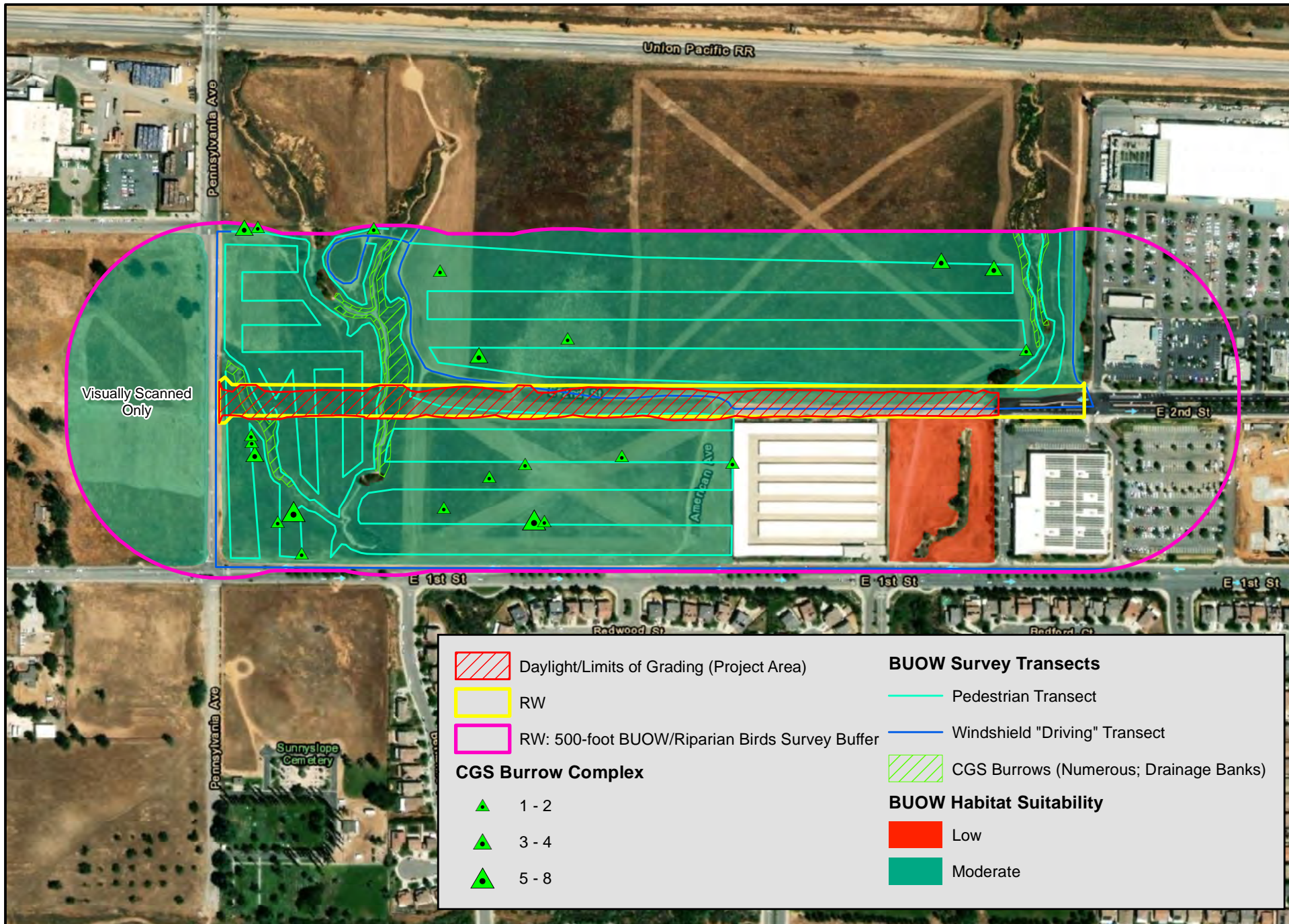




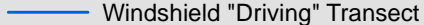








FIGURE 22
BUOW Query
Results





	Daylight/Limits of Grading (Project Area)	BUOW Survey Transects
	RW	 Pedestrian Transect
	RW: 500-foot BUOW/Riparian Birds Survey Buffer	 Windshield "Driving" Transect
CGS Burrow Complex		 CGS Burrows (Numerous; Drainage Banks)
	1 - 2	BUOW Habitat Suitability
	3 - 4	 Low
	5 - 8	 Moderate

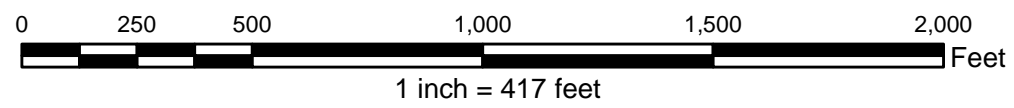


FIGURE 23
BUOW Assessment Results

were dominant, and portions of these areas were also disked. These areas became less suitable as the growing season progressed and the non-native grasses became denser and taller. The substrates of the Moderate-quality habitat were more friable and less compacted than the Low-quality area and thus allowing for more fossorial mammals to establish burrows.

Pedestrian transects were performed on the suitable areas east of Pennsylvania Avenue and public road rights-of-way but were not performed on the private property west of Pennsylvania Avenue to avoid potential trespassing issues. That area was surveyed visually only with 10 by 42 binoculars and a 20 by 60 spotting scope.

The Step II Part A: Focused Burrow Survey

SBS personnel mapped 22 CGS burrow complexes that ranged from a single burrow up to a complex of eight burrows. Additionally, numerous CGS burrows were present on portions of the ephemeral wash banks. Given the steepness of the terrain and the abundance of burrows present, these areas were mapped with a polygon rather than individually as depicted on Figure 23. No BUOW sign was detected at any of the burrow entrances. CGS was observed in suitable BUOW habitat west of Pennsylvania Avenue, but as noted above, these areas were not transected to avoid potential trespassing issues. No burrow surrogates suitable for BUOW were detected throughout the BUOW Assessment Area.

Step II Part B: Focused Burrowing Owl Surveys

No BUOW or BUOW sign was detected over the course of the protocol surveys. BUOW were absent within 500-feet of the RW.

7.3.3 Impacts

No Project impacts will occur to BUOW with the implementation of the required 30-Day BUOW Pre-Construction Survey.

7.3.4 Mitigation

The Project will be required to conduct a 30-day pre-construction survey per the MSHCP. Other BUOW mitigation is not anticipated; however, if BUOW have colonized the area prior to the initiation of project-related ground disturbance, the City should immediately inform the RCA and Wildlife Agencies (i.e., CDFW and USFWS), and would need to coordinate further with the RCA and Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance.

7.4 Mammals

The Project was not located within a designated assessment area for Mammals.

8.0 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The Project was not located in an area with Delhi sands.

8.2 Species Not Adequately Conserved

MSHCP *Table 9-3 Requirements to be Met for 28 Species Prior to Including Those Species on the List of Covered Species Adequately Conserved* (Dudek & Associates, Inc., 2003) is a list of “28 Covered Species [that] will be considered to be adequately conserved when certain conservation requirements are met as identified in the species-specific conservation objectives for those species” (Dudek & Associates, Inc., 2003). None of the 28 species were detected within the RW or area within 500-feet.

8.3 Nesting Birds

The Migratory Bird Treaty Act of 1918 (MBTA) created an “*Establishment of a Federal prohibition, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention . . . for the protection of migratory birds . . . or any part, nest, or egg of any such bird."*

Further, the California Fish and Game Code (CFGF) states the following:

CFGF 3503: “*It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.*”

CFGF 3503.5: “*It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.*”

8.4.1 Nesting Bird Mitigation

If construction activities occur during the nesting bird season (i.e., January 1 – August 31 for raptors and hummingbirds; February 1 – August 31 for all other birds), then a pre-construction nesting bird survey shall be conducted prior to and within three days of construction activities. The biologist shall have the authority to establish no disturbance buffers with the distances determined by factors such as species, tolerance of disturbance, nest status, etc.

If nesting bird surveys result in the need for a biological monitor to be present during construction activities, then one shall be present full-time to monitor construction activities to ensure no direct or indirect impacts occur to potential nest success. The biologist shall have the authority to suspend construction activities if potential impacts are observed.

9.0 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

MSHCP Section 6.1.4 provides recommendations and guidelines to minimize potential “edge effects”²⁶ resulting from locating development projects near the MSHCP Reserve Assembly, MSHCP conserved/avoided resources, and/or PQP Lands. Measures, such as buffers and/or barriers, are typically put in place to control drainage, toxics, lighting, noise, and invasives.

The Project is not located adjacent to or near MSHCP Criteria Areas; therefore, MSHCP Section 6.1.4 measures are not required.

²⁶ Edge effects are defined by the MSHCP as “Adverse direct and indirect effects to species, Habitats and Vegetation Communities along the natural urban/wildlands interface. May include predation by mesopredators (including native and non-native predators), invasion by exotic species, noise, lighting, urban runoff, and other anthropogenic impacts (trampling of vegetation, trash and toxic materials dumping, etc.)”

10.0 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

The following BMPs, taken directly from the MSHCP (Dudek & Associates, Inc., 2003), should be implemented to the extent feasible and where applicable.

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS [USFWS], and CDFG [CDFW], RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.

12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

11.0 REFERENCES

- California Bird Records Committee. (2021, August 20). *Official California Checklist*. Retrieved 2021, from <https://www.californiabirds.org/checklist.asp>
- California Burrowing Owl Consortium. (1993, April). *Burrowing Owl Survey Protocol and Guidelines*. Retrieved 2021, from California Department of Fish and Wildlife: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842&inline>
- California Department of Fish and Wildlife. (2012, March 7). *Staff Report on Burrowing Owl Mitigation*. Retrieved 2021, from Survey and Monitoring Protocols and Guidelines: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>
- California Department of Fish and Wildlife. (2018, March 20). *Survey and Monitoring Protocols and Guidelines*. Retrieved 2021, from Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>
- California Department of Fish and Wildlife. (2021, April). *California Natural Diversity Database* . Retrieved from Special Animals List: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>
- California Department of Fish and Wildlife. (2021, August 18). *Natural Communities*. Retrieved 2021, from California Natural Community List: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>
- California Native Plant Society. (2021). *About CNPS*. Retrieved 2021, from California Native Plant Society: <http://cnps.org/cnps/about/>
- California Native Plant Society. (2021). *The CNPS Ranking System*. Retrieved 2021, from California Native Plant Society: <http://cnps.org/cnps/rareplants/ranking.php>
- California Native Plant Society. (2021). *Rare Plant Program*. Retrieved 2021, from Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.0): www.rareplants.cnps.org
- Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker. (2021, July 01). *Sixty-first Supplement to the American*

- Ornithological Society's Check-list of North American Birds (online)*, Volume 138, Issue 3. (American Ornithological Society) Retrieved 2021, from The Auk: <http://checklist.americanornithology.org/taxa>
- Dudek & Associates, Inc. (2003). *RCA Documents Library - Multiple Species Habitat Conservation Plan*. Retrieved 2022, from Regional Conservation Authority (RCA) Western Riverside County: <https://www.wrc-rca.org/document-library/>
- Dudek & Associates, Inc. (2004, August 9). *Errata to MSHCP - Clarifications and Corrections to the MSHCP*. Retrieved 2020, from RCA Documents Library: http://www.wrc-rca.org/archivecdn/Permit_Docs/Clarifications_and_Corrections_to_the_MSHCP.pdf
- Environmental Programs Department. (2006, March 29). *Burrowing Owl Survey Instructions For the Western Riverside Multiple Species Habitat Conservation Plan Area*. Retrieved 2021, from Consultant Resources: http://rctlma.org/Portals/3/EPD/consultant/burrowing_owl_survey_instructions.pdf
- Federal Geographic Data Committee (FGDC). (2013, August). *Classification of Wetlands and Deepwater Habitats of the United States*. Retrieved 2021, from National Wetland Inventory Wetland Classification Codes: <https://www.fws.gov/wetlands/Data/Wetland-Codes.html>
- Gervais, J. A. (2008). Burrowing Owl (*Athene cunicularia*). In W. D. Shuford, & T. Gardali, *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California* (Studies of Western Birds 1 ed., pp. 218-226). Camarillo and Sacramento, California: Western Field Ornithologists and California Department of Fish and Game.
- Historic Aerials by Netronline. (2021). *Historic Aerials*. Retrieved 2021, from <https://www.historicaerials.com/>
- Kus, B. (2002). *Least Bell's Vireo (Vireo bellii pusillus)*. (California Partners in Flight) Retrieved 2021, from In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California: http://www.prbo.org/calpif/htmldocs/species/riparian/least_bell_vireo.htm
- Kus, B., Hopp, S. L., Johnson, R. R., & Brown, B. T. (2020). *Cornell Lab of Ornithology*. (A. F. Poole, Ed.) Retrieved 2021, from Bell's Vireo (*Vireo bellii*): <https://doi.org/10.2173/bow.belvir.01>
- Laymon, S. A. (1998). *Yellow-billed Cuckoo (Coccyzus americanus)*. (California Partners in Flight) Retrieved 2021, from In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California: http://www.prbo.org/calpif/htmldocs/species/riparian/yellow-billed_cuckoo.htm
- Lightner, J. (2006). *San Diego County Native Plants* (2nd Edition ed.). San Diego: San Diego Flora.
- Oscar F. Clarke, et al. (2007). *Flora of the Santa Ana River and Environs: with references to world botany*. Berkeley: Heyday Books.
- Polite, C. (1999, September). *California Wildlife Habitat Relationships System - California Department of Fish and Game California Interagency Wildlife Task Group - Burrowing Owl*. (L. Kiff, Ed.) Retrieved 2021, from Life History Accounts and Range Maps - California Wildlife Habitat Relationships System: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1871&inline=1>

- PWS Weather. (2021). *PWS Weather by Aerisweather*. Retrieved 2021, from BNTC1 Beaumont, CA, US: <https://www.pwsweather.com/station/mid/bntc1>
- Regional Conservation Authority. (2020, December 1). *Status of Covered Species Not Adequately Conserved (Table 9-3 Species)*. Retrieved 2021, from https://www.wrc-rca.org/annual_reports/Current_Status_of_Covered_Species_Not_Adequately_Conserved-REV2020.pdf
- Regional Conservation Authority. (2021). *RCA MSHCP Information App*. Retrieved 2021, from <http://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd>
- Riverside County. (2020, December). *Geographic Information Services*. Retrieved 2020, from GIS Data: <https://gis.rivcoit.org/GIS-Data-2>
- Sawyer, J. O., Keeler-Wolf, T., & Evens, J. M. (2009). *A Manual of California Vegetation* (2nd Edition ed.). Sacramento: California Native Plant Society.
- Sogge, M. K., Ahlers, D., & Sferra, S. J. (2010). *A natural history summary and survey protocol for the Southwestern Willow Flycatcher*. U.S. Geological Survey Techniques and Methods 2A-10.
- The Cornell Lab of Ornithology. (2021). *eBird*. Retrieved 2021, from <https://ebird.org/home>
- The Cornell Lab of Ornithology. (2021). *Hotspot*. Retrieved 2021, from Potrero Creek at Four Seasons Beaumont: <https://ebird.org/hotspot/L7681464>
- The Jepson Herbarium University of California, Berkeley. (2014, July 1). *Jepson Flora Project (eds.)*. Retrieved 2021, from Jepson eFlora: <https://ucjeps.berkeley.edu/interchange/>
- U. S. Department of the Interior Fish and Wildlife Service. (2001). *Least Bell's Vireo Survey Guidelines*. Carlsbad, CA: Ecological Services Carlsbad Fish and Wildlife Office.
- U. S. Fish and Wildlife Service - Pacific Region. (2019). *Little Known but Important Features of the Endangered Species Act*. Retrieved June 2019, from Distinct Population Segments, 4(d) Rules, and Experimental Populations: <https://www.fws.gov/pacific/news/grizzly/esafacts.htm>
- U. S. Fish and Wildlife Service Carlsbad Fish and Wildlife Office. (2021). *Species Occurrence Data*. Retrieved 2021, from <https://www.fws.gov/carlsbad/gis/cfwogis.html>
- U.S. Fish and Wildlife Service. (2021). *Least Bell's Vireo (Vireo bellii pusillus)*. Retrieved 2021, from https://www.fws.gov/refuge/san_diego/wildlife_and_habitat/threatened_and_endangered_species/Least_Bells_Vireo.html
- United States Department of Agriculture Natural Resources Conservation Service. (2021). (USDA) Retrieved 2021, from Web Soil Survey: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- Wilson, D. E., & Reeder, D. M. (2005). *Mammal Species of the World. A Taxonomic and Geographic Reference (3rd Edition)*. (2. p. Johns Hopkins University Press, Producer) Retrieved 2021, from <https://www.departments.bucknell.edu/biology/resources/msw3/>

12.0 CERTIFICATION

I hereby certify that the statements furnished above, the associated figures, and the attached appendices present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed: Tim Searl Date: September 26, 2022
Tim Searl, Owner/Biologist, Searl Biological Services
Permit Number: TE02351A-1

FIGURE DISCLAIMER

Figures and data are to be used for reference purposes only. Map features are approximate and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

APPENDIX A

Site Plan

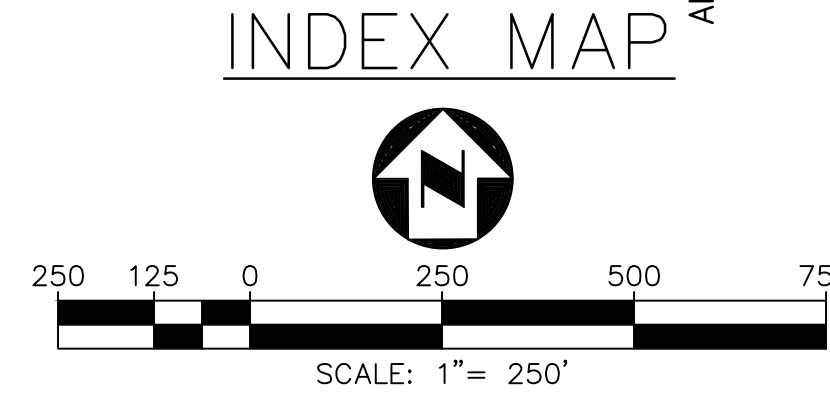
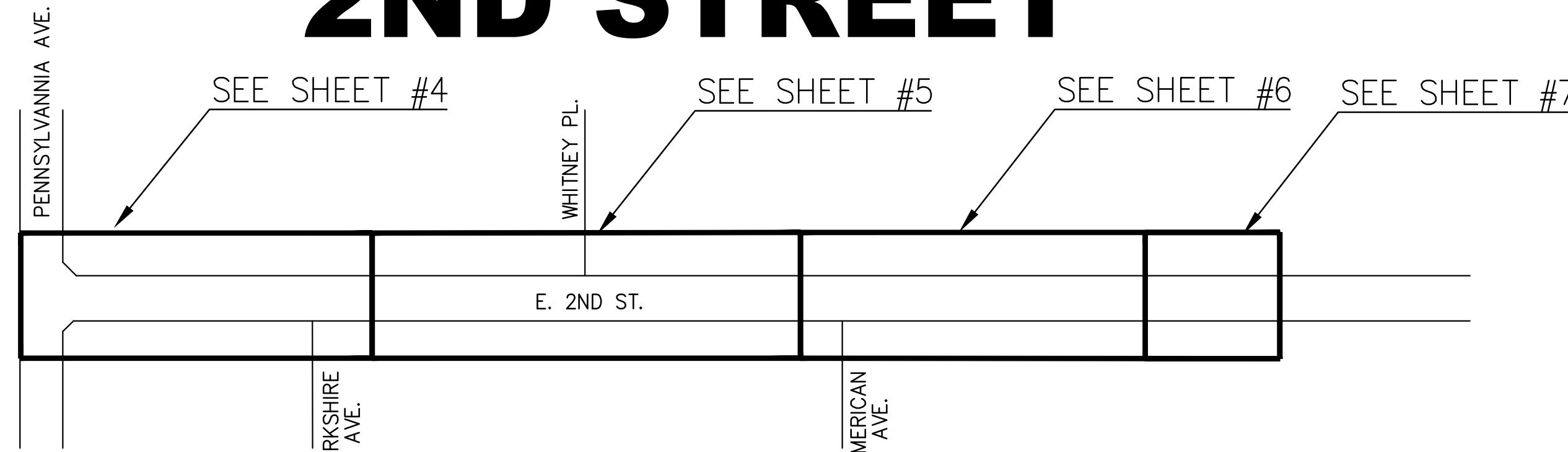
GRADING NOTE:

- ALL GRADING SHALL CONFORM TO THE CITY OF BEAUMONT ORDINANCES, CURRENT ADOPTED CALIFORNIA BUILDING CODE, APPENDIX J, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, "LATEST EDITION" AND RECOMMENDATIONS OF THE SOILS ENGINEER.
- NO WORK SHALL COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
- ALL PROPERTY CORNERS SHALL BE CLEARLY DELINEATED IN THE FIELD PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION /GRADING.
- DURING ROUGH GRADING OPERATIONS AND PRIOR TO CONSTRUCTION OF PERMANENT DRAINAGE STRUCTURES, TEMPORARY DRAINAGE AND EROSION CONTROL SHOULD BE PROVIDED TO PREVENT PONDING WATER, SEDIMENT TRANSPORTATION, AND DAMAGE TO ADJACENT PROPERTIES.
- DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
- NO FILL SHALL BE PLACED ON EXISTING GROUND THAT HAS NOT BEEN CLEARED OF WEEDS, DEBRIS, TOPSOIL AND OTHER DELETERIOUS MATERIAL.
- MAXIMUM CUT AND FILL SLOPE = 2: 1 EXCEPT WHERE SPECIFICALLY APPROVED OTHERWISE.
- STABILITY CALCULATIONS WITH A FACTOR OF SAFETY OF AT LEAST ONE AND FIVE TENTHS (1.5) SHALL BE SUBMITTED BY A SOILS ENGINEER TO THE PUBLIC WORKS DEPARTMENT.
- PROVIDE A 5' WIDE BY 1' HIGH BERM OR EQUIVALENT ALONG THE TOP OF ALL FILL SLOPES OVER 5' HIGH.
- PROVIDE A BROW DITCH DESIGNED TO HANDLE 100 YR STORM FLOWS ALONG THE TOP OF CUT SLOPES.
- MINIMUM BUILDING PAD AND DRAINAGE SWALE SLOPE SHALL BE 1% IF CUT OR FILL IS LESS THAN 10'. 2% IF CUT OR FILL IS GREATER THAN 10'. DRAINAGE SWALES SHALL BE A MINIMUM OF 0.2' DEEP AND BE CONSTRUCTED A MINIMUM OF 2' FROM THE TOE OF CUT OR FILL SLOPES.
- NO OBSTRUCTION OF FLOODPLAIN OR NATURAL WATER COURSES SHALL BE PERMITTED.
- ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE SHALL CONTINUE TO FUNCTION, ESPECIALLY DURING STORM CONDITIONS, PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING OPERATIONS.
- FINISH GRADE SHALL BE SLOPED AWAY FROM ALL EXTERIOR WALLS AT NOT LESS THAN 5% FOR A MINIMUM OF 10'.
- CUT AND FILL SLOPES EQUAL TO OR GREATER THAN 3' IN VERTICAL HEIGHT SHALL BE PLANTED WITH GRASS OR GROUND COVER TO PROTECT THE SOLE FROM EROSION AND INSTABILITY IN ACCORDANCE WITH CITY OF BEAUMONT REQUIREMENTS PRIOR TO FINAL GRADING INSPECTION
- ALL SLOPES REQUIRED TO BE PLANTED SHALL BE PLANTED WITH APPROVED GROUND COVER AT 12" ON CENTER. SLOPES EXCEEDING 15' IN VERTICAL HEIGHT SHALL BE PLANTED WITH APPROVED TREES SPACED NOT TO EXCEED 20' ON CENTER OR SHRUBS NOT TO EXCEED 10' OR A COMBINATION OF SHRUBS AND TREES NOT TO EXCEED 15' IN ADDITION TO A GRASS MIX GROUND COVER. SLOPES EQUAL TO OR GREATER THAN 4' IN VERTICAL HEIGHT SHALL BE PROVIDED WITH AN IN-GROUND IRRIGATION SYSTEM COMPLETE WITH AN APPROPRIATE BACKFLOW PREVENTION DEVICE PER CITY REQUIREMENTS.
- IF STEEP SLOPING TERRAIN OCCURS UPON WHICH FILL IS TO BE PLACED, IT MUST BE CLEARED, KEYED, AND BENCHED INTO FIRM NATURAL SOIL FOR FULL SUPPORT. PREPARATION SHALL BE APPROVED BY A SUITABLY QUALIFIED AND REGISTERED GEOTECHNICAL ENGINEER OR GEOLOGIST PRIOR TO PLACEMENT OF FILL MATERIAL.
- ALL GRADING SHALL BE CONTINUOUSLY OBSERVED BY A COMPETENT SOILS ENGINEER WHO SHALL VERIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND WHO SHALL SUBMIT A FINAL COMPACTION REPORT FOR ALL FILLS OVER 1' DEEP.
- A FINAL GEOTECHNICAL REPORT OF THE ROUGH GRADING, STATING SUBSTANTIAL CONFORMANCE WITH THE APPROVED GRADING PLAN, SHALL BE SUBMITTED TO THE BUILDING AND SAFETY DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT PRIOR TO REQUESTING INSPECTION AND ISSUANCE OF BUILDING PERMITS. CERTIFICATIONS SHALL INCLUDE LINE GRADES, ELEVATIONS, AND LOCATION OF CUT/FILL SLOPES.
- A LAND SURVEYOR OR ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING SHALL SUBMIT A PAD CERTIFICATION FOR ALL PADS. THE ELEVATION WITH RESPECT TO MEAN SEA LEVEL SHALL BE GIVEN. IF AN ELEVATION WITH RESPECT TO ADJACENT GROUND SURFACE IS REQUIRED, THE ACTUAL DISTANCE ABOVE THE ADJACENT GROUND SHALL BE GIVEN.
- A GEOTECHNICAL ENGINEER OR GEOLOGIST SHALL SUBMIT TO THE BUILDING AND SAFETY DEPARTMENT AND THE PUBLIC WORKS DEPARTMENT A FINAL GEOTECHNICAL REPORT OF COMPLETION OF FINAL GRADING STATING SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS FOR ALL GRADING DESIGNATED AS "ENGINEERED GRADING".
- THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AT LEAST 24 HOURS IN ADVANCE REQUESTING FINISH LOT GRADE AND DRAINAGE INSPECTION. THIS INSPECTION MUST BE APPROVED PRIOR TO BUILDING PERMIT FINAL INSPECTION FOR EACH LOT.
- ALL STORM DRAINS, CATCH BASINS, AND STORM WATER RUNOFF STRUCTURES WILL BE PROVIDED WITH ADEQUATE CAPABILITIES TO FILTER AND RETAIN SEDIMENT, GRIT, OIL, AND GREASE TO PREVENT POLLUTION IN STORM WATER RUNOFF IN COMPLIANCE WITH THE CITY OF BEAUMONT'S BEST MANAGEMENT PRACTICES AND BEAUMONT'S DRAINAGE MASTER PLAN FOR STORMWATER AS WELL AS BEST MANAGEMENT PRACTICES IDENTIFIED IN THE CURRENT REPORT OF WASTE DISCHARGE FOR RIVERSIDE COUNTY PERMITTEES.
- CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT TWO DAYS BEFORE DIGGING AT 8-1-1 AND THE FOLLOWING UTILITY OR AGENCIES A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCING ANY CONSTRUCTION OR GRADING:
 CITY OF BEAUMONT.....(951) 769-8520
 AT&T.....(808) 892-0123
 SOUTHERN CALIFORNIA GAS COMPANY.....(909) 335-7955
 BEAUMONT CHERRY VALLEY WATER DISTRICT.....(951) 845-9581
 SOUTHERN CALIFORNIA EDISON.....(800) 409-2365
 UNDERGROUND SERVICE ALERT.....(800) 422-4133
- TRENCHING FOR UTILITIES AND STRUCTURES IS NOT ALLOWED UNTIL A SOIL COMPACTION REPORT IS SUBMITTED TO AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.
- THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE CITY'S INSPECTOR. THE ADJACENT STREETS SHALL BE KEPT CLEAN OF SEDIMENT, DEBRIS AND OTHER NUISANCES AT ALL TIMES. THE DEVELOPER SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE CONSTRUCTION.
- ALL OPERATIONS CONDUCTED ON THE SITE OR ADJACENT THERETO SHALL ADHERE TO THE NOISE ORDINANCE SET FORTH BY THE CITY MUNICIPAL CODE. ALL OPERATIONS SHALL BE LIMITED BY THE NOISE ORDINANCE TO THE LIMIT OF DECIBELS SPECIFIED FOR THE AREA AND TIME PERIOD. CONSTRUCTION ACTIVITIES WILL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND 6:00 P.M. MONDAY THROUGH FRIDAY.
- ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY ENGINEER FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTE OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.

STREET IMPROVEMENT NOTES:

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, GREENBOOK, LATEST EDITION AND THE RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT IMPROVEMENT STANDARDS AND SPECIFICATIONS, "LATEST EDITION," COUNTY ORDINANCE NO. 461 AND SUBSEQUENT AMENDMENTS.
- CONTRACTOR SHALL COMPLY WITH THE STATE AND LOCAL SAFETY CODES DURING THE PROGRESS OF WORK.
- CONSTRUCTION PROJECTS THAT DISTURB MORE THAN ONE ACRE MUST OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. OWNER/DEVELOPERS ARE REQUIRED TO FILE A NOTICE OF INTENT (NOI) WITH THE STATE WATER RESOURCES CONTROL BOARD (SWRCB) AND COMPLY WITH ALL REQUIREMENTS OF THE BEAUMONT DRAINAGE MANAGEMENT PLAN. BEAUMONT IS CO-PERMITTEE WITH R.C.F.C. & W.C.D.
- CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE COUNTY'S OR DISTRICT'S INSPECTOR. THE ADJACENT STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE DEVELOPER SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION. METHOD OF STREET CLEANING SHALL BE DRY SWEEPING OF ALL PAVED AREAS.
- CONTRACTOR SHALL BE THE RESPONSIBILITY TO INSTALL AND MAINTAIN DURING CONSTRUCTION, REGULATORY GUIDE AND WARNING SIGNS WITHIN THE PROJECT LIMITS AND ITS SURROUNDINGS TO PROVIDE SAFE PASSAGE FOR THE TRAVELING PUBLIC AND WORKERS UNTIL THE FINAL COMPLETION AND ACCEPTANCE OF THE PROJECT BY THE CITY OF BEAUMONT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING OF THE PROPOSED WORK AREA AND RELOCATION COSTS OF ALL EXISTING UTILITIES. THIS INCLUDES UNDERGROUNDING OF EXISTING OVERHEAD LINES ALONG THE PROJECT FRONTAGE AS REQUIRED BY THE CONDITIONS OF APPROVAL. PERMITTEE MUST INFORM CITY OF CONSTRUCTION SCHEDULE AT LEAST 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION AT (951) 769-8520.
- CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, CITY OF BEAUMONT, AND THE DEVELOPER'S ENGINEER, HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNERS OR THE DEVELOPER'S ENGINEER.
- CONTRACTOR SHALL BE THE RESPONSIBLE TO OBTAIN AN ENCROACHMENT PERMIT FOR ALL WORK PERFORMED WITHIN PUBLIC RIGHT-OF-WAY, DEDICATED AND ACCEPTED FOR PUBLIC USE; AND TO BE RESPONSIBLE FOR SATISFACTORY COMPLIANCE FOR ALL CURRENT ENVIRONMENTAL REGULATIONS DURING THE LIFE OF CONSTRUCTION ACTIVITIES FOR THIS PROJECT.

CITY OF BEAUMONT, CALIFORNIA IMPROVEMENT PLANS FOR 2ND STREET

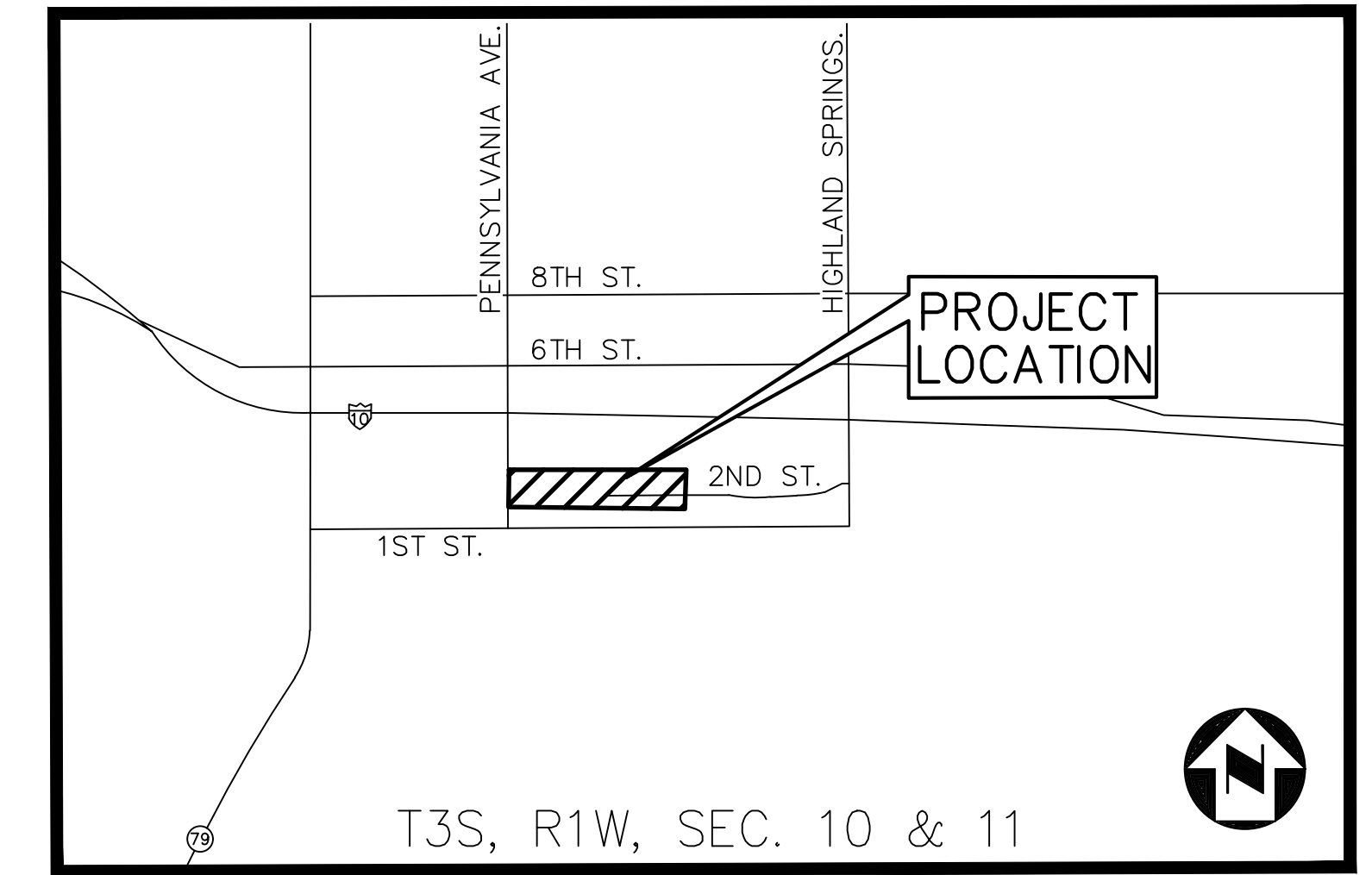


SHEET INDEX:

- SHEET 1: TITLE SHEET
- SHEET 2: CITY OF BEAUMONT NOTES
- SHEET 3: DETAIL SHEET
- SHEET 4: STREET PLAN AND PROFILE (STA 205+00 - 212+00)
- SHEET 5: STREET PLAN AND PROFILE (STA 212+00 - 220+65)
- SHEET 6: STREET PLAN AND PROFILE (STA 220+65 - 229+00)
- SHEET 7: STREET PLAN AND PROFILE (STA 229+00 - 230+00)
- SHEET 8: SIGNAGE AND STRIPING
- SHEET 9: CULVERT CROSSING (CULVERT A)
- SHEET 10: CULVERT CROSSING (CULVERT A)
- SHEET 11: CULVERT CROSSING (CULVERT C)
- SHEET 12: SECTION SHEET (STA 205+00 - 217+50)
- SHEET 13: SECTION SHEET (STA 218+00 - 228+50)

STREET IMPROVEMENT NOTES (CONTINUED):

- CONTRACTOR MUST NOTIFY THE CITY OF BEAUMONT AT (951) 769-8520 AT LEAST ONE WEEK PRIOR TO CONSTRUCTION.
- CONTRACTOR MUST PROVIDE CONSTRUCTION SCHEDULE TO THE CITY OF BEAUMONT AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR MUST CALL UNDERGROUND SERVICE ALERT AT 811 AT LEAST 48 HOURS BEFORE EXCAVATION.
- CONTRACTOR SHALL BE RESPONSIBLE TO APPLY TO THE RIVERSIDE COUNTY FLOOD CONTROL (RCFC) FOR PERMITS WHEN ANY STORM DRAIN PIPE NEEDS TO BE CONNECTED WITH A RCFC FACILITY AND ADD PERMITEE NUMBER ON THE PLAN.
- CONTRACTOR SHALL BE RESPONSIBLE TO APPLY TO THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) FOR AN ENCROACHMENT PERMIT FOR ALL WORK PERFORMED WITHIN STATE RIGHT-OF-WAY.
- CONTRACTOR SHALL BE THE RESPONSIBILITY TO INSTALL AND MAINTAIN ALL CONSTRUCTION, REGULATORY, GUIDE AND WARNING SIGNS WITHIN THE PROJECT LIMITS AND ITS SURROUNDINGS TO PROVIDE SAFE PASSAGE FOR THE TRAVELING PUBLIC AND WORKERS UNTIL THE FINAL COMPLETION AND ACCEPTANCE OF THE PROJECT BY THE CITY. A TRAFFIC CONTROL PLAN MUST BE SUBMITTED WITH APPROVED STREET PLAN FOR REVIEW TO THE PERMITS SECTION OR INSPECTION SECTION (FOR MAP CASES) PRIOR TO OBTAINING AN ENCROACHMENT PERMIT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ADDITIONAL SIGNS AND MARKINGS NOT INCLUDED IN THE SIGNING AND STRIPING PLAN WITHIN THE PROJECT AREAS, OR ON ROADWAYS ADJACENT TO THE PROJECT BOUNDARIES, UPON THE REQUEST OF THE DIRECTOR OF PUBLIC WORKS OR HIS DESIGNEE TO IMPROVE TRAFFIC SAFETY ON THE ROADS UNDER THE JURISDICTION OF THE DEVELOPER.
- CONTRACTOR SHALL HAVE GEOTECHNICAL/SOILS ENGINEERING FIRM OBSERVE TRENCHING, BACKFILLING, & SOIL COMPACTION OF ALL UTILITY TRENCHES WITHIN ALL EASEMENTS & ROAD RIGHTS OF WAY. TWO SETS OF COMPACTION REPORTS CERTIFYING THAT WORKS WERE DONE IN CONFORMANCE TO STANDARDS & GEOTECHNICAL REPORT SHALL BE SUBMITTED AFTER EACH UTILITY TRENCH IS COMPLETED & CERTIFIED. COMPACTION REPORT MUST BE SUBMITTED TO THE DEPT. OF PUBLIC WORKS AT LEAST TWO WORKING DAYS BEFORE AGGREGATE BASE MATERIALS ARE PLACED ONSITE.
- ALL UNDERGROUND FACILITIES, WITH LATERALS, SHALL BE IN PLACE PRIOR TO PAVING THE STREET SECTION INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: SEWER, WATER, ELECTRIC, GAS AND STORM DRAIN.
- ALL STREET SECTIONS ARE TENTATIVE. ADDITIONAL SOIL TESTS SHALL BE TAKEN AFTER ROUGH GRADING TO DETERMINE THE EXACT STREET SECTION REQUIREMENTS. USE R.C.T.D. STANDARD NO. 401 IF EXPANSIVE SOILS ARE ENCOUNTERED.
- ASPHALTIC EMULSION (FOG SEAL) SHALL BE APPLIED NOT LESS THAN FOURTEEN DAYS FOLLOWING PLACEMENT OF THE ASPHALT SURFACING. FOG SEAL AND PAINT BINDER SHALL BE APPLIED AT A RATE OF 0.05 AND 0.03 GALLON PER SQUARE YARD RESPECTIVELY. ASPHALTIC EMULSION SHALL CONFORM TO SECTIONS 37, 39 AND 94 OF THE STATE STANDARD SPECIFICATIONS.
- PRIME COAT IS REQUIRED PRIOR TO PAVING ALL GRADES IN EXCESS OF TEN PERCENT.
- ANY PRIVATE DRAINAGE FACILITIES SHOWN ON THESE PLANS ARE FOR INFORMATION ONLY. BY SIGNING THESE IMPROVEMENT PLANS, NO REVIEW OR APPROVAL OF THESE PRIVATE FACILITIES ARE IMPLIED OR INTENDED BY CITY OF BEAUMONT PUBLIC WORKS DEPT.
- THE CONTRACTOR SHALL INSTALL STREET NAME SIGNS CONFORMING TO R.C.T.D. STANDARD NO. 816.
- STREET LIGHTS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED STREET LIGHTING PLAN PER CITY OF BEAUMONT'S APPROVED STREET LIGHTING SPECIFICATIONS.
- INSTALL STREET TREES IN ACCORDANCE WITH ORDINANCE 461 AND THE COMPREHENSIVE LANDSCAPING GUIDELINES (CHOOSE THREE SPECIES AND NAME THEM HERE).
- FOR ALL DRIVEWAY RECONSTRUCTION BEYOND RIGHT-OF-WAY, PROOF OF DRIVEWAY OWNER NOTIFICATION IS REQUIRED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE ENGINEER TO INSTALL STREET CENTERLINE MONUMENTS AS REQUIRED BY RIVERSIDE COUNTY ORDINANCE NO. 461. IF CONSTRUCTION CENTERLINE DIFFERS, PROVIDE A TIE TO EXISTING CENTERLINE OF RIGHT-OF-WAY. PRIOR TO ROAD CONSTRUCTION, SURVEY MONUMENTS INCLUDING CENTERLINE MONUMENTS, TIE POINTS, PROPERTY CORNERS AND BENCH MARKS SHALL BE REFERENCED OUT AND CORNER RECORDS FILED WITH THE COUNTY SURVEYOR PURSUANT TO SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE. SURVEY POINTS DESTROYED DURING CONSTRUCTION SHALL BE RESET, AND A SECOND CORNER RECORD FILED FOR THOSE POINTS PRIOR TO COMPLETION AND ACCEPTANCE OF THE IMPROVEMENTS.



