APPROVED
EL DORADO COUNTY
PLANNING COMMISSION

DATE October 13, 2016

BY Roger Trout / Cnt
EXECUTIVE SECRETARY

verizon

OUTINGDALE
PSL # 295537

4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN CALIFORNIA (NORTH & CENTRAL), CALL USA NORTH 811

TOLL FREE: 1-800-227-2600 OR www.usanorth811.org

CALIFORNIA STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE

811. Know what's below. Call before you dig.

PROJECT TEAM

SITE ACQUISITION
SAC WIRELESS, LLC
1851 HERITAGE LANE
SUITE 182
SACRAMENTO, CA 95815
CONTACT: RYAN BEAUMONT
TELEPHONE: (949) 878-2249
RYAN.BEAUMONT@SACW.COM

PLANNING
SAC WIRELESS, LLC
1851 HERITAGE LANE
SUITE 182
SACRAMENTO, CA 95815
CONTACT: RYAN BEAUMONT
TELEPHONE: (949) 878-2249
RYAN.BEAUMONT@SACW.COM

ARCHITECT:
SAC WIRELESS, LLC
NESTOR POPOWYCH, AIA
5015 SHOREHAM PLACE SUITE 150
SAN DIEGO, CA 92122
CONTACT: RYAN LIMA
TELEPHONE: (619) 471-8359
FAX: (619) 736-3016
RYAN.LIMA@SACW.COM

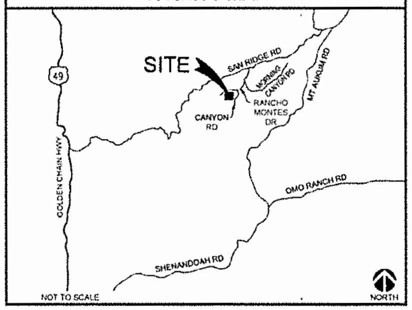
SURVEYOR:
CAL VADA SURVEYING, INC
411 JENKS CIRCLE
SUITE 205
CORONA, CA 92880
CONTACT: RAMON GONZALEZ, LSIT
TELEPHONE: (951) 280-9960 (x108)

UTILITY COORDINATOR:
SAC WIRELESS, LLC
120 G ST.
WHEATLAND, CA 95692
CONTACT: GEORGE GRIFFITH
TELEPHONE: (530) 237-6584

VERIZON WIRELESS SIGNATURE BLOCK

DISCIPLINE	SIGNATURE	DATE
SITE ACQUISITION		
CONSTRUCTION		
RADIO		
MICROWAVE		
TELCO		
EQUIPMENT		
PROJECT ADMINISTRATOR		
WO ADMINISTRATOR		

VICINITY MAP



DRIVING DIRECTIONS

FROM: 2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598

TO: 4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

1. HEAD NORTHEAST ON MITCHELL DR TOWARD OAK GROVE RD AND TURN LEFT
2. TURN LEFT ONTO TREAT BLVD
3. TURN RIGHT ONTO BUSKIRK AVE
4. TAKE THE INTERSTATE 680 N RAMP ON THE LEFT AND MERGE
5. TAKE THE EXIT TOWARD I-80 E/SACRAMENTO AND MERGE ONTO I-80 E
6. KEEP LEFT AT THE FORK TO CONTINUE ON I-80
7. CONTINUE ONTO US-50 E
8. TAKE THE MISSOURI FLAT RD EXIT AND TURN RIGHT
9. TURN LEFT ONTO PLEASANT VALLEY RD
10. TURN RIGHT ONTO SAND RIDGE RD
11. TURN LEFT ONTO MORNING CANYON RD
12. TURN RIGHT ONTO RANCHO MONTES DR
13. RANCHO MONTES DR TURNS SLIGHTLY RIGHT AND BECOMES CENTER REACH RD
14. ARRIVE AT 4260 RANCHO MONTES DR PLACERVILLE, CA 95667

PROJECT DESCRIPTION

THIS PROJECT IS A VERIZON WIRELESS UNMANNED TELECOMMUNICATION WIRELESS FACILITY. IT WILL CONSIST OF THE FOLLOWING:

- NEW VERIZON WIRELESS 30'-0" x 30'-0" LEASE AREA
- NEW VERIZON WIRELESS OUTDOOR EQUIPMENT ON NEW 4'-0" X 15'-0" CONCRETE PAD
- (1) NEW VERIZON WIRELESS GPS ANTENNA
- (1) NEW VERIZON WIRELESS 30KW GENERAC STANDBY GENERATOR W/132 GALLON DIESEL TANK (UL 142) ON NEW 5'-0" X 10'-0" CONCRETE PAD
- (1) NEW VERIZON WIRELESS ELECTRICAL METER W/ FUSED DISCONNECT ON NEW CMU WALL
- (1) NEW VERIZON WIRELESS 150'-0" TALL MONOPINE
- (12) NEW VERIZON WIRELESS 6' TALL PANEL ANTENNAS
- (2) NEW VERIZON WIRELESS 6'Ø MICROWAVE ANTENNAS
- (12) NEW VERIZON WIRELESS RRUS12 + A2
- (4) NEW VERIZON WIRELESS RAYCAPS
- (12) NEW VERIZON WIRELESS COAX CABLES
- (2 NEW VERIZON WIRELESS HYBRID CABLES
- NEW VERIZON WIRELESS 8'-0" TALL CMU ALL
- (2) NEW VERIZON WIRELESS LIVE OAK TREES (QUERCUS WISLIZENI)
- **NEW VERIZON WIRELESS 86"Ø X70" HIGH,1500 GALLON PLASTIC WATER TANK FOR IRRIGATION**

PROJECT SUMMARY

APPLICANT/LESSEE
verizon
2785 MITCHELL DRIVE, BLDG 9
WALNUT CREEK, CA 94598
OFFICE: (925) 279-6000

ASSESSOR'S PARCEL NUMBER
048-361-60-10

APPLICANT'S REPRESENTATIVE
SAC WIRELESS, LLC
1851 HERITAGE LANE
SUITE 182
SACRAMENTO, CA 95815
CONTACT: TIMOTHY ADAMS
TELEPHONE: (916) 835-5120
TIMOTHY.ADAMS@SACW.COM

PROPERTY OWNER:

OWNER	HJERPE FAMILY TRUST
ADDRESS	8751 SUNSET AVE FAIR OAKS, CA 95628
CONTACT	FREDERICK HJERPE
TELEPHONE:	(916) 802-2847

PROPERTY INFORMATION:

SITE NAME:	OUTINGDALE
SITE NUMBER	295537
SITE ADDRESS	4260 RANCHO MONTES DRIVE PLACERVILLE, CA 95667
JURISDICTION	EL DORADO COUNTY

CONSTRUCTION INFORMATION

AREA OF CONSTRUCTION	30'-0" x 30'-0" = 900 SQ FT
OCCUPANCY	U
TYPE OF CONSTRUCTION	V-B
CURRENT ZONING	RE-10
ACCESSIBILITY REQUIREMENTS:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. ACCESSIBILITY NOT REQUIRED

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS IF NOT FULL SIZE (24 X 36)

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. ALL WORK SHALL CONFORM TO 2013 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES

- 2013 CALIFORNIA ADMINISTRATIVE CODE
- 2013 CALIFORNIA BUILDING CODES
- 2013 CALIFORNIA ELECTRICAL CODE
- 2013 CALIFORNIA FIRE CODE
- 2013 CALIFORNIA ENERGY CODE
- CITY & COUNTY ORDINANCES

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET	4
A-1	SITE PLAN & ENLARGED SITE PLAN	4
A-2	EQUIPMENT & ANTENNA LAYOUT	4
A-3	NORTH & EAST ELEVATIONS	4
A-4	SOUTH & WEST ELEVATIONS	4
A-5	EQUIPMENT ELEVATIONS	4

ZONING DRAWINGS

SAC WIRELESS SIGNATURE BLOCK

DISCIPLINE	SIGNATURE	DATE
SITE ACQUISITION		
PLANNER		
CONSTRUCTION		
LANDLORD		

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	04/13/15	90% ZONING	FA
1	05/06/15	100% ZONING	FA
2	06/22/15	100% ZONING	NG
3	07/14/15	100% ZONING	NG
4	10/06/16	100% ZONING	FA

SAC WIRELESS
SAC AE DESIGN GROUP, INC.
5015 SHOREHAM PLACE, STE. 150
SAN DIEGO, CA 92122
www.sacw.com
619.736.3766

PROPRIETARY INFORMATION
THE INFORMATION CONTAINED IN THIS SET OF DRAWINGS IS PROPRIETARY & CONFIDENTIAL TO VERIZON WIRELESS
ANY USE OR DISCLOSURE OTHER THAN AS IT RELATES TO VERIZON WIRELESS IS STRICTLY PROHIBITED

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OUTINGDALE
PSL # 295537
4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

SHEET TITLE:
TITLE SHEET

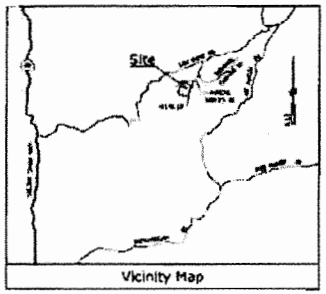
T-1

REVISED Exhibit E-1

APPROVED
EL DORADO COUNTY
PLANNING COMMISSION

DATE October 13, 2016

BY Roger Trout /cm
EXECUTIVE SECRETARY



Title Report

Legal Description

Assessor's Parcel No.