VICINITY MAP
N.T.S.

EARTHWORK QUANTITIES:

CUT	5884 CU. YD.	FACTOR = 1.0	5884 CU. YD.
FILL	9251 CU. YD.	FACTOR = 1.15	10638 CU. YD.
NET (ADJ)	-	-	4754 CU. YD.

LEGEND

	PROPOSED AC PAVEMENT		POWER POLE
	AC PAVEMENT REMOVAL		ELECTRICAL VAULT
	PROPOSED CONCRETE SIDEWALK		WATER VALVE
	CENTERLINE		GAS VALVE
	RIGHT OF WAY		SEWER MANHOLE
	PROPERTY LINE		FIREHYDRANT
	(EX) OVERHEAD ELECTRIC EDISON		
	(EX) SEWER MAIN LINE		
	(EX) 2" GAS LINE		
	(EX) WATER LINE		
	EDGE OF DIRT ROAD		

DECLARATION OF RESPONSIBLE CHARGE:

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THESE 95-PERCENT DESIGN LEVEL DRAWINGS, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THESE DESIGN OF THIS PROJECT TO DATE AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY CITY OF BEAUMONT IS CONFINED TO A REVIEW ONLY, AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT'S DESIGN.

APPROVED:

BRIAN D. FOX, P.E., P.L.S. R.C.E. NO. 57264
COZAD AND FOX, INC.

BENCHMARK

BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:

STATION	NGS POINT ID	ELEVATION (FT)
K1311	DX3472	2601.93

DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF I-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.

BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS SURVEY IS SHOWN HEREON ARE BASED ON THE BEARING OF SECOND STREET BEING NORTH 89°54'34" WEST PER TRACT 28017-1, M.B. 254/71-72, IN THE CITY OF BEAUMONT, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

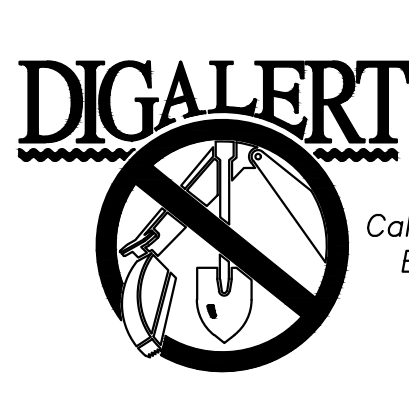
DATUM STATEMENT

COORDINATES SHOWN ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, NAD83 (NRS2007, EPOCH 2011.00). ALL DISTANCES ARE US SURVEY FOOT GRID DISTANCES, UNLESS OTHERWISE NOTED. TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINED FACTOR 0.999888832.

NOTE: DISTANCES AND STATIONING FROM ROW MAPS FOR 1-10 WERE IN CCS 29 GRID, SAID DATA WAS CONVERTED TO GROUND BY MULTIPLYING BY A CF OF 1.000117736 PER ROW MAP 49309-02 AND THEN CONVERTED TO NAD 83 BY USING THE CF STATED ABOVE.

97% SUBMITTAL (NOT FOR CONSTRUCTION)

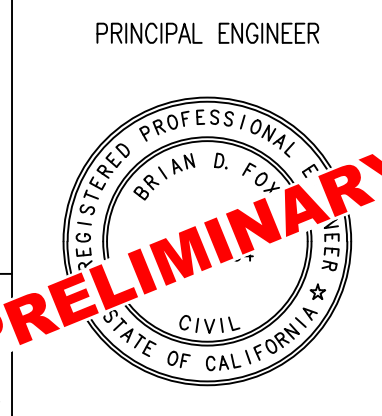
Z:\2001800.DWG\2001800.00_2NDSTREET_100%DWG



BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

PREPARED UNDER THE SUPERVISION OF:

 CIVIL / STRUCTURAL ENGINEERS
 MUNICIPAL CONSULTANTS / PLANNERS
 SURVEYORS / GPS
 151 SOUTH GRAND STREET HENRY, CA 92544
 TEL: (951) 862-1444 FAX: (951) 766-8942
 E-MAIL: BFO@COZADFOX.COM



PRINCIPAL ENGINEER
 DESIGN BY: A.J.R.
 DRAWN BY: D.D.S.
 CHECKED BY: B.D.F.
 SCALE: 1"=40'
 DATE: 03/2022
 JOB NUMBER: 2001800.00



REVIEWED BY:	_____	DATE:	_____
RECOMMENDED BY:	_____	DATE:	_____
APPROVED BY:	_____	DATE:	_____

CITY OF BEAUMONT, CALIFORNIA
 IMPROVEMENT PLANS FOR:
 2ND STREET
 TITLE SHEET

S H E E T
 1
 OF 13 SHEETS
 FILE NO:

STORM DRAIN NOTES:





- CONTRACTOR SHALL CONSTRUCT THE DRAINAGE IMPROVEMENT SHOWN ON THE DRAWINGS IN CONFORMANCE WITH THE REQUIREMENTS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT DESIGN MANUAL STANDARD DRAWINGS, RECENT EDITION, THE SSPWC 'LATEST EDITION', AND IN CONFORMANCE WITH THE REQUIREMENTS OF THE BEAUMONT DRAINAGE MANAGEMENT PLAN.
- CONTRACTOR SHALL COMPLY WITH THE STATE AND LOCAL SAFETY CODES DURING THE PROGRESS OF WORK.
- CONSTRUCTION PROJECTS THAT DISTURB MORE THAN ONE ACRE MUST OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT. OWNER/DEVELOPERS ARE REQUIRED TO FILE A NOTICE OF INTENT (NOI) WITH THE STATE WATER RESOURCES CONTROL BOARD (SWRCB) AND COMPLY WITH ALL REQUIREMENTS OF THE BEAUMONT DRAINAGE MANAGEMENT PLAN. BEAUMONT IS CO-PERMITTEE WITH R.C.F.C. & W.C.D.
- ALL STORM DRAINS, CATCH BASINS, AND STORM WATER RUNOFF STRUCTURES WILL BE PROVIDED WITH ADEQUATE CAPABILITIES TO FILTER AND RETAIN SEDIMENT AND DIRT, OIL, AND GREASE, TO PREVENT POLLUTION IN STORM WATER RUNOFF IN COMPLIANCE WITH THE CITY OF BEAUMONT'S BEST MANAGEMENT PRACTICES AND THE BEAUMONT DRAINAGE MASTER PLAN FOR STORM WATER AS WELL AS BEST MANAGEMENT PRACTICES IDENTIFIED IN THE CURRENT REPORT OF WASTE DISCHARGE FOR RIVERSIDE COUNTY PERMITTEES.
- CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE COUNTY'S OR DISTRICT'S INSPECTOR. THE ADJACENT STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE DEVELOPER SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION. METHOD OF STREET CLEANING SHALL BE DRY SWEEPING OF ALL PAVED AREAS.
- CONTRACTOR SHALL BE THE RESPONSIBILITY TO INSTALL AND MAINTAIN DURING CONSTRUCTION, REGULATORY GUIDE AND WARNING SIGNS WITHIN THE PROJECT LIMITS AND ITS SURROUNDINGS TO PROVIDE SAFE PASSAGE FOR THE TRAVELING PUBLIC AND WORKERS UNTIL THE FINAL COMPLETION AND ACCEPTANCE OF THE PROJECT BY THE CITY OF BEAUMONT.
- CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, CITY OF BEAUMONT, AND THE DEVELOPER'S ENGINEER, HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNERS OR THE DEVELOPER'S ENGINEER.
- CONTRACTOR SHALL BE THE RESPONSIBLE TO OBTAIN AN ENCRoACHMENT PERMIT FOR ALL WORK PERFORMED WITHIN PUBLIC RIGHT-OF-WAY, DEDICATED AND ACCEPTED FOR PUBLIC USE; AND TO BE RESPONSIBLE FOR SATISFACTORY COMPLIANCE FOR ALL CURRENT ENVIRONMENTAL REGULATIONS DURING THE LIFE OF CONSTRUCTION ACTIVITIES FOR THIS PROJECT.
- CONTRACTOR MUST NOTIFY THE CITY OF BEAUMONT AT (951) 769-8520 AT LEAST ONE WEEK PRIOR TO CONSTRUCTION.
- CONTRACTOR MUST PROVIDE CONSTRUCTION SCHEDULE TO THE CITY OF BEAUMONT AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR MUST CALL UNDERGROUND SERVICE ALERT AT 811 AT LEAST 48 HOURS BEFORE EXCAVATION.
- CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY AGENCIES REGARDING TEMPORARY SUPPORT AND SHORING REQUIREMENTS FOR THE VARIOUS UTILITIES SHOWN IN THE PLANS.
- THE CONTRACTOR SHALL VERIFY, BY POT HOLING, THE LOCATION OF POTENTIALLY AFFECTED UTILITIES.
- CONTRACTOR SHALL HAVE GEOTECHNICAL/SOILS ENGINEERING FIRM OBSERVE TRENCHING, BACKFILLING, & SOIL COMPACTION OF ALL UTILITY TRENCHES WITHIN ALL EASEMENTS & ROAD RIGHTS OF WAY. TWO SETS OF COMPACTION REPORTS CERTIFYING THAT WORKS WERE DONE IN CONFORMANCE TO STANDARDS & GEOTECHNICAL REPORT SHALL BE SUBMITTED AFTER EACH UTILITY TRENCH IS COMPLETED & CERTIFIED. COMPACTION REPORT MUST BE SUBMITTED TO THE DEPT. OF PUBLIC WORKS AT LEAST TWO WORKING DAYS BEFORE AGGREGATE BASE MATERIALS ARE PLACED ONSITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING OF THE PROPOSED WORK AREA AND RELOCATION COSTS OF ALL EXISTING UTILITIES.
- ELEVATIONS AND LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE UNLESS OTHERWISE NOTED. ALL UTILITIES SHOWN ARE TO BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS SHOWN ARE TO THE INVERTS OF PIPE, EXCEPT WHERE OTHERWISE NOTED.
- STORM DRAIN PROFILES CONTAIN CALL-OUTS AND REFERENCE TO INTERSECTING STORM DRAIN LINES. INTERSECTIONS OF THESE JUNCTIONS ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS TO OBTAIN INVERT ELEVATIONS FROM THE RESPECTIVE PROFILE OF THE INTERSECTING PIPE.
- ALL STATIONING REFERS TO THE CENTERLINE OF CONSTRUCTION UNLESS OTHERWISE NOTED.
- STATIONING FOR LATERALS AND CONNECTOR PIPE REFER TO THE CENTERLINE--CENTERLINE--INTERSECTION STATION.
- ALL PIPE LENGTHS ARE HORIZONTAL PROJECTIONS (NOT TRUE LENGTHS OF PIPE) AND ARE THE BASIS OF THE ESTIMATES OF QUANTITIES. THE CONTRACTOR SHALL DETERMINE THE TRUE QUANTITY OF PIPE REQUIRED FOR THIS PROJECT PRIOR TO PLACING THE ORDER.
- ALL CROSS SECTIONS ARE TAKEN LOOKING UPSTREAM.
- OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES TO BE ABANDONED SHALL BE SEALED WITH 6 INCHES OF CLASS "B" CONCRETE.
- PIPE CONNECTED TO THE MAINLINE PIPE SHALL CONFORM TO JUNCTION STRUCTURE NO. 4 (JS 229) UNLESS OTHERWISE NOTED.
- PIPE BEDDING SHALL CONFORM TO R.C.F.C. & W.C.D. STD. DWG. M 815
- "V" IS THE DEPTH OF INLET AT THE CATCH BASINS MEASURED FROM THE TOP OF THE CURB TO THE INVERT OF CONNECTOR PIPE.
- HYDRAULIC GRADE LINES SHOWN IN PROFILES ARE FOR 100 YEAR FREQUENCY FLOWS, UNLESS OTHERWISE NOTED.
- ALL BACKFILL AND BEDDING AROUND STRUCTURES AND PIPES SHALL BE COMPACTED TO NOT LESS THAN 90 PERCENT RELATIVE COMPACTION EXCEPT WHERE SUCH MATERIAL IS PLACED UNDER EXISTING PAVED ROADWAYS. THE TOP 3 FEET, MEASURED FROM THE FINISH PAVING, SHALL BE COMPACTED TO 95 PERCENT RELATIVE COMPACTION.
- CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATED MATERIAL AT MANDATORY DISPOSAL SITE.
- ALL CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS, AND OTHER EXISTING IMPROVEMENTS TO BE RECONSTRUCTED IN KIND PER LATEST COUNTY STANDARD AND AT THE SAME ELEVATION AND LOCATION AS THE EXISTING IMPROVEMENTS UNLESS OTHERWISE NOTED. FOR PAVEMENT OVERLAY, 0.10' MIN. FOR FULL LANE WIDTH IS REQUIRED.
- ALL UNDERGROUND FACILITIES WITH LATERALS SHALL BE IN PLACE PRIOR TO PAVING THE STREET, INCLUDING BUT NOT LIMITED TO, THE FOLLOWING: SEWER, WATER, ELECTRIC, STORM DRAINS.
- ALL SURVEY MONUMENTS SHALL BE REPLACED AS REQUIRED. MONUMENTS SHALL BE TIED OUT PRIOR TO CONSTRUCTION AND REPLACED UPON COMPLETION OF CONSTRUCTION.

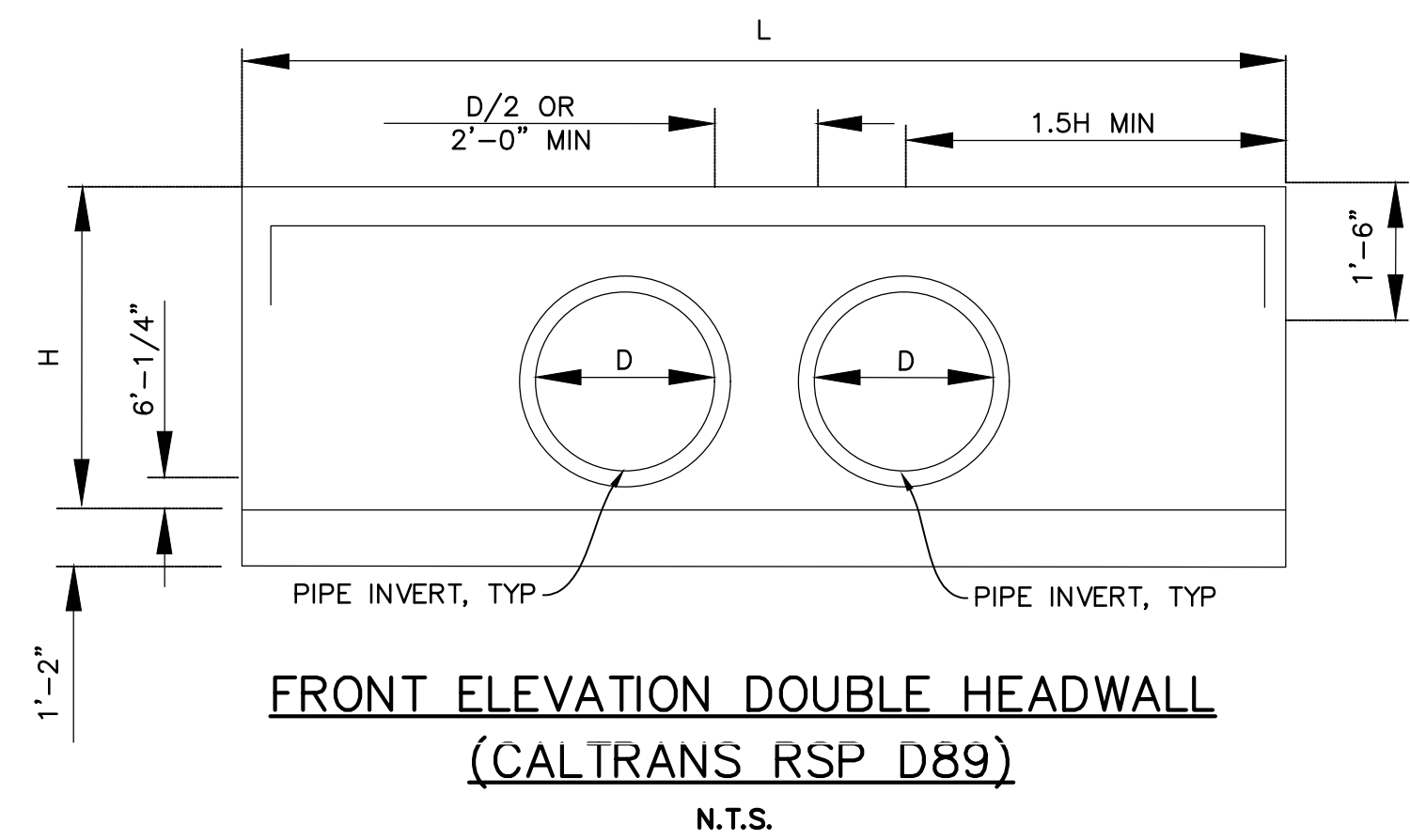
ABBREVIATIONS

AC	ASPHALT CONCRETE	PP	POWER POLE
BEG	BEGIN	PVMT	PAVEMENT
BC	BEGIN CURVE	PRWY	PARKWAY
BCR	BEGIN CURB RETURN	PVI	POINT OF VERTICAL INTERSECTION
BF	BACK FLOW	PRC	POINT OF REVERSE COURSE
BFP	BACK FLOW PREVENTER	PROP	PROPOSED
BVCE	BEGIN VERTICAL CURVE ELEVATION	PT	POINT
BVCS	BEGIN VERTICAL CURVE STATION	R/W	RIGHT OF WAY
CB	CATCH BASIN	RCB	REINFORCED CONCRETE BOX
CL/℄	CENTERLINE	RCFC	RIVERSIDE COUNTY FLOOD CONTROL
CLF	CHAIN LINK FENCE	RCP	REINFORCED CONCRETE PIPE
COB	CITY OF BEAUMONT	RT	RIGHT
CONC	CONCRETE	SC	SAWCUT
COR	COUNTY OF RIVERSIDE	SD	STORM DRAIN
C&G	CURB & GUTTER	SDMH	STORM DRAIN MANHOLE
DI	DRAINAGE INLET	S'LY	SOUTHERLY
DWY	DRIVEWAY	S/O	SOUTH OF
E/ELEC	ELECTRICAL	SHLD	SHOULDER
E'LY	EASTERLY	SIC	SIGNAL INTERCONNECT
E/O	EAST OF	SL	STREET LIGHT
ECR	END CURB RETURN	SMH	SEWER MANHOLE
EC	END CURVE	SOCAL	SOUTHERN CALIFORNIA GAS COMPANY
EG	EXISTING GRADE	SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
EMH	ELECTRICAL MANHOLE	SS	SANITARY SEWER
EP	EDGE OF PAVEMENT	ST	STREET
ES	EDGE OF SHOULDER	STA	STATION
ETW	EDGE OF TRAVELED WAY	SW	SIDEWALK
EVCE	END VERTICAL CURVE ELEVATION	STR	STRUCTURE
EVCS	END VERTICAL CURVE STATION	TC	TOP OF CURB
EX	EXISTING	TELE	TELECOMMUNICATIONS
FG	FINISH GRADE	TRANS	TRANSITION
FH	FIRE HYDRATE	TW	TOP OF WALL
HW	HEADWALL	TYP	TYPICAL
IR	IRRIGATION	UE	UNDERGROUND ELECTRICAL
LAT	LATERAL	UPRR	UNION PACIFIC RAILROAD
LIP	LIP OF GUTTER	UTL	UTILITY
LT	LEFT	VC	VERTICAL CURVE
MH	MANHOLE	VCP	VERIFIED CLAY PIPE
N'LY	NORTHERLY	W	WATER
N/O	NORTH OF	W'LY	WESTERLY
PCC	PORTLAND CEMENT CONCRETE	W/O	WEST OF
PENN	PENNSYLVANIA	WM	WATER METER
PG	PROPOSED GRADE	WCD	WATER CONSERVATION DISTRICT
		WV	WATER VALVE

97% SUBMITTAL (NOT FOR CONSTRUCTION)

Z:\2001800.DWG\2001800.00_2\NDSTREET_100%.DWG

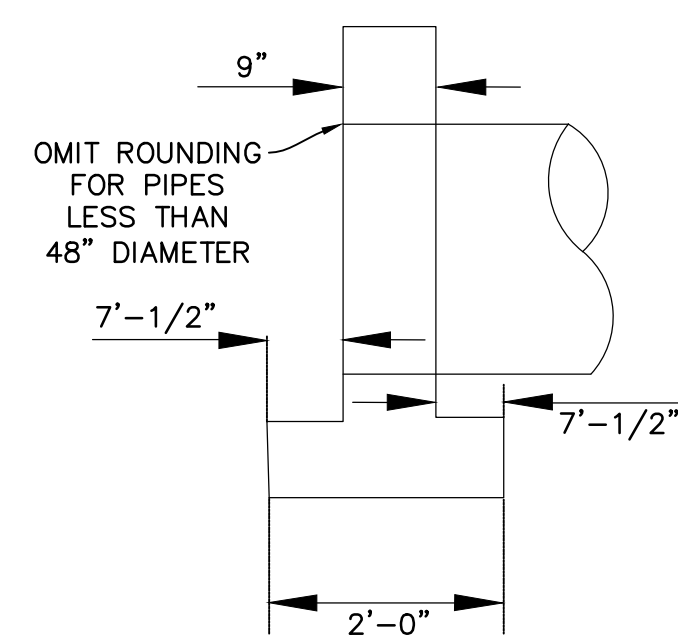
 <p>Call 2 Working Days Before You Dig! 811</p>	<p>BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:</p> <table border="1"> <tr> <th>STATION</th> <th>NGS POINT ID</th> <th>ELEVATION (FT)</th> </tr> <tr> <td>K1311</td> <td>DX3472</td> <td>2601.93</td> </tr> </table> <p>DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF 1-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.</p>	STATION	NGS POINT ID	ELEVATION (FT)	K1311	DX3472	2601.93	 <p>CIVIL / STRUCTURAL ENGINEERS MUNICIPAL CONSULTANTS / PLANNERS SURVEYORS / GPS 151 SOUTH GRAND STREET HENET, CA 92544 TEL: (951) 652-1454 FAX: (951) 765-8942 E-MAIL: BFO@COZAD.COM</p>	<p>PRINCIPAL ENGINEER</p>  <p>BRIAN D. FOX, P.E.</p>	<p>DESIGN BY: A.J.R. DRAWN BY: D.D.S. CHECKED BY: B.D.F. SCALE: 1"=40' DATE: 03/2022 JOB NUMBER: 2001800.00</p>	 <p>BEAUMONT CALIFORNIA 550 E. 6TH ST, BEAUMONT, CA 92223</p>	<p>REVIEWED BY: _____ DATE: _____ STAFF ENGINEER</p> <p>RECOMMENDED BY: _____ DATE: _____ PRINCIPAL ENGINEER</p> <p>APPROVED BY: _____ DATE: _____ CITY ENGINEER</p>	<p>CITY OF BEAUMONT, CALIFORNIA IMPROVEMENT PLANS FOR: 2ND STREET CITY OF BEAUMONT NOTES</p>	<p>S H E E T 2 OF 13 SHEETS FILE NO:</p>			
	STATION	NGS POINT ID	ELEVATION (FT)														
K1311	DX3472	2601.93															
<table border="1"> <thead> <tr> <th>BY</th> <th>MARK</th> <th>DESCRIPTION</th> <th>APPR.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>ENGINEER</td> <td></td> <td>R E V I S I O N S</td> <td>CITY</td> <td></td> </tr> </tbody> </table> <p>PREPARED UNDER THE SUPERVISION OF: BRIAN D. FOX, P.E.; RCE NO. 57264 DATE: _____</p>	BY	MARK	DESCRIPTION	APPR.	DATE	ENGINEER		R E V I S I O N S	CITY								
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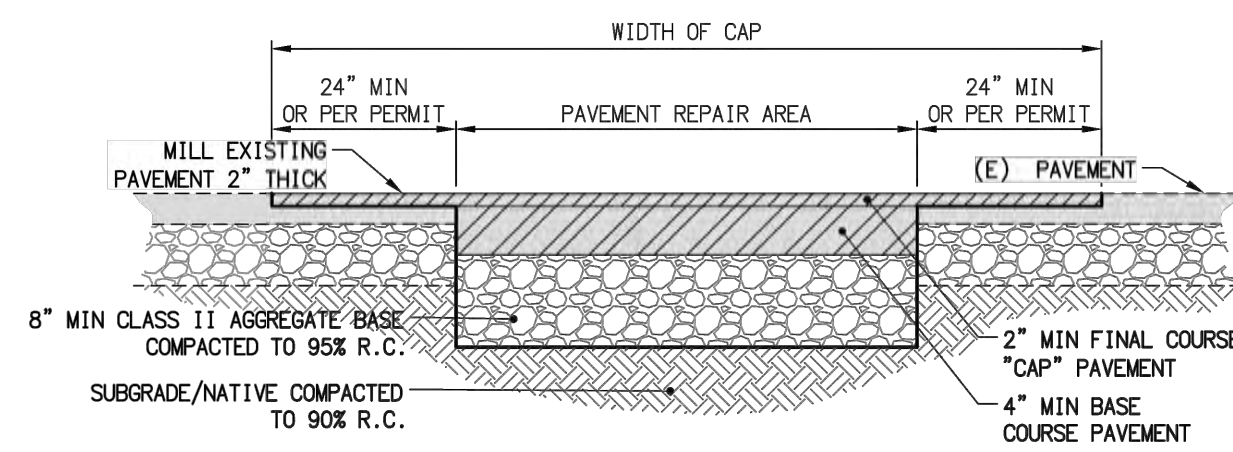
FRONT ELEVATION DOUBLE HEADWALL
(CALTRANS RSP D89)
N.T.S.

HEADWALL DIMENSION FOR CULVERT A, B, & C:		
DIMENSION	UNIT	AMOUNT
D	FT-IN	3'-0"
H	FT-IN	AS SHOWN
L	FT-IN	17'-0"

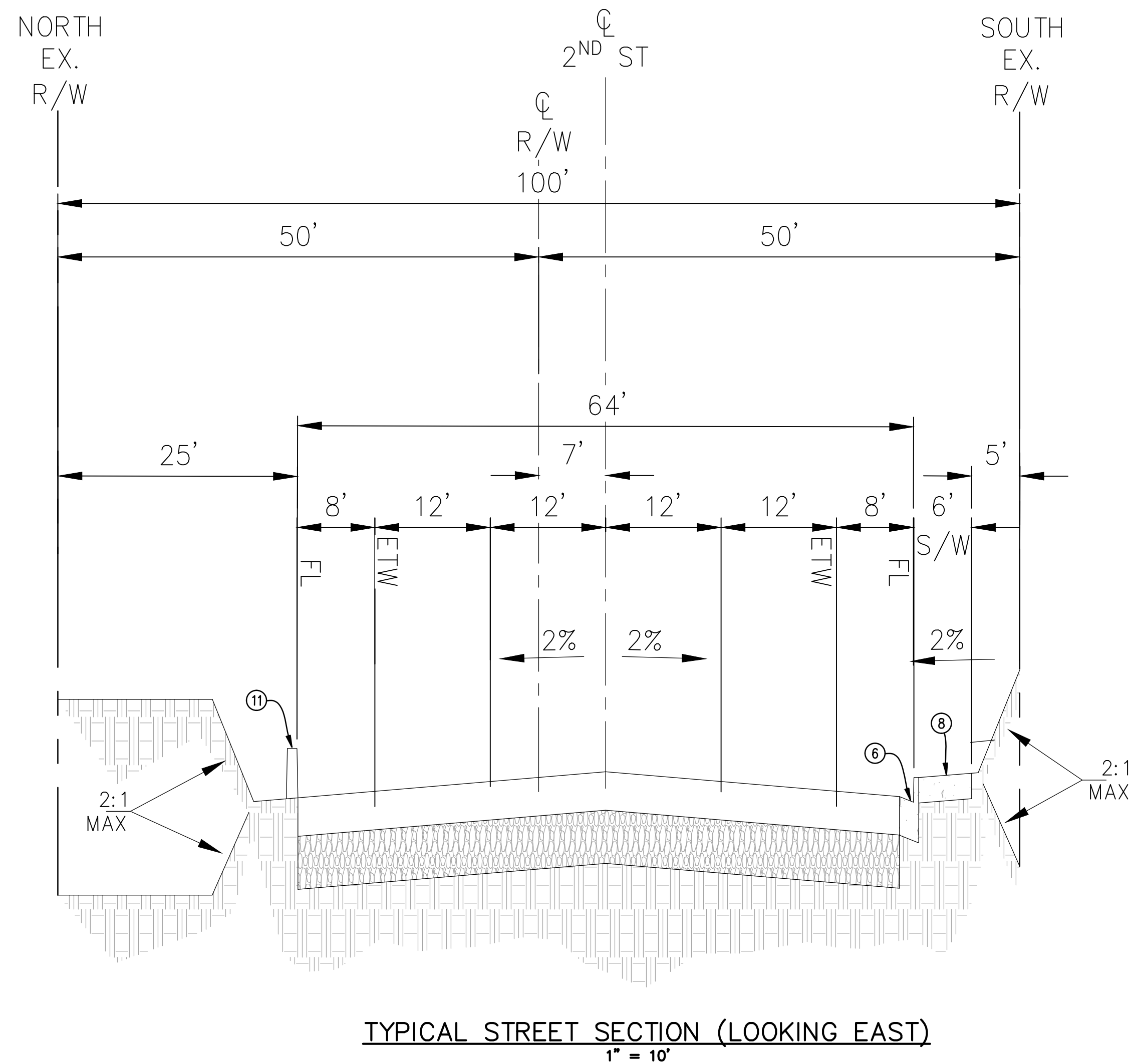
HEADWALL INVERT ELEVATIONS:		
CULVERT No.	ELEVATION (FT)	CULVERT FACING
A	2570.00	NORTH
A	2572.00	SOUTH
B	2565.00	NORTH
B	2567.00	SOUTH
C	2577.00	NORTH
C	2579.00	SOUTH



SECTION DOUBLE HEADWALL
(CALTRANS RSP D89)
N.T.S.

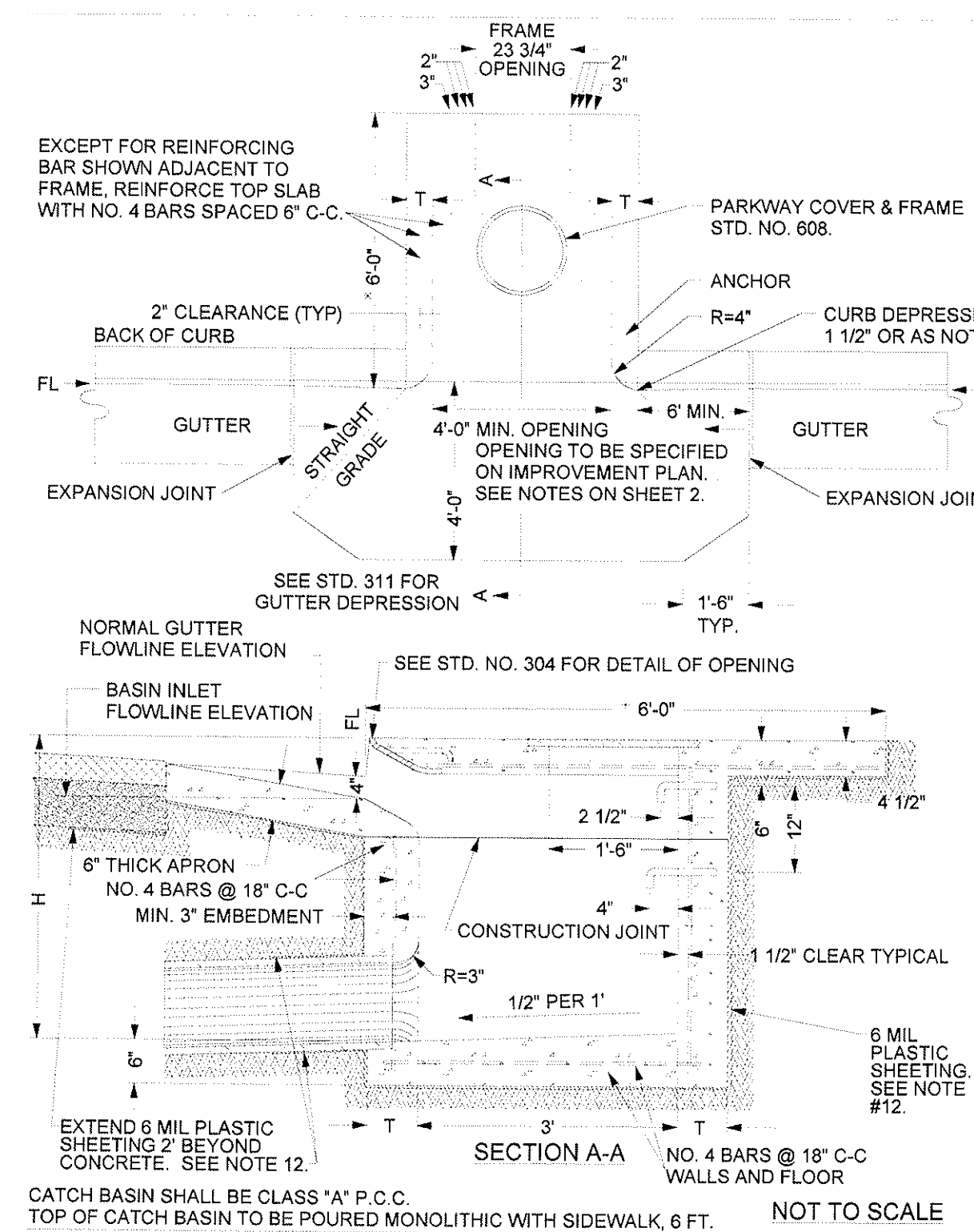


PAVEMENT RESTORATION
N.T.S.



TYPICAL STREET SECTION (LOOKING EAST)
1" = 10'

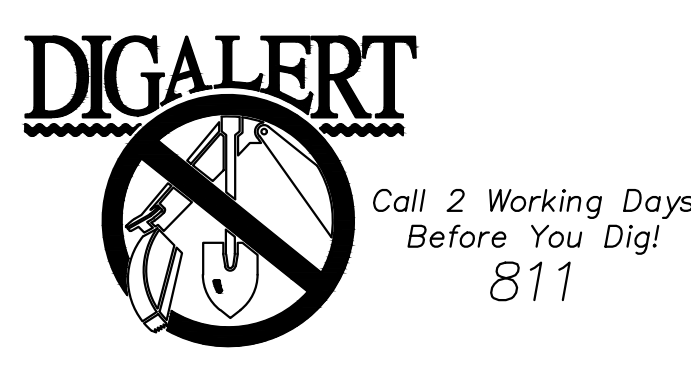
CONSTRUCTION NOTES		QUANTITY ESTIMATES
1	PROTECT IN PLACE.	-
2	SAWCUT AND REMOVE EXISTING AC PAVEMENT TO SUBGRADE.	23,064 FT ²
3	COLDMILL EXISTING AC PAVEMENT (2").	23,064 FT ²
4	CONSTRUCT XX" HMA (1/2 INCH TYPE A PG-64-10) OVER XX" CLASS AB OVER COMPACTED SUBGRADE.	153,749 FT ²
5	CONSTRUCT VARIABLE DEPTH AC OVERLAY (2" MIN).	153,749 FT ²
6	CONSTRUCT TYPE A-B CURB AND GUTTER PER COUNTY OF RIVERSIDE STD. DETAIL 201.	1,622 FT.
7	CONSTRUCT CURB RAMP (CASE PER PLAN) PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	2 EA.
8	CONSTRUCT PCC SIDEWALK PER COUNTY OF RIVERSIDE STD. DETAIL 401.	8,829 FT ²
9	CONSTRUCT 4'X3' TRUNCATED DOMES, DETECTABLE WARNING DETAIL PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	-
10	REMOVE EXISTING CURB AND GUTTER.	3,338 FT.
11	CONSTRUCT AC DIKE TO 8" PER RIVERSIDE COUNTY STANDARD NO. 212.	2,457 FT.
12	REMOVE PCC SW.	-
13	CONSTRUCT TYPE D (8-INCH) CURB PER COUNTY OF RIVERSIDE STD DETAIL 201.	-
14	EXISTING 36" Ø CONCRETE PIPE.	1 EA
15	MATCH EXISTING SIDEWALK.	-
16	MATCH EXISTING ASPHALT CONCRETE.	-
17	GRIND AND CAP EXISTING ASPALT CONCRETE.	23,064 FT ²
18	PROTECT IN PLACE CURRENT SEWER LINE.	1 EA
19	PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.	1 EA
20	PROPOSED STORM DRAIN STRUCTURE.	1 EA
21	PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	-
22	CONSTRUCT DOUBLE STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP D89.	3 EA
23	MATCH TO EXISTING CURB AND GUTTER.	-
24	EXISTING HEADWALL.	2 EA
25	EXISTING 60" Ø CONCRETE PIPE.	2 EA



CURB INLET CATCH BASIN (RIV. CO. STD. NO. 300)
N.T.S.

97% SUBMITTAL (NOT FOR CONSTRUCTION)

Z:\2001800\DWG\2001800.00_2\NOSTREET_100%.DWG

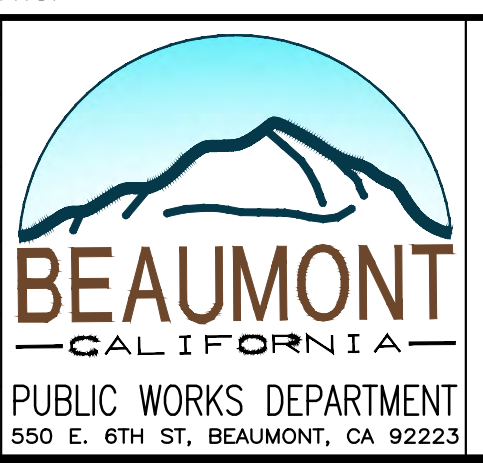


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BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

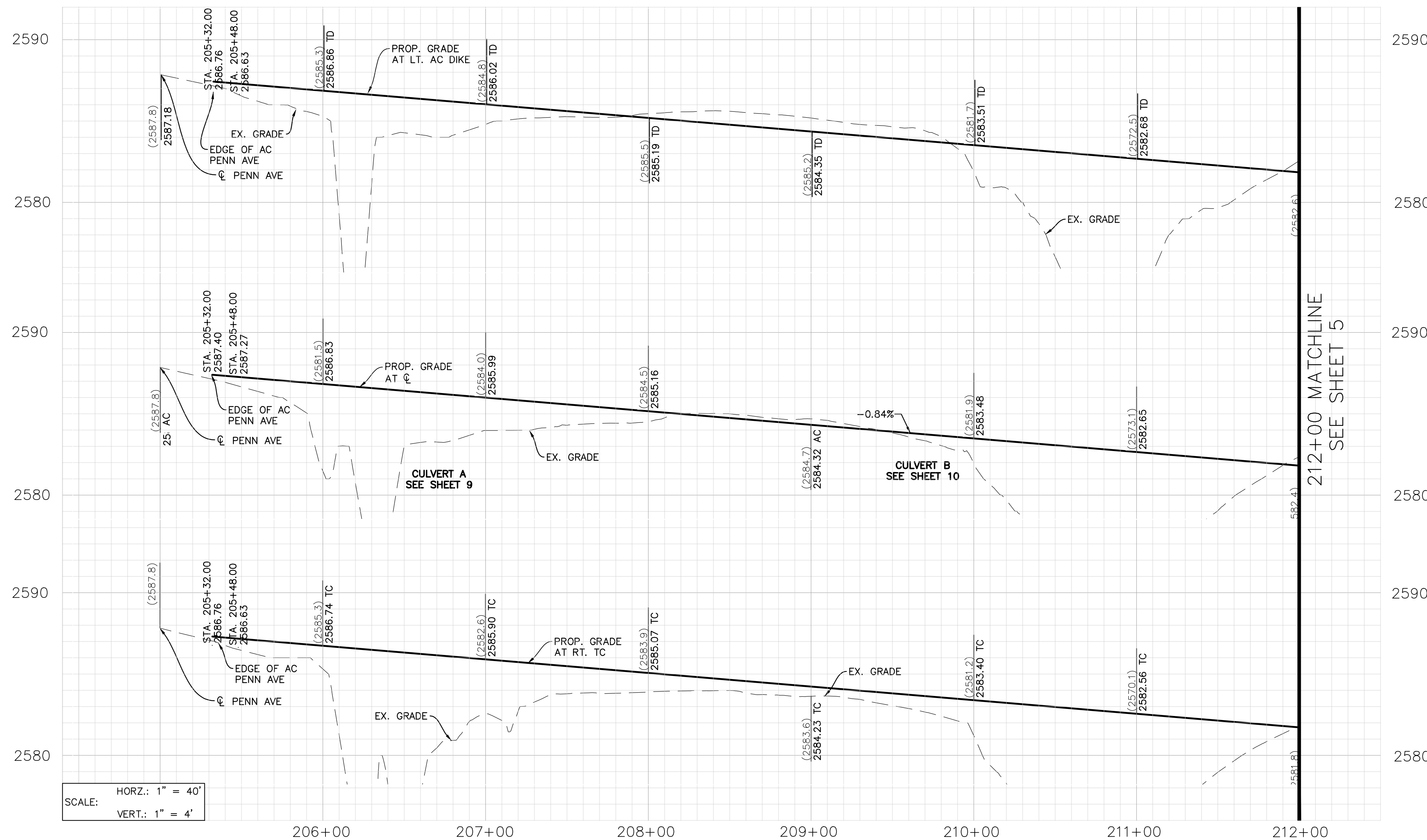
PREPARED UNDER THE SUPERVISION OF:
BRIAN D. FOX, P.E.; RCE NO. 57264 DATE

PRINCIPAL ENGINEER
DESIGN BY: A.J.R.
DRAWN BY: D.D.S.
CHECKED BY: B.D.F.
SCALE: 1"=40'
DATE: 03/2022
JOB NUMBER: 2001800.00



REVIEWED BY: _____ STAFF ENGINEER DATE: _____
RECOMMENDED BY: _____ PRINCIPAL ENGINEER DATE: _____
APPROVED BY: _____ CITY ENGINEER DATE: _____

CITY OF BEAUMONT, CALIFORNIA
IMPROVEMENT PLANS FOR:
2ND STREET SECTIONS/DETAIL SHEET
SHEET 3 OF 13 SHEETS
FILE NO:



SCALE: HORIZ.: 1" = 40'
VERT.: 1" = 4'

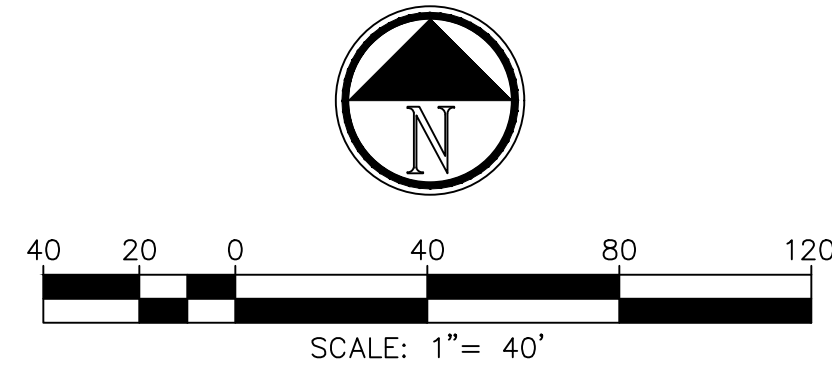
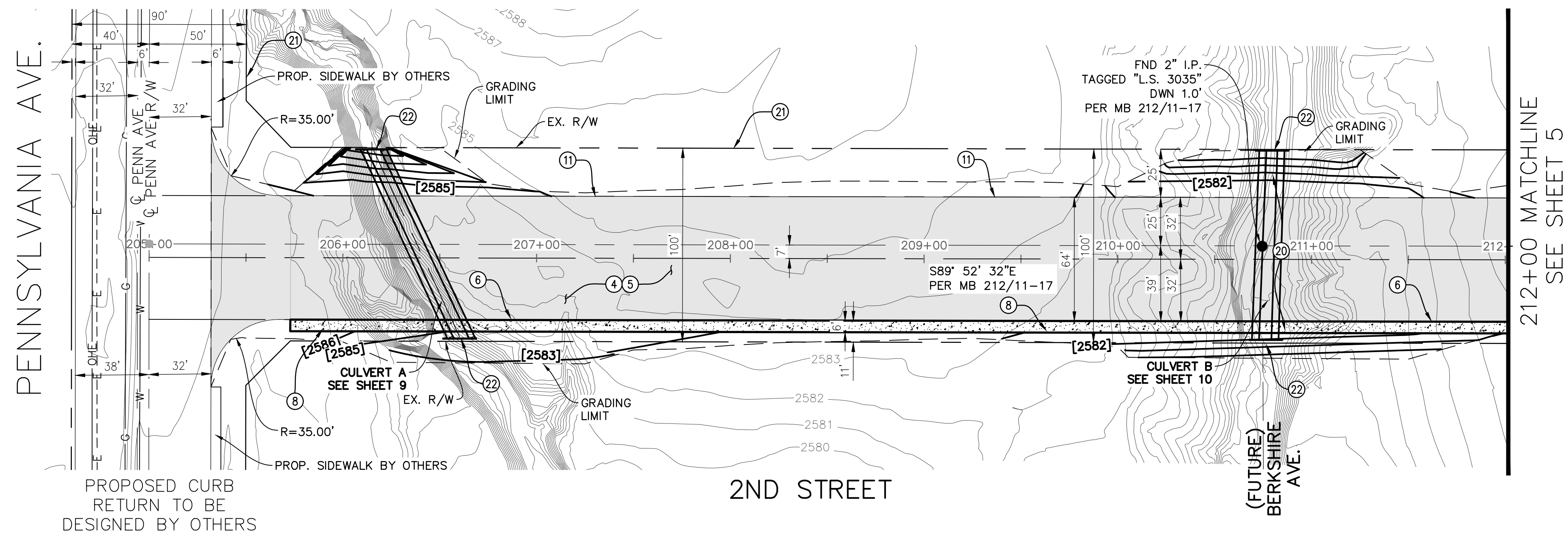
CONSTRUCTION NOTES	
1	PROTECT IN PLACE.
2	SAWCUT AND REMOVE EXISTING AC PAVEMENT TO SUBGRADE.
3	COLDMILL EXISTING AC PAVEMENT (2").
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17	GRIND AND CAP EXISTING ASPHALT CONCRETE.
18	PROTECT IN PLACE CURRENT SEWER LINE.
19	PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.
20	PROPOSED STORM DRAIN STRUCTURE.
21	PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
22	CONSTRUCT STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP D99.
23	MATCH TO EXISTING CURB AND GUTTER.
24	EXISTING HEADWALL.
25	EXISTING 60" # CONCRETE PIPE.
26	INSTALL CURB INLET CATCH BASIN PER COUNTY OF RIVERSIDE STANDARD NO. 300.
27	CONSTRUCT RIP-RAP APRON.
28	FURNISH AND INSTALL PRECAST TYPE G3 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73B AND GUTTER DEPRESSION PER CALTRANS STANDARD PLAN RSP D78A, TYPE G3 INLET IN GRADE S&S.
29	FURNISH AND INSTALL TWO (2) 36-INCH RCP WITH CONCRETE ENCASEMENT.
30	FURNISH AND INSTALL ONE (1) 18-INCH RCP WITH CONCRETE ENCASEMENT.
31	FURNISH AND INSTALL TYPE "X" INLET PER COUNTY OF RIVERSIDE STANDARD NO. CB10B.
32	REMOVE EXISTING MEDIAN STRIPPING.

NOTES

- SEE THE SIGNING AND STRIPING PLANS FOR DISPOSITION OF STREET SIGN REMOVALS AND RELOCATIONS.
- SEE DRAINAGE PLANS FOR DISPOSITION OF DRAINAGE APPURTENANCES.
- EXISTING UTILITIES ARE DEPICTED ON PLAN.

LEGEND

	PROPOSED AC PAVEMENT		POWER POLE
	AC PAVEMENT REMOVAL		ELECTRICAL VAULT
	PROPOSED CONCRETE SIDEWALK		WATER VALVE
	REMOVE EXISTING AC PAVEMENT ADD PROPOSED AC PAVEMENT		GAS VALVE
	CENTERLINE		SEWER MANHOLE
	RIGHT OF WAY		FIREHYDRANT
	PROPERTY LINE		
	(EX) OVERHEAD ELECTRIC EDISON		
	(EX) SEWER MAIN LINE		
	(EX) 2" GAS LINE		
	(EX) WATER LINE		
	EDGE OF DIRT ROAD		
	(EX) TOPO		
	PROP TOPO		



97% SUBMITTAL (NOT FOR CONSTRUCTION)

Z: 2001800.DWG 2001800.00_2NDSTREET_100%.DWG

DIGALERT
Call 2 Working Days Before You Dig!
811

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ENGINEER		REVISIONS		CITY

Cozad & Fox, Inc.
CIVIL / STRUCTURAL ENGINEERS
MUNICIPAL CONSULTANTS / PLANNERS
SURVEYORS / GPS
151 SOUTH GRAND STREET HENNEY, CA 92544
TEL: (951) 862-1454 FAX: (951) 764-9842
E-MAIL: BFO@COZADFOX.COM

PREPARED UNDER THE SUPERVISION OF:
BRIAN D. FOX, P.E.; RCE NO. 57264 DATE

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PRELIMINARY

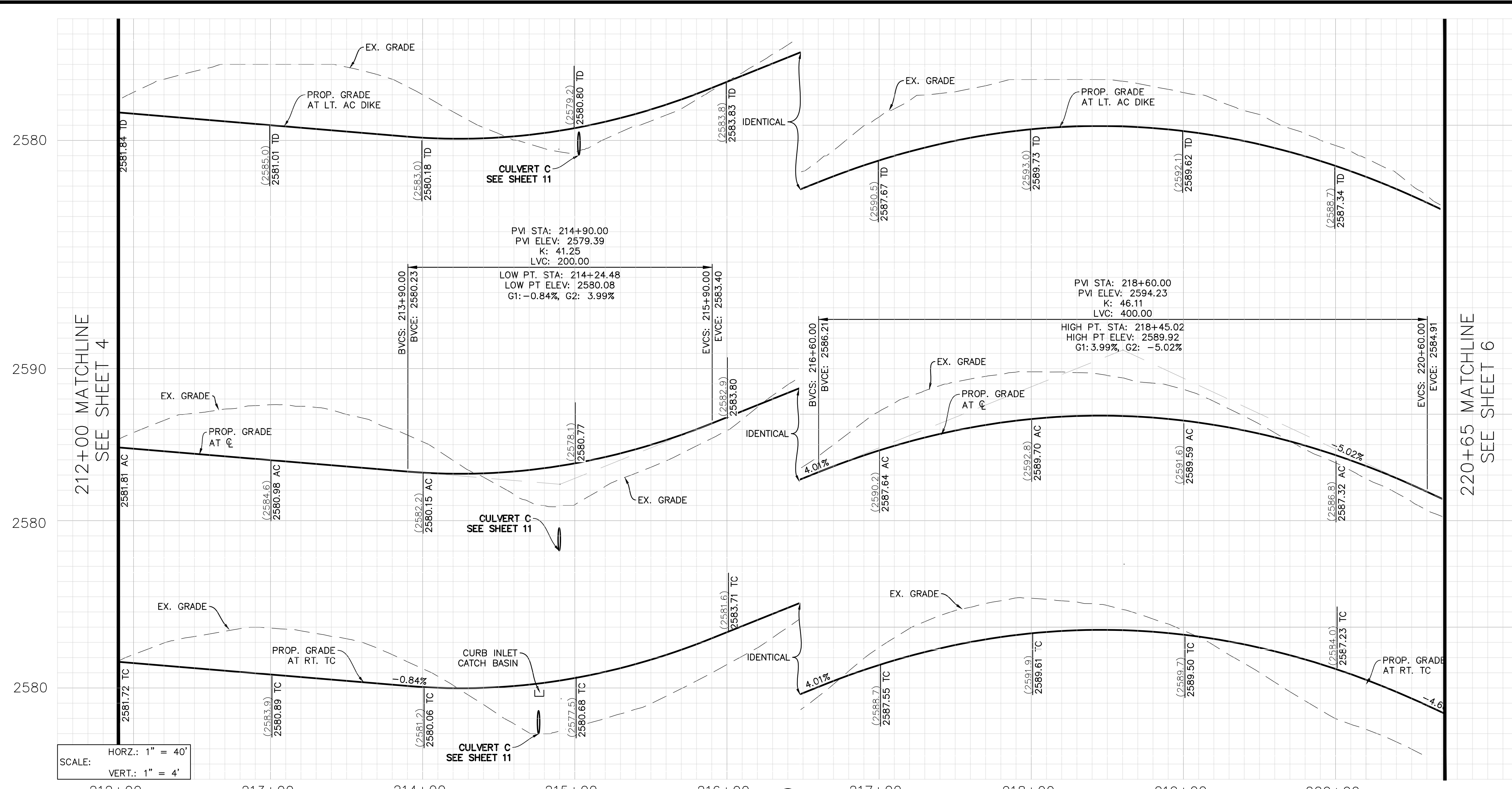
BEAUMONT CALIFORNIA
PUBLIC WORKS DEPARTMENT
550 E. 6TH ST, BEAUMONT, CA 92223

REVIEWED BY:	STAFF ENGINEER	DATE:
RECOMMENDED BY:	PRINCIPAL ENGINEER	DATE:
APPROVED BY:	CITY ENGINEER	DATE:

CITY OF BEAUMONT, CALIFORNIA
IMPROVEMENT PLANS FOR:
2ND STREET
STREET PLAN AND PROFILE
STA 205+00.00 - 212+00.00

SHEET
4
OF 13 SHEETS
FILE NO:

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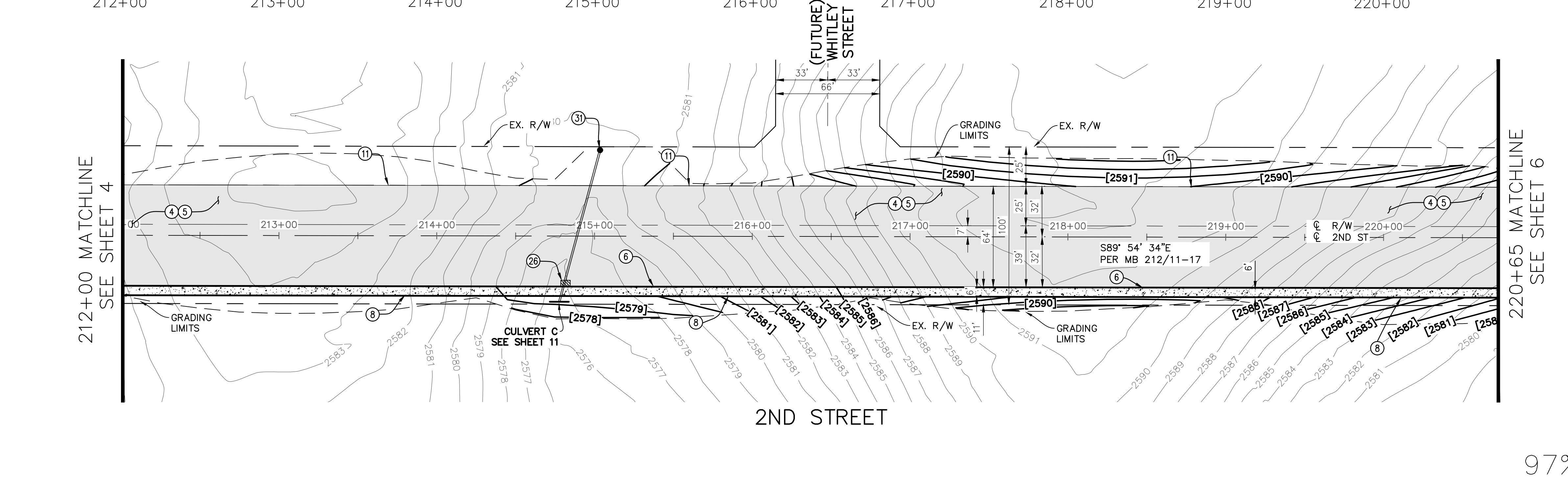
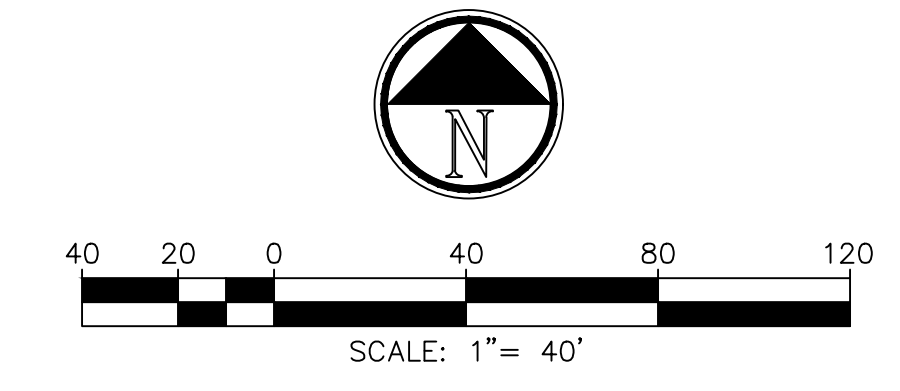


SCALE: HORIZ.: 1" = 40'
VERT.: 1" = 4'

CONSTRUCTION NOTES	
1	PROTECT IN PLACE.
2	SAWCUT AND REMOVE EXISTING AC PAVEMENT TO SUBGRADE.
3	COLDMILL EXISTING AC PAVEMENT (2").
4	CONSTRUCT 8" HMA (1/2 INCH TYPE A PG-64-10) OVER 8" CLASS AB OVER COMPACTED SUBGRADE.
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11	CONSTRUCT 8" AC DIKE PER RIVERSIDE COUNTY STANDARD NO. 212.
12	REMOVE PCC SW.
13	CONSTRUCT TYPE D (8-INCH) CURB PER COUNTY OF RIVERSIDE STD DETAIL 201.
14	EXISTING 36" # CONCRETE PIPE.
15	MATCH EXISTING SIDEWALK.
16	MATCH EXISTING ASPHALT CONCRETE.
17	GRIND AND CAP EXISTING ASPHALT CONCRETE.
18	PROTECT IN PLACE CURRENT SEWER LINE.
19	PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.
20	PROPOSED STORM DRAIN STRUCTURE.
21	PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
22	CONSTRUCT STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP D89.
23	MATCH TO EXISTING CURB AND GUTTER.
24	EXISTING HEADWALL.
25	EXISTING 60" # CONCRETE PIPE.
26	INSTALL CURB INLET CATCH BASIN PER COUNTY OF RIVERSIDE STANDARD NO. 300.
27	CONSTRUCT RIP-RAP APRON.
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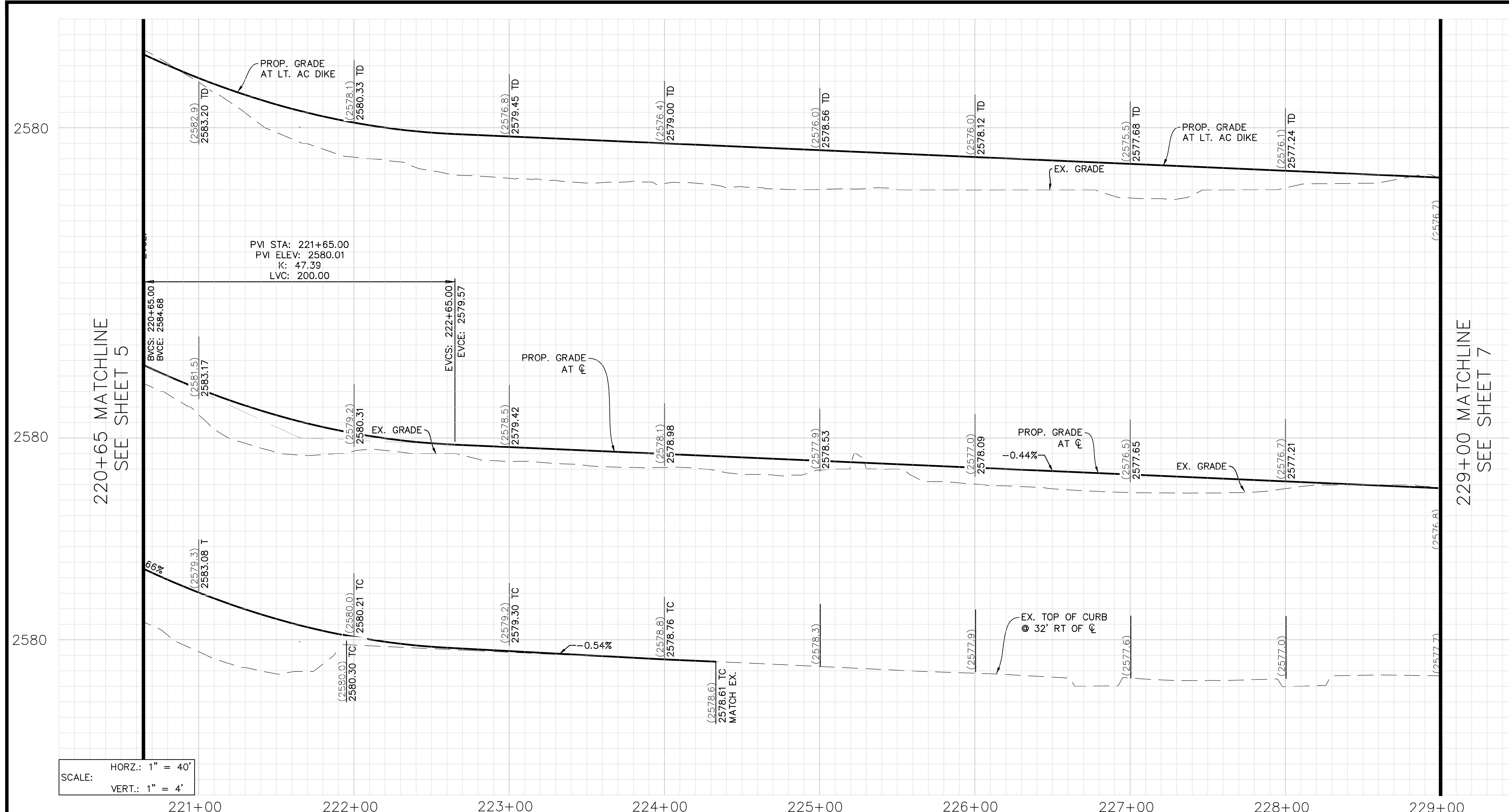
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 - EXISTING UTILITIES ARE DEPICTED ON PLAN.

LEGEND	
	PROPOSED AC PAVEMENT
	AC PAVEMENT REMOVAL
	PROPOSED CONCRETE SIDEWALK
	REMOVE EXISTING AC PAVEMENT ADD PROPOSED AC PAVEMENT
	CENTERLINE
	RIGHT OF WAY
	PROPERTY LINE
	(EX) OVERHEAD ELECTRIC EDISON
	(EX) SEWER MAIN LINE
	(EX) 2" GAS LINE
	(EX) WATER LINE
	EDGE OF DIRT ROAD
	(EX) TOPO
	PROP TOPO
	POWER POLE
	ELECTRICAL VAULT
	WATER VALVE
	GAS VALVE
	SEWER MANHOLE
	FIREHYDRANT



97% SUBMITTAL (NOT FOR CONSTRUCTION)

<p>Call 2 Working Days Before You Dig! 811</p>	<p>BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:</p> <p>STATION K1311 NGS POINT ID DX3472 ELEVATION (FT) 2601.93</p> <p>DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF 1-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.</p>	<p>CIVIL / STRUCTURAL ENGINEERS MUNICIPAL CONSULTANTS / PLANNERS SURVEYORS / GPS</p> <p>151 SOUTH GRAND STREET HENET, CA 92544 TEL: (951) 862-1454 FAX: (951) 766-8942 E-MAIL: BFO@COZADFOX.COM</p>	<p>PRINCIPAL ENGINEER</p> <p>BRIAN D. FOX, P.E., RCE NO. 57264</p>	<p>DESIGN BY: A.J.R.</p> <p>DRAWN BY: D.D.S.</p> <p>CHECKED BY: B.D.F.</p> <p>SCALE: 1"=40'</p> <p>DATE: 03/2022</p> <p>JOB NUMBER: 2001800.00</p>	<p>PUBLIC WORKS DEPARTMENT 550 E. 6TH ST, BEAUMONT, CA 92223</p>	<p>REVIEWED BY: _____ DATE: _____</p> <p>STAFF ENGINEER</p> <p>RECOMMENDED BY: _____ DATE: _____</p> <p>PRINCIPAL ENGINEER</p> <p>APPROVED BY: _____ DATE: _____</p> <p>CITY ENGINEER</p>	<p>CITY OF BEAUMONT, CALIFORNIA</p> <p>IMPROVEMENT PLANS FOR:</p> <p>2ND STREET STREET PLAN AND PROFILE STA 212+00.00 - 220+65.00</p>	<p>SHEET</p> <p>5</p> <p>OF 13 SHEETS</p> <p>FILE NO:</p>				
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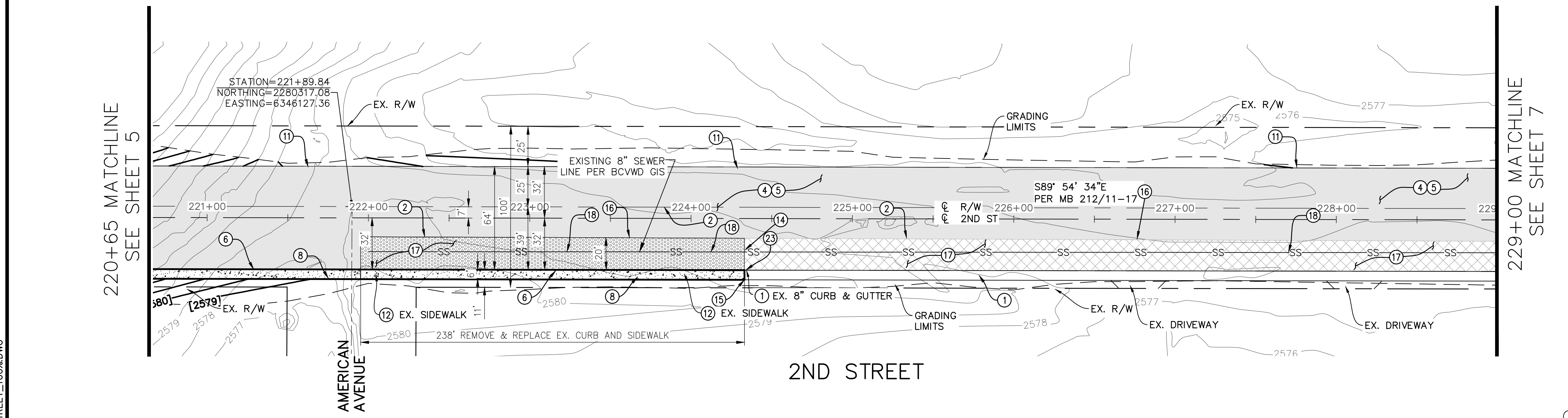
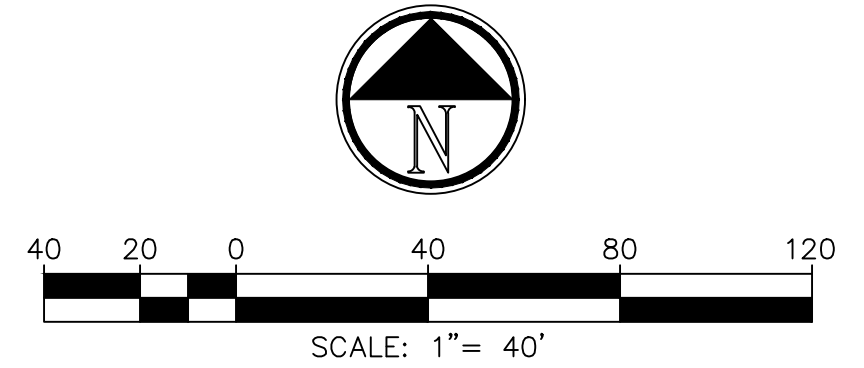
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2580
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2580

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LEGEND

	PROPOSED AC PAVEMENT		POWER POLE
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	REMOVE EXISTING AC PAVEMENT ADD PROPOSED AC PAVEMENT		GAS VALVE
	CENTERLINE		SEWER MANHOLE
	RIGHT OF WAY		FIREHYDRANT
	PROPERTY LINE		
	(EX) OVERHEAD ELECTRIC EDISON		
	(EX) SEWER MAIN LINE		
	(EX) 2" GAS LINE		
	(EX) WATER LINE		
	EDGE OF DIRT ROAD		
	(EX) TOPO		
	[XXXX'] PROP TOPO		



229+00 MATCHLINE
SEE SHEET 7

97% SUBMITTAL (NOT FOR CONSTRUCTION)

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BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

PREPARED UNDER THE SUPERVISION OF:
BRIAN D. FOX, P.E.; RCE NO. 57264 DATE

PRINCIPAL ENGINEER
DESIGN BY: A.J.R.
DRAWN BY: D.D.S.
CHECKED BY: B.D.F.
SCALE: 1"=40'
DATE: 03/2022
JOB NUMBER: 2001800.00

PUBLIC WORKS DEPARTMENT
550 E. 6TH ST., BEAUMONT, CA 92223

REVIEWED BY: _____ DATE: _____
STAFF ENGINEER

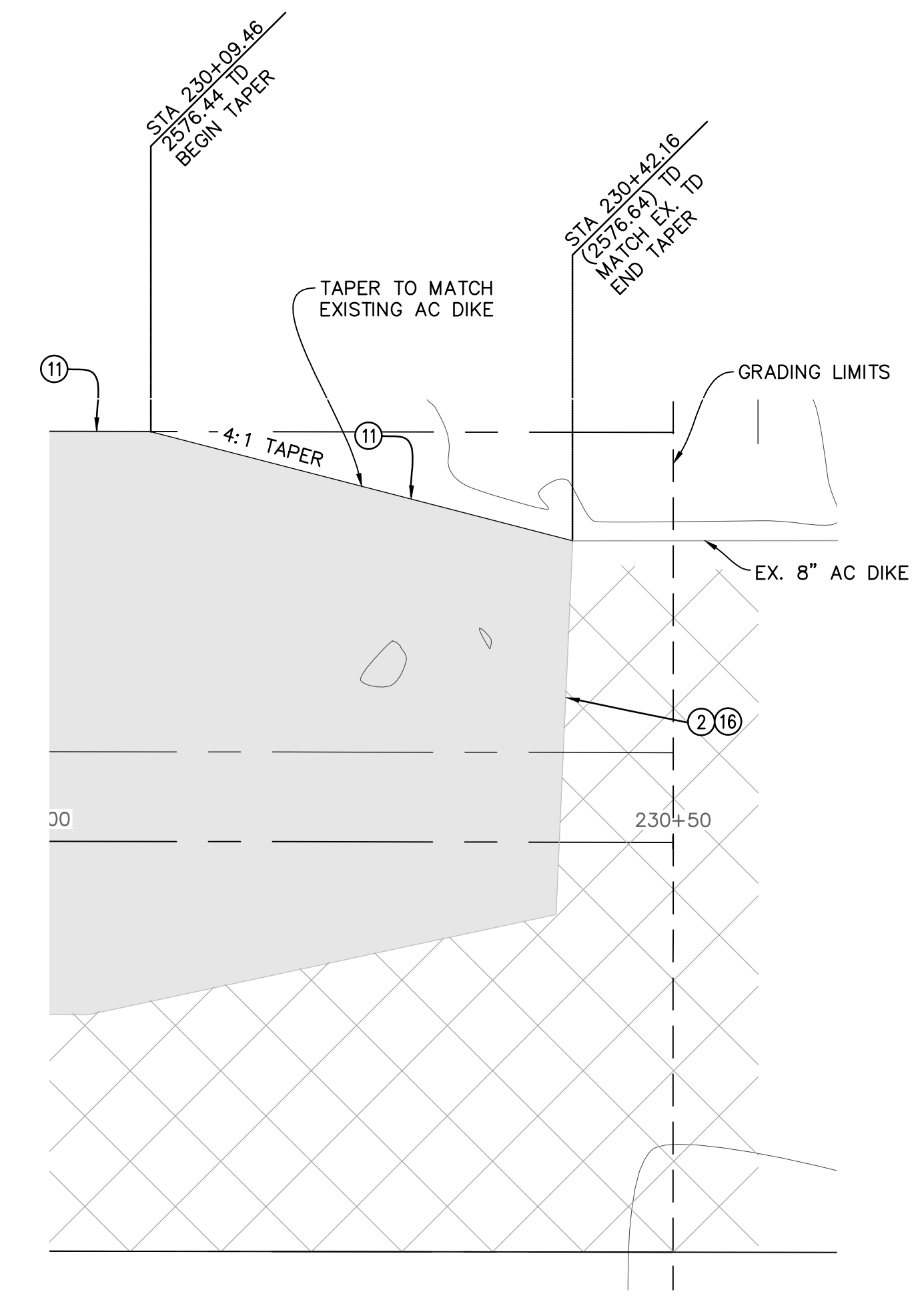
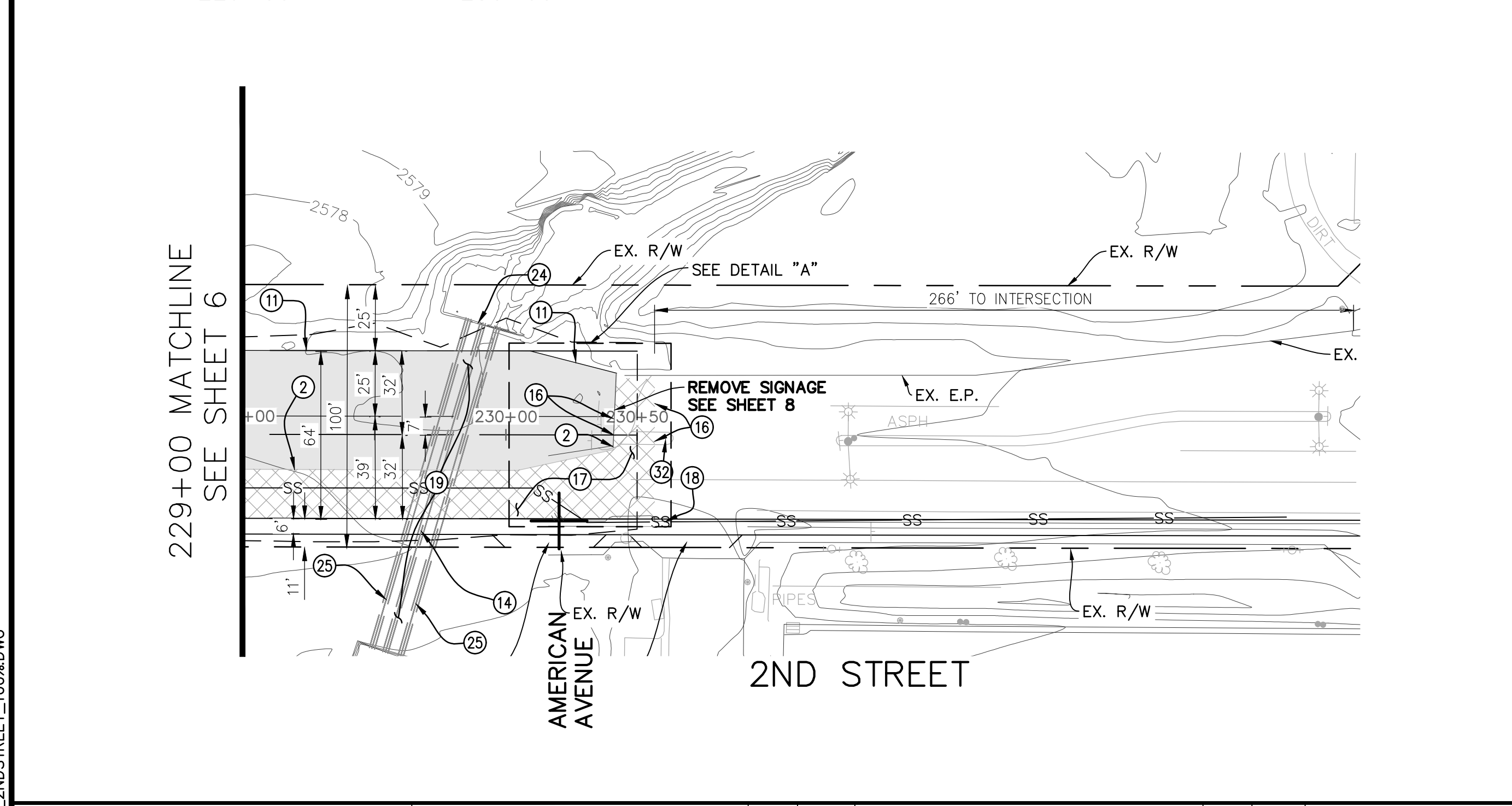
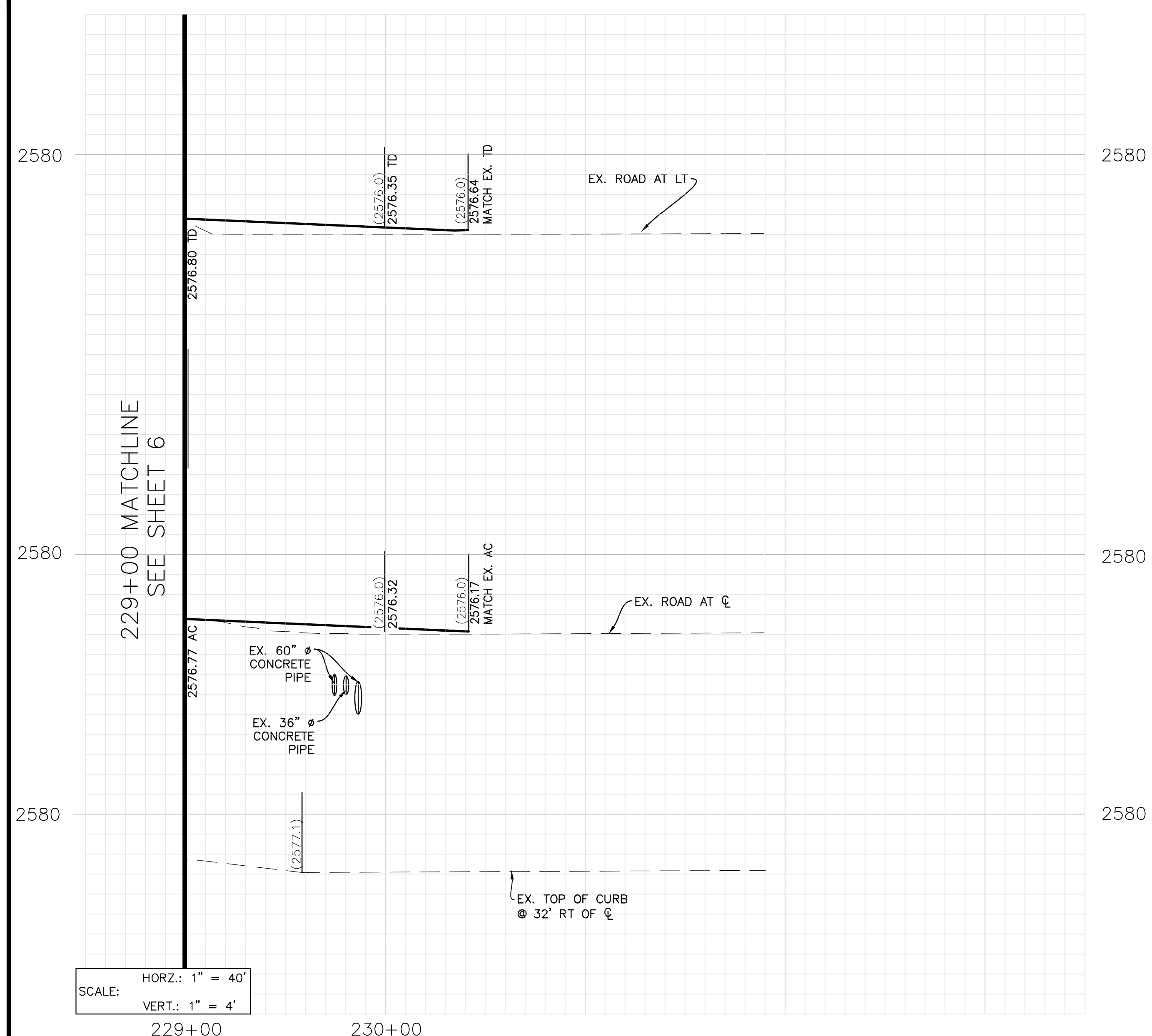
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PRINCIPAL ENGINEER