Easements

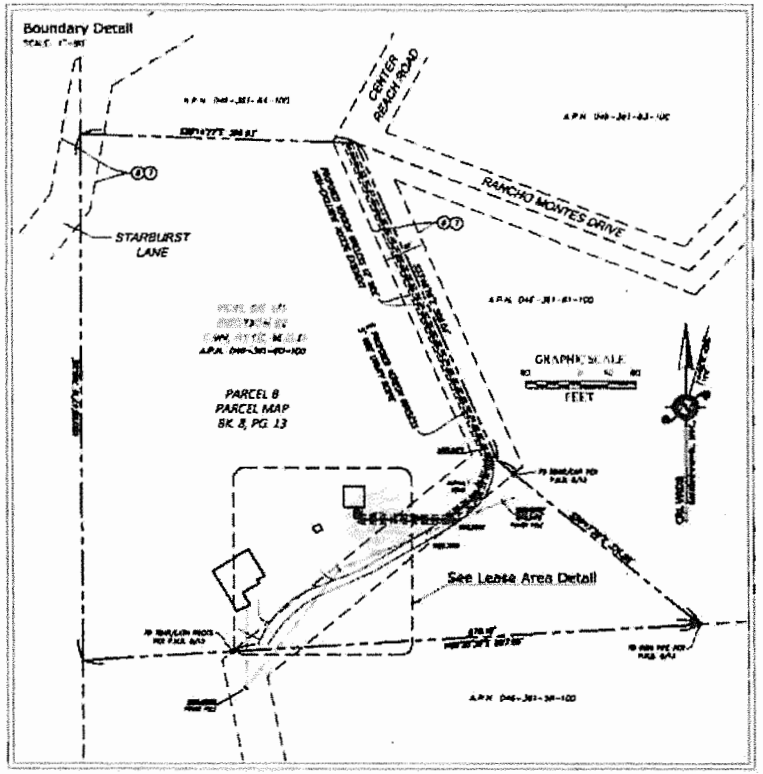
Access & Utility Easement/Lease Area

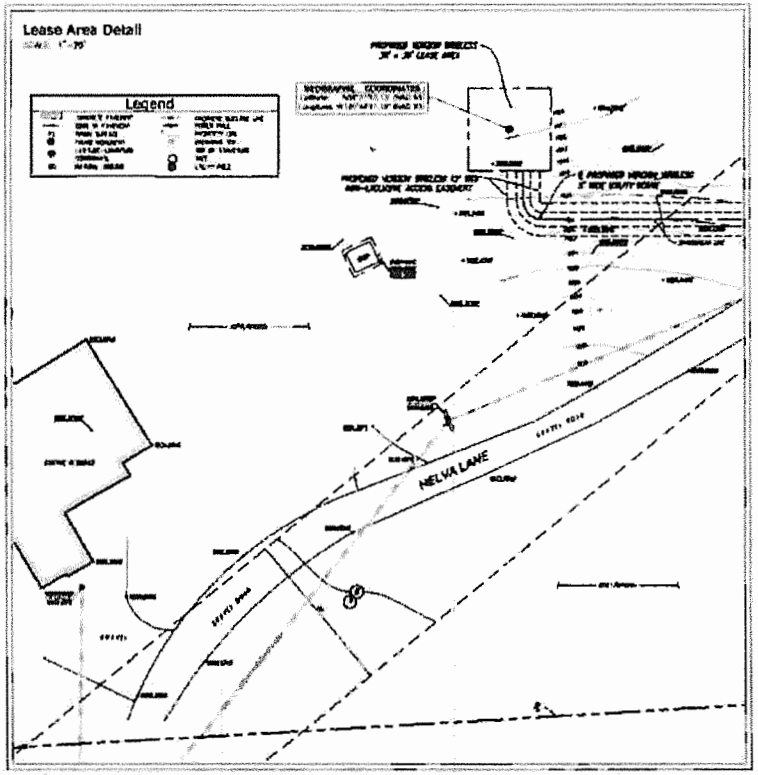
Geographic Coordinates at Proposed Monopole

Basis of Bearings

Bench Mark

Date of Survey





verizon

SAC WIRELESS
3883 AVENIDA ENCINAS
CARLSBAD, CA 92008
WWW.SACW.COM

PROJECT NO:	15179
DRAWN BY:	AV
CHECKED BY:	RC

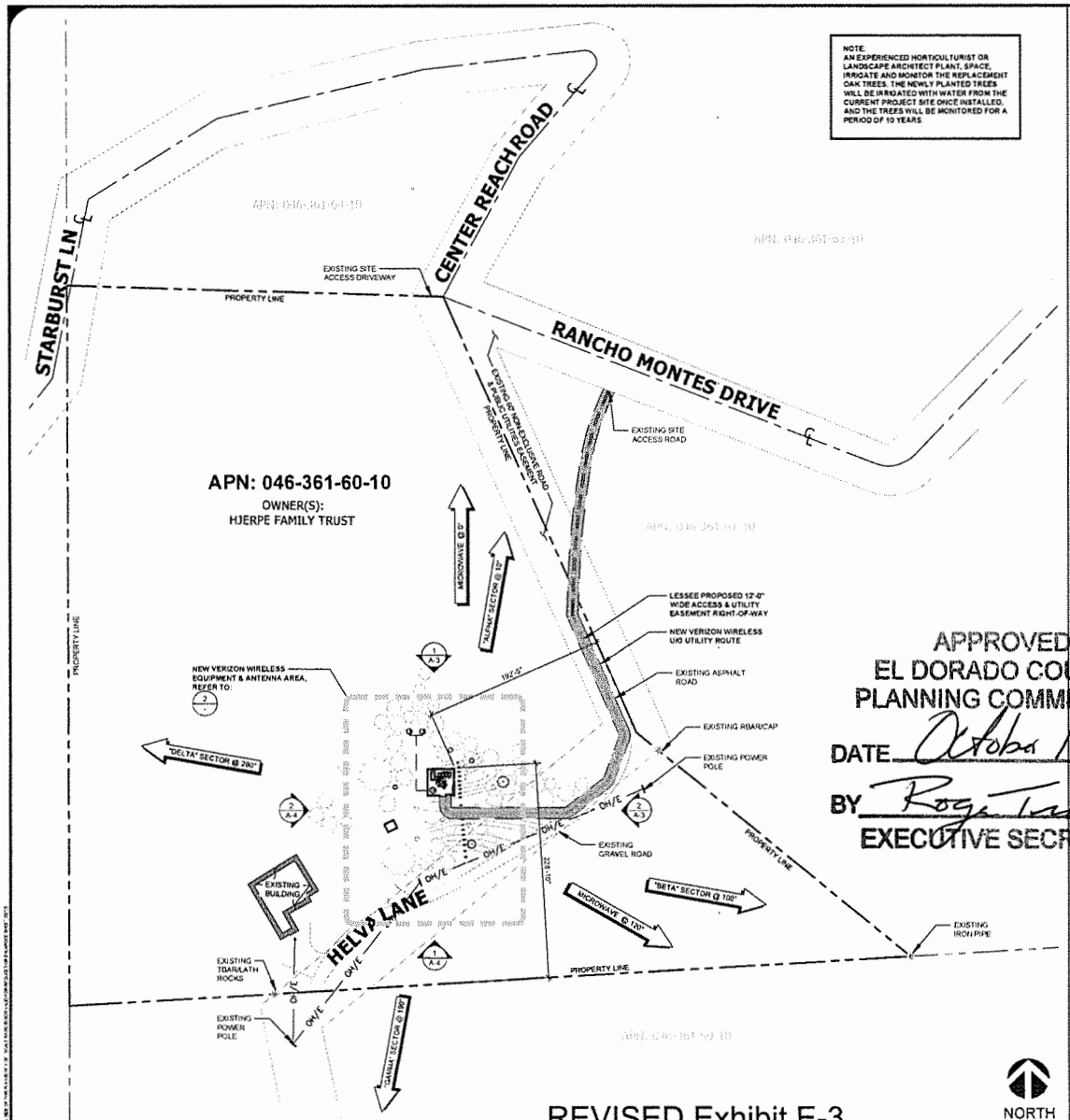
CALVADA SURVEYING, INC.

OUTINGDALE
4260 RANCHO MONTES DR.
PLACERVILLE, CA 95667
EL DORADO COUNTY

SHEET TITLE
TOPOGRAPHIC SURVEY

SHEET NUMBER
C-1

Exhibit E-2



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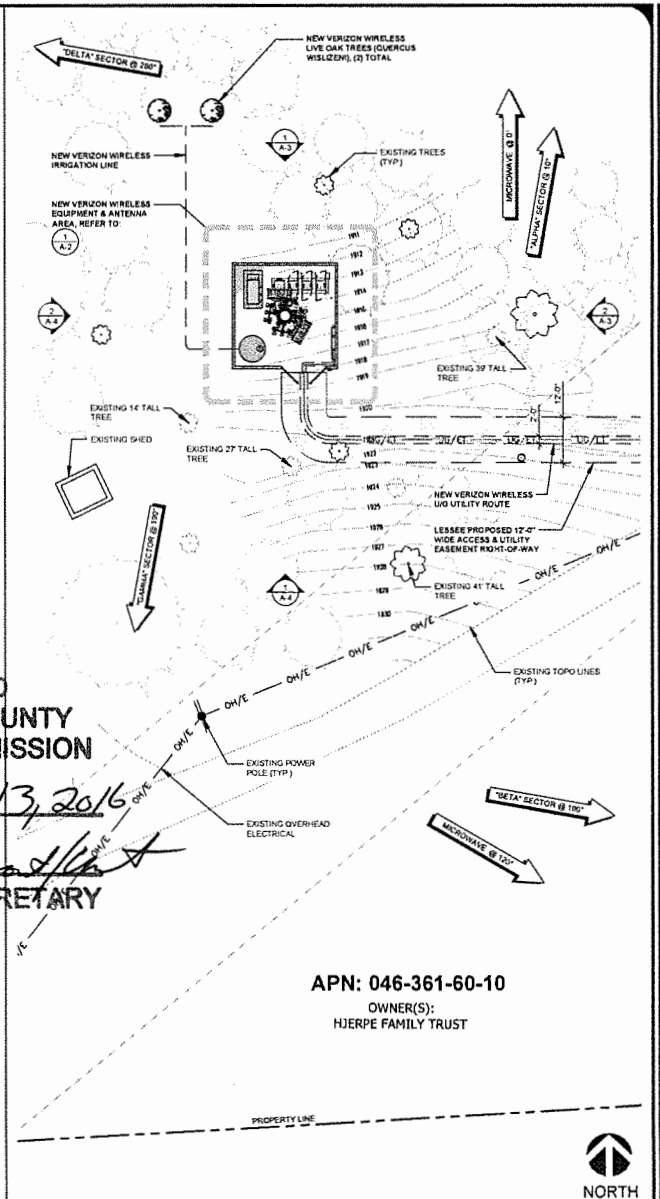
DATE October 13, 2016
BY Roger Trout
EXECUTIVE SECRETARY

REVISED Exhibit E-3



ISSUE STATUS

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4	10/06/16	100% ZONING	FA

SD WIRELESS
SITE DESIGN GROUP, INC.
5015 SHOREHAM PLACE, STE. 150
SAN DIEGO, CA 92122
www.sdginc.com
619.736.3788

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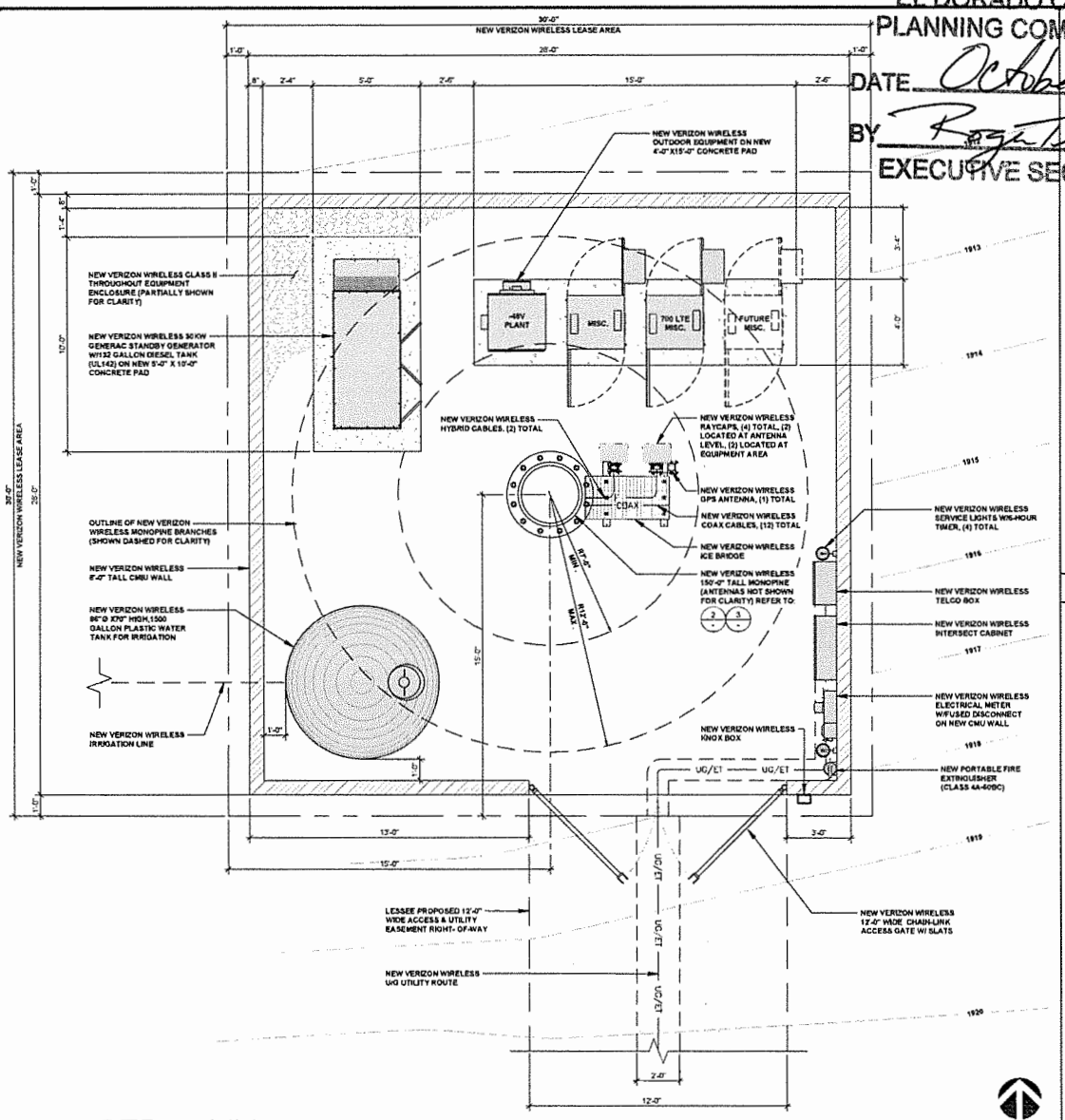
WALNUT CREEK, CA 94598

OUTINGDALE
PSL # 295537
4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

SHEET TITLE:
SITE PLAN &
ENLARGED SITE PLAN

A-1

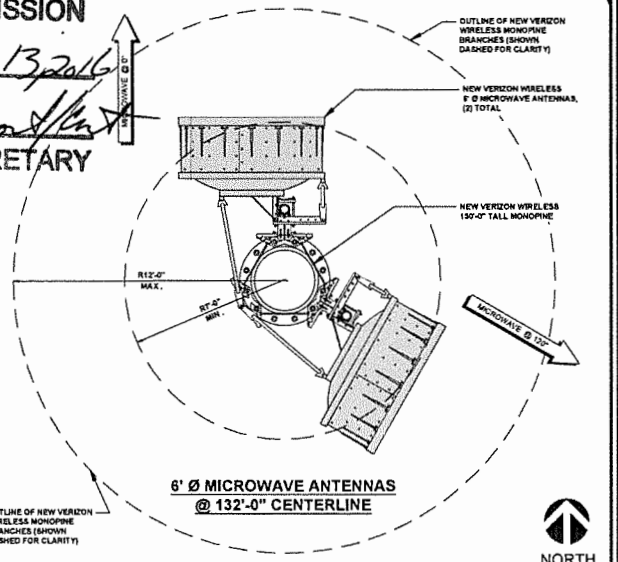
APPROVED
EL DORADO COUNTY
PLANNING COMMISSION
DATE October 13, 2016
BY [signature]
EXECUTIVE SECRETARY



REVISED Exhibit E-4

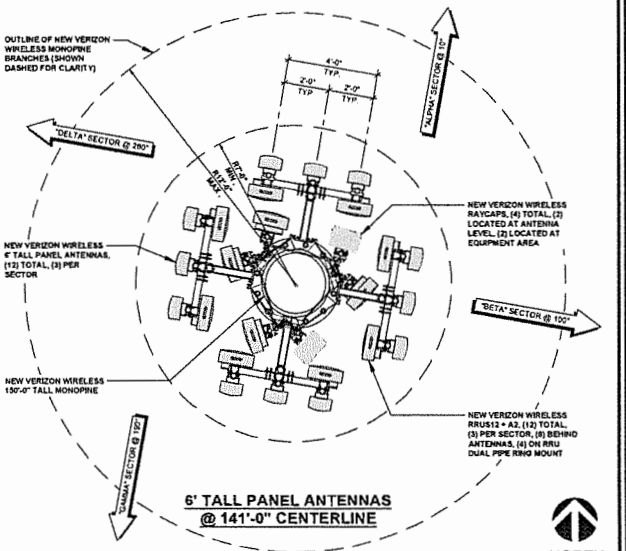
EQUIPMENT LAYOUT

SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) 1



MICROWAVE ANTENNA LAYOUT

SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) 3



PANEL ANTENNA LAYOUT

SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) 2

ISSUE STATUS

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3	07/14/15	100% ZONING	NG
4	10/06/16	100% ZONING	FA

SC WIRELESS
5015 @OREHAM PLACE, STE. 150
SAN DIEGO, CA 92122
www.sctw.com
619.736.3766

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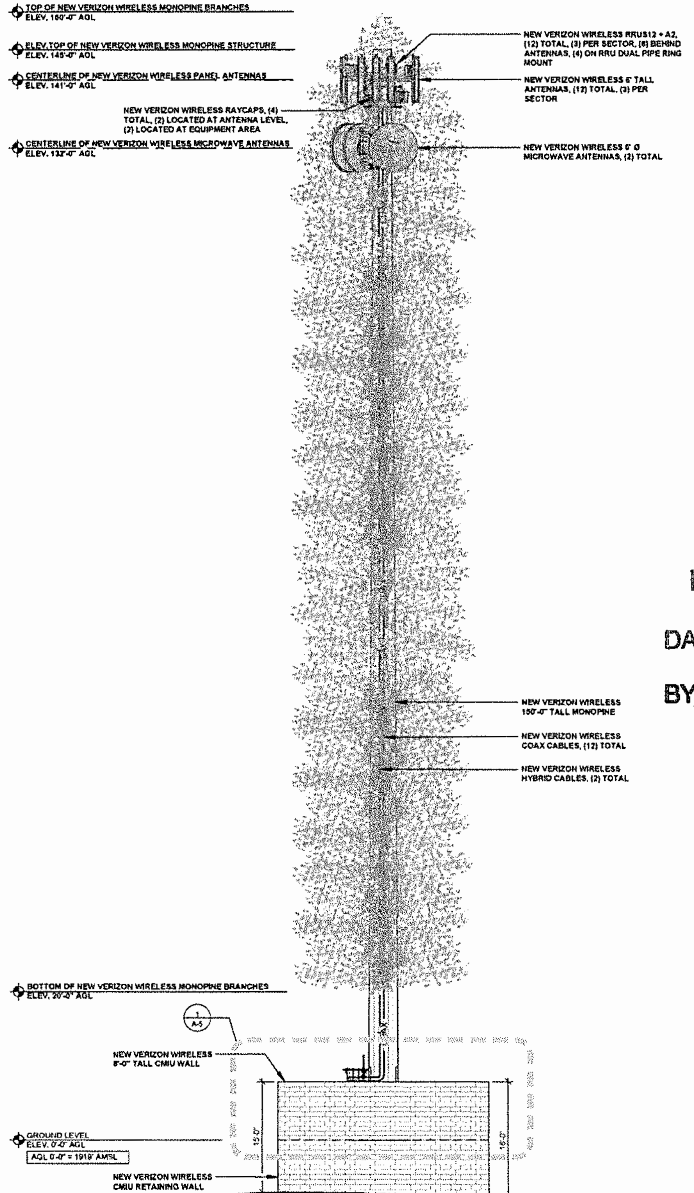
WALNUT CREEK, CA 94598

OUTINGDALE
PSL # 295537
4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

SHEET TITLE:
EQUIPMENT & ANTENNA LAYOUTS

A-2



NORTH ELEVATION | 0 2' 4' 8' | SCALE: 1/8" = 1'-0" (24x36) (OR) 1/16" = 1'-0" (11x17) | 1

NOTE:
PAINT ALL NEW VERIZON WIRELESS EQUIPMENT TO MATCH MONOPINE

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DATE October 13, 2016
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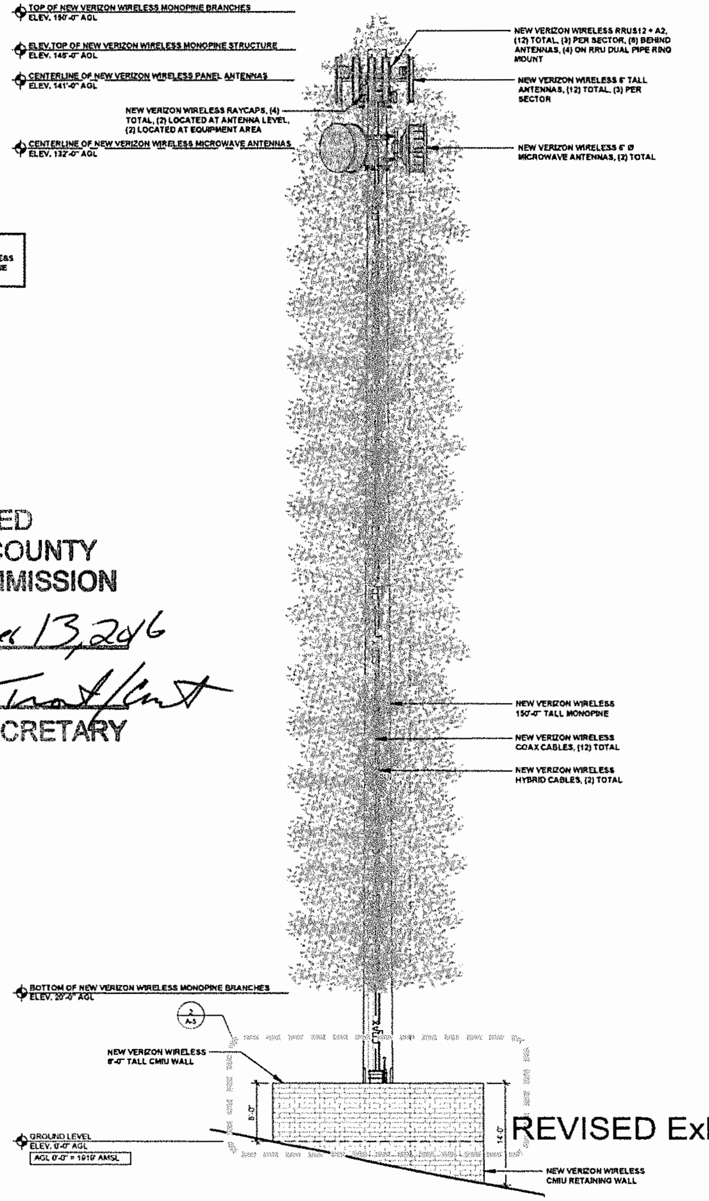