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CITY ENGINEER

CITY OF BEAUMONT, CALIFORNIA
IMPROVEMENT PLANS FOR:
2ND STREET
STREET PLAN AND PROFILE
STA 220+65.00 - 229+00.00

SHEET
6
OF 13 SHEETS
FILE NO:

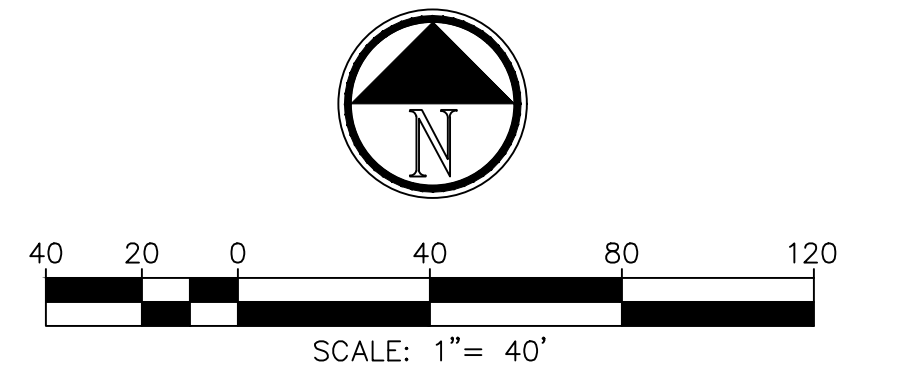
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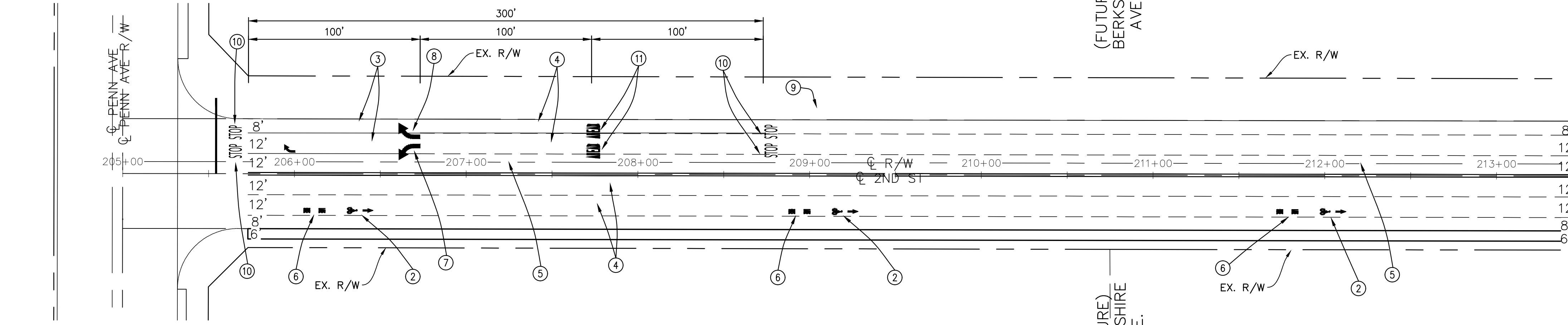
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97% SUBMITTAL (NOT FOR CONSTRUCTION)

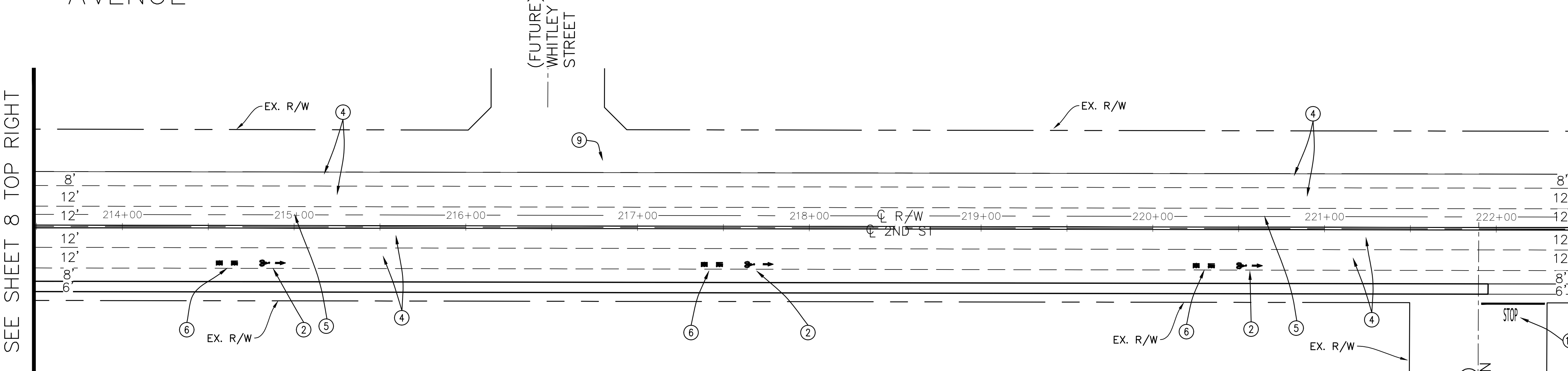
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ENGINEER		REVISIONS		CITY							

PENNSYLVANIA AVENUE



213+50 MATCHLINE
SEE SHEET 8 MIDDLE LEFT

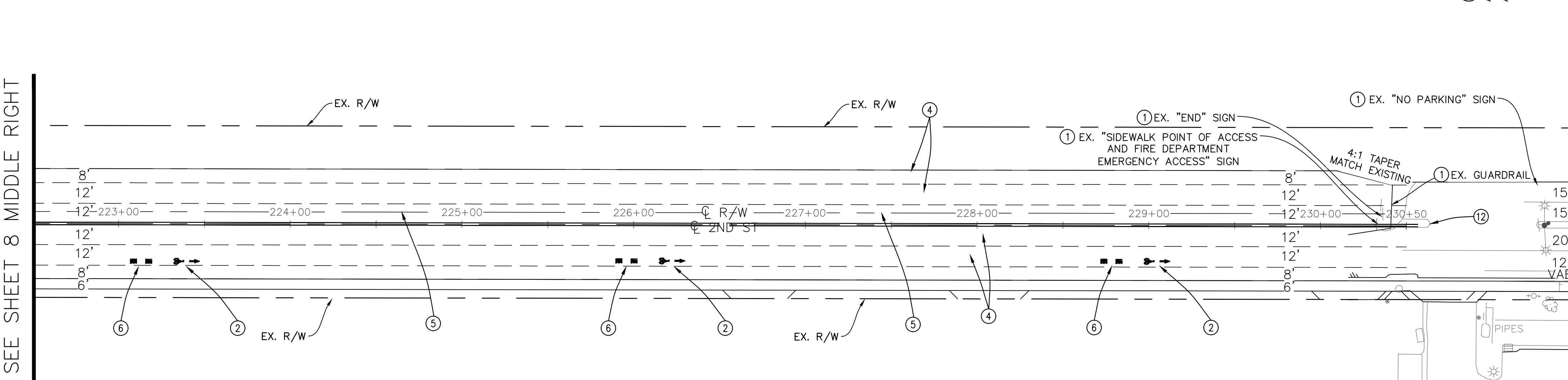
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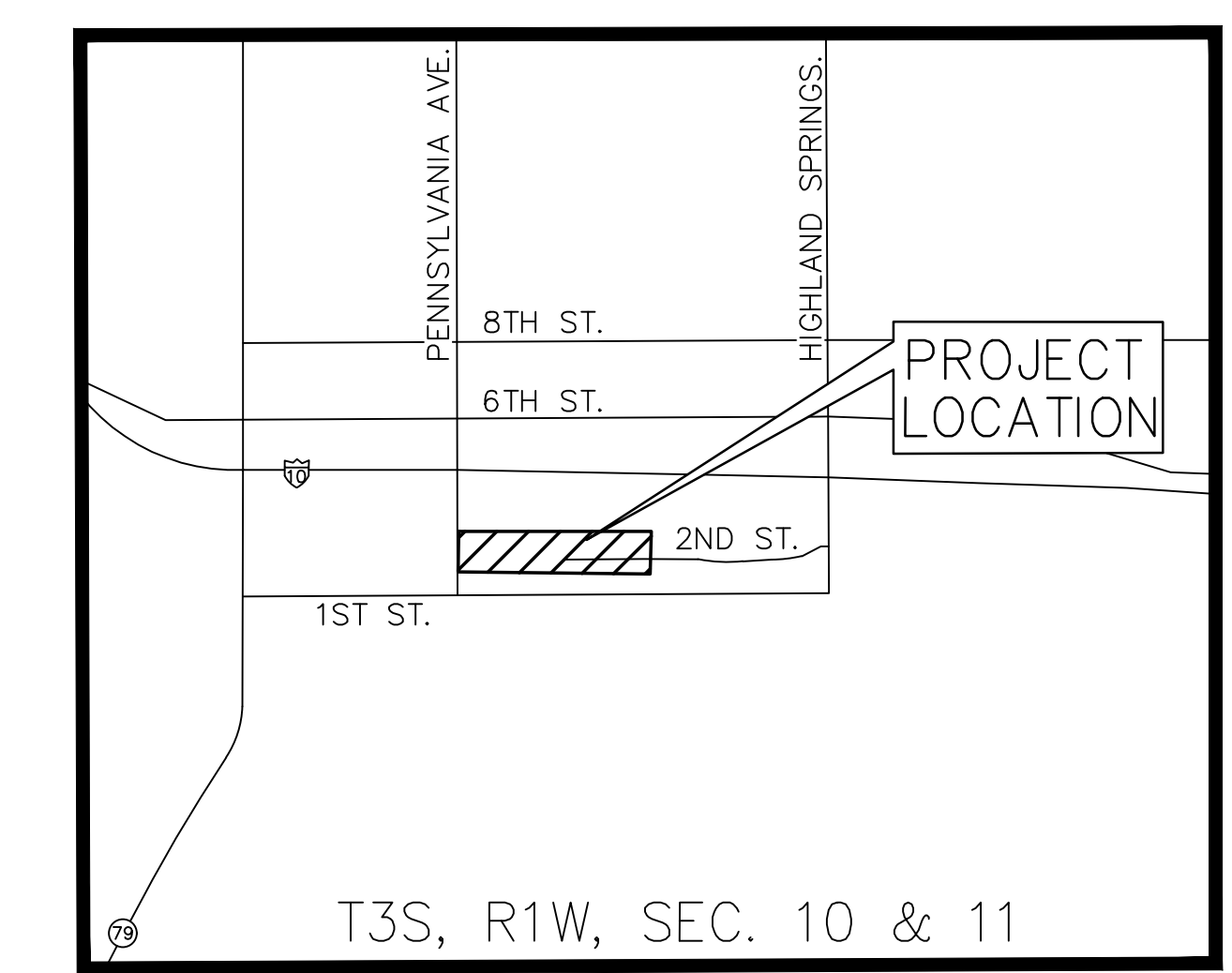
213+50 MATCHLINE
SEE SHEET 8 TOP RIGHT

222+50 MATCHLINE
SEE SHEET 8 BOTTOM LEFT

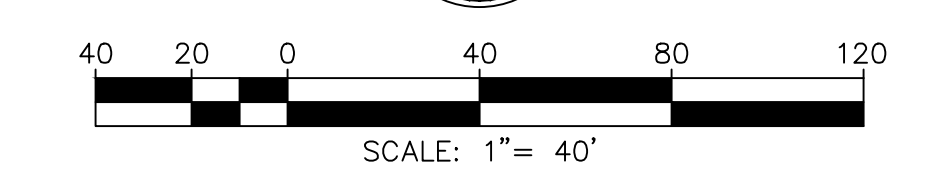
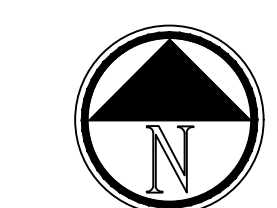
PENNSYLVANIA AVENUE



222+50 MATCHLINE
SEE SHEET 8 MIDDLE RIGHT



T3S, R1W, SEC. 10 & 11
VICINITY MAP
N.T.S.



SIGNAGE AND STRIPING NOTES	
①	REMOVE CONFLICTING STRIPING AND MARKERS
②	INSTALL HELMETED BICYCLIST SYMBOL PER CALIFORNIA MUTCD SPECIFICATIONS
③	INSTALL DETAIL 38 CHANNELIZING LINE PER CALTRANS STANDARD PLAN A20D
④	INSTALL DETAIL 9 STRIPING PER CALTRANS STANDARD PLAN A20A
⑤	INSTALL DETAIL 22 STRIPING PER CALTRANS STANDARD PLAN A20A
⑥	INSTALL BIKE LANE SYMBOL PER CALIFORNIA MUTCD SPECIFICATIONS
⑦	INSTALL TYPE IV(L) PAVEMENT MARKING ARROW PER CALTRANS STANDARD PLAN A24A
⑧	INSTALL TYPE IV(R) PAVEMENT MARKING ARROW PER CALTRANS STANDARD PLAN A24A
⑨	INSTALL DETAIL 27B STRIPING PER CALTRANS STANDARD PLAN A20B
⑩	INSTALL "STOP" LEGEND PER CALTRANS STANDARD PLAN A24D
⑪	INSTALL "AHEAD" LEGEND PER CALTRANS STANDARD PLAN A24D
⑫	REMOVE EXISTING MEDIAN STRIPING

97% SUBMITTAL (NOT FOR CONSTRUCTION)

Z:\2001800\DWG\2001800.00_2NDSTREET_100%_SIGNAGE&STRIPING.DWG

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ENGINEER		REVISIONS	CITY	

PREPARED UNDER THE SUPERVISION OF:
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CHECKED BY: B.D.F.
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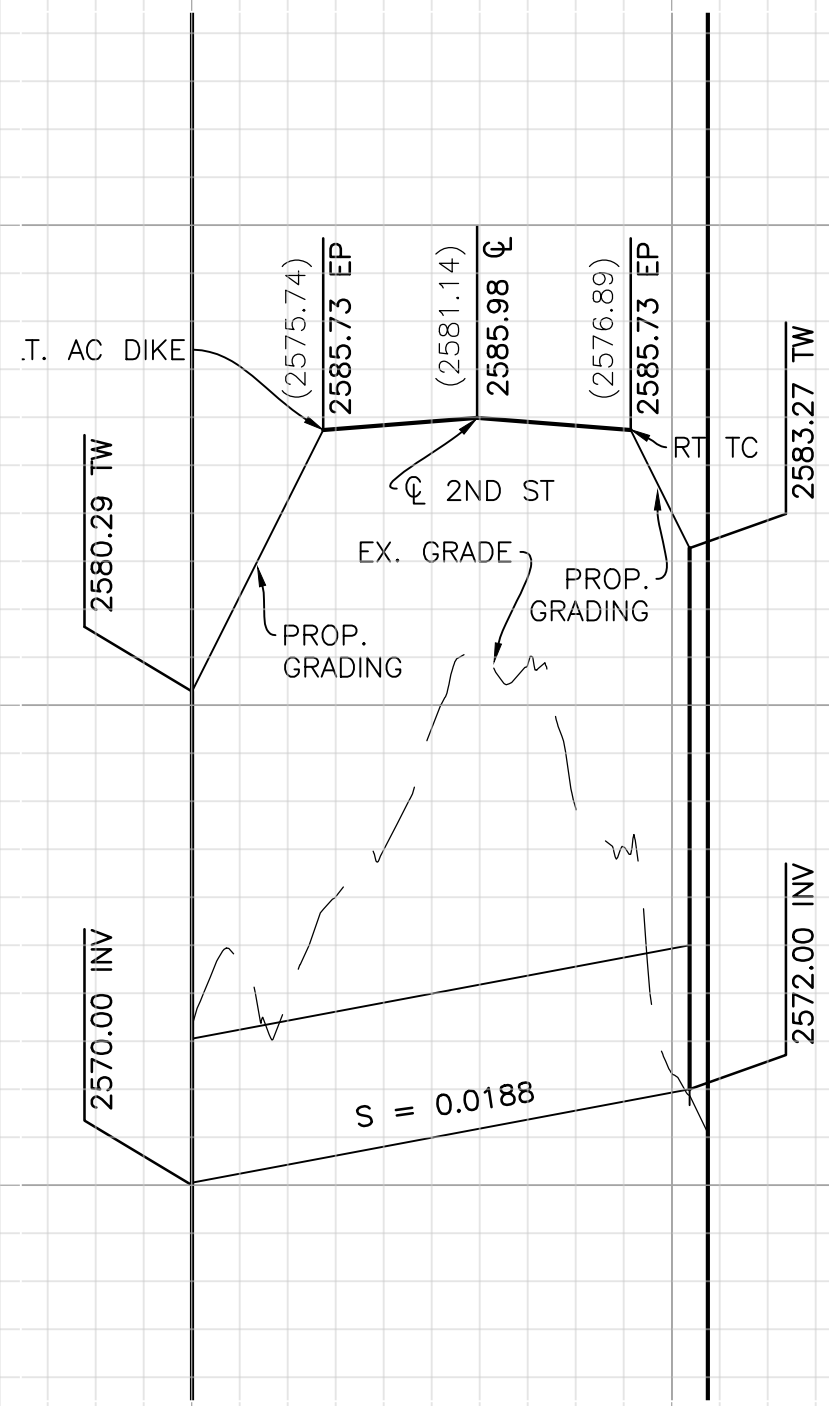
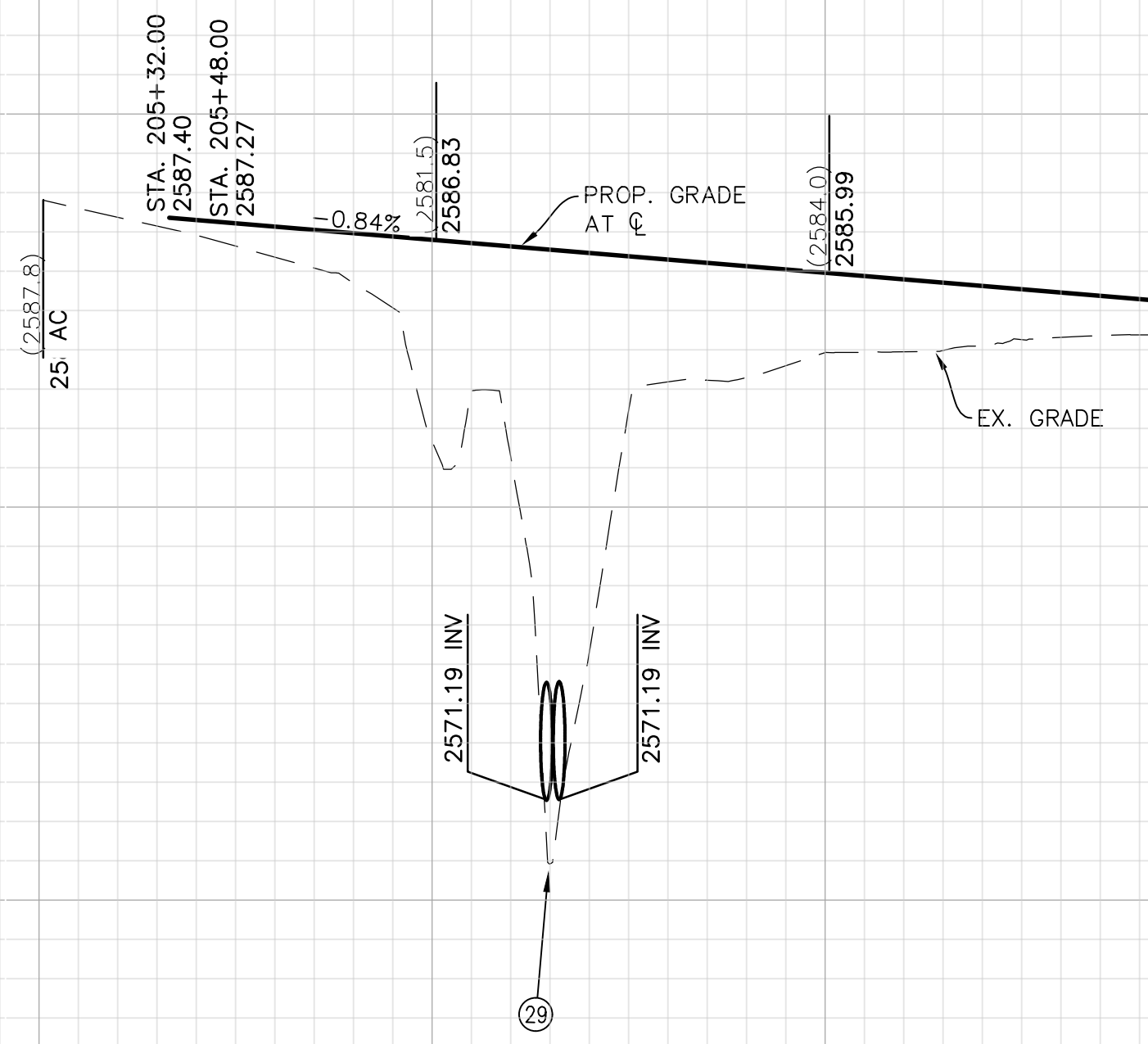
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SHEET
8
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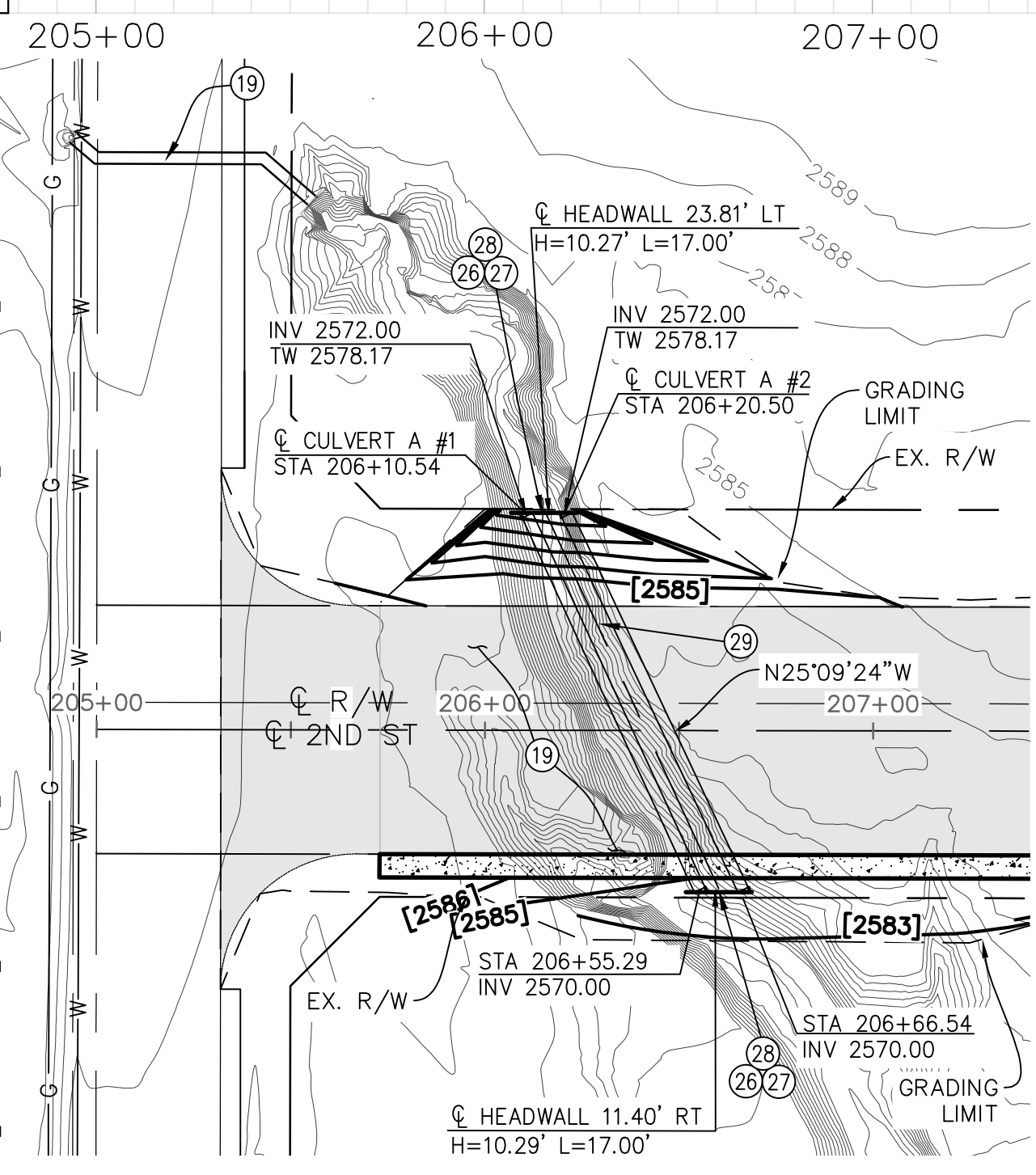
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2580
2570



SECTION AT C

PROFILE
STA 0+00.00 - 1+07.45

SCALE: HORZ.: 1" = 40'
VERT.: 1" = 4'



PROPOSED CULVERT "A"

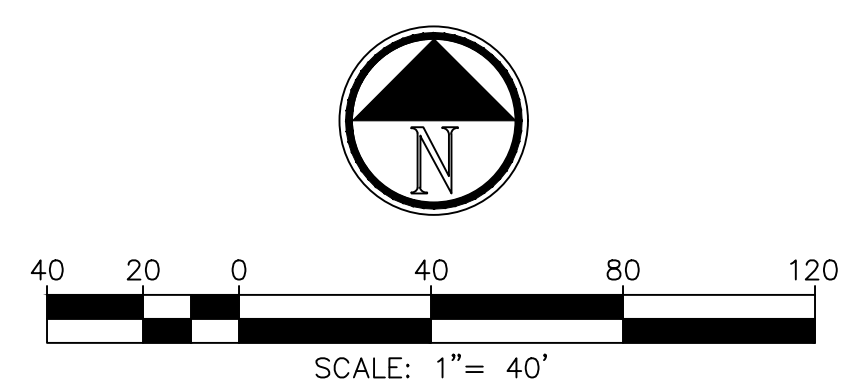
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3	COLDMILL EXISTING AC PAVEMENT (2").
4	CONSTRUCT 8" HMA (1 1/2 INCH TYPE A PG-64-10) OVER 8" CLASS AB OVER COMPACTED SUBGRADE.
5	CONSTRUCT VARIABLE DEPTH AC OVERLAY (2" MIN).
6	CONSTRUCT TYPE A-8 CURB AND GUTTER PER COUNTY OF RIVERSIDE STD. DETAIL 201.
7	CONSTRUCT CURB RAMP (CASE PER PLAN) PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
8	CONSTRUCT PCC SIDEWALK PER COUNTY OF RIVERSIDE STD. DETAIL 401.
9	CONSTRUCT 4"x3" TRUNCATED DOMES, DETECTABLE WARNING DETAIL PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
10	REMOVE EXISTING CURB AND GUTTER.
11	CONSTRUCT 8" AC DIKE PER RIVERSIDE COUNTY STANDARD NO. 212.
12	REMOVE PCC SW.
13	CONSTRUCT TYPE D (8-INCH) CURB PER COUNTY OF RIVERSIDE STD. DETAIL 201.
14	EXISTING 36" Ø CONCRETE PIPE.
15	MATCH EXISTING SIDEWALK.
16	MATCH EXISTING ASPHALT CONCRETE.
17	GRIND AND CAP EXISTING ASPHALT CONCRETE.
18	PROTECT IN PLACE CURRENT SEWER LINE.
19	PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.
20	PROPOSED STORM DRAIN STRUCTURE.
21	PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
22	CONSTRUCT STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP D89.
23	MATCH TO EXISTING CURB AND GUTTER.
24	EXISTING HEADWALL.
25	EXISTING 60" Ø CONCRETE PIPE.
26	INSTALL CURB INLET CATCH BASIN PER COUNTY OF RIVERSIDE STANDARD NO. 300.
27	CONSTRUCT RIP-RAP APRON.
28	FURNISH AND INSTALL PRECAST TYPE G3 DRAINAGE INLET PER CALTRANS STANDARD PLAN D73B AND GUTTER DEPRESSION PER CALTRANS STANDARD PLAN RSP D78A, TYPE G3 INLET IN GRADE SAG.
29	FURNISH AND INSTALL TWO (2) 36-INCH RCP WITH CONCRETE ENCASUREMENT.
30	FURNISH AND INSTALL ONE (1) 18-INCH RCP WITH CONCRETE ENCASUREMENT.
31	FURNISH AND INSTALL TYPE "X" INLET PER COUNTY OF RIVERSIDE STANDARD NO. G510B.
32	REMOVE EXISTING MEDIAN STRIPPING.

NOTES

- SEE THE SIGNING AND STRIPING PLANS FOR DISPOSITION OF STREET SIGN REMOVALS AND RELOCATIONS.
- SEE DRAINAGE PLANS FOR DISPOSITION OF DRAINAGE APPURTENANCES.
- EXISTING UTILITIES ARE DEPICTED ON PLAN.

LEGEND

	PROPOSED AC PAVEMENT		POWER POLE
	AC PAVEMENT REMOVAL		ELECTRICAL VAULT
	PROPOSED CONCRETE SIDEWALK		WATER VALVE
	CENTERLINE		GAS VALVE
	RIGHT OF WAY		SEWER MANHOLE
	PROPERTY LINE		FIREHYDRANT
	(EX) OVERHEAD ELECTRIC EDISON		
	(EX) SEWER MAIN LINE		
	(EX) 2" GAS LINE		
	(EX) WATER LINE		
	EDGE OF DIRT ROAD		
	(EX) TOPO		
	PROP TOPO		



97% SUBMITTAL (NOT FOR CONSTRUCTION)

Z:\2001800\DWG\2001800.00_CULVERTCROSSING_100%.DWG



BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:
STATION K1311 NGS POINT ID DX3472 ELEVATION (FT) 2601.93
DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF 1-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

Cozad & Fox, Inc.
CIVIL / STRUCTURAL ENGINEERS
MUNICIPAL CONSULTANTS / PLANNERS
SURVEYORS / GPS
151 SOUTH GRAND STREET HENET, CA 92544
TEL: (951) 802-1454 FAX: (951) 766-8942
E-MAIL: BFO@COZADFOX.COM

PREPARED UNDER THE SUPERVISION OF:
BRIAN D. FOX, P.E.; RCE NO. 57264 DATE

PRINCIPAL ENGINEER
DESIGN BY: A.J.R.
DRAWN BY: D.D.S.
CHECKED BY: B.D.F.
SCALE: 1"=40'
DATE: 03/2022
JOB NUMBER: 2001800.00

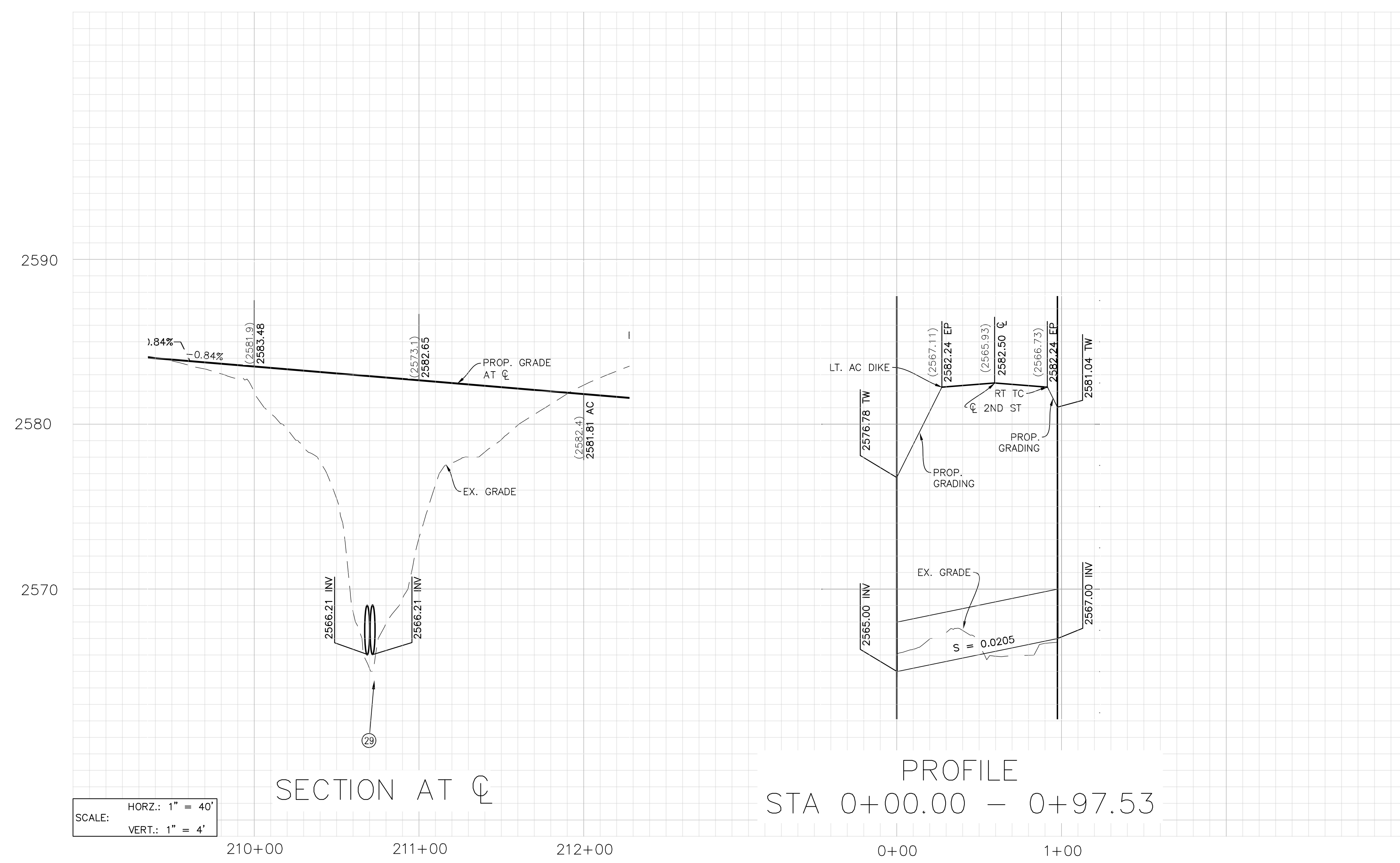
PRELIMINARY

BEAUMONT CALIFORNIA
PUBLIC WORKS DEPARTMENT
550 E. 6TH ST, BEAUMONT, CA 92223

REVIEWED BY: _____	DATE: _____
RECOMMENDED BY: _____	DATE: _____
APPROVED BY: _____	DATE: _____

CITY OF BEAUMONT, CALIFORNIA
IMPROVEMENT PLANS FOR:
2ND STREET CULVERT CROSSING

CONSTRUCTION NOTES	
1	PROTECT IN PLACE.
2	SAWCUT AND REMOVE EXISTING AC PAVEMENT TO SUBGRADE.
3	COLDMILL EXISTING AC PAVEMENT (2").
4	CONSTRUCT 8" HMA (1/2 INCH TYPE A PG-64-10) OVER 8" CLASS AB OVER COMPACTED SUBGRADE.
5	CONSTRUCT VARIABLE DEPTH AC OVERLAY (2" MIN).
6	CONSTRUCT TYPE A-8 CURB AND GUTTER PER COUNTY OF RIVERSIDE STD. DETAIL 201.
7	CONSTRUCT CURB RAMP (CASE PER PLAN) PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
8	CONSTRUCT PCC SIDEWALK PER COUNTY OF RIVERSIDE STD. DETAIL 401.
9	CONSTRUCT 4'x3' TRUNCATED DOMES, DETECTABLE WARNING DETAIL PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
10	REMOVE EXISTING CURB AND GUTTER.
11	CONSTRUCT 8" AC DIKE PER RIVERSIDE COUNTY STANDARD NO. 212.
12	REMOVE PCC SW.
13	CONSTRUCT TYPE D (8-INCH) CURB PER COUNTY OF RIVERSIDE STD DETAIL 201.
14	EXISTING 36" Ø CONCRETE PIPE.
15	MATCH EXISTING SIDEWALK.
16	MATCH EXISTING ASPHALT CONCRETE.
17	GRIND AND CAP EXISTING ASPHALT CONCRETE.
18	PROTECT IN PLACE CURRENT SEWER LINE.
19	PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.
20	PROPOSED STORM DRAIN STRUCTURE.
21	PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
22	CONSTRUCT STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP D89.
23	MATCH TO EXISTING CURB AND GUTTER.
24	EXISTING HEADWALL.
25	EXISTING 60" Ø CONCRETE PIPE.
26	INSTALL CURB INLET CATCH BASIN PER COUNTY OF RIVERSIDE STANDARD NO. 300.
27	CONSTRUCT RIP-RAP APRON.
28	FURNISH AND INSTALL PRECAST TYPE G3 DRAINAGE INLET PER CALTRANS STANDARD PLAN D739 AND GUTTER DEPRESSION PER CALTRANS STANDARD PLAN RSP D78A, TYPE G3 INLET IN GRADE SAG.
29	FURNISH AND INSTALL TWO (2) 36-INCH RCP WITH CONCRETE ENCASUREMENT.
30	FURNISH AND INSTALL ONE (1) 18-INCH RCP WITH CONCRETE ENCASUREMENT.
31	FURNISH AND INSTALL TYPE "X" INLET PER COUNTY OF RIVERSIDE STANDARD NO. CB10B.
32	REMOVE EXISTING MEDIAN STRIPPING.