REVISED Exhibit E-5

EAST ELEVATION | 0 2' 4' 8' | SCALE: 1/8" = 1'-0" (24x36) (OR) 1/16" = 1'-0" (11x17) | 2

ISSUE STATUS

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3	07/14/15	100% ZONING	NG
4	10/06/16	100% ZONING	FA

SAC WIRELESS
SAC AE DESIGN GROUP INC.
5015 SHOREHAM PLACE, STE. 150
SAN DIEGO, CA 92122
www.sacw.com
619.736.3766

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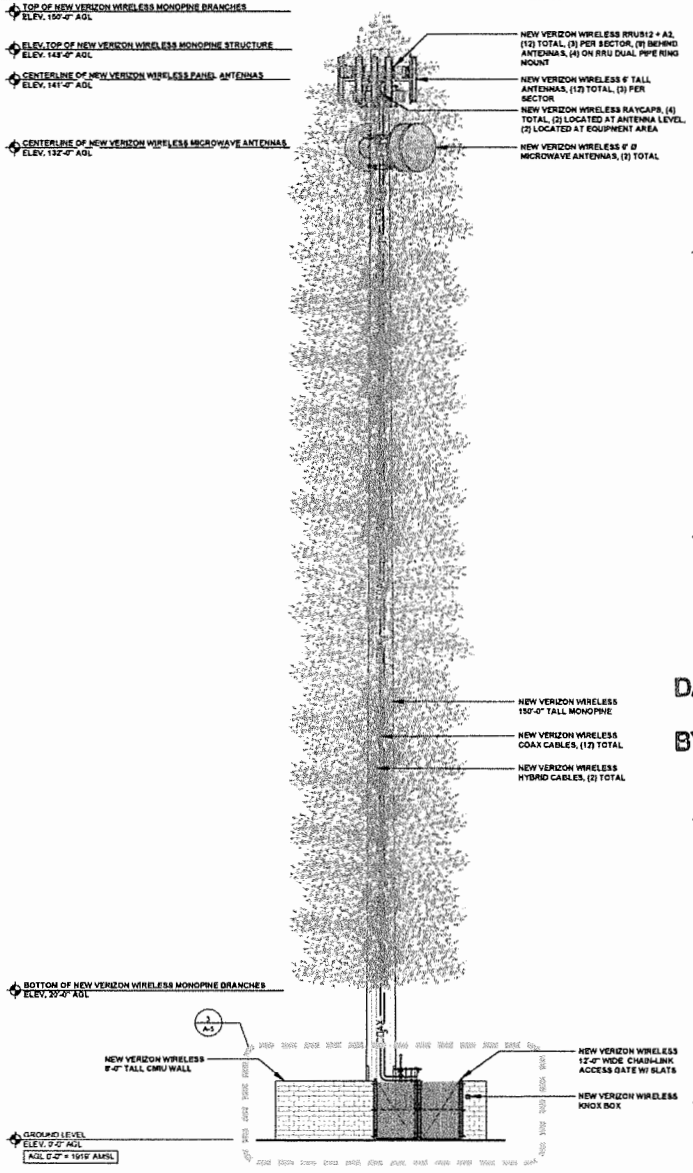
OUTINGDALE
PSL # 295537
4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

SHEET TITLE:
NORTH & EAST ELEVATIONS

A-3



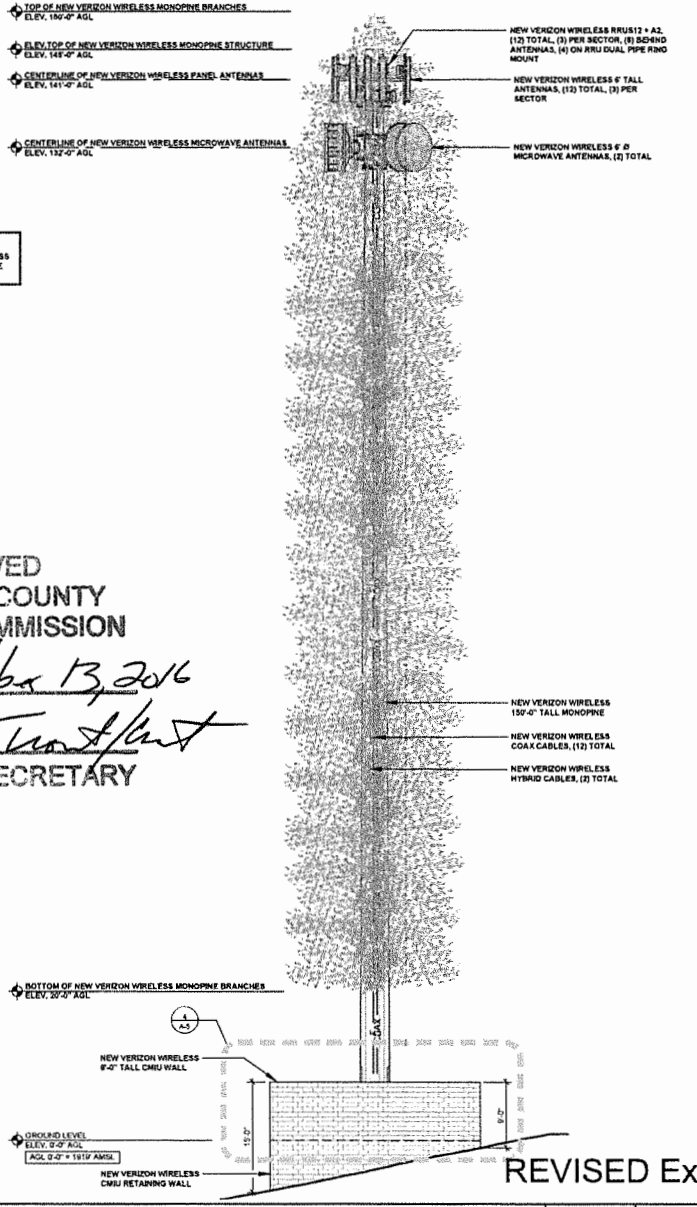
SOUTH ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17)

1

NOTE:
PAINT ALL NEW VERIZON WIRELESS EQUIPMENT TO MATCH MONOPINE

APPROVED
EL DORADO COUNTY
PLANNING COMMISSION
DATE October 13, 2016
BY Rose Turnbull
EXECUTIVE SECRETARY



WEST ELEVATION

SCALE: 1/8" = 1'-0" (24x36)
(OR) 1/16" = 1'-0" (11x17)

2

REVISED Exhibit E-6

ISSUE STATUS

REV.	DATE	DESCRIPTION	BY
0	04/13/15	90% ZONING	FA
1	05/06/15	100% ZONING	FA
2	06/22/15	100% ZONING	NG
3	07/14/15	100% ZONING	NG
4	10/06/16	100% ZONING	FA

SAC WIRELESS
SAC WIRELESS DESIGN GROUP INC.
5015 SHOREHAM PLACE, STE. 150
SAN DIEGO, CA 92122
www.sacwireless.com
619.736.3766

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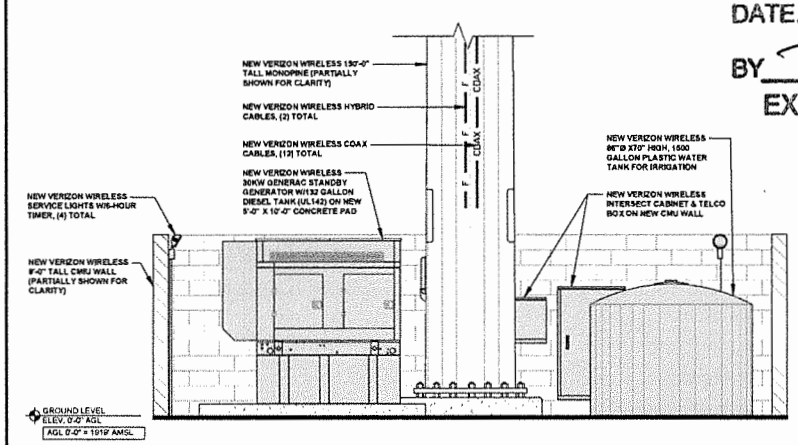
WALNUT CREEK, CA 94598

OUTINGDALE
PSL # 295537
4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

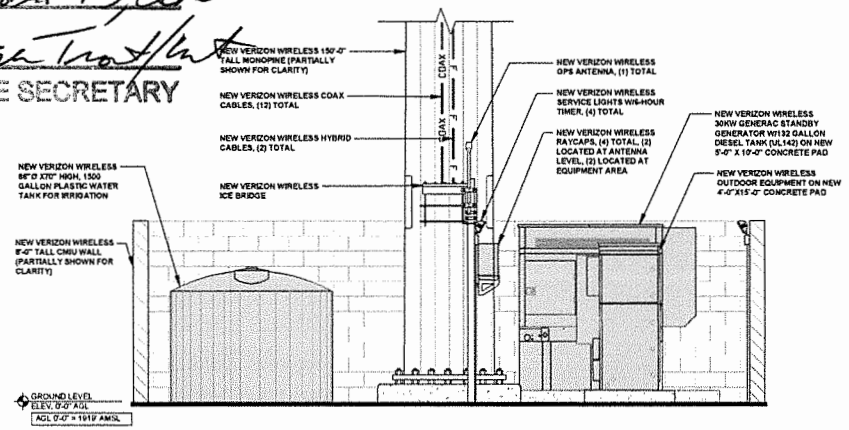
SHEET TITLE:
SOUTH & WEST ELEVATIONS

A-4

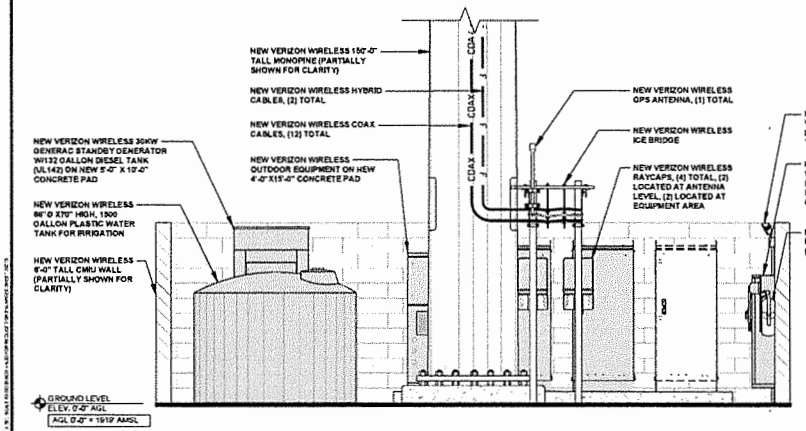
APPROVED
~~EL DORADO COUNTY~~
PLANNING COMMISSION
DATE October 13, 2016
BY Roger Trout/Kat
~~EXECUTIVE SECRETARY~~



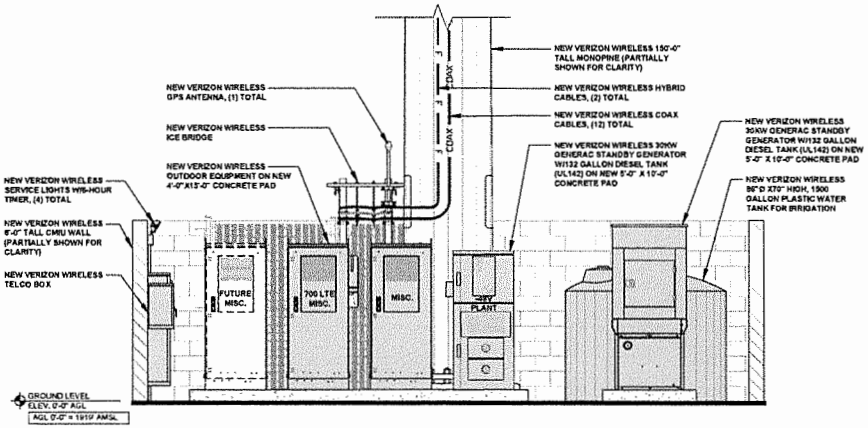
WEST EQUIPMENT ELEVATION — SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) — 4



EAST EQUIPMENT ELEVATION — SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) — 2



SOUTH EQUIPMENT ELEVATION — SCALE: 3/8" = 1'-0" (24x36) (OR) 3/16" = 1'-0" (11x17) — 3



REVISED Exhibit E-7

NORTH EQUIPMENT ELEVATION — SCALE: 3/4" = 1'-0" (24x36) (OR) 3/8" = 1'-0" (11x17) — 1

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SD WIRELESS
SAC-M DESIGN GROUP, INC.
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SAN DIEGO, CA 92122
www.sacw.com
619.736.3766

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verizon
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WALNUT CREEK, CA 94598

OUTINGDALE
PSL # 295537
4260 RANCHO MONTES DRIVE
PLACERVILLE, CA 95667

SHEET TITLE:
EQUIPMENT ELEVATIONS

A-5

HELIX Environmental Planning, Inc.
11 Natoma Street
Suite 155
Folsom, CA 95630
916.365.8700 tel
www.Helixepl.com

HELIX
Environmental Planning

APPROVED
EL DORADO COUNTY
PLANNING COMMISSION
DATE October 13 2016
BY Roger Trout/Cmt
EXECUTIVE SECRETARY

May 5, 2016

Mr. Ryan Beaumont
SAC Wireless for Verizon Wireless
1851 Heritage Lane, Suite 182
Sacramento, CA 95815

Re: Oak Canopy Analysis for Outingdale Verizon Wireless Facility/SIS-0013, 4260 Rancho Montes Drive Placerville, CA 95667 - APN: 046-361-60-100

Permit number: TBD

Dear Mr. Beaumont:

Per your request, HELIX Environmental Consulting, Inc. (HELIX) conducted an oak canopy analysis for the ±10.06-acre project site located at 4260 Rancho Montes Drive Placerville, CA (APN 046-361-60-100). The project applicant proposes to lease a 30' x 30' area on the subject property in order to install a 150' "monopine" Verizon tower and associated equipment. HELIX also developed a conceptual mitigation plan based on the proposed project's impacts to oak trees and their canopies, outlined below. The project is located in Section 22, Township 09N, and Range 11E on the AUKUM, California 7.5 minute USGS quadrangle (**Figure 1 – Regional Location and Vicinity**).

Oak Canopy Impact Analysis

HELIX staff conducted a field survey on February 2, 2016 in order to determine the coverage of the site's oak canopy and to locate the existing oak trees on-site that would be potentially impacted as a result of the proposed project. An oak canopy map was created utilizing several methodologies. First, HELIX staff delineated a portion of the oak canopy on-site utilizing a Trimble GeoXT in order to obtain sub-meter accurate data. The field collected data was then overlaid on the most recent available 2015/16 Google Earth aerials and digitized using ESRI ArcMap (GIS Software package). The mapped oak canopy area consists primarily of scattered canyon live oak (*Quercus chrysolepis*) and interior live oak (*Quercus wislizeni*), with an understory consisting of live oak scrub, coffeeberry (*Rhamnus californica*), deerweed (*Lotus scoparius*), toyon (*Heteromeles arbutifolia*), manzanita and non-native grasses.

The oak canopy impact analysis was performed based on 2015 plans and surveys prepared by SAC Wireless and CAL VADA Surveying, Inc. (**Figure 2 – Project Plans**). The analysis was conducted in accordance with the El Dorado County Oak Woodland Management Plan, Chapter 17.73 of the El Dorado County Zoning Code and State law (PRC 21083.43), and

specifically the Interim Interpretative Guidelines for El Dorado County, General Plan Policy 7.4.4.4 (Option A) (October 2007).

The total acreage of the subject APN is approximately 10.06 acres. Field survey data and aerial photograph mapping determined that the existing oak canopy covers 8.04 acres (438,214 square feet), approximately 80 percent of the entire parcel, as shown in **Figure 3 – Oak Canopy Impact Analysis**. Photographs of the typical landscape of the subject property as well as the area to be leased for the installation of Verizon equipment and the lease area on-site are shown in **Figure 4 – Site Photographs**.

The project's site plan was overlaid with the existing oak canopy mapping in order to determine the area of impact that would occur with implementation of the proposed project. An analysis of the site plan in relation to the existing oak canopy cover determined the project would impact approximately 0.01 acre (436 square feet) of existing oak canopy. Under Option A of the Interim Guidelines, the County requires 60 percent retention of oak canopy for a parcel with 80-100 percent existing canopy cover as stated in Section 17.73.070 under Policy 7.4.4.4. As the property is 10.06 acres in total area with 8.04 acres of existing oak canopy, the percentage of oak canopy coverage is approximately 80 percent of the subject APN, as mentioned above. Based on this requirement, approximately 4.82 acres (60 percent) of the existing oak canopy must be retained. As the proposed project plans to retain 8.03 acres (99 percent), the project more than fulfills the County's oak canopy retention requirement.

Conceptual Mitigation Plan

El Dorado County General Plan Policy 7.4.4.4 is intended to apply exclusively to retention and replacement of oak canopy within oak woodlands. All oak trees, of all sizes, are included in the measurement of oak canopy. The policy stipulates the following regarding potential replacement plans (Option A):

- On-Site Replacement Tree Planting;
- On-Site Planting of Acorns;
- Off-Site Replacement of Canopy Area; and
- Off-Site Conservation Easement to Protect Existing Oak Woodland in Lieu of Replacement.

With regards to replanting, General Plan Policy 7.4.4.4 stipulates that 200 (1-gallon) oak saplings per acre (or equivalent number of acorns or larger sized oak trees) will be planted to offset canopy losses from the proposed project. The replacement of oak canopy is required in addition to meeting the 60 percent oak canopy retention requirement for a development project of this size. According to the Important Habitat Mitigation Program Guidelines (Section 2.2.3 Monitoring and Reporting Plan), the replanted oaks are subject to active management and 10 years of monitoring (15 years for acorns).

Oak Replacement Planting

We recommend on-site planting in order to offset the minor tree canopy removal. We propose replanting two (2) interior live oak (*Quercus wislizeni*) adjacent to the proposed lease area, as

shown on **Figure 5 – Conceptual Planting Plan**. Replanting at this location will be contiguous with existing oak woodland habitat. This species of oak is consistent with the native oaks that grow either on the property or throughout the region. There is one large heritage oak approximately 60 ft. east from the lease area. We recommend that all construction and grading activity should remain outside of the critical root zone of this large heritage oak.

It is recommended that an experienced horticulturist or landscape architect plant, space, irrigate and monitor the replacement oak trees. The newly planted trees will be irrigated with water from the current project site once installed, and the trees will be monitored for a period of 10 years. As the project will impact 0.01 acre of oak canopy, replanting two oak trees will meet and/or potentially exceed the requirement for the replacement of oak tree canopy at a 1:1 ratio.

Thank you for the opportunity to work on this project. If you need further information please contact me at 916.365.8700 to discuss the results of this analysis.