SCALE: HORZ.: 1" = 40'
VERT.: 1" = 4'

SECTION AT C

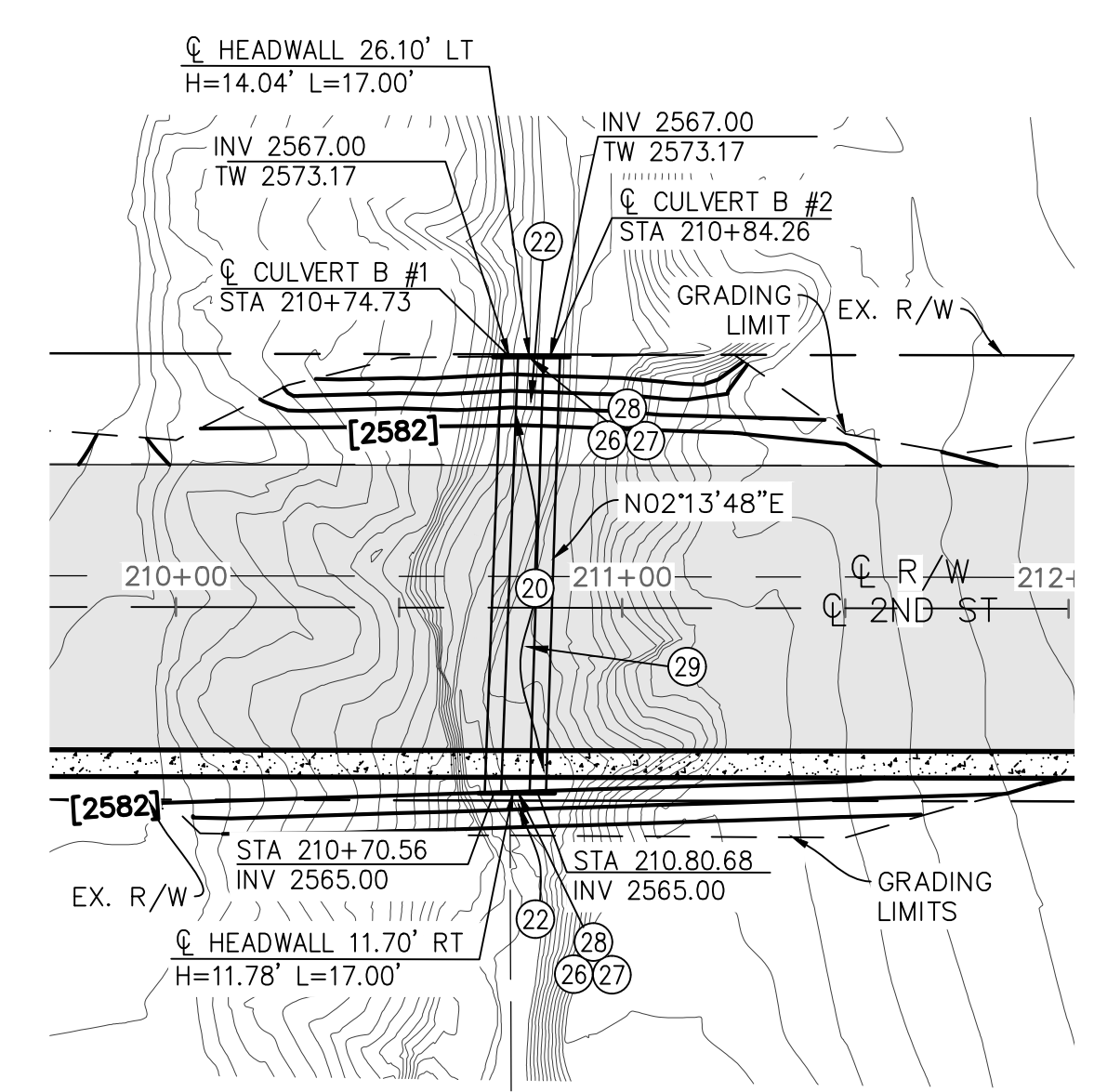
PROFILE
STA 0+00.00 - 0+97.53

NOTES

- SEE THE SIGNING AND STRIPING PLANS FOR DISPOSITION OF STREET SIGN REMOVALS AND RELOCATIONS.
- SEE DRAINAGE PLANS FOR DISPOSITION OF DRAINAGE APPURTENANCES.
- EXISTING UTILITIES ARE DEPICTED ON PLAN.

LEGEND

	PROPOSED AC PAVEMENT		POWER POLE
	AC PAVEMENT REMOVAL		ELECTRICAL VAULT
	PROPOSED CONCRETE SIDEWALK		WATER VALVE
	CENTERLINE		GAS VALVE
	RIGHT OF WAY		SEWER MANHOLE
	PROPERTY LINE		FIREHYDRANT
	(EX) OVERHEAD ELECTRIC EDISON		
	(EX) SEWER MAIN LINE		
	(EX) 2" GAS LINE		
	(EX) WATER LINE		
	EDGE OF DIRT ROAD		
	(EX) TOPO		
	PROP TOPO		



PROPOSED CULVERT "B"

97% SUBMITTAL (NOT FOR CONSTRUCTION)



BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:
STATION K1311 NGS POINT ID DX3472 ELEVATION (FT) 2601.93
DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF 1-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

Cozad & Fox, Inc.
CIVIL / STRUCTURAL ENGINEERS
MUNICIPAL CONSULTANTS / PLANNERS
SURVEYORS / GPS
151 SOUTH GRAND STREET HENET, CA 92544
TEL: (951) 802-1404 FAX: (951) 766-8942
E-MAIL: BFO@COZADFOX.COM

PREPARED UNDER THE SUPERVISION OF:
BRIAN D. FOX, P.E., RCE NO. 57264 DATE

PRINCIPAL ENGINEER
DESIGN BY: A.J.R.
DRAWN BY: D.D.S.
CHECKED BY: B.D.F.
SCALE: 1"=40'
DATE: 03/2022
JOB NUMBER: 2001800.00

PRELIMINARY

BEAUMONT CALIFORNIA
PUBLIC WORKS DEPARTMENT
550 E. 6TH ST, BEAUMONT, CA 92223

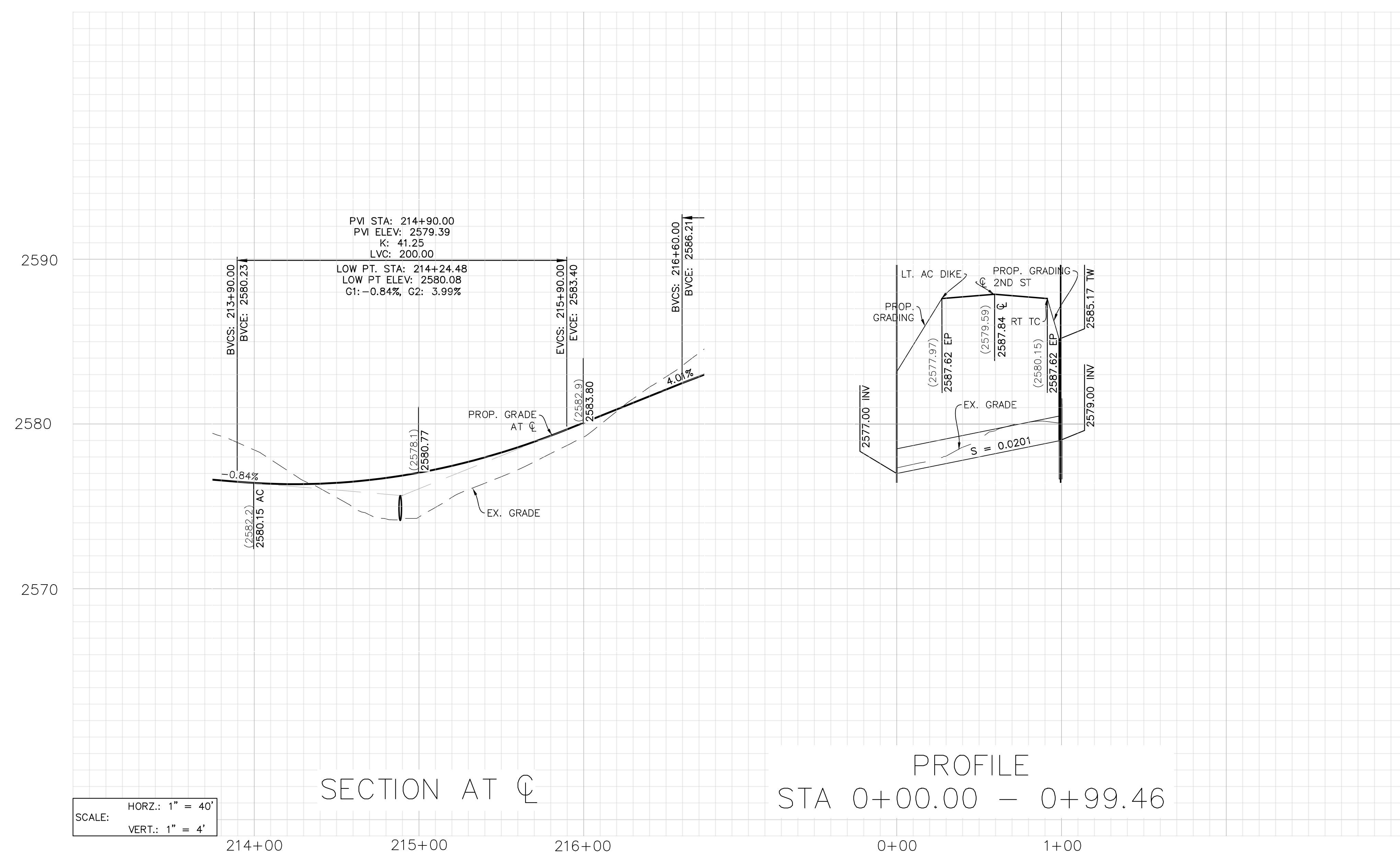
REVIEWED BY: _____	DATE: _____
RECOMMENDED BY: _____	DATE: _____
APPROVED BY: _____	DATE: _____

CITY OF BEAUMONT, CALIFORNIA
IMPROVEMENT PLANS FOR:
2ND STREET
CULVERT CROSSING

SHEET
10
OF 13 SHEETS
FILE NO:

Z:\2001800\DWG\2001800.00_CULVERTCROSSING_100%.DWG

Z:\2001800\DWG\2001800.00_CULVERTCROSSING_100%.DWG



CONSTRUCTION NOTES	
①	PROTECT IN PLACE.
②	SAWCUT AND REMOVE EXISTING AC PAVEMENT TO SUBGRADE.
③	COLDMILL EXISTING AC PAVEMENT (2").
④	CONSTRUCT 8" HMA (1/2 INCH TYPE A PG-64-10) OVER 8" CLASS AB OVER COMPACTED SUBGRADE.
⑤	CONSTRUCT VARIABLE DEPTH AC OVERLAY (2" MIN).
⑥	CONSTRUCT TYPE A-8 CURB AND GUTTER PER COUNTY OF RIVERSIDE STD. DETAIL 201.
⑦	CONSTRUCT CURB RAMP (CASE PER PLAN) PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
⑧	CONSTRUCT PCC SIDEWALK PER COUNTY OF RIVERSIDE STD. DETAIL 401.
⑨	CONSTRUCT 4'X3' TRUNCATED DOMES, DETECTABLE WARNING DETAIL PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
⑩	REMOVE EXISTING CURB AND GUTTER.
⑪	CONSTRUCT 8" AC DIKE PER RIVERSIDE COUNTY STANDARD NO. 212.
⑫	REMOVE PCC SW.
⑬	CONSTRUCT TYPE D (8-INCH) CURB PER COUNTY OF RIVERSIDE STD DETAIL 201.
⑭	EXISTING 36" Ø CONCRETE PIPE.
⑮	MATCH EXISTING SIDEWALK.
⑯	MATCH EXISTING ASPHALT CONCRETE.
⑰	GRIND AND CAP EXISTING ASPHALT CONCRETE.
⑱	PROTECT IN PLACE CURRENT SEWER LINE.
⑲	PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.
⑳	PROPOSED STORM DRAIN STRUCTURE.
㉑	PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]
㉒	CONSTRUCT STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP D89.
㉓	MATCH TO EXISTING CURB AND GUTTER.
㉔	EXISTING HEADWALL.
㉕	EXISTING 60" Ø CONCRETE PIPE.
㉖	INSTALL CURB INLET CATCH BASIN PER COUNTY OF RIVERSIDE STANDARD NO. 300.
㉗	CONSTRUCT RIP-RAP APRON.
㉘	FURNISH AND INSTALL PRECAST TYPE G3 DRAINAGE INLET PER CALTRANS STANDARD PLAN D738 AND GUTTER DEPRESSION PER CALTRANS STANDARD PLAN RSP D78A, TYPE G3 INLET IN GRADE SAG.
㉙	FURNISH AND INSTALL TWO (2) 36-INCH RCP WITH CONCRETE ENCASEMENT.
㉚	FURNISH AND INSTALL ONE (1) 18-INCH RCP WITH CONCRETE ENCASEMENT.
㉛	FURNISH AND INSTALL TYPE "X" INLET PER COUNTY OF RIVERSIDE STANDARD NO. CB108.
㉜	REMOVE EXISTING MEDIAN STRIPPING.

SECTION AT C

PROFILE
STA 0+00.00 - 0+99.46

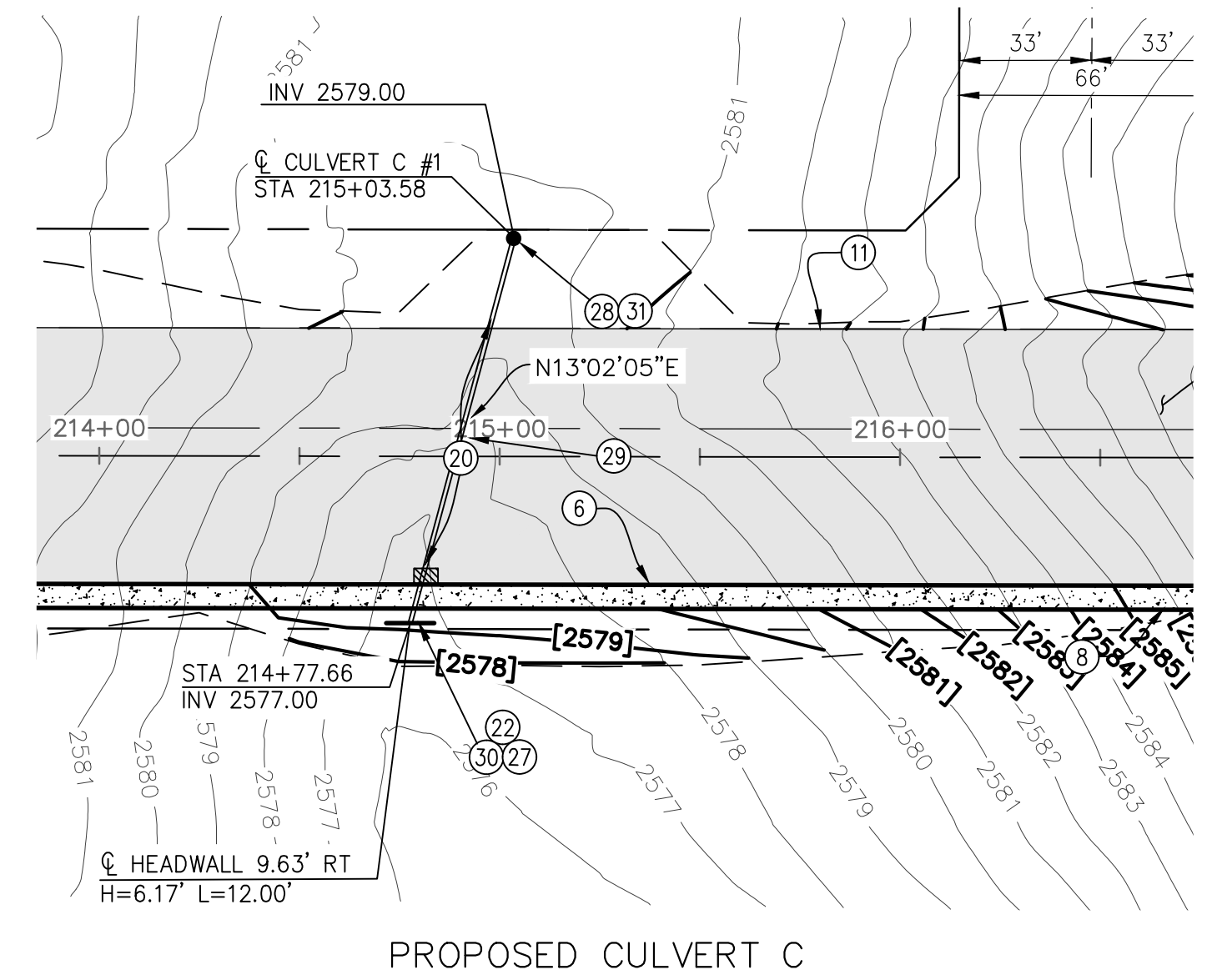
SCALE: HORZ.: 1" = 40'
VERT.: 1" = 4'

NOTES

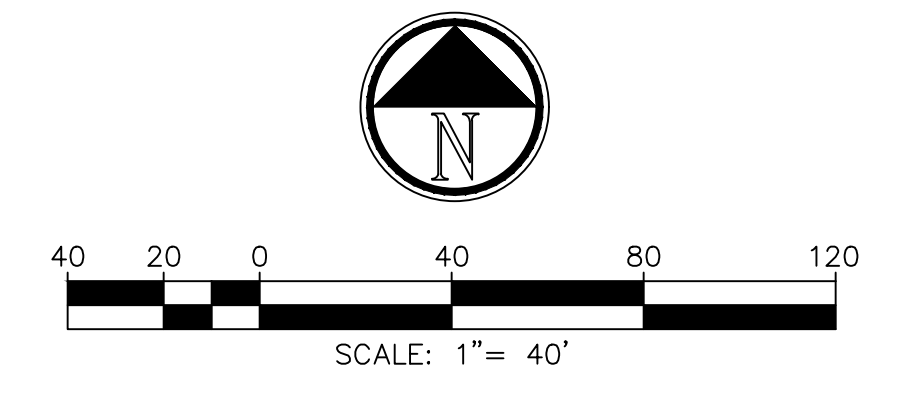
- SEE THE SIGNING AND STRIPING PLANS FOR DISPOSITION OF STREET SIGN REMOVALS AND RELOCATIONS.
- SEE DRAINAGE PLANS FOR DISPOSITION OF DRAINAGE APPURTENANCES.
- EXISTING UTILITIES ARE DEPICTED ON PLAN.

LEGEND

	PROPOSED AC PAVEMENT		POWER POLE
	AC PAVEMENT REMOVAL		ELECTRICAL VAULT
	PROPOSED CONCRETE SIDEWALK		WATER VALVE
	CENTERLINE		GAS VALVE
	RIGHT OF WAY		SEWER MANHOLE
	PROPERTY LINE		FIREHYDRANT
	(EX) OVERHEAD ELECTRIC EDISON		
	(EX) SEWER MAIN LINE		
	(EX) 2" GAS LINE		
	(EX) WATER LINE		
	EDGE OF DIRT ROAD		
	(EX) TOPO		
	PROP TOPO		



PROPOSED CULVERT C



97% SUBMITTAL (NOT FOR CONSTRUCTION)

DIGALERT
Call 2 Working Days Before You Dig!
811

BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:
STATION K1311 NGS POINT ID DX3472 ELEVATION (FT) 2601.93
DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF 1-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

Cozad & Fox, Inc.
CIVIL / STRUCTURAL ENGINEERS
MUNICIPAL CONSULTANTS / PLANNERS
SURVEYORS / GPS
151 SOUTH GRAND STREET HENET, CA 92544
TEL: (951) 602-1454 FAX: (951) 766-8942
E-MAIL: BFO@COZADFOX.COM

PREPARED UNDER THE SUPERVISION OF:
BRIAN D. FOX, P.E., RCE NO. 57264 DATE

PRINCIPAL ENGINEER
DESIGN BY: A.J.R.
DRAWN BY: D.D.S.
CHECKED BY: B.D.F.
SCALE: 1"=40'
DATE: 03/2022
JOB NUMBER: 2001800.00

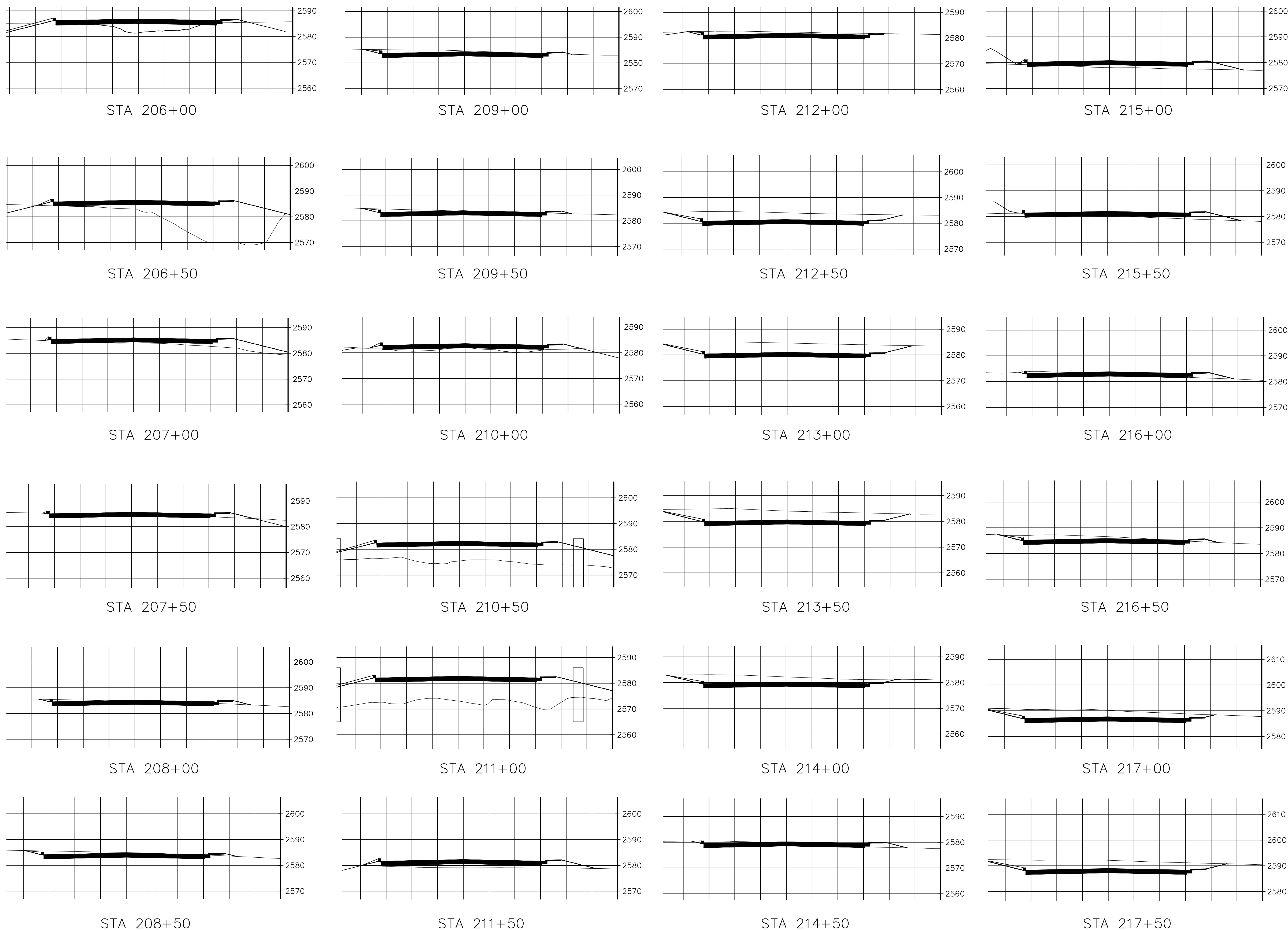
PRELIMINARY

BEAUMONT CALIFORNIA
PUBLIC WORKS DEPARTMENT
550 E. 6TH ST, BEAUMONT, CA 92223

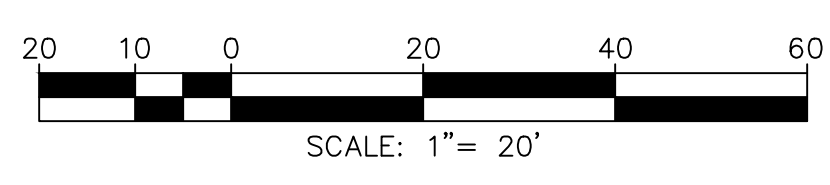
REVIEWED BY: _____	DATE: _____
STAFF ENGINEER	
RECOMMENDED BY: _____	DATE: _____
PRINCIPAL ENGINEER	
APPROVED BY: _____	DATE: _____
CITY ENGINEER	

CITY OF BEAUMONT, CALIFORNIA
IMPROVEMENT PLANS FOR:
2ND STREET CULVERT CROSSING

SHEET
11
OF 13 SHEETS
FILE NO:



CONSTRUCTION NOTES	QUANTITY ESTIMATES
① PROTECT IN PLACE.	-
② SAWCUT AND REMOVE EXISTING AC PAVEMENT TO SUBGRADE.	23,064 FT ²
③ COLDMILL EXISTING AC PAVEMENT (2").	23,064 FT ²
④ CONSTRUCT XX" HMA (1/2 INCH TYPE A PG-64-10) OVER XX" CLASS AB OVER COMPACTED SUBGRADE.	153,749 FT ²
⑤ CONSTRUCT VARIABLE DEPTH AC OVERLAY (2" MIN).	153,749 FT ²
⑥ CONSTRUCT TYPE A-8 CURB AND GUTTER PER COUNTY OF RIVERSIDE STD. DETAIL 201.	1,622 FT.
⑦ CONSTRUCT CURB RAMP (CASE PER PLAN) PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	2 EA.
⑧ CONSTRUCT PCC SIDEWALK PER COUNTY OF RIVERSIDE STD. DETAIL 401.	8,829 FT ²
⑨ CONSTRUCT 4'X3' TRUNCATED DOMES, DETECTABLE WARNING DETAIL PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	-
⑩ REMOVE EXISTING CURB AND GUTTER.	3,338 FT.
⑪ CONSTRUCT AC DIKE TO 8" PER RIVERSIDE COUNTY STANDARD NO. 212.	2,457 FT.
⑫ REMOVE PCC SW.	-
⑬ CONSTRUCT TYPE D (8-INCH) CURB PER COUNTY OF RIVERSIDE STD DETAIL 201.	-
⑭ EXISTING 36" # CONCRETE PIPE.	1 EA.
⑮ MATCH EXISTING SIDEWALK.	-
⑯ MATCH EXISTING ASPHALT CONCRETE.	-
⑰ GRIND AND CAP EXISTING ASPALT CONCRETE.	23,064 FT ²
⑱ PROTECT IN PLACE CURRENT SEWER LINE.	1 EA.
⑲ PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.	1 EA.
⑳ PROPOSED STORM DRAIN STRUCTURE.	1 EA.
㉑ PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	-
㉒ CONSTRUCT DOUBLE STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP D89.	3 EA.
㉓ MATCH TO EXISTING CURB AND GUTTER.	-
㉔ EXISTING HEADWALL.	2 EA.
㉕ EXISTING 60" # CONCRETE PIPE.	2 EA.



97% SUBMITTAL (NOT FOR CONSTRUCTION)

Z:\2001800\DWG\2001800.00_2NDSTREET_100%.DWG

BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:

STATION	NGS POINT ID	ELEVATION (FT)
K1311	DX3472	2601.93

DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF 1-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.

CIVIL / STRUCTURAL ENGINEERS
MUNICIPAL CONSULTANTS / PLANNERS
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151 SOUTH GRAND STREET HENRY, CA 92544
TEL: (951) 952-1454 FAX: (951) 765-8942
E-MAIL: BFO@COZADFOX.COM

PRINCIPAL ENGINEER

BRIAN D. FOX, P.E., RCE NO. 57264

DESIGN BY: A.J.R.
DRAWN BY: D.D.S.
CHECKED BY: B.D.F.
SCALE: 1"=40'
DATE: 03/2022
JOB NUMBER: 2001800.00

PUBLIC WORKS DEPARTMENT
550 E. 6TH ST, BEAUMONT, CA 92223

REVIEWED BY: _____ DATE: _____
STAFF ENGINEER

RECOMMENDED BY: _____ DATE: _____
PRINCIPAL ENGINEER

APPROVED BY: _____ DATE: _____
CITY ENGINEER

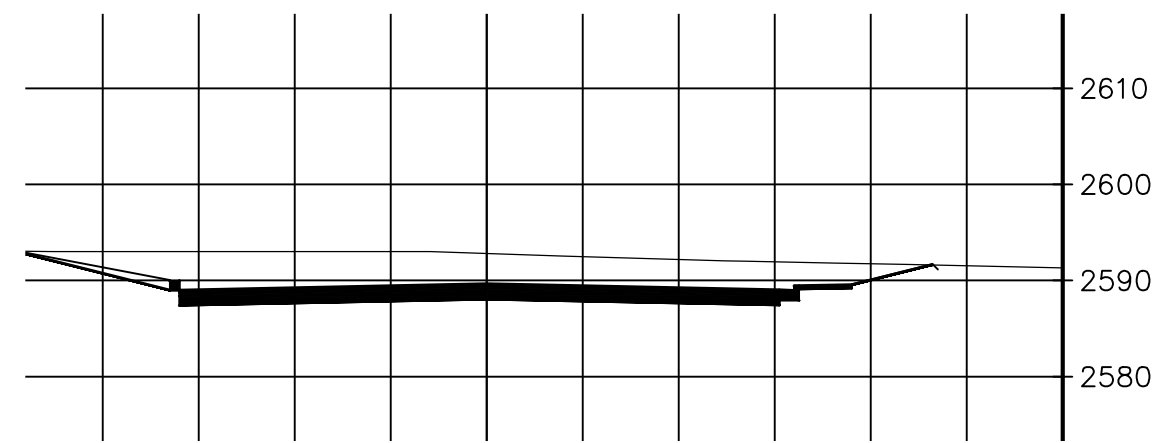
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IMPROVEMENT PLANS FOR:

2ND STREET
SECTIONS/DETAIL SHEET

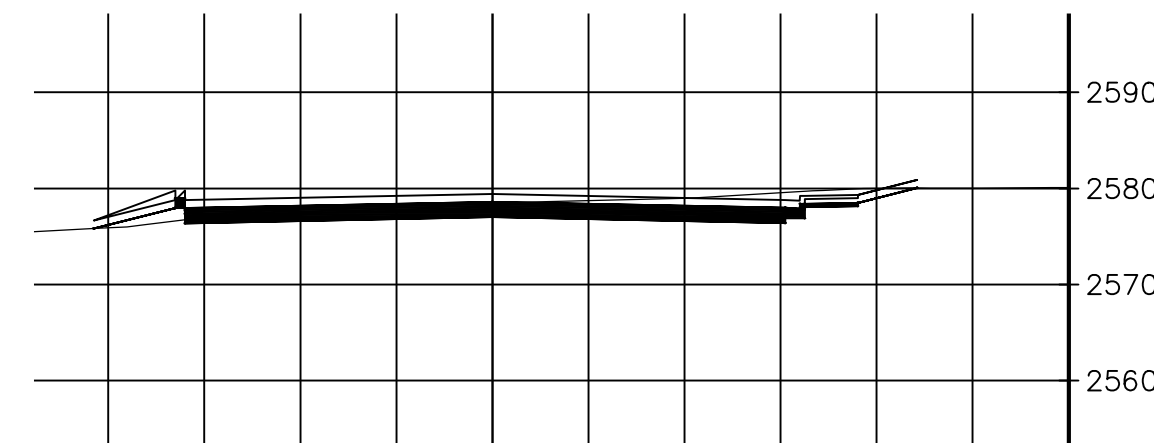
SHEET
12
OF 13 SHEETS
FILE NO:

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

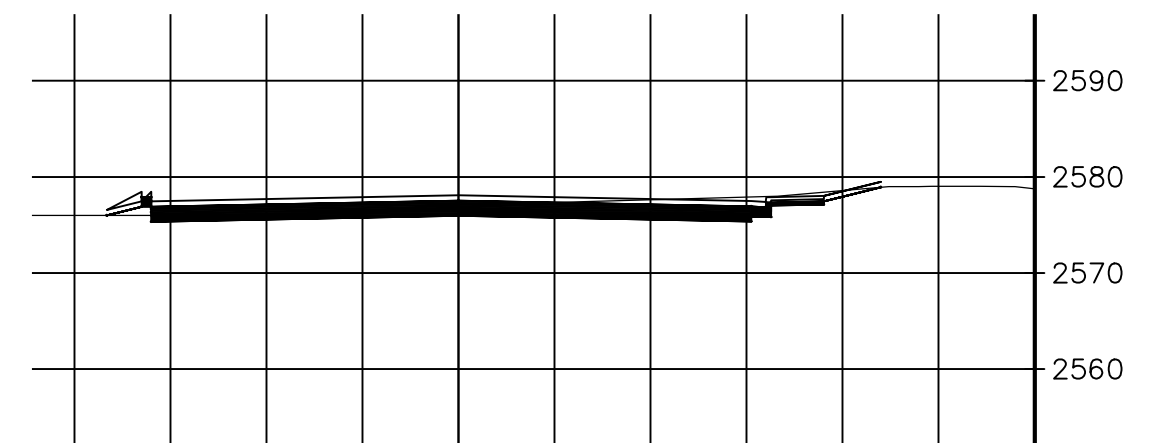
PREPARED UNDER THE SUPERVISION OF:	DATE
BRIAN D. FOX, P.E., RCE NO. 57264	



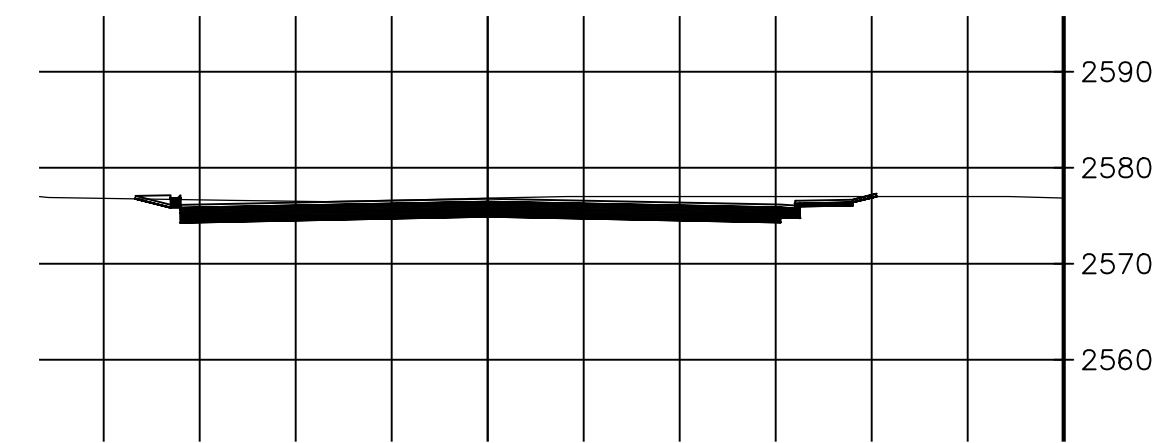
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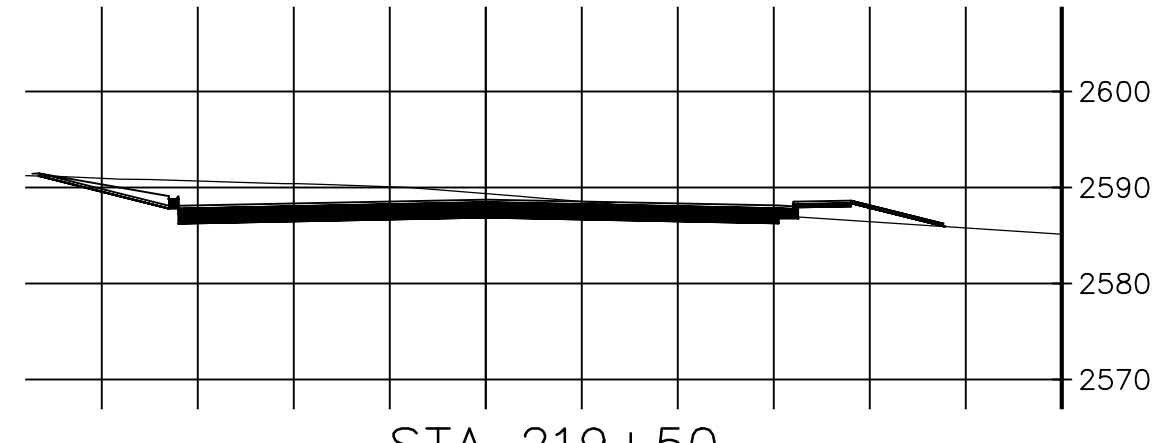
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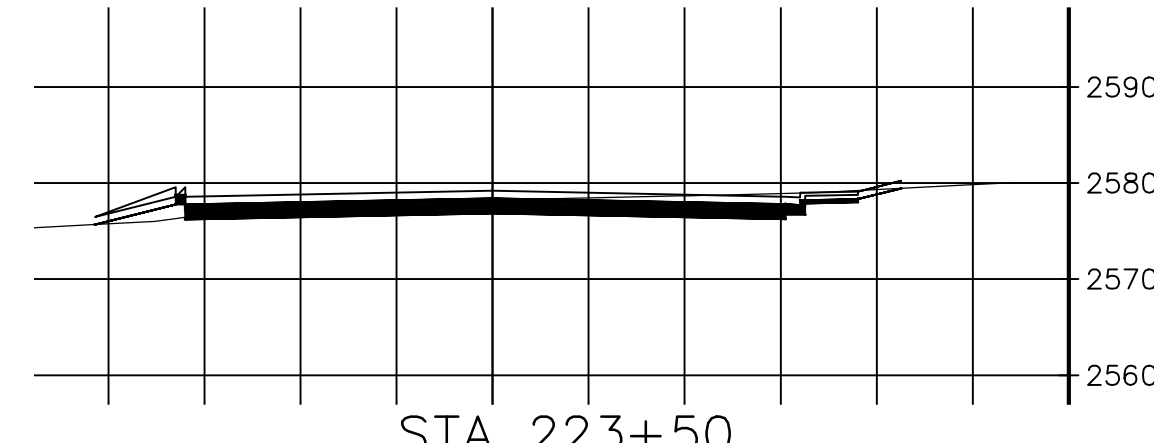
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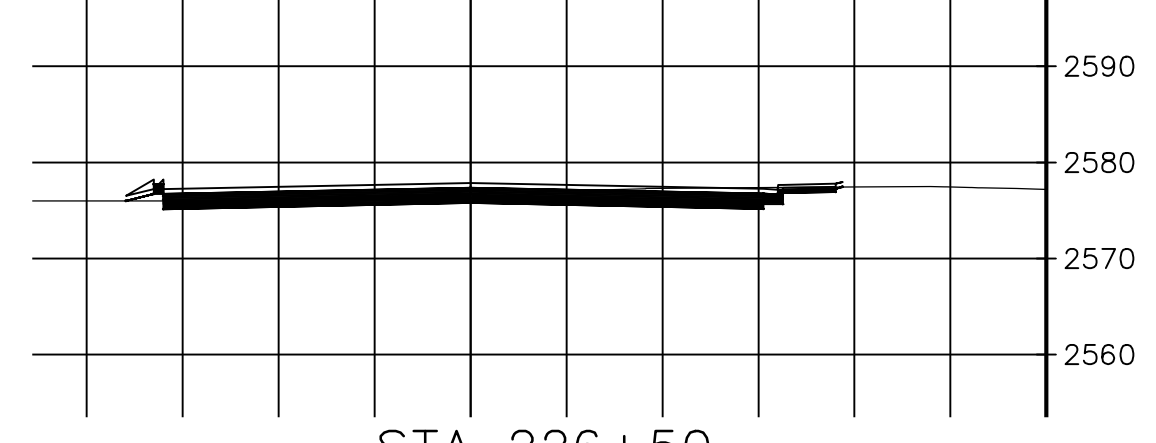
STA 229+00