Sincerely,

Stephen Stringer

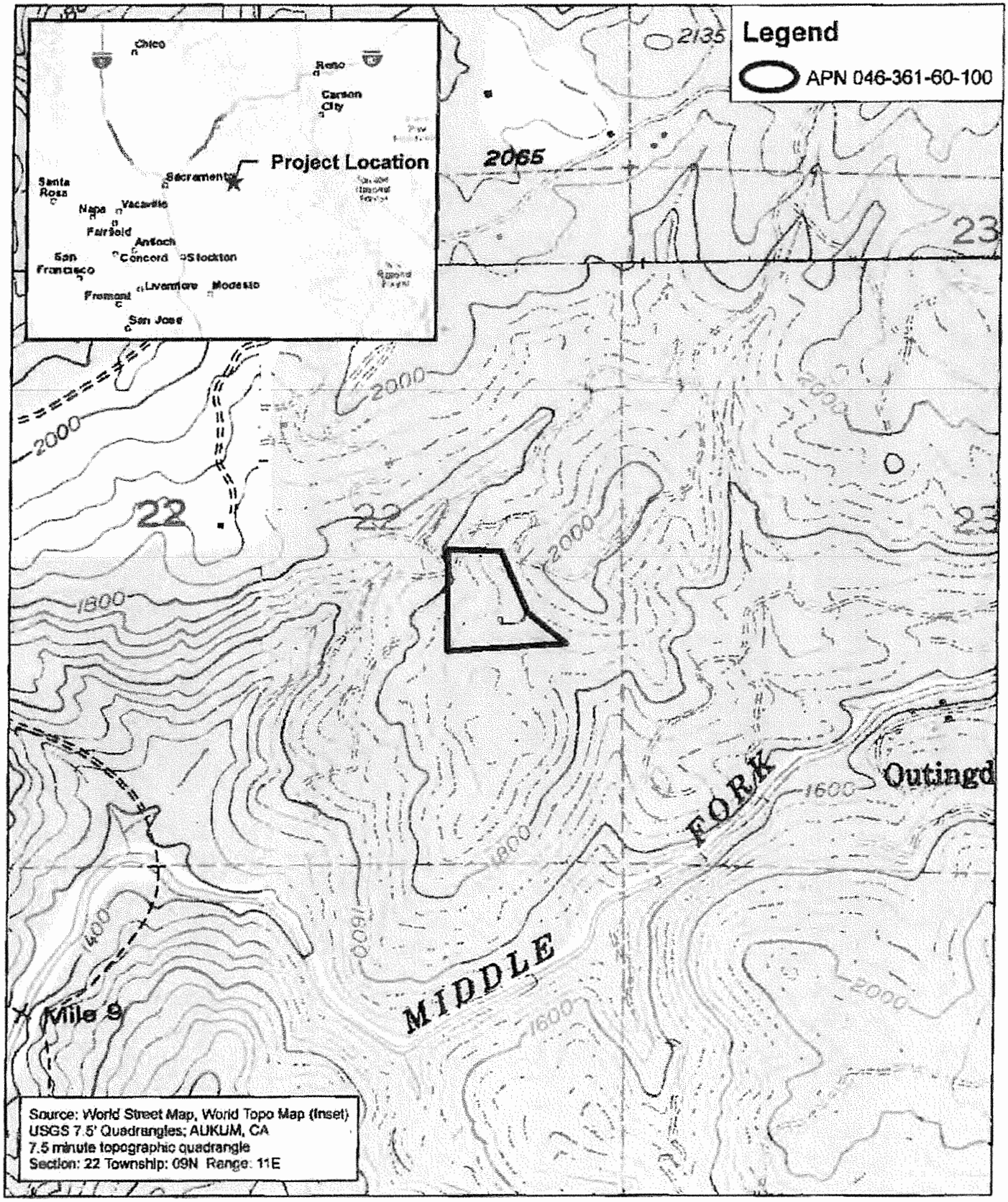
Stephen Stringer, M.S.
ISA Certified Arborist (WE-7129A)/Biologist

Attachments:

Oak Canopy Assessment Form/Resume

Figures:

Figure 1: Project Vicinity
Figure 2: Project Plans
Figure 3: Oak Canopy Impact Analyses
Figure 4: Site Photographs
Figure 5: Conceptual Planting Plan



Map Date: May 2016

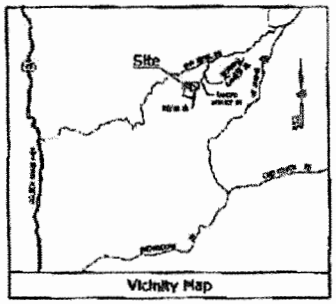
Figure 1

Regional Location and Vicinity

APN 046-361-60-100
Placerville, El Dorado Co., CA

HELIX Environmental Planning

0 2,000 Feet



Title Report

Legal Description

Assessor's Parcel No.

Easements

Access & Utility Easement/Lease Area

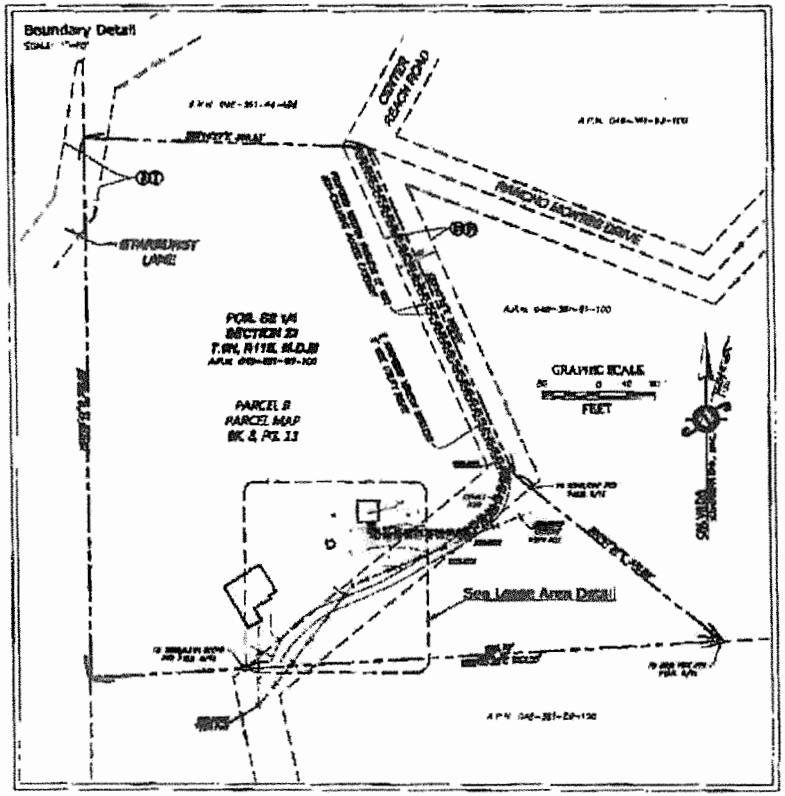
Geographic Coordinates at Proposed Monopole

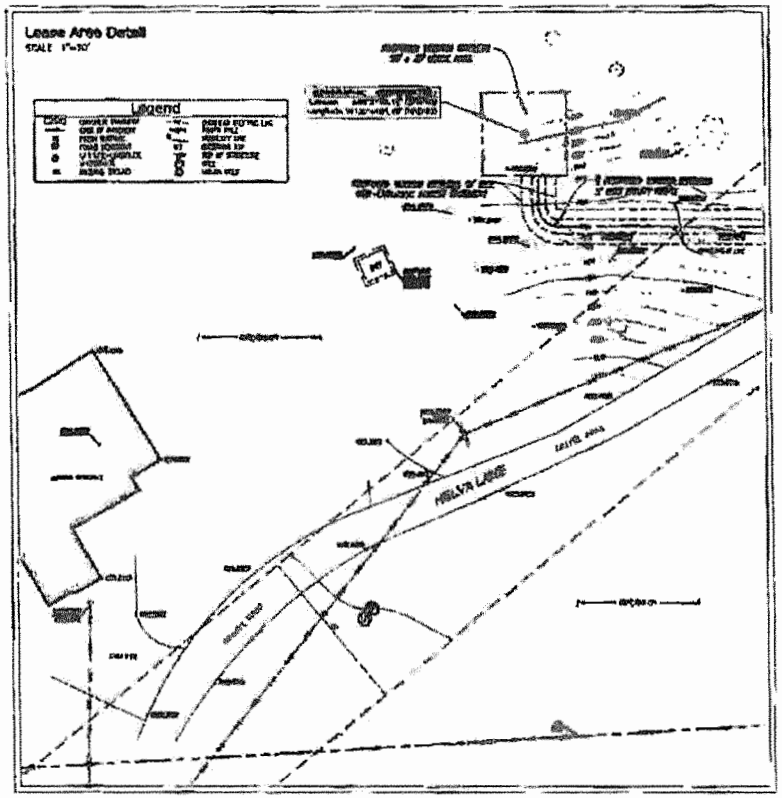
Basis of Bearings

Bench Mark

Date of Survey

FIGURE 2





verizon

SDC WIRELESS

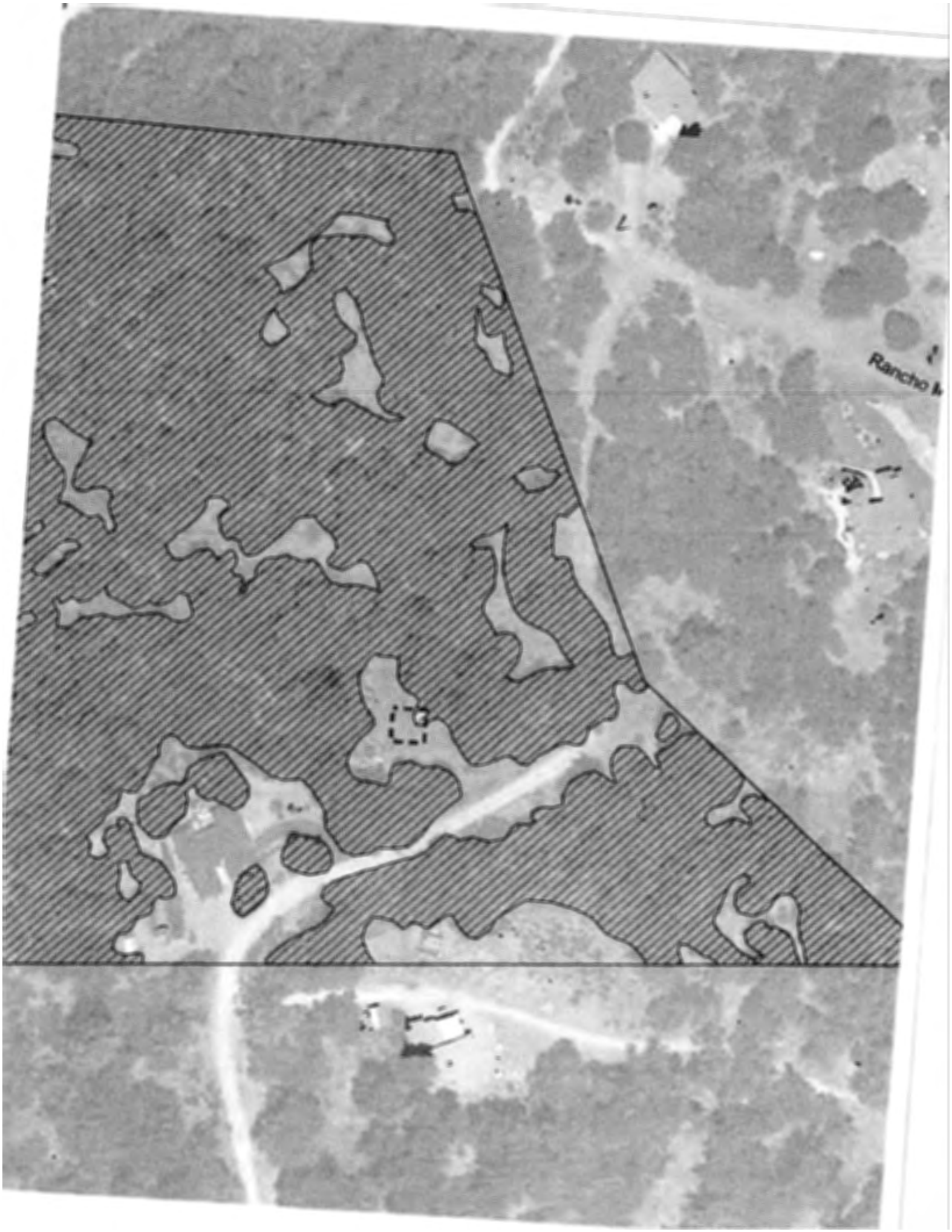
PROJECT NO:	18179
DRAWN BY:	AV
CHECKED BY:	PH