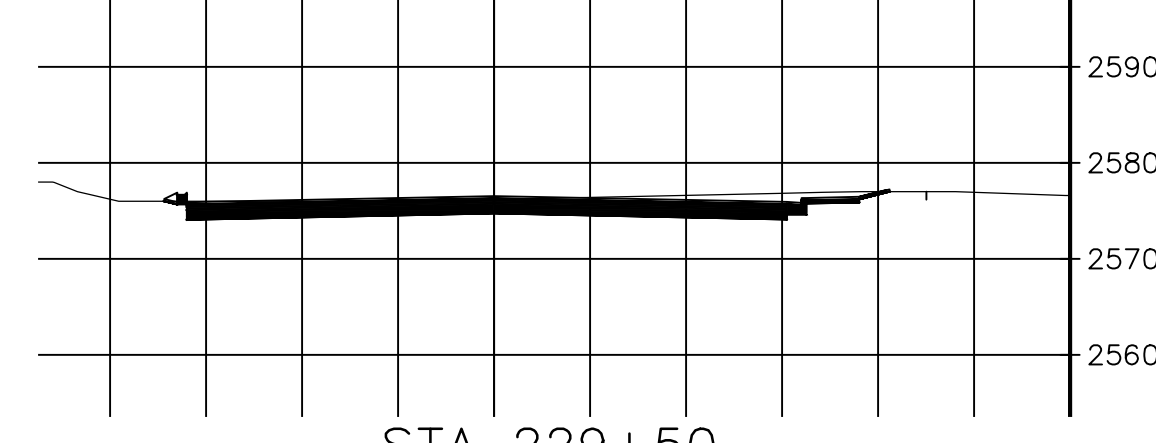
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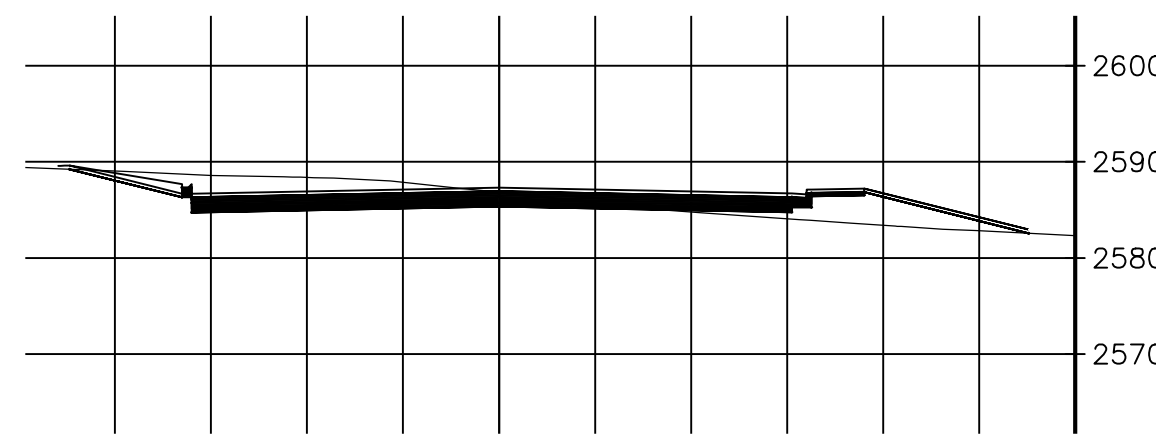
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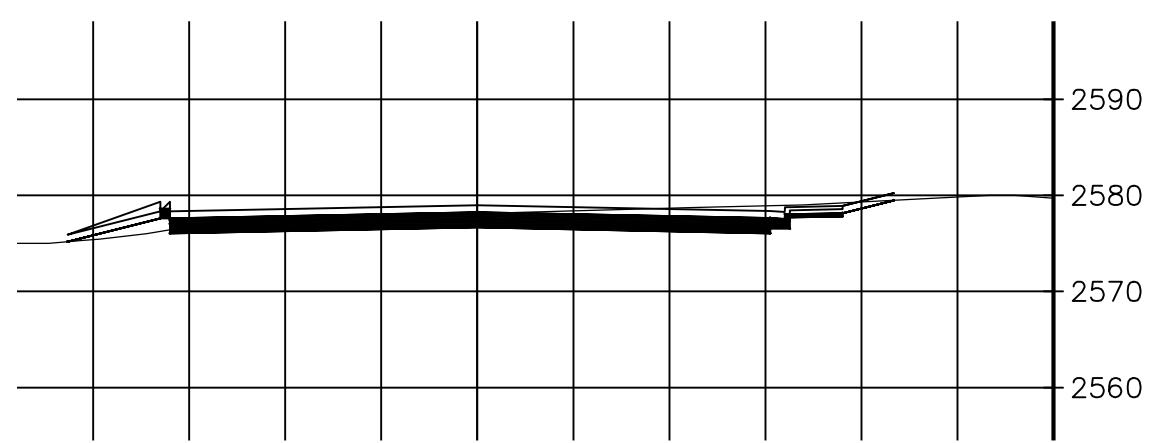
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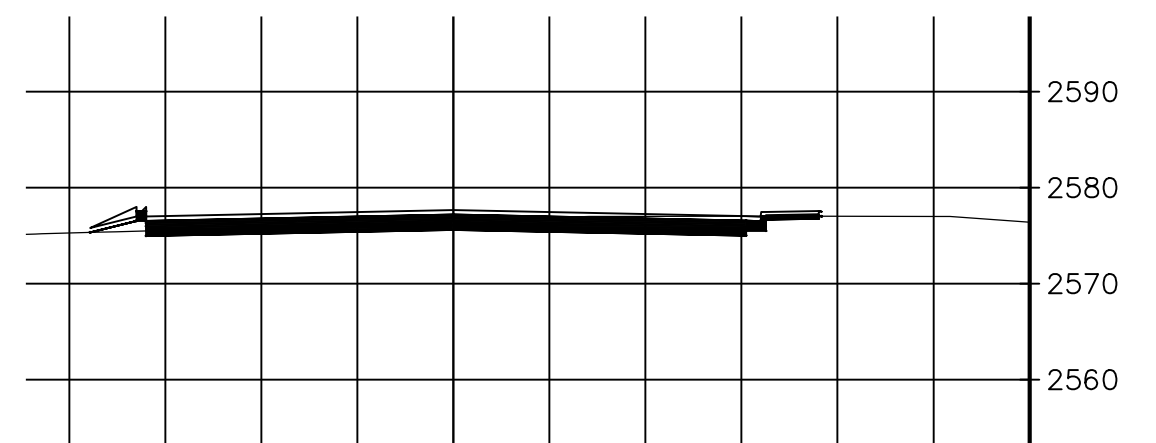
STA 229+50



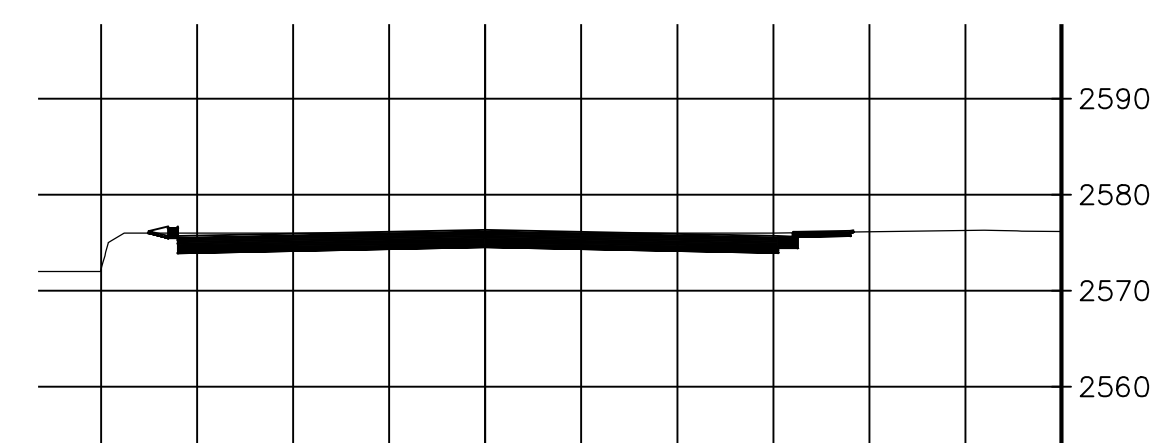
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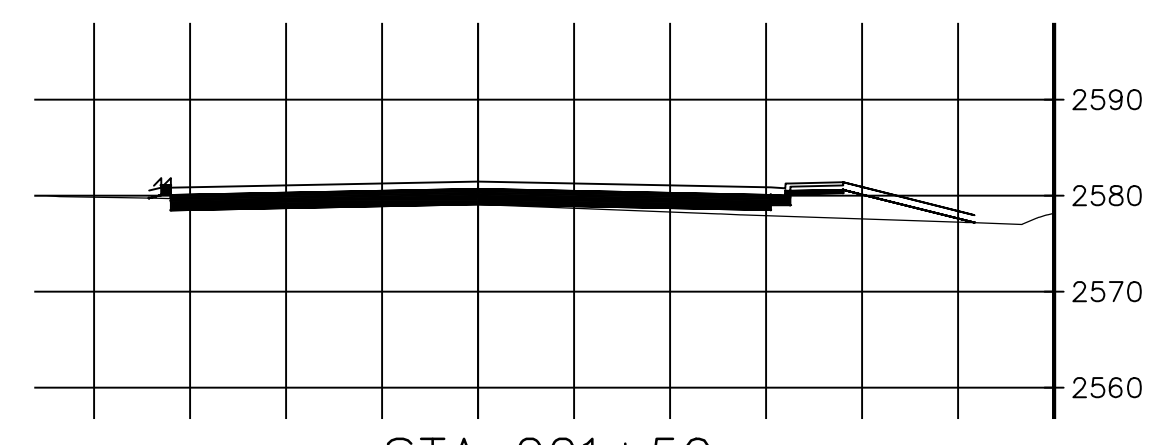
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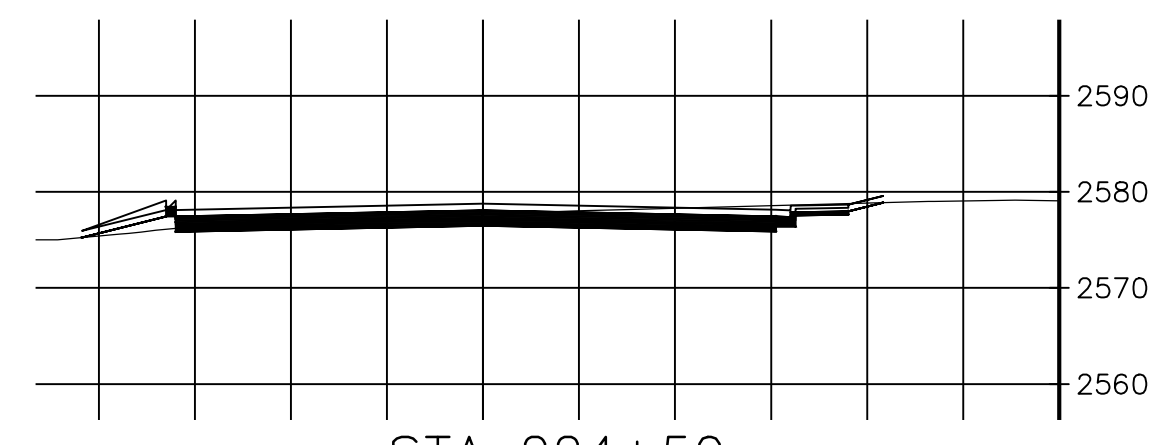
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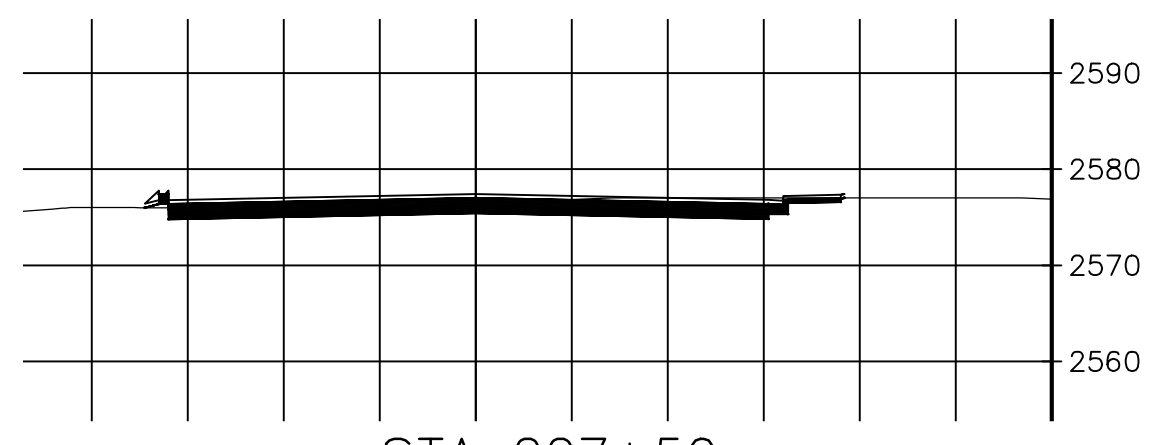
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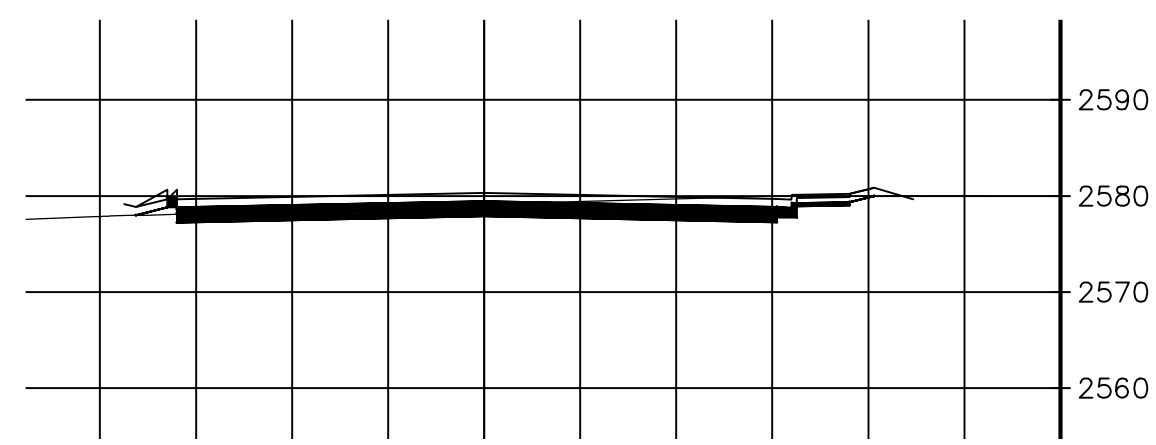
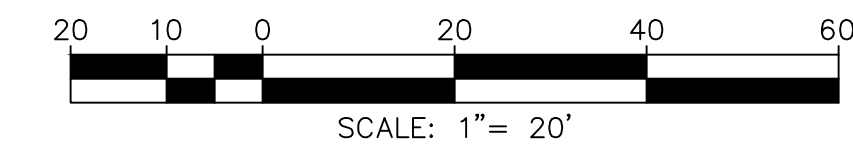
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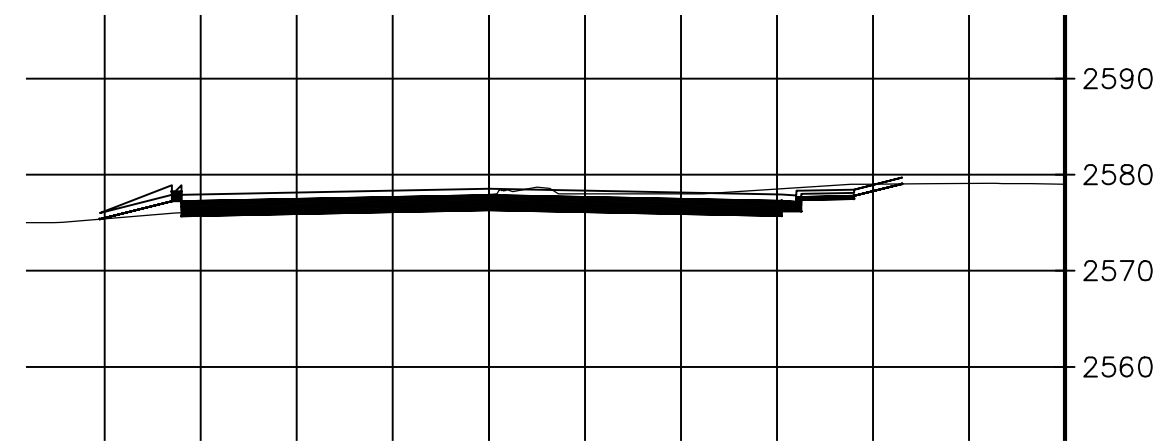
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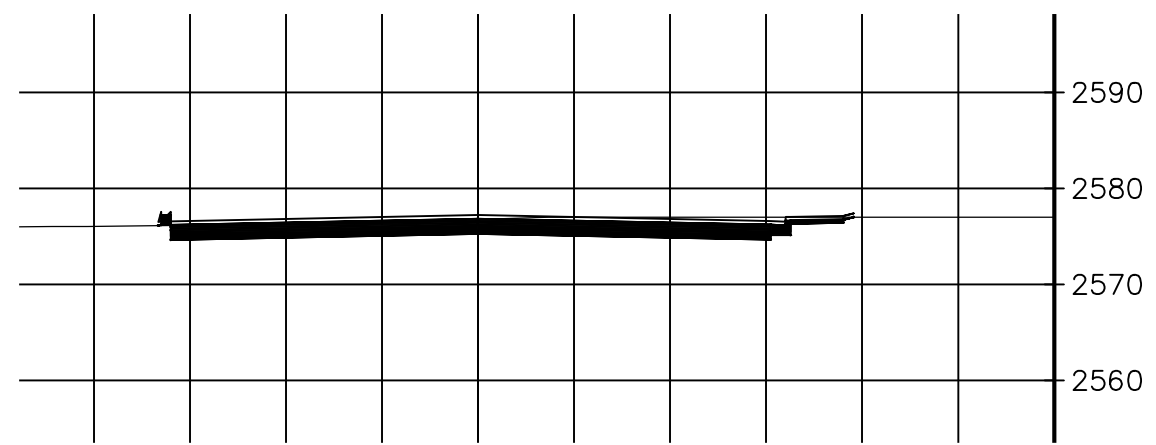
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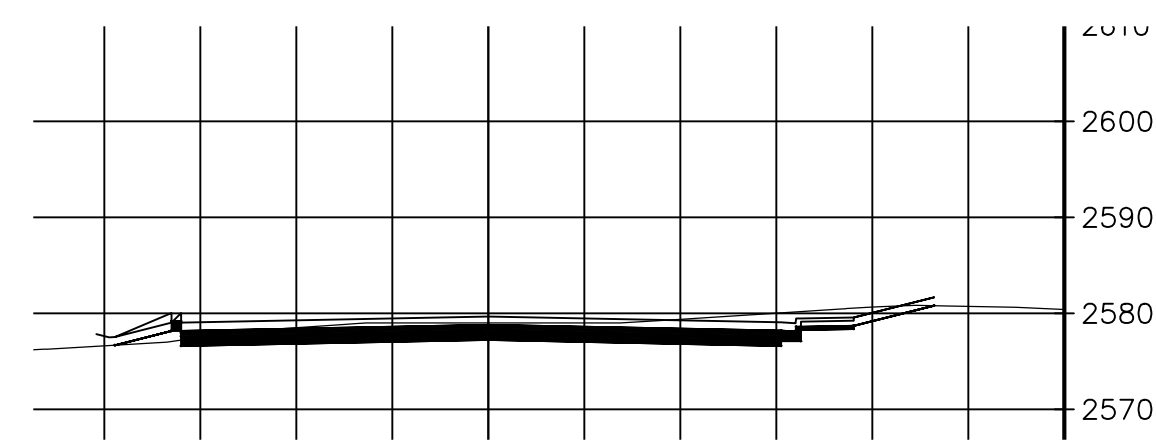
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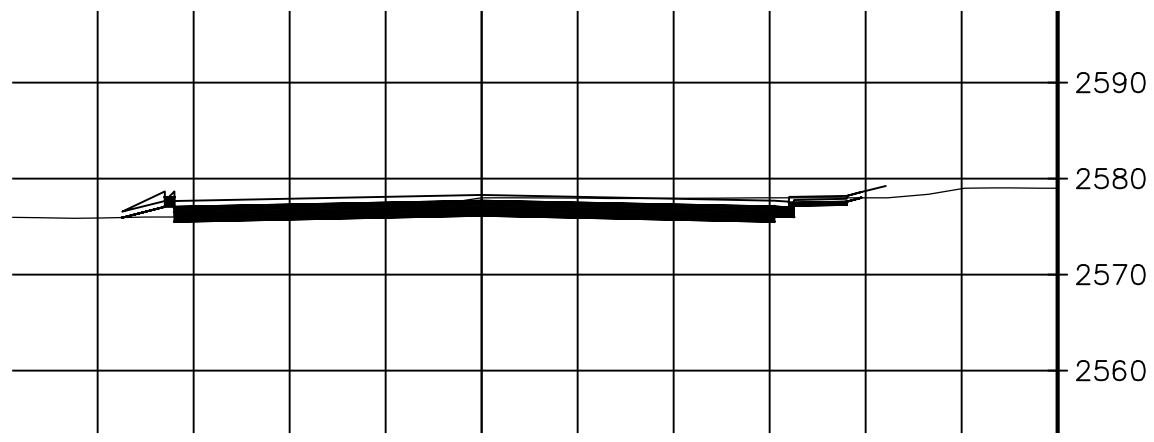
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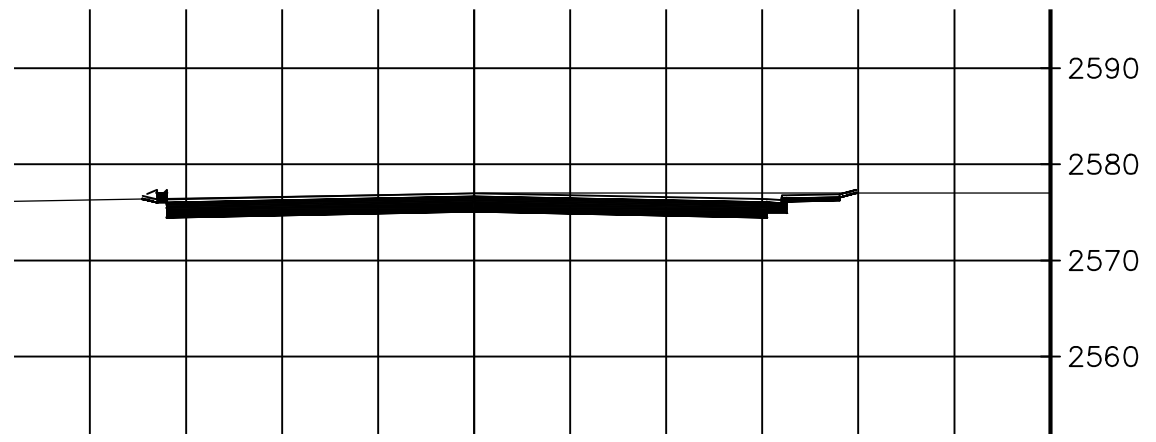
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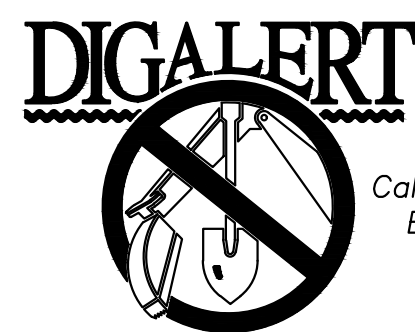


STA 228+50

CONSTRUCTION NOTES	QUANTITY ESTIMATES
① PROTECT IN PLACE.	-
② SAWCUT AND REMOVE EXISTING AC PAVEMENT TO SUBGRADE.	23,064 FT ²
③ COLDMILL EXISTING AC PAVEMENT (2").	23,064 FT ²
④ CONSTRUCT XX" HMA (1/2 INCH TYPE A PG-64-10) OVER XX" CLASS AB OVER COMPACTED SUBGRADE.	153,749 FT ²
⑤ CONSTRUCT VARIABLE DEPTH AC OVERLAY (2" MIN).	153,749 FT ²
⑥ CONSTRUCT TYPE A-8 CURB AND GUTTER PER COUNTY OF RIVERSIDE STD. DETAIL 201.	1,622 FT.
⑦ CONSTRUCT CURB RAMP (CASE PER PLAN) PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	2 EA.
⑧ CONSTRUCT PCC SIDEWALK PER COUNTY OF RIVERSIDE STD. DETAIL 401.	8,829 FT ²
⑨ CONSTRUCT 4'X3' TRUNCATED DOMES, DETECTABLE WARNING DETAIL PER COUNTY OF RIVERSIDE STD. DETAIL 403. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	-
⑩ REMOVE EXISTING CURB AND GUTTER.	3,338 FT.
⑪ CONSTRUCT AC DIKE TO 8" PER RIVERSIDE COUNTY STANDARD NO. 212.	2,457 FT.
⑫ REMOVE PCC SW.	-
⑬ CONSTRUCT TYPE D (8-INCH) CURB PER COUNTY OF RIVERSIDE STD DETAIL 201.	-
⑭ EXISTING 36" # CONCRETE PIPE.	1 EA
⑮ MATCH EXISTING SIDEWALK.	-
⑯ MATCH EXISTING ASPHALT CONCRETE.	-
⑰ GRIND AND CAP EXISTING ASPALT CONCRETE.	23,064 FT ²
⑱ PROTECT IN PLACE CURRENT SEWER LINE.	1 EA
⑲ PROTECT IN PLACE CURRENT STORM DRAIN SYSTEM.	1 EA
⑳ PROPOSED STORM DRAIN STRUCTURE.	1 EA
㉑ PROPOSED R/W. [IMPROVEMENTS BY OTHERS; NOT PART OF PROJECT]	-
㉒ CONSTRUCT DOUBLE STRAIGHT HEADWALL PER CALTRANS STANDARD PLAN NO. RSP DB9.	3 EA
㉓ MATCH TO EXISTING CURB AND GUTTER.	-
㉔ EXISTING HEADWALL.	2 EA
㉕ EXISTING 60" # CONCRETE PIPE.	2 EA

97% SUBMITTAL (NOT FOR CONSTRUCTION)

Z:\2001800\DWG\2001800.00_2NDSTREET_100%.DWG



BENCHMARK: ELEVATIONS SHOWN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). DIFFERENTIAL LEVELS AND STATIC GPS OBSERVATIONS DETERMINED ELEVATIONS. THE NATIONAL GEODETIC SURVEY (NGS) DATASHEET ELEVATION AT THE NGS BENCHMARK WAS USED:
 STATION K1311 NGS POINT ID DX3472 ELEVATION (FT) 2601.93
 DESCRIPTION: 3" BRASS DISK SET VERTICALLY IN THE WEST FACE OF 1-10 OVERCROSSING OF PENNSYLVANIA AVE., 36' EAST OF THE AVENUE CENTERLINE, 1.7' NORTH OF THE SOUTH END OF THE WEST FACE, 3' ABOVE THE GROUND.

BY	MARK	DESCRIPTION	APPR.	DATE
ENGINEER		REVISIONS		CITY

Cozad & Fox, Inc.
 CIVIL / STRUCTURAL ENGINEERS
 MUNICIPAL CONSULTANTS / PLANNERS
 SURVEYORS / GPS
 151 SOUTH GRAND STREET HENET, CA 92544
 TEL: (951) 852-1454 FAX: (951) 765-8942
 E-MAIL: BFO@COZADFOX.COM

PREPARED UNDER THE SUPERVISION OF:
 BRIAN D. FOX, P.E., RCE NO. 57264 DATE

PRINCIPAL ENGINEER
 DESIGN BY: A.J.R.
 DRAWN BY: D.D.S.
 CHECKED BY: B.D.F.
 SCALE: 1"=40'
 DATE: 03/2022
 JOB NUMBER: 2001800.00

PRELIMINARY

BEAUMONT CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 550 E. 6TH ST, BEAUMONT, CA 92223

REVIEWED BY: _____ DATE: _____
 STAFF ENGINEER

RECOMMENDED BY: _____ DATE: _____
 PRINCIPAL ENGINEER

APPROVED BY: _____ DATE: _____
 CITY ENGINEER

CITY OF BEAUMONT, CALIFORNIA
 IMPROVEMENT PLANS FOR:
 2ND STREET SECTIONS/DETAIL SHEET

SHEET
 13
 OF 13 SHEETS
 FILE NO:

APPENDIX B

Plants Observed

The plants listed below were detected either on or within 500-feet of the Project during field surveys conducted in July 2020, April, May, June, and July 2021. Nomenclature follows *The Jepson Online Interchange*. Introduced/Naturalized species are indicated with an (I). Remnant volunteer cereal crops detected are indicated with a (C). Not all planted ornamentals are included in the list below.

COMMON NAME	SCIENTIFIC NAME
Amaranth Family	Amaranthaceae
Palmer's amaranth	<i>Amaranthus palmeri</i>
procumbent pigweed	<i>Amaranthus blitoides</i>
tumbleweed (I)	<i>Amaranthus albus</i>
Borage Family	Boraginaceae
common cryptantha	<i>Cryptantha intermedia</i>
common fiddleneck	<i>Amsinckia menziesii</i>
Buckwheat Family	Polygonaceae
California buckwheat	<i>Eriogonum fasciculatum</i>
common knotweed (I)	<i>Polygonum aviculare</i> subsp. <i>depressum</i>
curly dock (I)	<i>Rumex crispus</i>
slender buckwheat	<i>Eriogonum gracile</i>
willow weed	<i>Persicaria lapathifolia</i>
Caltrop Family	Zygophyllaceae
puncture vine (I)	<i>Tribulus terrestris</i>
Elm Family	Ulmaceae
Chinese elm (I)	<i>Ulmus parvifolia</i>
Evening-Primrose Family	Onagraceae
willow herb	<i>Epilobium ciliatum</i>
Geranium Family	Geraniaceae
long beaked filaree (I)	<i>Erodium botrys</i>
redstem filaree (I)	<i>Erodium cicutarium</i>
Goosefoot Family	Chenopodiaceae
lamb's quarters (I)	<i>Chenopodium album</i>
Russian thistle (I)	<i>Salsola tragus</i>
Gourd Family	Cucurbitaceae
buffalo gourd	<i>Cucurbita foetidissima</i>
Grass Family	Poaceae
alkali sacaton	<i>Sporobolus airoides</i>
barley (C)	<i>Hordeum vulgare</i>
cheat grass (I)	<i>Bromus tectorum</i>
giant reed (I)	<i>Arundo donax</i>
rattail sixweeks grass (I)	<i>Festuca myuros</i>
red brome (I)	<i>Bromus rubens</i>
ripgut grass (I)	<i>Bromus diandrus</i>
rye grass (I)	<i>Festuca perennis</i>
slender wild oat (I)	<i>Avena barbata</i>
wall barley (I)	<i>Hordeum murinum</i>
wheat (C)	<i>Triticum aestivum</i>
Hemp Family	Cannabaceae
netleaf hackberry	<i>Celtis reticulata</i>
Legume Family	Fabaceae
burclover (I)	<i>Medicago polymorpha</i>

COMMON NAME	SCIENTIFIC NAME
hairy vetch (I)	<i>Vicia villosa</i>
honey mesquite	<i>Prosopis glandulosa</i> var. <i>torreyana</i>
Mexican palo verde (I)	<i>Parkinsonia aculeata</i>
miniature lupine	<i>Lupinus bicolor</i>
Spanish clover	<i>Acemison americanus</i> var. <i>americanus</i>
white sweetclover (I)	<i>Melilotus albus</i>
Miner's Lettuce Family	Montiaceae
red maids	<i>Calandrinia menziesii</i>
Mint Family	Lamiaceae
horehound (I)	<i>Marrubium vulgare</i>
vinegar weed	<i>Trichostema lanceolatum</i>
Morning-Glory Family	Convolvulaceae
bindweed (I)	<i>Convolvulus arvensis</i>
Muskroot Family	Adoxaceae
blue elderberry	<i>Sambucus nigra</i> subsp. <i>caerulea</i>
Mustard Family	Brassicaceae
black mustard (I)	<i>Brassica nigra</i>
eastern rocket (I)	<i>Sisymbrium orientale</i>
London rocket (I)	<i>Sisymbrium irio</i>
radish (I)	<i>Raphanus sativus</i>
shortpod mustard (I)	<i>Hirschfeldia incana</i>
tumble mustard (I)	<i>Sisymbrium altissimum</i>
Myrtle Family	Myrtaceae
blue gum (I)	<i>Eucalyptus globulus</i>
Nightshade Family	Solanaceae
jimson weed	<i>Datura wrightii</i>
tree tobacco (I)	<i>Nicotiana glauca</i>
Olive Family	Oleaceae
shamel ash (I)	<i>Fraxinus uhdei</i>
Poppy Family	Papaveraceae
California poppy	<i>Eschscholzia californica</i>
Quassia Family	Simaroubaceae
tree-of-heaven (I)	<i>Ailanthus altissima</i>
Spurge Family	Euphorbiaceae
doveweed	<i>Croton setiger</i>
rattlesnake sandmat	<i>Euphorbia albomarginata</i>
Sunflower Family	Asteraceae
annual bur-sage	<i>Ambrosia acanthicarpa</i>
cocklebur	<i>Xanthium strumarium</i>
common sandaster	<i>Corethrogyne filaginifolia</i>
common sunflower	<i>Helianthus annuus</i>
hairy horsebrush	<i>Tetradymia comosa</i>
Canada horseweed	<i>Erigeron canadensis</i>
interior goldenbush	<i>Ericameria linearifolia</i>
mule fat	<i>Baccharis salicifolia</i> subsp. <i>salicifolia</i>
Palmer's goldenbush	<i>Ericameria palmeri</i>
prickly lettuce (I)	<i>Lactuca serriola</i>
small wirelettuce	<i>Stephanomeria exigua</i> subsp. <i>deanei</i>

COMMON NAME	SCIENTIFIC NAME
stinknet (I)	<i>Oncosiphon pilulifer</i>
tall wreath plant	<i>Stephanomeria virgata</i>
tarragon	<i>Artemisia dracunculus</i>
telegraph weed	<i>Heterotheca grandiflora</i>
tocalote (I)	<i>Centaurea melitensis</i>
western ragweed	<i>Ambrosia psilostachya</i>
yellow star-thistle (I)	<i>Centaurea solstitialis</i>
Tamarisk Family	Tamaricaceae
saltcedar (I)	<i>Tamarix ramosissima</i>
Willow Family	Salicaceae
arroyo willow	<i>Salix lasiolepis</i>
Goodding's black willow	<i>Salix gooddingii</i>
Fremont cottonwood	<i>Populus fremontii</i> subsp. <i>fremontii</i>
narrow-leaved willow	<i>Salix exigua</i>
red willow	<i>Salix laevigata</i>

APPENDIX C

Wildlife Observed

Birds

The bird species listed below were detected either on, above, or near the area within 500-feet of the Project during field surveys conducted in July 2020, April, May, June, and July 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Icteridae), Common Name, and Scientific Name follow the American Ornithologists' Union (AOU) *Checklist of North and Middle American Birds*.

COMMON NAME	SCIENTIFIC NAME
Blackbirds	Icteridae
Hooded Oriole	<i>Icterus cucullatus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Western Meadowlark	<i>Sturnella neglecta</i>
Caracaras and Falcons	Falconidae
American Kestrel	<i>Falco sparverius</i>
Cardinals and Allies	Cardinalidae
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Blue Grosbeak	<i>Passerina caerulea</i>
Crows and Jays	Corvidae
American Crow	<i>Corvus brachyrhynchos</i>
Common Raven	<i>Corvus corax</i>
Finches and Allies	Fringillidae
House Finch	<i>Haemorhous mexicanus</i>
Lawrence's Goldfinch	<i>Spinus lawrencei</i>
Lesser Goldfinch	<i>Spinus psaltria</i>
Hawks, Kites, Eagles, and Allies	Accipitridae
Cooper's Hawk	<i>Accipiter cooperii</i>
Northern Harrier	<i>Circus hudsonius</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Hummingbirds	Trochilidae
Anna's Hummingbird	<i>Calypte anna</i>
Lapwings and Plovers	Charadriidae
Killdeer	<i>Charadrius vociferus</i>
Larks	Alaudidae
Horned Lark	<i>Eremophila alpestris</i>
Long-tailed Tits and Bushtits	Aegithalidae
Bushtit	<i>Psaltriparus minimus</i>
Mockingbirds and Thrashers	Mimidae
California Thrasher	<i>Toxostoma redivivum</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
New World Sparrows	Passerellidae
California Towhee	<i>Melospiza crissalis</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Old World Sparrows	Passeridae
House Sparrow (I)	<i>Passer domesticus</i>
Pigeons and Doves	Columbidae
Eurasian Collared-Dove (I)	<i>Streptopelia decaocto</i>
Mourning Dove	<i>Zenaidura macroura</i>

COMMON NAME	SCIENTIFIC NAME
Rock Pigeon (I)	<i>Columba livia</i>
Starlings	Sturnidae
European Starling (I)	<i>Sturnus vulgaris</i>
Swallows	Hirundinidae
Barn Swallow	<i>Hirundo rustica</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Swifts	Apodidae
White-throated swift	<i>Aeronautes saxatalis</i>
Tyrant Flycatchers	Tyrannidae
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
Black Phoebe	<i>Sayornis nigricans</i>
Cassin's Kingbird	<i>Tyrannus vociferans</i>
Say's Phoebe	<i>Sayornis saya</i>
Woodpeckers and Allies	Picidae
Nuttall's Woodpecker	<i>Dryobates nuttallii</i>
Wood-Warblers	Parulidae
Nashville Warbler	<i>Leiothlypis ruficapilla</i>
Wilson's Warbler	<i>Cardellina pusilla</i>
Yellow Warbler	<i>Setophaga petechia</i>
Wrens	Troglodytidae
Bewick's Wren	<i>Thryomanes bewickii</i>

Mammals

The mammals listed below were detected on or near the area within 500-feet of the Project during field surveys conducted in July 2020, April, May, June, and July 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Canidae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*.

COMMON NAME	SCIENTIFIC NAME
Coyotes, dogs, foxes, jackals, and wolves	Canidae
coyote	<i>Canis latrans</i>
Ground Squirrels	Sciuridae
California ground squirrel	<i>Spermophilus beecheyi</i>
Hares and Rabbits	Leporidae
desert cottontail	<i>Sylvilagus audubonii</i>
New World Rats and Mice	Cricetidae
California meadow vole	<i>Microtus californicus</i>
Pocket Gophers	Geomyidae
Botta's pocket gopher	<i>Thomomys bottae</i>

Herpetofauna

The herpetofauna listed below were detected on or near the area within 500-feet of the Project during field surveys conducted in July 2020, April, May, June, and July 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Phrynosomatidae), Common Name, and Scientific Name follow the Society for the Study of Amphibian and Reptiles (SSAR) *Standard English and Scientific Names*.

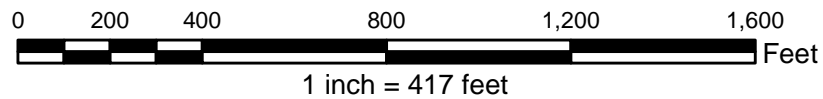
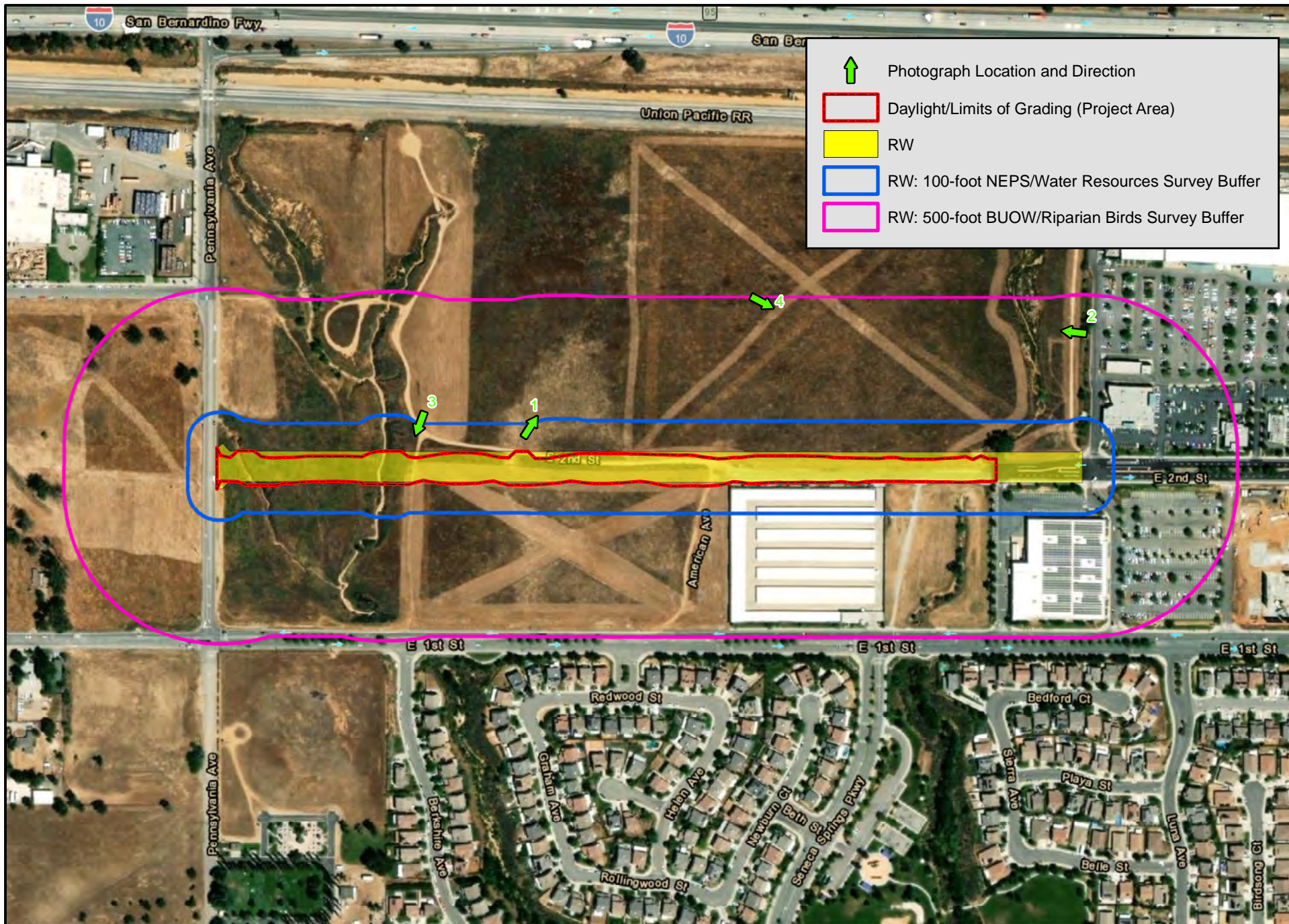
Reptiles

COMMON NAME	SCIENTIFIC NAME
Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched, and Horned Lizards	Phrynosomatidae
Great Basin Fence Lizard	<i>Sceloporus occidentalis longipes</i>
Western Side-blotched Lizard	<i>Uta stansburiana elegans</i>

APPENDIX D

Assessment Photographs

General Site Photographs



**APPENDIX D
General Site
Photographs**

DATE: June 17, 2022
 COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI
 SOURCE: ESRI World Imagery Basemap, ESRI World Transportation, Cozad & Fox, SBS

PROJECT:
 City of Beaumont
 2nd Street Improvement



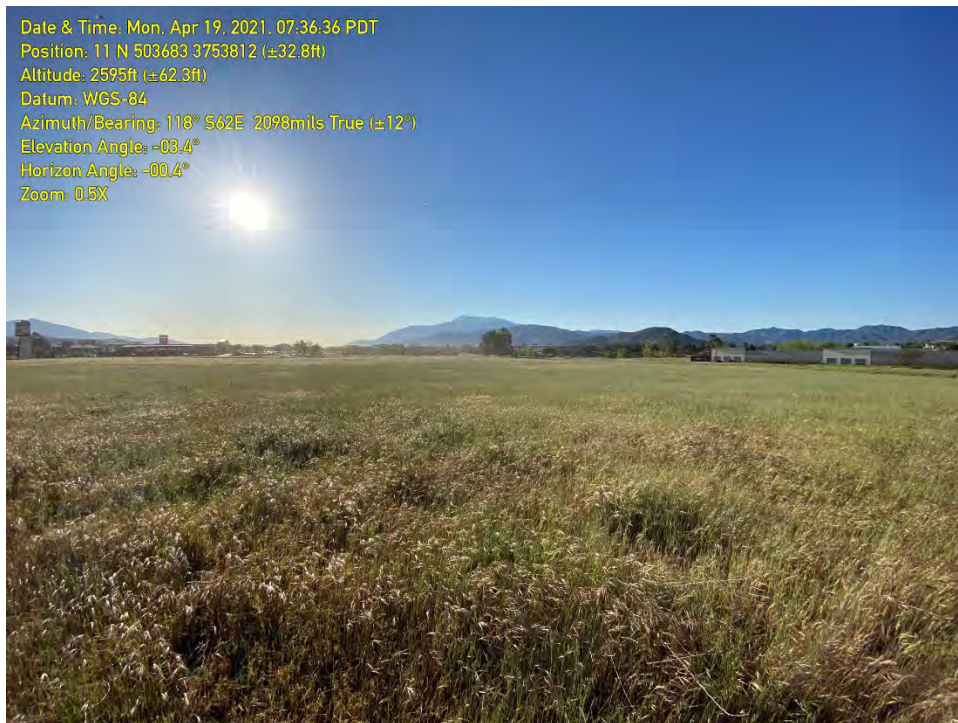
PHOTOGRAPH 1: A northerly view of the Ruderal habitat with non-native grasses dominant.



PHOTOGRAPH 2: A westerly view from the northeast portion of the 500-foot survey area.

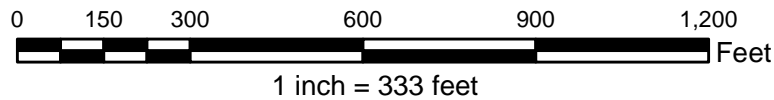
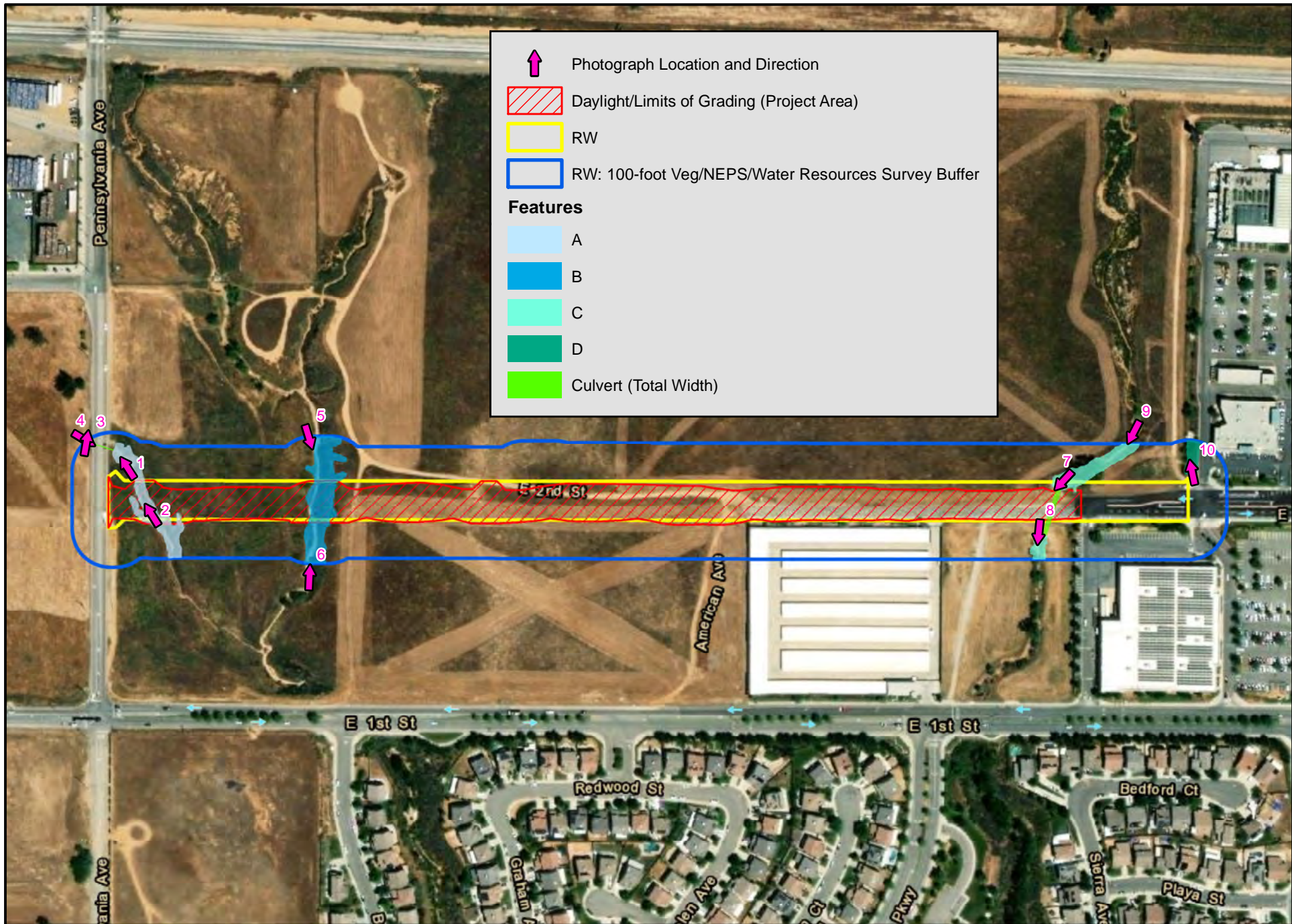


PHOTOGRAPH 3: A southerly view from near the 100-foot buffer boundary in the western portion.



PHOTOGRAPH 4: A view of the area during an early survey in 2021.

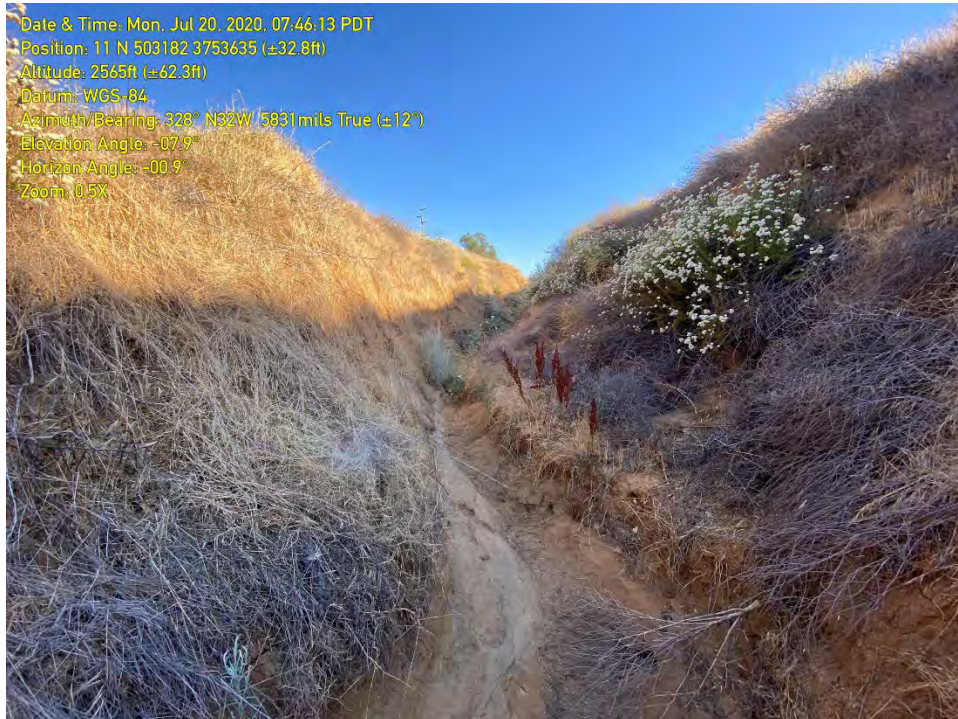
MSHCP Section 6.1.2 Assessment Photographs



APPENDIX D
Riparian/Riverine Areas
Assessment Photographs



PHOTOGRAPH 1: The upstream portion of Feature A where the culvert begins the feature beneath Pennsylvania Avenue.



PHOTOGRAPH 2: The bed and bank of Feature A was narrow and deeply incised.



PHOTOGRAPH 3: The westside of Pennsylvania Avenue where storm runoff entered a standpipe connected to the culvert where Feature A began.



PHOTOGRAPH 4: No roadside drainage was present, or evidence thereof, indicating all flow for Feature A originated from road runoff.



PHOTOGRAPH 5: A view looking down Feature B.



PHOTOGRAPH 6: The depth of Feature B varied and decreased from the upstream end to the downstream portion.



PHOTOGRAPH 7: The culvert at 2nd Street from the upstream end of Feature C (Potrero Creek).



PHOTOGRAPH 8: The low-quality willow scrub in Feature C downstream of 2nd Street.

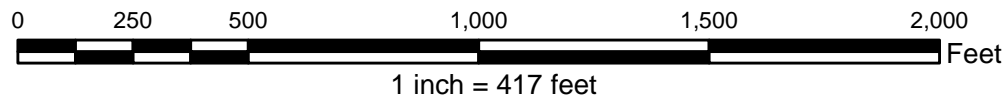
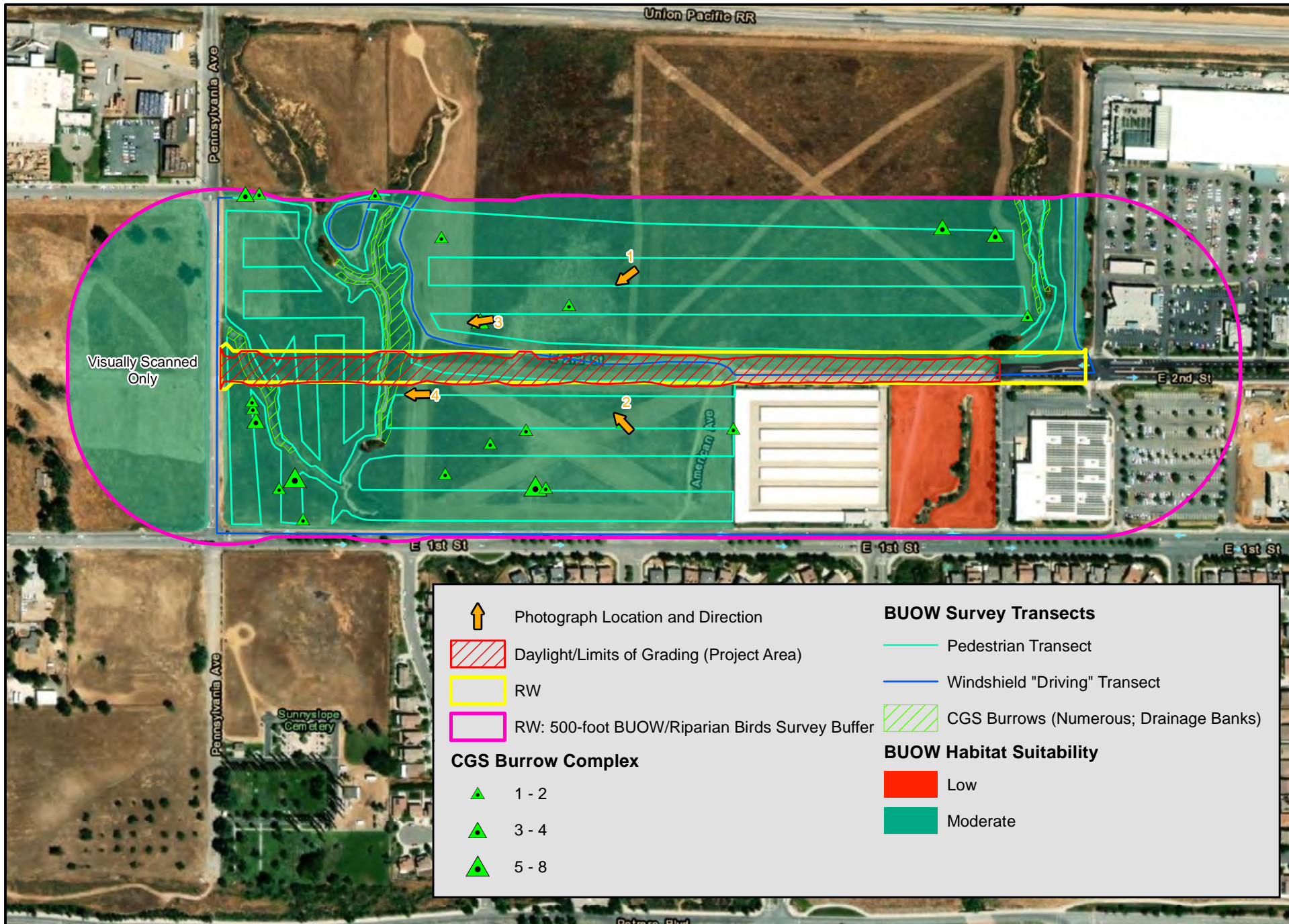


PHOTOGRAPH 9: Feature C upstream of 2nd Street looking downstream. No riparian habitat present. The large blue gum tree depicted in the background.



PHOTOGRAPH 10: The human-created ditch Feature D with low-quality riparian habitat. The drainpipe entered the underground drainage system.

MSHCP Section 6.3.2 BUOW Assessment Photographs



APPENDIX D
BUOW Assessment
Photographs



PHOTOGRAPH 1: A view of the habitat during the first focused survey.



PHOTOGRAPH 2: A single CGS burrow. No BUOW sign was observed at any of the burrow entrances.



Date & Time: Mon, May 10, 2021, 08:14:54 PDT
Position: 11 N 503403 3753673 (±32.8ft)
Altitude: 2581ft (±62.3ft)
Datum: WGS-84
Azimuth/Bearing: 261° S81°W 4649mils True (±12°)
Elevation Angle: -59.7°
Horizon Angle: -04.0°
Zoom: 0.5X

PHOTOGRAPH 3: Another CGS burrow that was part of a burrow complex.



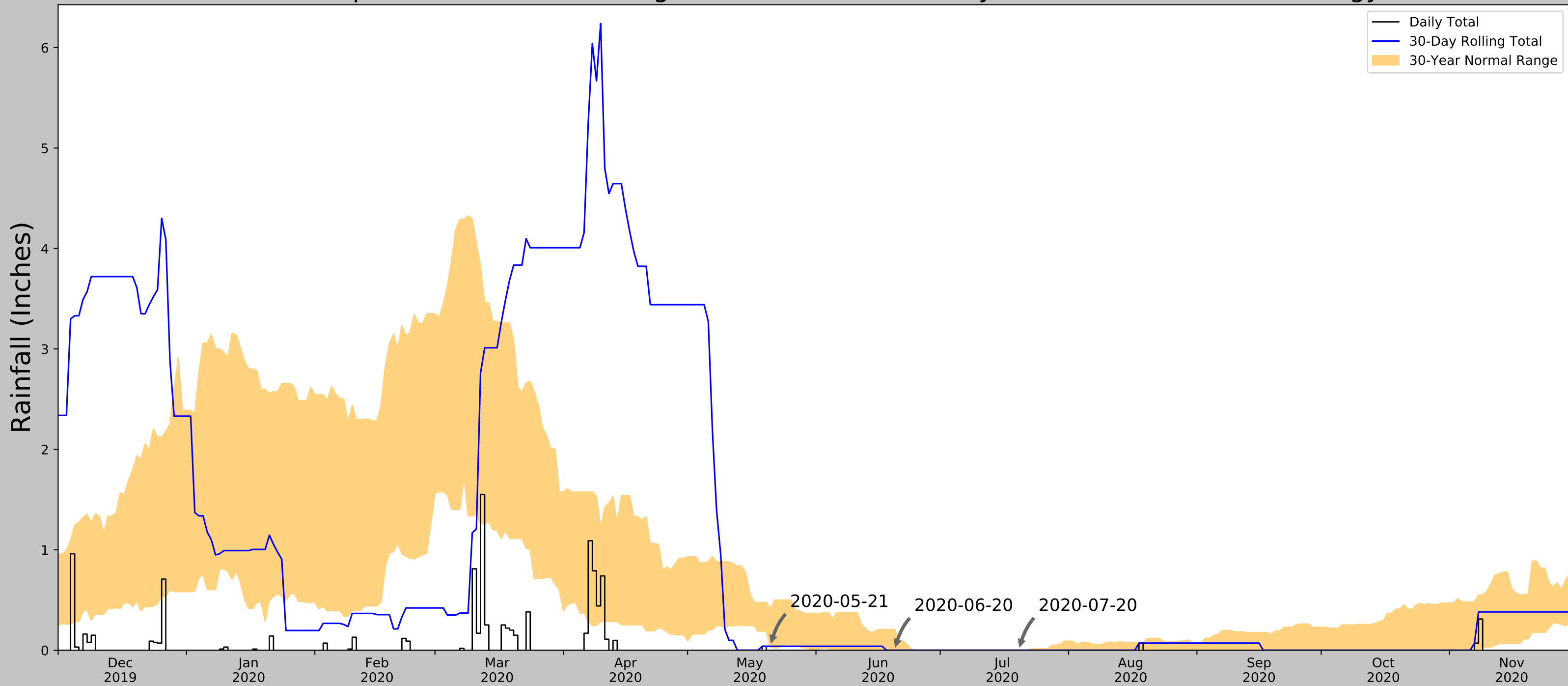
Date & Time: Tue, Jul 06, 2021, 07:43:50 PDT
Position: 11 N 503342 3753621 (±32.8ft)
Altitude: 2580ft (±62.3ft)
Datum: WGS-84
Azimuth/Bearing: 269° S89°W 4782mils True (±12°)
Elevation Angle: -01.9°
Horizon Angle: -00.0°
Zoom: 1.0X

PHOTOGRAPH 4: A view of the habitat in the western portion on the last focused survey.

APPENDIX E

Wetlands Climate Tables

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	33.923289, -116.961809
Observation Date	2020-07-20
Elevation (ft)	2586.24
Drought Index (PDSI)	Normal
WebWIMP H ₂ O Balance	Dry Season

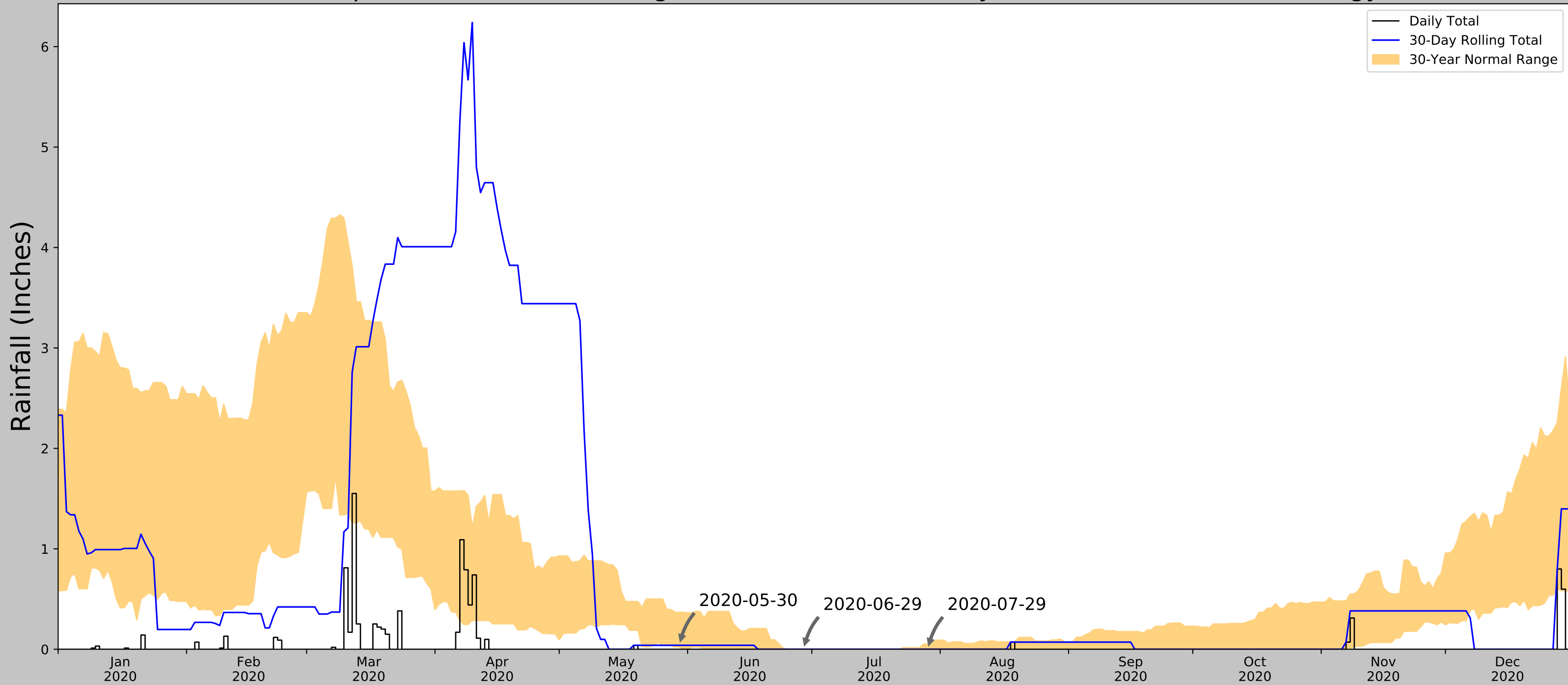
30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2020-07-20	0.0	0.0	0.0	Normal	2	3	6
2020-06-20	0.0	0.206693	0.0	Normal	2	2	4
2020-05-21	0.027953	0.414567	0.03937	Normal	2	1	2
Result							Normal Conditions - 12

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
SAN JACINTO	33.7964, -116.9753	1524.934	8.801	1061.306	13.301	10972	90
BEAUMONT #2	33.9286, -116.9814	2590.879	1.182	4.639	0.537	163	0
BEAUMONT 2.5 NW	33.9543, -117.012	2532.152	3.587	54.088	1.808	18	0
HOMELAND 1.7 NNE	33.769, -117.0923	2248.032	13.028	338.208	10.268	11	0
HEMET 4.1 ENE	33.7527, -116.9196	1698.163	12.033	888.077	16.101	3	0
HEMET	33.7381, -116.8939	1811.024	13.376	775.216	16.388	185	0

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	33.923289, -116.961809
Observation Date	2020-07-29
Elevation (ft)	2586.24
Drought Index (PDSI)	Normal
WebWIMP H ₂ O Balance	Dry Season

30 Days Ending	30 th %ile (in)	70 th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2020-07-29	0.0	0.051181	0.0	Normal	2	3	6
2020-06-29	0.0	0.0	0.0	Normal	2	2	4
2020-05-30	0.022047	0.36811	0.03937	Normal	2	1	2
Result							Normal Conditions - 12

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
SAN JACINTO	33.7964, -116.9753	1524.934	8.801	1061.306	13.301	10972	90
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HOMELAND 1.7 NNE	33.769, -117.0923	2248.032	13.028	338.208	10.269	11	0
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HEMET	33.7381, -116.8939	1811.024	13.376	775.216	16.388	185	0

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

APPENDIX F

Least Bell's Vireo Protocol Survey Report

**LEAST BELL'S VIREO PRESENCE/ABSENCE
PROTOCOL SURVEY REPORT
2ND Street Expansion
Riverside County, Beaumont, California**

Prepared for:

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September 2, 2021

Table of Contents

1.0 EXECUTIVE SUMMARY.....	1
2.0 INTRODUCTION	1
2.1 Project Location.....	1
2.2 Project Description.....	1
2.3 Regulatory Status	1
2.4 Natural History.....	1
3.0 STUDY AREA	4
2.3 Study Area Description.....	4
2.3.1 Ephemeral Drainage.....	4
2.3.2 Potrero Creek	6
2.3.3 Human-Created Ditch	6
4.0 METHODS	6
4.1 Office Analysis	6
4.2 Habitat Assessment.....	6
4.3 Focused Surveys	7
5.0 RESULTS	7
5.1 Office Analysis	7
5.1.1 Aerial Imagery Review	7
5.1.2 Critical Habitat.....	9
5.1.3 Query Results.....	9
5.2 Habitat Assessment.....	9
5.3 Focused Surveys	9
5.3.1 Other Regulatory-Status Species Detected	9
6.0 CONCLUSIONS.....	11
7.0 REFERENCES	13
8.0 CERTIFICATION	13

List of Tables

Table 1 – LBVI Assessment Conditions 8
Table 2 – Regulatory-Status Species Detected 11

List of Figures

Figure 1 – Regional Map 2
Figure 2 – USGS Topographic Map 3
Figure 3 – Study Area Aerial Photograph..... 5
Figure 4 – Query Results 10
Figure 5 - LBVI Offsite Survey Areas..... 12

List of Appendices

Appendix A – Assessment Photographs A-1
Appendix B – Wildlife Observed..... B-1

1.0 EXECUTIVE SUMMARY

A Least Bell's Vireo (*Vireo bellii pusillus*) (LBVI) protocol presence/absence survey (protocol survey) was conducted in marginally suitable habitat within 500-feet of the proposed City of Beaumont, California (City) 2nd Street Expansion project (Study Area) by Searl Biological Services' (SBS) biologist Tim Searl (TE02351A-1) during the Spring and Summer 2021. Eight surveys were performed between April 19 and July 21, 2021 per the U. S. Fish and Wildlife Service (USFWS) January 19, 2001 *Least Bell's Vireo Survey Guidelines* (U. S. Department of the Interior Fish and Wildlife Service 2001) (LBVI Survey Protocol). The overall habitat suitability within the Study Area was marginal, and LBVI was not detected within the Study Area.

2.0 INTRODUCTION

The purpose of this protocol survey was to determine if LBVI was present or absent within the Study Area for the City's 2nd Street Expansion/Improvements Project (Project). The protocol survey was performed, and this report prepared, according to the requirements of the LBVI Survey Protocol.

2.1 Project Location

The Study Area was located in the City of Beaumont (City), Riverside County, California, west of the existing 2nd Street between 1st Street and Interstate 10 (I-10) and east of Pennsylvania Avenue, approximately 0.2-mile aerial mile south/southeast of the Pennsylvania Avenue and I-10 intersection. *Figure 1 - Regional Map* (Page 2) depicts the 2nd Street Right-of-Way (RW) associated with the Project and the 500-foot buffer Study Area.

The Study Area was geographically located in Township 3 South, Range 1 West, Sections 10 and 11 of the Beaumont 7.5 Minute United States Geological Survey (USGS) California Quadrangle. *Figure 2 - USGS Topographic Map* (Page 3) depicts the Study Area's geographic location. Elevations on the Study Area ranged from approximately 2,600-feet to 2,560-feet above mean sea level (msl). The Universal Transverse Mercator (UTM) coordinates of the approximate center of the Study Area was Zone 11; 503,571-meters East; 3,753,649-meters North; North American Datum 1983 (NAD83).

2.2 Project Description

The City proposes to extend and improve 2nd Street between Pennsylvania Avenue to where recent improvements terminate to the east. Details of the Project specifics are currently unknown; however, the street layout will likely be similar to those of the recent improvements where 2nd Street terminates to the east.

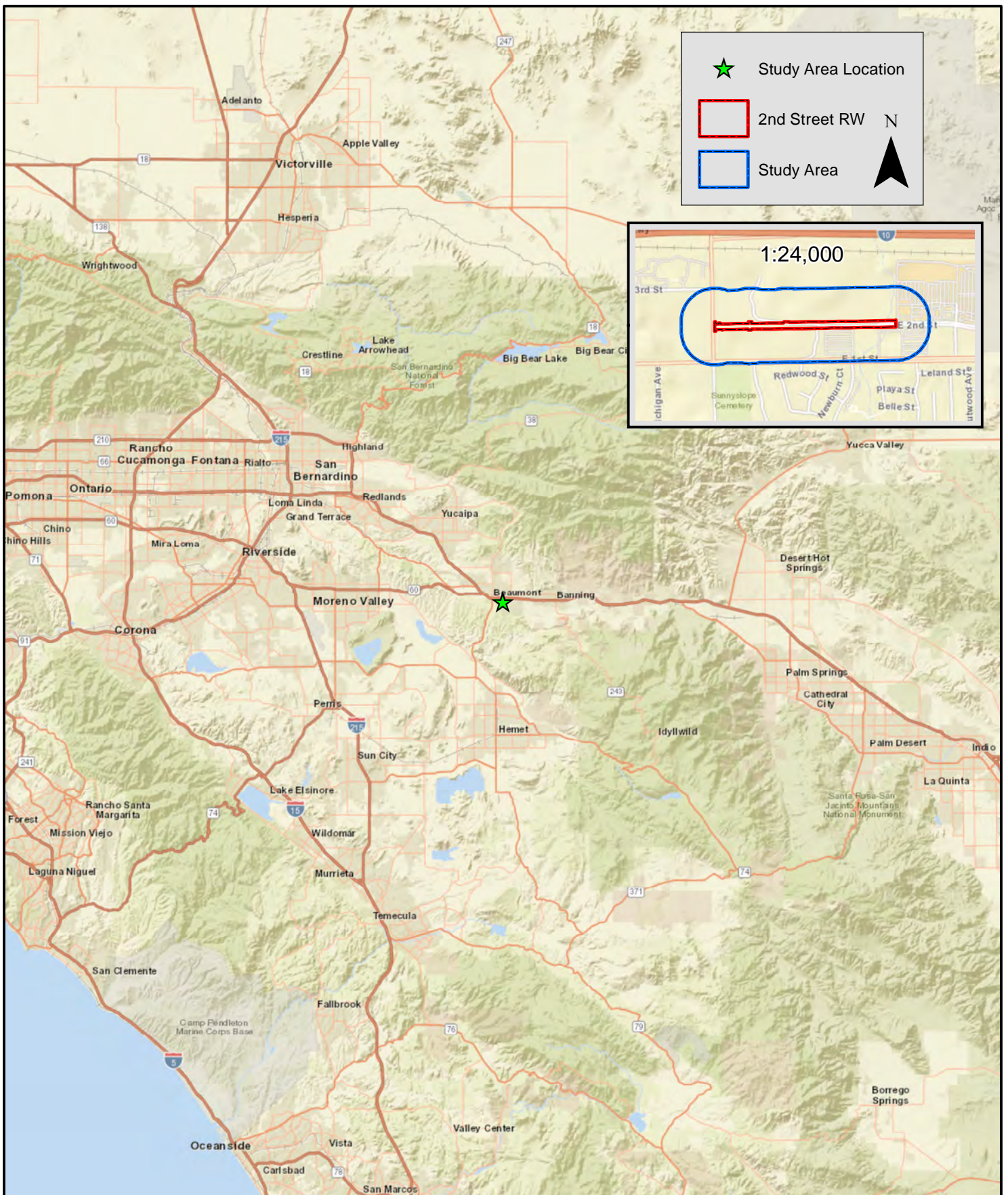
2.3 Regulatory Status

The USFWS listed the LBVI as Endangered under the Endangered Species Act of 1973, as amended (ESA) on May 2, 1986 (U.S. Fish & Wildlife Service 2021). Critical habitat was revised and ultimately designated for LBVI by the USFWS on February 2, 1994 (U.S. Fish & Wildlife Service 2021).

The LBVI was designated by the California Department of Fish and Game Commission (CDFGC) as Endangered under the California Endangered Species Act (CESA) prior to the federal listing on October 2, 1980 (California Department of Fish & Wildlife 2021).

2.4 Life History

The LBVI subspecies breeds within California and northern Baja California, Mexico. The wintering range of the subspecies includes southern Baja California, Mexico. Breeding habitats may include willow (*Salix* spp.) woodlands, stands of mule fat (*Baccharis salicifolia* subsp. *salicifolia*), brushy fields, scrub oak



★ Study Area Location
 2nd Street RW N
 Study Area

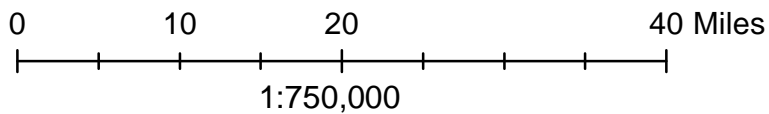
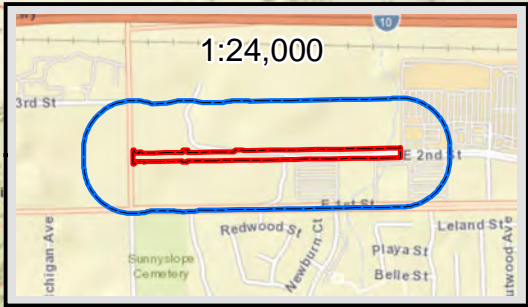
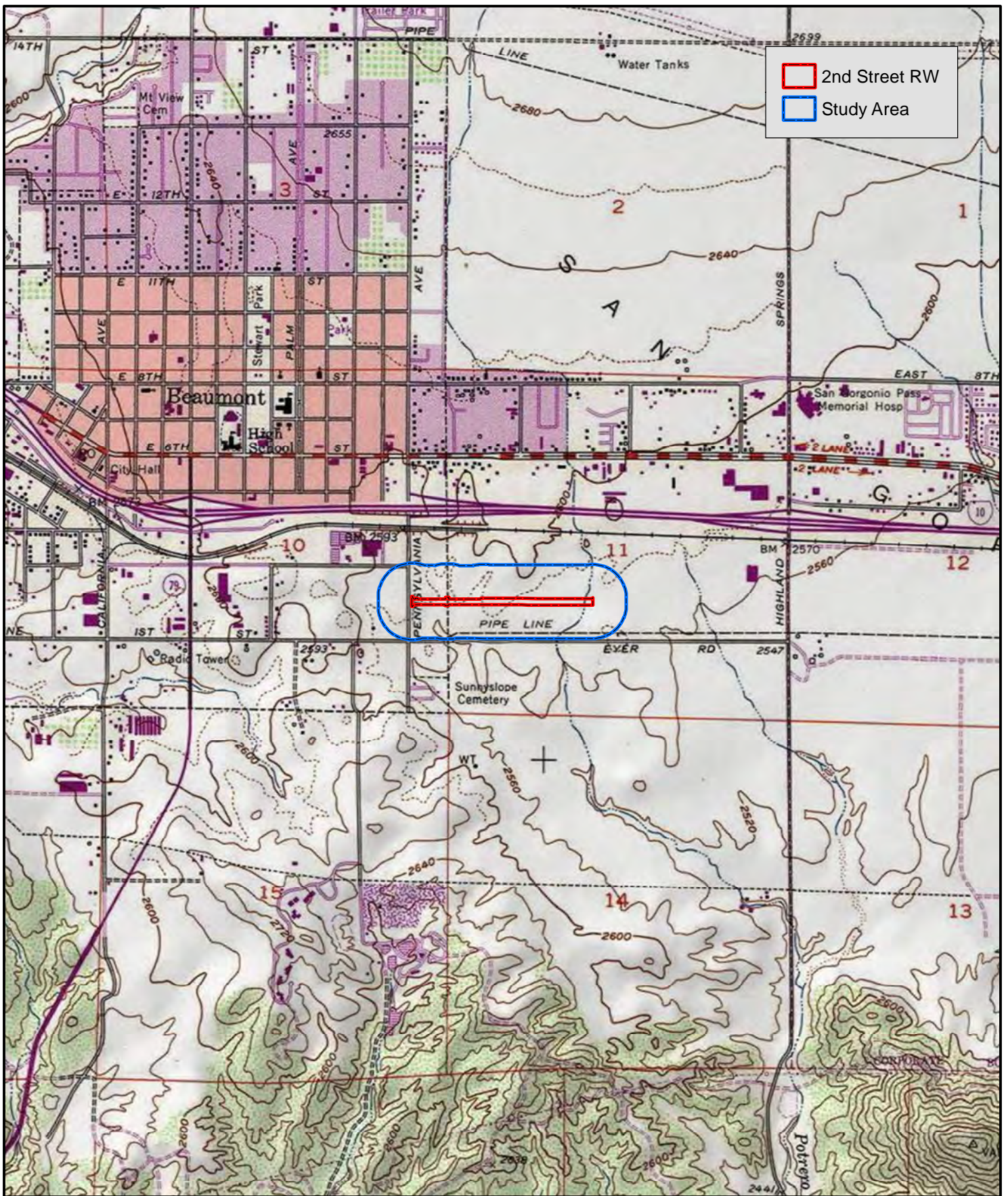


FIGURE 1
Regional Location





2nd Street RW
 Study Area

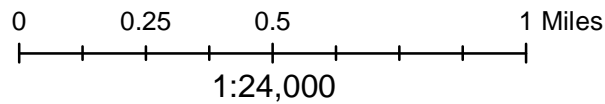


FIGURE 2
USGS Topographic Map

(*Quercus berberidifolia*), coastal chaparral, and mesquite (*Prosopis* spp.) patches with dense, early successional understories. Although it inhabits riparian woodlands, it was found that individuals benefited from using both riparian and non-riparian ecosystems (Kus, et al. 2020).

LBVI is a small, active songbird approximately 4.5 to 5 inches in length with a wingspan of 6.7 to 7.5 inches (U.S. Fish and Wildlife Service 2021). It generally has drab gray plumage throughout, two pale wing bars, and a faint white eye ring. Males and females are sexually monomorphic in plumage coloration.

The breeding season for LBVI ranges from late March to the beginning of August, with the peak of nesting activity from the beginning of April through the end of July. Incubation takes 14 days, and young fledge 10 to 12 days after hatching.

LBVI is an insectivore that forages at all vegetative levels from the ground to approximately 60 feet above ground level, but concentrated in lower to mid-level canopies. LBVI exhibit preferences for black willow (*Salix gooddingii*) relative to its cover within territories, but forage on other plant species depending on availability (Kus, et al. 2020).