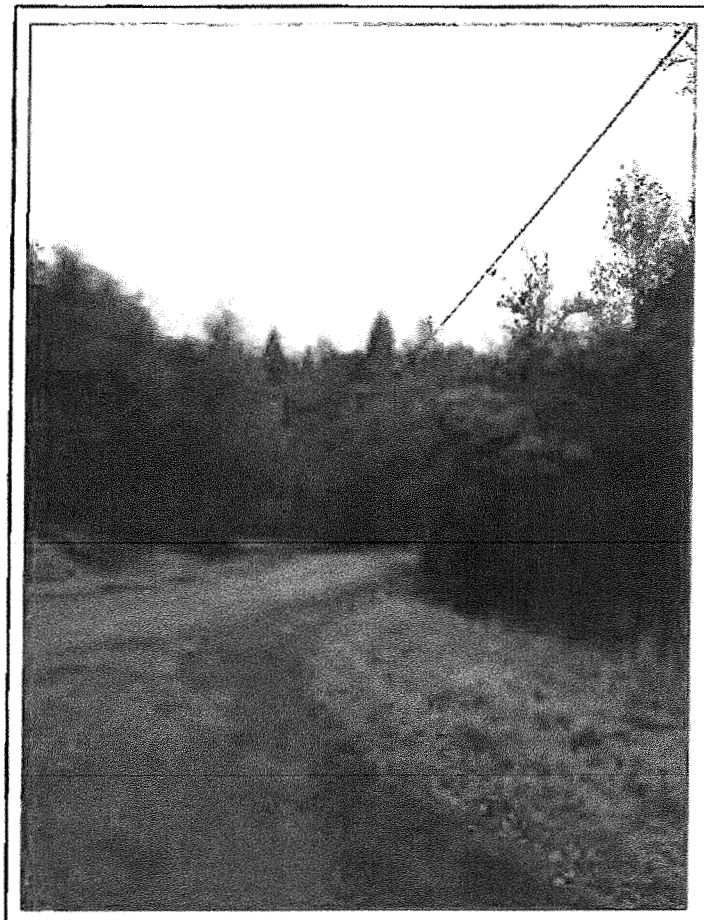
CALVADA SURVEYING, INC.

OUTNOOKDALE
4250 RANCHO MONTES DR.
PLACERVILLE, CA 95667
EL DORADO COUNTY

SHEET TITLE
TOPOGRAPHIC SURVEY

SHEET NUMBER
C-1





3a. Viewpoint looking south along Rancho Montes Drive. Typical landscape throughout the site includes scattered canyon and interior live oak.

3b. Viewpoint of the proposed project area, looking north.

Photo Date: 02/02/2016

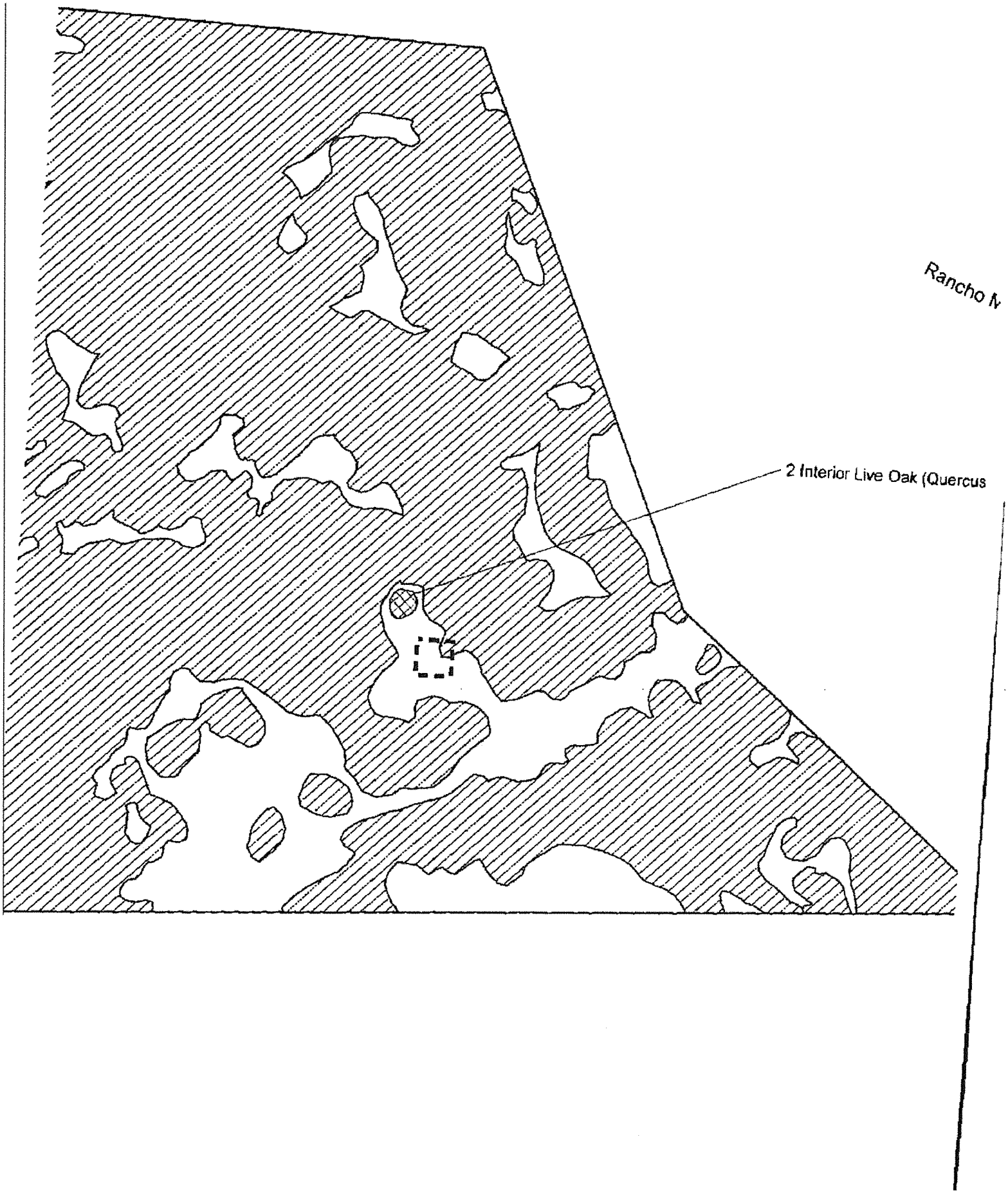
Figure 4

Site Photographs

APN 046-361-60-100

Placerville, El Dorado Co., CA

HELIX Environmental Planning


Rancho N
2 Interior Live Oak (Quercus

El Dorado County

OAK/CANOPY SITE ASSESSMENT FORM

Qualified Professional & Contact Information: *(attach qualifications)*	Stephen Stringer Phone: 916-996-9374 email: StephenS@helixepi.com
Property Owner's Name/APN(s):	APN: 046-361-60-100
Address:	4260 Rancho Montes Drive Placerville, CA
General Plan Designation:	Rural Residential
Zoning:	Rural Residential
Project Description: *(attach site photos)*	See Letter.

Would the project, directly or indirectly, have the potential to cause any impact, conflict with, or disturbance to:	YES	NO
a) Individual landmark or heritage trees (of any species) subject to review under General Plan Policy 7.4.5.2?		✓
c) Oak woodland corridor continuity (General Plan Policy 7.4.4.5)?		✓
d) Sensitive or important oak woodland habitat as defined in the Guidelines?		✓
e) Movement of Wildlife and/or Any Wildlife Migration Corridor?		✓
f) Any Candidate, Listed or Special Status Plant or Animal Species observed or expected to occur on or adjacent to the project site?		✓
g) Is the affected area of oak canopy within or directly adjacent to an Important Biological Corridor or Ecological Preserve overlay?		✓
h) Does the removal of oak canopy comply with the retention requirements of Policy 7.4.4.4?	✓	
i) Was project subject to prior County approval? (If yes, provide Tentative Map # and environmental documents if available)		✓
j) For Discretionary Projects, would the project have the potential to cause a significant environmental impact on biological resources?		✓

I affirm that all of the information contained in this document is true and correct to the best of my knowledge and I acknowledge and agree that any material misinformation in this document can result in the denial or revocation of any permits or County approvals for this project.

Qualified Professional: Stephen Stringer **Date:** 5/5/2016

Applicant/Owner: [signature] **Date:** 5/11/16

Required Attachments: 1) Qualified Professional Qualifications; 2) Site Photos; 3) Required Tree Survey, Preservation, and Replacement Plan *or* Biological Resources Study and Important Habitat Mitigation Program (see Interim Interpretive Guidelines for El Dorado County Policy 7.4.4.4 Option A)

Stephen Stringer M.S.

Senior Scientist

Summary of Qualifications

Mr. Stringer is a biologist with more than 13 years of experience in the public and private sector conducting biological and wetland studies in support of California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) documentation, and aquatic resources issues. He conducts Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) consultations with U.S. Fish & Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW). His biological survey experience includes conducting general biological surveys, habitat assessments/mapping, botanical surveys, arborist surveys, CRAM assessments, and wetland delineations, as well as USFWS protocol surveys for species such as federally-listed vernal pool branchiopods, California red-legged frog, and Valley elderberry longhorn beetle. He also conducts surveys for other special-status species, including burrowing owl, Swainson's hawk, and other raptors and migratory birds. Mr. Stringer supports the construction phase of projects by providing specialty biological monitoring support or worker awareness training as needed. Mr. Stringer is a USFWS approved biologist authorized to conduct pre-construction surveys, worker awareness training, and biological monitoring efforts for several Bay Area and Central Valley species including San Francisco garter snake, California red-legged frog, San Francisco dusky-footed woodrat, Giant Garter Snake, and California Coastal steelhead. His report preparation experience includes technical biological studies in support of environmental impact reports (EIRs), environmental impact statements (EISs), environmental assessments (EAs), and initial studies, as well as the preparation of biological assessments, natural environment studies, mitigation and monitoring plans, arborist survey reports, rare plant survey reports, wetland delineation reports, and environmental constraints analysis. He also prepares individual and nationwide permit applications for the U.S. Army Corps of Engineers (USACE) permit program under Section 404 of the Clean Water Act; Regional Water Quality Control Board Water Quality Certification Applications, and CDFW Streambed Alteration Agreements.