The two major factors in the decline of LBVI populations are loss of habitat and nest parasitism by the Brown-headed Cowbird (*Molothrus ater*) (Kus, et al. 2020). Habitat restoration through removal of invasive non-native plants such as giant reed (*Arundo donax*) and re-planting of native riparian species, and brown-headed cowbird control have been the two primary measures to conserve LBVI populations (Kus, et al. 2020).

3.0 STUDY AREA

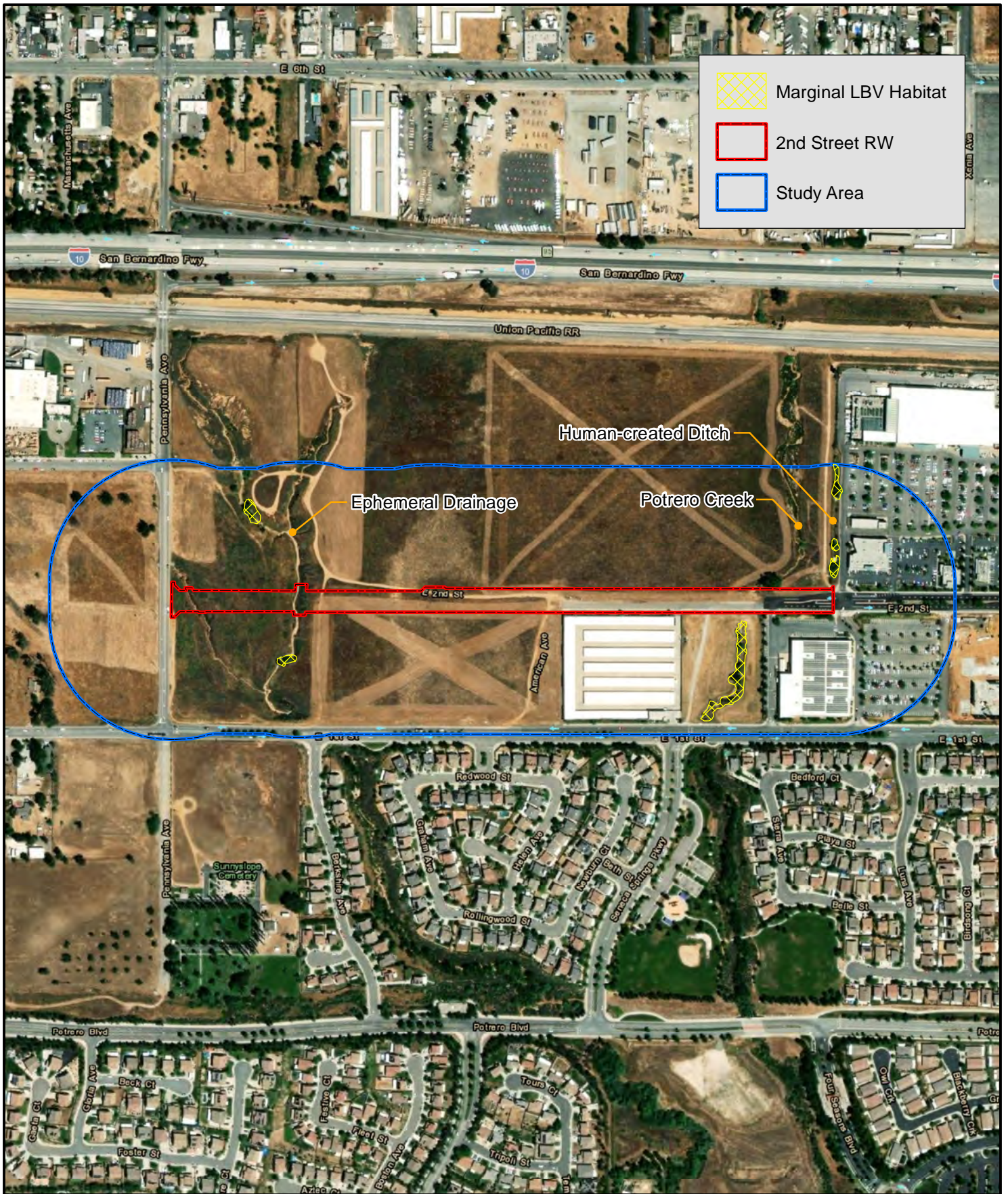
3.1 Study Area Description




The Study Area primarily consisted of upland habitat with commercial areas present in the eastern end. Three unnamed ephemeral drainages, where two of which converged into one, the headwaters of Potrero Creek which was also ephemeral, and a human-created drainage ditch that received runoff from the commercial center to the east were present within the Study Area. The small ephemeral wash in the far west of the Study Area was a deep incised gully and the result of storm runoff from Pennsylvania Avenue. This wash did not support riparian vegetation. The remaining washes and ditch only supported a total of 0.75-acre of marginally suitable habitat for LBVI, but protocol surveys were performed due to LBVI recently being documented by the California Natural Diversity Database (CNDDDB), USFWS Carlsbad Fish and Wildlife Office Species Occurrence GIS data (CFWO), and eBird within one mile. The Study Area is depicted on *Figure 3 – Study Area Aerial Photograph* (Page 5). Representative photographs of the Study Area are provided in the attached Appendix A. Marginally suitable LBVI habitat is described below.

3.1.1 Ephemeral Drainage

The unnamed ephemeral drainage in the western portion of the Study Area primarily consisted of upland habitat with non-native, weedy vegetation such as red brome (*Bromus rubens*), ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), and wall barley (*Hordeum murinum*) dominant. Some native upland vegetation was present, with the majority occurring on the banks, and included interior goldenbush (*Ericameria linearifolia*) and California buckwheat (*Eriogonum fasciculatum*).

The marginal LBVI habitat consisted of a black willow thicket in the upstream end that lacked an understory. Giant reed, an invasive species, and tree-of heaven (*Ailanthus altissima*), a non-native ornamental, were also present. Trespassers were often observed walking and sleeping in the drainage near



	Marginal LBV Habitat
	2nd Street RW
	Study Area

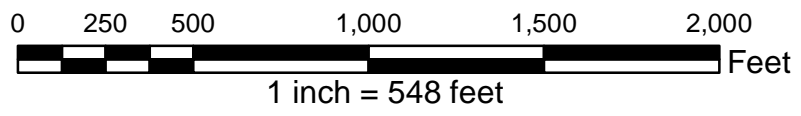


FIGURE 3
Study Area
Aerial Photograph



the black willows. This notwithstanding, migrant birds such as Wilson's Warbler (*Cardellina pusilla*) and Yellow Warbler (*Setophaga petechia*) were detected foraging within the black willows.

A small stand of arroyo willow (*Salix lasiolepis*) was present in the downstream area. Though the patch was small, it was dense. The area around the patch consisted of upland habitat similar to that described above with a few scattered giant reed.

3.1.2 Potrero Creek

Potrero Creek was present in the eastern end of the Study Area. The drainage was divided by a culvert located under a paved portion of 2nd Street. The entirety of Potrero Creek upstream of 2nd Street consisted of upland habitat with a homogenous stand of California buckwheat in the upstream end then transitioned to more non-native vegetation near 2nd Street including a single, large blue gum (*Eucalyptus globulus*).

The marginal LBVI habitat downstream of 2nd Street included a mix of sparsely distributed willow species, that included arroyo willow, black willow, narrow-leaved willow (*Salix exigua*), and red willow (*Salix laevigata*). Mule fat was also present. Although the riparian plant diversity was high, species richness was low throughout the area. The habitat was also mixed with several non-native trees, such as Chinese elm (*Ulmus parvifolia*), Shamel ash (*Fraxinus uhdei*), and tree-of-heaven. Saltcedar (*Tamarix ramosissima*), an invasive species, was also present.

3.1.3 Human-Created Ditch

According to Google Earth, the commercial center, including the drainage ditch, to the east began construction in late 2005/early 2006. The majority of the ditch was earthen with a few concrete trapezoid aprons. The human-created ditch supported only a few, scattered black willow and generally lacked an understory though a few mule fat were present. The majority of the ditch consisted of non-native, weedy vegetation. Trash was prevalent throughout the ditch and was likely the result of being located adjacent to a commercial parking lot. The downstream terminus of the ditch was near 2nd Street. A large, vertical drainpipe was present at the terminus where ephemeral flow entered the underground drainage system.

4.0 METHODS

4.1 Office Analysis

Prior to initiating field surveys, SBS performed an office analysis of the Study Area and its vicinity by reviewing the Beaumont 7.5 Minute USGS California Quadrangle using ESRI ArcGIS, aerial imagery using Google Earth, LBVI designated critical habitat (U.S. Fish & Wildlife Service 2021), CDFW's California Natural Diversity Database (CNDDDB), USFWS Carlsbad Fish & Wildlife Office (CFWO) Species Occurrence Data (U. S. Fish and Wildlife Service Carlsbad Fish and Wildlife Office 2021), and eBird Hotspots (The Cornell Lab of Ornithology 2021). The analysis was conducted to ascertain the potential for presence or absence of LBVI by analyzing the topography, current and historical habitat conditions, and the Study Area's location relative to designated critical habitat. Further, the CNDDDB and CFWO Species Occurrence Data were queried to determine if LBVI had been documented within five miles of the Study Area. The Cornell Lab of Ornithology's eBird's "Hotspots" map was also analyzed to determine if LBVI had been reported in the vicinity.

4.2 Habitat Assessment

A habitat assessment was conducted by biologists Tim Searl and Arthur Davenport in July 2020. The habitat suitability for LBVI of the entire Study Area was assessed by conducting a "windshield survey" from a vehicle, a pedestrian survey, and scanning areas with 10 by 42 binoculars. Mapping and data collection were performed in the field utilizing both paper maps (i.e., aerial photographs and USGS topographic

maps), and Collector for ArcGIS installed on a smart phone (Collector)¹. Field observations were also noted such as plant communities, dominant plant species, vegetation height and density, and human disturbance levels. Habitat suitability for LBVI is typically classified by SBS as Not Suitable², Low/Marginal³, Moderate⁴, or High⁵.

The results of the habitat assessment were further assessed and confirmed during the first focused survey in 2021.

4.3 Focused Surveys

The eight focused surveys were performed by Tim Searl per the LBVI Survey Protocol on April 19, April 30, May 10, May 24, June 1, June 11, July 6, and July 21, 2021. Tim Searl was accompanied by field technician Colin Chapin during the May 10 survey. The surveys were conducted during weather conditions conducive for detecting LBVI while avoiding inclement weather such as excessive heat, high winds, and dense fog.

All suitable habitat within the Study Area, including adjacent upland areas, was surveyed by slowly walking along the margins while stopping often to scan the area with binoculars and listen for calls from LBVI.

Data collected on each of the surveys included start and stop times, start and stop weather conditions, survey routes, and a complete list of the wildlife detected. *Table 1 – LBVI Assessment Conditions* (Page 8) provides the survey conditions. A complete list of the wildlife detected over the course of the surveys is attached in Appendix B.

5.0 RESULTS

5.1 Office Analysis

The office analysis confirmed the potential for LBVI to occupy the Study Area, and that a habitat assessment would be required, and protocol surveys would potentially be required.

5.1.1 Aerial Imagery Review

Based on review of aerial imagery, the naturally occurring drainages within the Study Area have transitioned from ephemeral washes with very little associated vegetation in 1996 to ephemeral washes that support more vegetation, though primarily occurring in patches, in more recent imagery. These same washes south of the Study Area were also ephemeral with very little vegetation present until the area was developed into a large residential project beginning in 2005. The washes appeared to have been enhanced, rehabilitated/restored, and/or through creation, planted with riparian vegetation such as cottonwood (*Populus* spp.), willow (*Salix* spp.), and mule fat.

¹ Some data is recorded with Collector connected to a SXBlue II + GNSS submeter unit and antenna.

² The habitat lacks the required characteristics to support LBVI. Examples include developed land, land that completely lacks riparian areas, etc.

³ The habitat is structurally suitable with sparse riparian habitat; however, factors such as the presence of non-native vegetation, habitat loss and severe fragmentation, very small habitat patch size, fire regime, human activity (i.e., disking, mowing, grazing, historical use), etc. have degraded the quality of the habitat.

⁴ The habitat is structurally suitable with less of the above degrading factors, and the presence of more contiguous riparian habitat.

⁵ This habitat is the preferred habitat of LBVI with dense riparian habitat with multi-structured canopy levels (i.e., forb/shrub/tree layers) and provides larger blocks of contiguous habitat.

Table 1 – LBVI Assessment Conditions

PROTOCOL SURVEY NUMBER	SURVEY TYPE ⁶	DATE	BIOLOGIST	TIME (24hr)	SUNRISE	TEMPERATURE (°F)	RELATIVE HUMIDITY (%)	CLOUD COVER (%)	WIND SPEED (mph)	PRECIP. ⁷ (Yes/No)	MOON PHASE
N/A	HA	7/20/2020	Tim Searl/Arthur Davenport	0600-1300	N/A	72-90	55-30	0-0	2-5	No	New Moon
1	HA/FS	4/19/2021	Tim Searl	0545-0700	0612	51-55	28-21	0-0	1-4	No	First Quarter
2	FS	4/30/2021	Tim Searl	0540-0745	0600	61-72	38-34	0-0	0-0	No	Waning Gibbous
3	FS	5/10/2021	Tim Searl/Colin Chapin	0600-0715	0551	58-62	78-68	100-100*	1-2	No	New Moon
4	FS	5/24/2021	Tim Searl	0555-0700	0542	51-64	48-33	30-20	4-5	No	Waxing Gibbous
5	FS	6/1/2021	Tim Searl	0530-0645	0539	62-73	47-35	40-40	4-2	No	Last Quarter
6	FS	6/11/2021	Tim Searl	0530-0730	0537	57-64	47-53	0-0	1-0	No	New Moon
7	FS	7/6/2021	Tim Searl	0530-0645	0544	67-73	38-31	90-50	1-1	No	Waning Crescent
8	FS	7/21/2021	Tim Searl	0545-0715	0553	70-79	47-40	10-10	2-4	No	Waxing Gibbous

*High fog w/good visibility

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⁶ HA: Habitat Assessment; FS: Focused Survey

⁷ If measurable rain occurred during the survey

5.1.2 Critical Habitat

The Study Area was not located within designated critical habitat for LBVI. The nearest critical habitat was approximately 26-miles west of the Study Area in the Santa Ana River.

5.1.3 Query Results

According to the CFWO and CNDDDB, 26 records (CFWO 22, CNDDDB 4) of LBVI have been reported within 5-miles of the Study Area over the past 30 years with the most recent record reported in 2016. The nearest documented record to the Study Area was in 2015 approximately 0.7-mile southeast in Potrero Creek. A total of eight records (CFWO 6, CNDDDB 2; overlapping records), including the 2015 record, were located within approximately 1.4-miles of the Study Area in Potrero Creek. According to the CFWO and CNDDDB, two breeding pairs of LBVI successfully fledged young at the nearest record. Singing males and a “probable” nesting pair were detected at the 1.4-mile record in 2016. *Figure 4 – Query Results* (Page 10) depicts the LBVI records within five miles of the Study Area.

An eBird hotspot, *Potrero Creek at Four Seasons Beaumont* (The Cornell Lab of Ornithology 2021), was located approximately 0.5-mile south/southeast of the Study Area within the gated community of Four Seasons. LBVI was reported and documented through photographs and sound recordings at the hotspot in April 2019. In addition to LBVI, Yellow-billed Cuckoo (*Coccyzus americanus*) (YBCU) and Willow Flycatcher (*Empidonax traillii*) (WIFL) have been reported at this location. The YBCU, listed as Endangered through the CESA and Threatened through the ESA, was documented in July 2020. An immature bird was observed dead as a result of a window strike. The WIFL, with all subspecies listed as Endangered by the CESA, and the Southwestern Willow Flycatcher (*Empidonax traillii extimus*) (SWFL), a subspecies that nests in the southwestern U. S., is listed as Endangered through the ESA. The WIFL was reported in October 2018. The subspecies was not reported.

5.2 Habitat Assessment

The Study Area depicted on the Figure 3, which totaled 94.73-acres, was primarily comprised of ruderal upland habitat and developed areas. The Study Area, as described in Section 2.0, consisted of ephemeral washes and a human-created drainage ditch that supported 0.75-acre of marginally suitable habitat for LBVI. The LBVI habitat was considered unlikely to support LBVI; however, due to LBVI being documented recently at numerous locations within 0.5 to 1.4-miles of the Study Area, SBS determined LBVI protocol surveys were warranted.

5.3 Focused Surveys

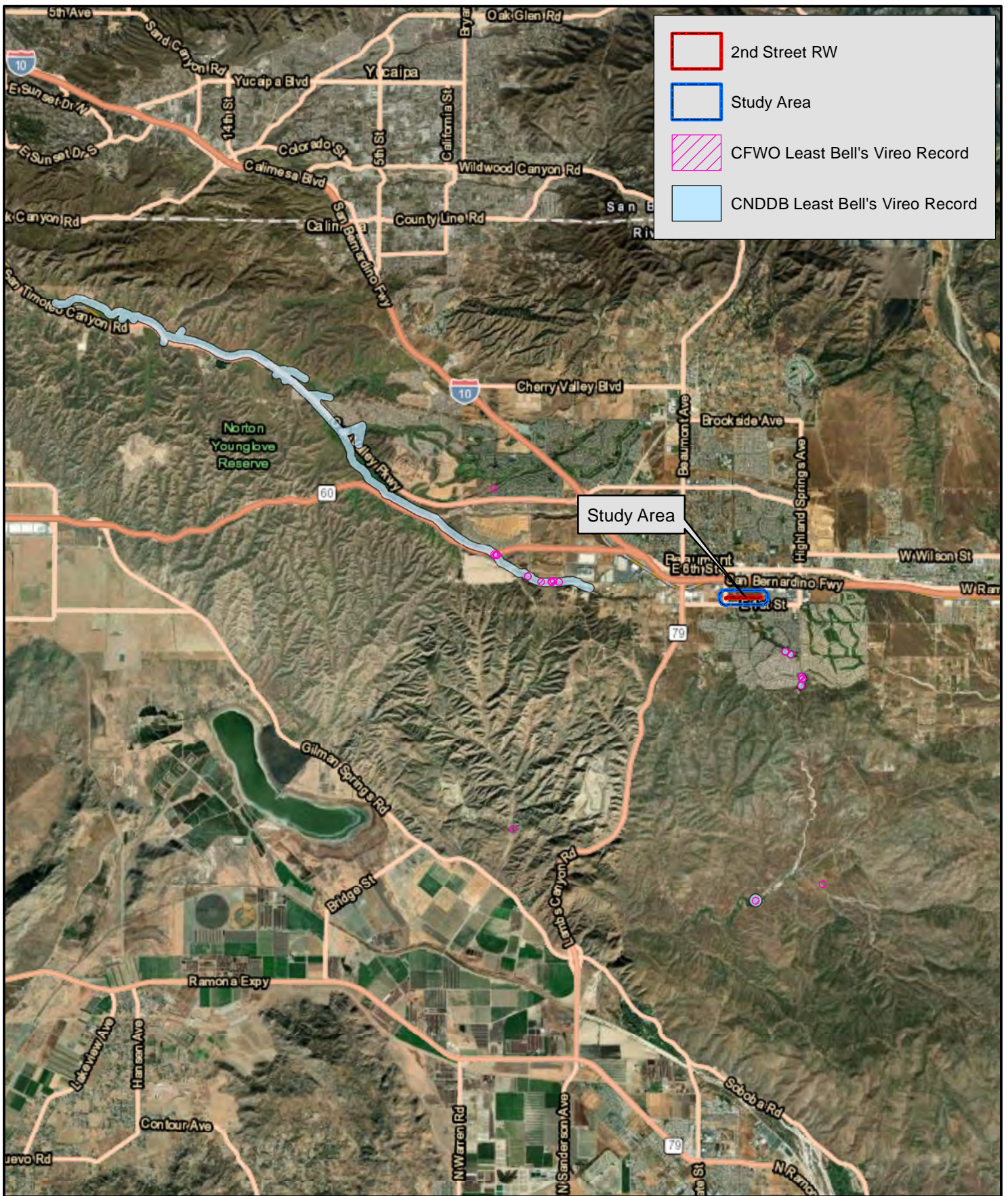
LBVI was not detected within or immediately adjacent to the Study Area during the 2021 focused surveys.

5.3.1 Other Regulatory-Status Species Detected

No federal and/or state listed Endangered, Threatened, or Candidate species were detected during the surveys. Five birds listed on the CDFW's Special Animals List⁸ (California Department of Fish and Wildlife 2021) with varying degrees of status from CDFW Species of Special Concern⁹ (SSC) and CDFW Watch List (WL), to no formal federal or state designation, were detected over the course of the surveys.

⁸ “Special Animals” is a broad term used to refer to all the animal taxa tracked by the CDFW CNDDDB, regardless of their legal or protection status (California Department of Fish and Wildlife 2021).

⁹ [CDFW] has designated certain vertebrate species as “Species of Special Concern” because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of designating SSCs is to halt or reverse their decline by calling attention to their plight and addressing the issues of concern early enough to secure their long-term viability (California Department of Fish and Wildlife 2021).



- 2nd Street RW
- Study Area
- CFWO Least Bell's Vireo Record
- CNDDDB Least Bell's Vireo Record

Study Area

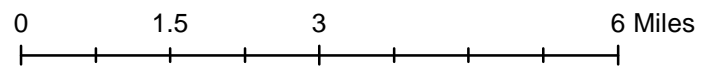


FIGURE 4
Query Results

A list of the regulatory-status species detected is presented in *Table 2 – Regulatory-Status Species Detected* (below).

Table 2 – Regulatory-Status Species Detected

SPECIES	REGULATORY STATUS	DETECTION DETAILS
Cooper's Hawk (<i>Accipiter cooperii</i>) (COHA)	CDFW WL - Nesting	COHA was observed perched in a black willow in the human-created feature and soaring overhead during protocol surveys 1 and 3. COHA nesting was not observed.
Northern Harrier (<i>Circus hudsonius</i>) (NOHA)	CDFW SSC - Nesting	NOHA was observed flying low above the upland field area in the northern portion of the Study Area during protocol survey 1. NOHA nesting was not observed.
California Horned Lark (<i>Eremophila alpestris actia</i>) (HOLA)	CDFW WL	HOLA flocks were observed foraging in the upland field areas during protocol surveys 1, 3, and 6.
Lawrence's Goldfinch (<i>Spinus lawrencei</i>) (LAGO)	CDFW Special Animal (No formal CDFW status designation)	A mixed flock of LAGO, Lesser Goldfinch (<i>Spinus psaltria</i>) (LEGO), and House Finch (<i>Haemorhous mexicanus</i>) (HOFI) was observed foraging in upland areas north of 2 nd Street during protocol surveys 1 and 3.
Yellow Warbler (<i>Setophaga petechia</i>) (YEWA)	CDFW SSC – Nesting	YEWA was detected foraging in black willows in the ephemeral drainage and human-created ditch during protocol surveys 2 and 3. YEWA nesting was not observed.

6.0 CONCLUSIONS

LBVI was not detected during the habitat assessment or protocol survey in the Study Area. Based on the negative survey result of the protocol survey and the marginal quality of the habitat, LBVI is absent and not expected to utilize the Study Area as a breeding territory.

Tim Searl conducted a brief survey of three offsite areas depicted on *Figure 5 – LBVI Offsite Survey Areas* (Page 12) south of the Study Area within Potrero Creek on protocol surveys 1, 2, 3, and 5. The offsite surveys were conducted after completing the survey of the Study Area on each of the four dates.

Offsite Area 1 was a mix of willow thicket and scrub oak (*Quercus berberidifolia*). Singing males were detected at the two locations depicted on Figure 5 on protocol surveys 1, 2, and 3. A third LBVI was observed in the same willow as the singing male at the southern-most detection on protocol survey 3. Brown-headed Cowbird (*Molothrus ater*) was common in Offsite Area 1.

Offsite Area 2 was fenced and not accessible for a detailed visual inspection, and therefore, was surveyed aurally. The area consisted primarily of Fremont cottonwood (*Populus fremontii* subsp. *fremontii*). LBVI was not detected.

The area between Offsite Area 2 and 3 was within a gated community and was not surveyed. Offsite Area 3 also consisted primarily of Fremont cottonwood, and much of the riparian habitat, particularly in the northern half, lacked an understory. LBVI was not detected. The riparian habitat was planted, likely for mitigation purposes, as noted above in section 5.1.1, and the structure of the habitat was more suitable for YBCU rather than LBVI. A dead YBCU was reported in 2020 between Offsite Areas 2 and 3 as noted above in section 5.1.3.

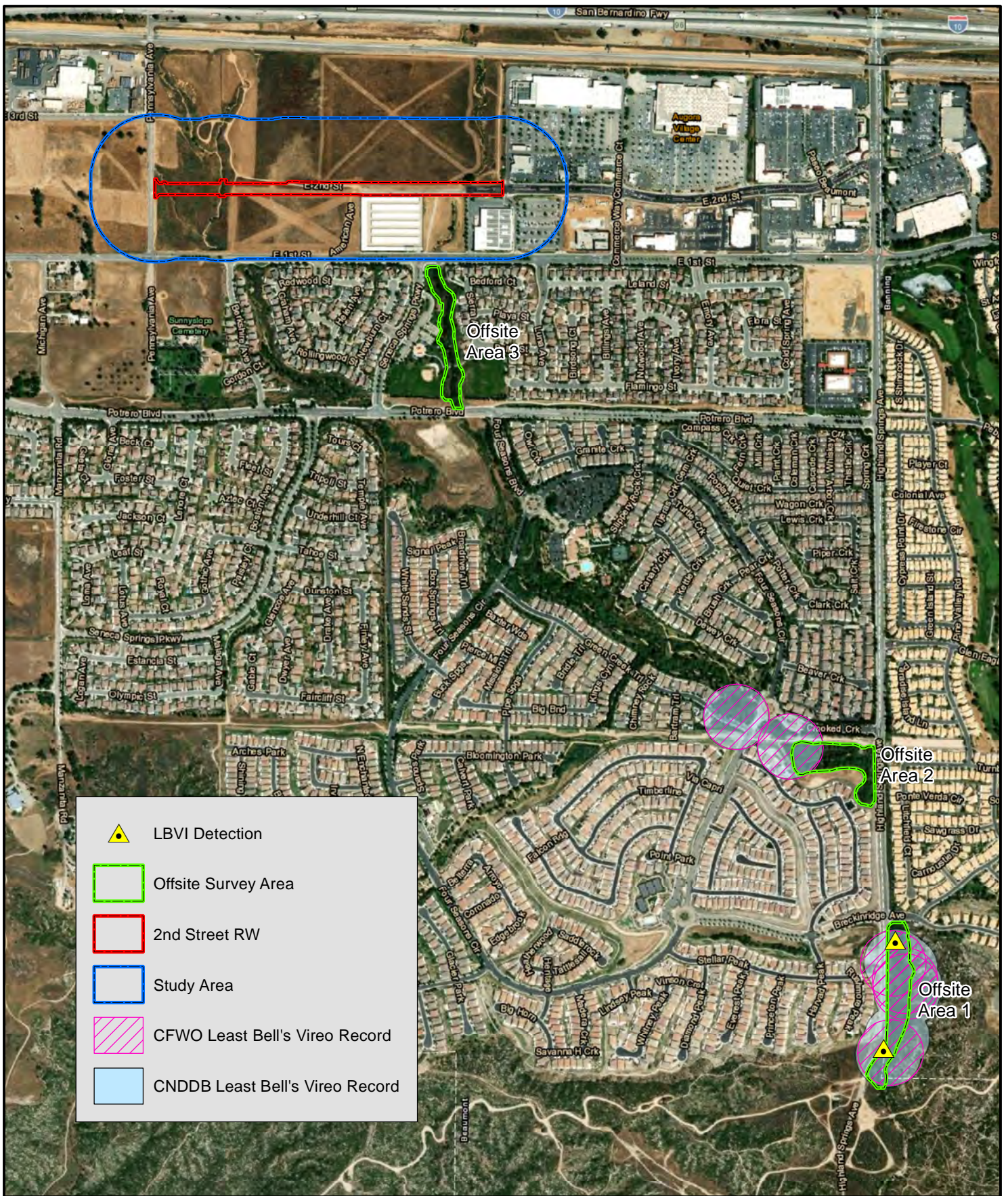
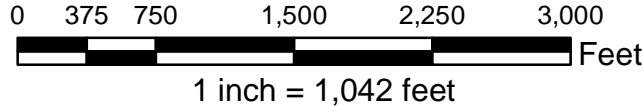


FIGURE 5
LBVI Offsite
Survey Areas



7.0 REFERENCES

- California Department of Fish & Wildlife. 2021. "State and Federally Listed Endangered and Threatened Animals of California." Accessed 2021. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline>.
- California Department of Fish and Wildlife. 2021. "California Natural Diversity Database ." *Special Animals List*. CA Sacramento. April. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>.
- Kus, B., S. L. Hopp, R. R. Johnson, and B. T. Brown. 2020. "Cornell Lab of Ornithology." Vers. 1.0. *Bell's Vireo (Vireo bellii)*. Edited by A. F. Poole. Cornell Lab of Ornithology. Accessed 2021. <https://doi.org/10.2173/bow.belvir.01>.
- The Cornell Lab of Ornithology. 2021. *eBird*. Accessed 2021. <https://ebird.org/home>.
- . 2021. *Hotspot*. Accessed 2021. <https://ebird.org/hotspot/L7681464>.
- U. S. Department of the Interior Fish and Wildlife Service. 2001. *Least Bell's Vireo Survey Guidelines*. Carlsbad, CA: Ecological Services Carlsbad Fish and Wildlife Office.
- U. S. Fish and Wildlife Service Carlsbad Fish and Wildlife Office. 2021. *Species Occurrence Data*. Accessed 2021. <https://www.fws.gov/carlsbad/gis/cfwogis.html>.
- U.S. Fish & Wildlife Service. 2021. *ECOS Environmental Conservation Online System*. Accessed 2021. <https://ecos.fws.gov/ecp/species/5945>.
- U.S. Fish and Wildlife Service. 2021. *Least Bell's Vireo (Vireo bellii pusillus)*. Accessed 2021. https://www.fws.gov/refuge/san_diego/wildlife_and_habitat/threatened_and_endangered_species/Least_Bells_Vireo.html.

8.0 CERTIFICATION

We hereby certify that the statements furnished above, the associated figures, and the attached appendices present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of our knowledge and belief.

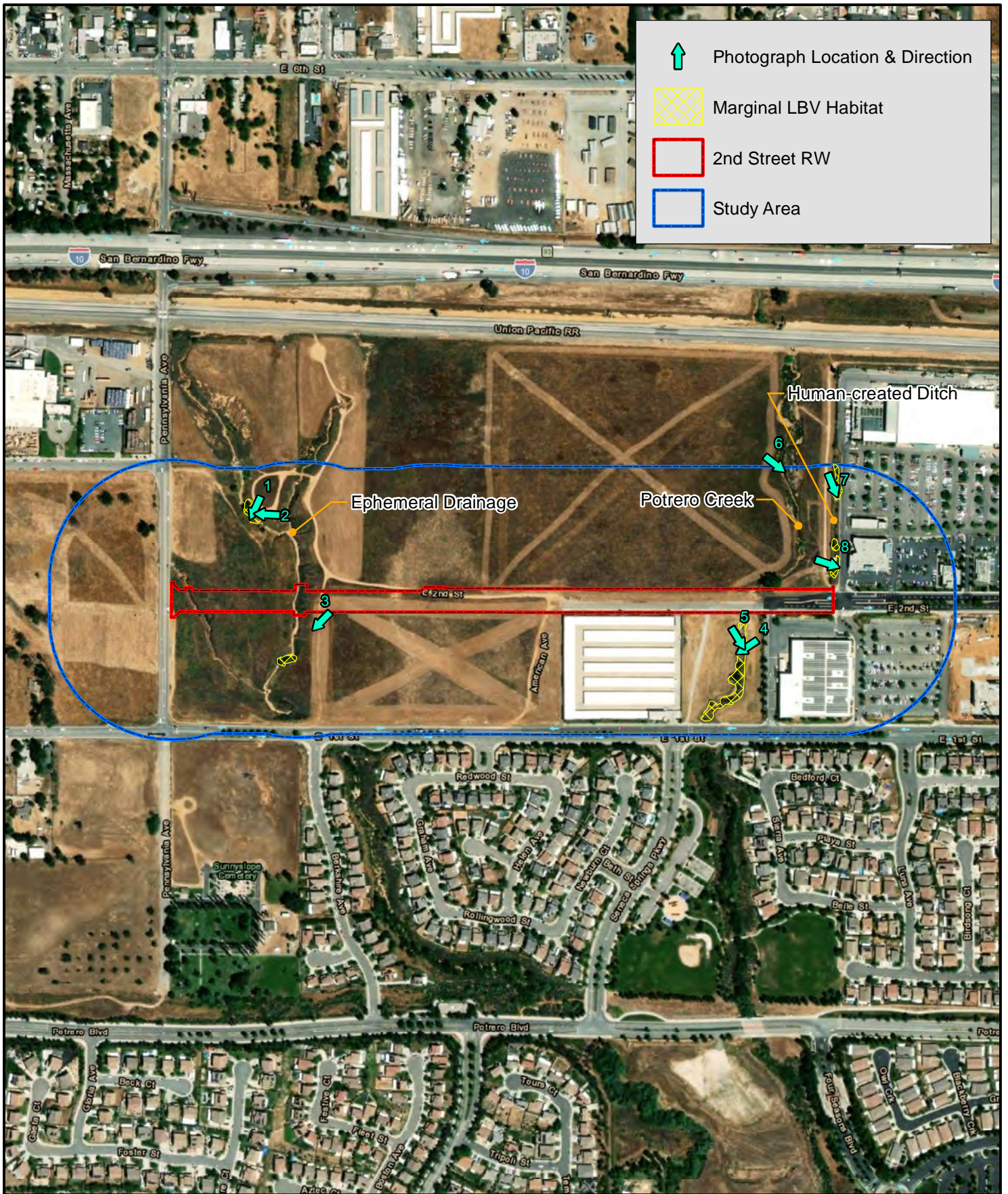
Signed: Tim Searl Date: September 2, 2021
 Tim Searl, Biologist, Searl Biological Services
 Permit Number: TE02351A-1





FIGURE DISCLAIMER

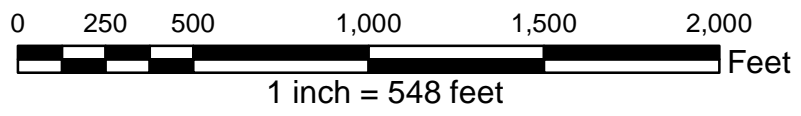
Figures and data are to be used for reference purposes only. Map features are approximate and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

APPENDIX A

Assessment Photographs



-  Photograph Location & Direction
-  Marginal LBV Habitat
-  2nd Street RW
-  Study Area



APPENDIX A
Photograph
Key Map

DATE: September 1, 2021
 COORDINATE SYSTEM: NAD 1983 State Plane California Zone VI FIPS 0406 (feet)
 SOURCE: ESRI World Imagery, ESRI World Transportation, Cozad & Fox

PROJECT:
 City of Beaumont
 2nd Street



PHOTOGRAPH 1: The black willow thicket in the upstream portion of the unnamed ephemeral drainage. An understory was lacking, and the area was utilized often by trespassers.



PHOTOGRAPH 2: The ephemeral drainage was a deep gully, approximately 30-feet in some locations. The canopy of the black willow thicket is pictured.



PHOTOGRAPH 3: A small patch of arroyo willow in the ephemeral drainage.



PHOTOGRAPH 4: Potrero Creek downstream of a culvert at 2nd Street. The habitat had a mix of willow species, including narrow-leaved, but occurred sparingly throughout and was mixed with non-natives, such as Chinese elm, Shamel ash, and tree-of-heaven.



PHOTOGRAPH 5: A patch of mixed willow downstream of 2nd Street.



PHOTOGRAPH 6: The entirety of Potrero Creek upstream of 2nd Street consisted of upland habitat with a homogenous stand of California buckwheat in the upstream end then transitioned to more non-native vegetation near 2nd Street.



PHOTOGRAPH 7: The human-created ditch supported only a few, scattered black willow and generally lacked an understory. Trash was prevalent throughout the ditch and was likely the result of being located adjacent to a commercial parking lot.



PHOTOGRAPH 8: The ditch was irrigated but ruderal, weedy vegetation was dominant.

APPENDIX B

Wildlife Observed

Birds

The bird species listed below were detected visually or aurally either on, above, or near the Study Area during a LBVI protocol survey in 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Icteridae), Common Name, and Scientific Name follow the American Ornithological Society *Checklist of North and Middle American Birds*. Introduced species are indicated with an (I).

COMMON NAME	SCIENTIFIC NAME
Blackbirds	Icteridae
Hooded Oriole	<i>Icterus cucullatus</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Western Meadowlark	<i>Sturnella neglecta</i>
Caracaras and Falcons	Falconidae
American Kestrel	<i>Falco sparverius</i>
Cardinals and Allies	Cardinalidae
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>
Blue Grosbeak	<i>Passerina caerulea</i>
Crows and Jays	Corvidae
American Crow	<i>Corvus brachyrhynchos</i>
Common Raven	<i>Corvus corax</i>
Fringilline and Cardueline Finches and Allies	Fringillidae
House Finch	<i>Haemorhous mexicanus</i>
Lawrence's Goldfinch	<i>Spinus lawrencei</i>
Lesser Goldfinch	<i>Spinus psaltria</i>
Hawks, Kites, Eagles, and Allies	Accipitridae
Cooper's Hawk	<i>Accipiter cooperii</i>
Northern Harrier	<i>Circus hudsonius</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
Hummingbirds	Trochilidae
Anna's Hummingbird	<i>Calypte anna</i>
Lapwings and Plovers	Charadriidae
Killdeer	<i>Charadrius vociferus</i>
Larks	Alaudidae
Horned Lark	<i>Eremophila alpestris</i>
Long-tailed Tits and Bushtits	Aegithalidae
Bushtit	<i>Psaltriparus minimus</i>
Mockingbirds and Thrashers	Mimidae
Northern Mockingbird	<i>Mimus polyglottos</i>
New World Sparrows	Passerellidae
California Towhee	<i>Melospiza crissalis</i>
Lark Sparrow	<i>Chondestes grammacus</i>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
Old World Sparrows	Passeridae
House Sparrow (I)	<i>Passer domesticus</i>
Pigeons and Doves	Columbidae
Eurasian Collared-Dove (I)	<i>Streptopelia decaocto</i>
Mourning Dove	<i>Zenaidura macroura</i>
Rock Pigeon (I)	<i>Columba livia</i>

COMMON NAME	SCIENTIFIC NAME
Starlings	Sturnidae
European Starling (I)	<i>Sturnus vulgaris</i>
Swallows	Hirundinidae
Barn Swallow	<i>Hirundo rustica</i>
Swifts	Apodidae
White-throated Swift	<i>Aeronautes saxatalis</i>
Tyrant Flycatchers	Tyrannidae
Black Phoebe	<i>Sayornis nigricans</i>
Cassin's Kingbird	<i>Tyrannus vociferans</i>
Say's Phoebe	<i>Sayornis saya</i>
Woodpeckers and Allies	Picidae
Nuttall's Woodpecker	<i>Dryobates nuttallii</i>
Wood-Warblers	Parulidae
Nashville Warbler	<i>Leiothlypis ruficapilla</i>
Wilson's Warbler	<i>Cardellina pusilla</i>
Yellow Warbler	<i>Setophaga petechia</i>
Wrens	Troglodytidae
Bewick's Wren	<i>Thryomanes bewickii</i>

Mammals

The mammals listed below were observed on or near the Study Area through sign and/or physical sightings during a LBVI protocol survey in 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Canidae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*.

COMMON NAME	SCIENTIFIC NAME
Coyotes, Dogs, Foxes, Jackals, and Wolves	Canidae
coyote	<i>Canis latrans</i>
Hares and Rabbits	Leporidae
desert cottontail	<i>Sylvilagus audubonii</i>
Pocket Gophers	Geomyidae
Botta's pocket gopher	<i>Thomomys bottae</i>
Squirrels	Sciuridae
California ground squirrel	<i>Spermophilus beecheyi</i>

Herpetofauna

The herpetofauna listed below were detected during a LBVI protocol survey in 2021. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Phrynosomatidae), Common Name, and Scientific Name follow the Society for the Study of Amphibian and Reptiles (SSAR) *Standard English and Scientific Names*.

COMMON NAME	SCIENTIFIC NAME
Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched, and Horned Lizards	Phrynosomatidae
Western Side-blotched Lizard	<i>Uta stansburiana elegans</i>