Selected Project Experience

Loma Rica Reservoir Cleaning (2011 - Present). Lead botanist who conducted a rare plant survey at Loma Rica Reservoir located in the vicinity of Grass Valley, Nevada County, and prepared a rare plant survey report for submittal to the CDFW. Loma Rica Reservoir is part of the Nevada Irrigation District (NID) water-supply system and stores raw water which feeds the Loma Rica Water Treatment Plan and the NID canal system. The purpose of the proposed project was to dredge the reservoir to remove sediments that have accumulated in the reservoir since its construction in 1964. Work performed for Nevada Irrigation District.

Prop 50 Funding Downieville Public Utilities District Plant Expansion Project (2013 - Present). Lead scientist who conducted a biological survey and prepared the

Education

Master of Science, Biological Sciences. California State University, Sacramento, 2007

Bachelor of Science, Biological Sciences. California State University, Sacramento, 2003

Registrations/Certifications

International Society of Arboriculture, Certified Arborist, WE-7129A, 2004

San Francisco Estuary Institute. CRAM Certified for Riverine Habitats, 2011

Society of Wetland Scientists. Professional Wetland Scientist (Certification Pending), 2014

U.S. Fish and Wildlife Service Section 10(a)(1)(A) Recovery Permit (TE-141359-2) for Vernal Pool Branchiopods, 2006, and California Tiger Salamander (Central DPS), 2012

CA Department of Fish and Wildlife, Scientific Collecting Permit #801117-05, 2003

CA Department of Fish and Wildlife, Rare, Threatened, and Endangered Plant Voucher Collecting Permit #05111, 2003

Professional Affiliations

International Society of Arboriculture, Western Chapter

California Native Plant Society

The Wildlife Society, Sacramento-Shasta Chapter

Solano Land Trust - Member/Volunteer Docent (Jepson Prairie Preserve)

American Fisheries Society

biological resources section of technical memorandum used to support a Notice of Exemption for the project. The 0.52-acre Downieville Public Utilities District (DPUD) site is located north of the town of Downieville in unincorporated Sierra County. The project consisted of the construction of a Contact Clarification Filtration Plant with integrated disinfection system, all being comprised of approved technologies. Work performed for Downieville Public Utilities District.

Schaad Road over Forest Creek Bridge Replacement Project (2013 - Present). Lead scientist who conducted biological and wetland surveys and is overseeing the preparation of biological and wetland reports for the Project in support of environmental documentation in accordance with Caltrans guidelines including a Natural Environment Study, Wetland Delineation, and biological resources sections of NEPA/CEQA documentation. The project proponent, Calaveras County, plans to replace the existing structurally deficient and functionally obsolete bridge that is eligible for rehabilitation under the federal Highway Bridge Program. Work is being performed for T.Y. Lin International.

Whiskey Slide Road over Jesus Maria Creek Bridge Replacement Project (2013 - Present). Lead scientist who conducted biological and wetland surveys and is overseeing the preparation of biological and wetland reports for the Project in support of environmental documentation in accordance with Caltrans guidelines including a Natural Environment Study, Wetland Delineation, and biological resources sections of NEPA/CEQA documentation. The project proponent, Calaveras County, plans to replace the existing structurally deficient and functionally obsolete bridge that is eligible for rehabilitation under the federal Highway Bridge Program. Work is being performed for T.Y. Lin International.

United Auburn Indian Community of the Auburn Rancheria 1,100 Acre Residential Project Management Plan (2007). Project Manager/Lead Biologist who conducted wet season vernal pool surveys in a complex of twenty-one vernal pools on the project site, according to the Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods dated April 19, 1996 in accordance with a USFWS approved Management Plan, as well as supervised other biologists. The surveys include a complete inventory of vernal pool invertebrates in addition to fairy shrimp. The data that is being collected will be used to determine baseline conditions in the vernal pools prior to project construction and will be used to compare five years of post-construction monitoring and guide future management of the vernal pools on the entire 1,100 acre property. Also assisted with preparation of the management plan. Work performed as a subcontractor to Analytical Environmental Services for the United Auburn Indian Community

Biological Surveys of 200+ Emergency Levee Repair Sites in the Sacramento-San Joaquin River Delta (Reclamation Districts 3, 17, 524, 544, 551, 755, 784, 785, 1001, 2068, 2098, and 2083) (2007 - 2008). Lead Biologist/Arborist who was responsible for conducting biological assessments and preparing biological resources evaluations, including tree inventories of each of the levee sites located throughout the Sacramento-San Joaquin River Delta that were damaged in the floods of 2005-2006 and that qualified for federal aid under Public Law 84-99. Conducted general biological surveys, botanical surveys, riparian assessments, wetland assessments, and tree inventories of all of the repair sites and prepared the biological resources section of technical memorandums identifying potential constraints for the sites. Coordinated with USFWS, NMFS, and the U.S. Army Corps of Engineers to develop and implement mitigation measures to protect biological resources and riparian trees during construction. Work performed for the U.S. Army Corps of Engineers, Sacramento District.

City of Hercules Intermodal Transit Facility EIS/EIR (2009 - 2011). Lead Biologist responsible for preparation of a Biological Resources Evaluation, the biological resources section of the EIS/EIR, a Jurisdictional Delineation Report, and biological assessments for USFWS and NMFS. Assisted/conducted focused biological studies for California red-legged frog and vernal pool branchiopods. The project included realignment of a segment of Refugio Creek at its confluence with San Pablo Bay and construction of a tidal channel into the Bay, construction of a new railroad passenger station within and adjacent to the Union Pacific Railroad right-of-way, and realignment of approximately 4,000 feet of track adjacent to San Pablo Bay. The project encompasses a station platform and related structures and appurtenances, and an optional overhead access to a future ferry terminal. The Federal Transit Administration was the federal lead agency. Work performed for the City of Hercules.

North Truckee Drain Realignment Project (2010). Biologist who assisted with fieldwork and preparation of a wetland delineation to identify potential waters of the U.S. in the project site, which consisted of the realignment of approximately 6,000 linear feet of the North Truckee Drain. The goal of the project is flood damage reduction in a predominately industrial/commercial area. Work performed for City of Sparks.

Bay-Delta Conservation Plan (BDCP) EIR/EIS (2010 - 2011). Biologist who conducted protocol avian surveys as well as habitat assessments for giant garter snake throughout the Sacramento-San Joaquin River Delta, including protocol surveys for western yellow-billed cuckoo, clapper rail, black rail, and numerous other special-status bird species. The surveys were conducted in support of the BDCP EIR/EIS. Work performed for the California Department of Water Resources.

Peer Review of the Terrestrial Biological Resources Chapters of the Bay Delta Conservation Plan EIR/EIS (2014). Senior Terrestrial Biologist responsible for peer review of the terrestrial biological resources chapters of the Bay Delta Conservation Plan EIR/EIS. Peer reviewed approximately 3,000 pages of technical studies and EIR/EIS chapters related to terrestrial biological resources and provided comments in the manuscript as well as a technical memorandum outlining major comments. Work performed for Metropolitan Water District of Southern California.

Assessment of Fluvial Geomorphology in Relation to Arroyo Toad Habitat in the San Antonio River at Fort Hunter Liggett (FHL) (2011). Lead Biologist who assisted the project geomorphologist with study design and project implementation, including conducting a CRAM analysis of select sites on the San Antonio River, and was the lead author on preparation of the report. The purpose of the study was to gain an understanding of disturbance history, habitat conditions, and habitat-forming processes within the San Antonio River and its watershed to provide FHL with information to develop habitat improvement projects in breeding habitat for federally endangered arroyo toads. The study area encompassed an approximately 30 km segment of the San Antonio River and adjacent upland areas in Monterrey County. Work performed for the U.S. Army, Sacramento District.

Los Padres Dam Fish Passage Project (2001 - 2012). Biologist/Lead Arborist responsible for preparation of an arborist survey report to document the species, size, and condition of native trees with the potential to be impacted by construction of the proposed project as well as rare plant surveys and wetland surveys in support of CEQA documentation. Observed California red-legged frog during wetland surveys. The project involved the construction of a fixed/floating weir and behavior guidance system that will promote the downstream passage of steelhead in the Carmel River (Monterey County). Work performed for California American Water.

La Grange Road Bridge at Dry Creek Replacement Project (2008 - 2012). Lead Biologist who prepared a Natural Environment Study, a Biological Assessment, and a Jurisdictional Delineation for this road/bridge project located in Merced County. Also assisted with consultation with USFWS and CDFG regarding project impacts to California red-legged frog, vernal pool branchiopods, California tiger salamander, and rare plants. The project involved replacement of the existing La Grange Road Bridge over Dry Creek and realignment of the bridge approaches to eliminate a dangerous curve. Work was in support of CEQA/NEPA documentation in accordance with Caltrans procedures. Work performed as a subconsultant to ESA for Merced County Public Works Department.

Merced Irrigation District Federal Energy Regulatory Commission License Application (2010). Biologist/Botanist who conducted focused surveys for numerous special-status plant and animal species with the potential to be impacted by the proposed project around the perimeter of Lake McClure and Lake McSwain. Work

was performed in support of an application for renewal of a Federal Energy Regulatory Commission license for Merced Irrigation District. Work performed for Merced Irrigation District.

Dobbins Pole Replacement (2010). Lead Biologist who conducted a biological survey and a wetland delineation of the proposed project site and prepared a biological technical memorandum and a delineation of wetlands and other waters of the U.S. report. PG&E planned the replacement of power poles along an existing power line in Dobbins. Work performed for Pacific Gas and Electric, San Ramon.

Konocti Substation Expansion (2010). Lead Biologist who conducted a biological and wetland survey of the proposed project site and prepared a technical memorandum outlining potential biological and wetland constraints and recommended mitigation measures. This PG&E project consisted of expanding the existing Konocti Substation facility in Kelseyville, California (Lake County). Work performed for Pacific Gas and Electric, San Ramon.

PG&E Geysers No. 3 (2010). Lead Biologist who led a team of biologists to survey the proposed project corridor and evaluate the potential impacts of the project on special-status plant and animal species as well as wetlands and other waters of the U.S. Also prepared a technical memorandum outlining potential biological and wetland constraints and recommended mitigation measures. PG&E proposed installation of a fiber-optic cable along an estimated two-mile stretch of the existing Geysers No.3 to Cloverdale 115kV power line in "The Geysers" geothermal area near Geyserville, California (Sonoma County). Work performed for Pacific Gas and Electric, San Ramon.

Rice-Logan Creek Back Tie (2010). Lead Biologist who led a team of biologists to survey the proposed project corridor and evaluate the potential impacts of the project on special-status plant and animal species as well as wetlands and other waters of the U.S. Prepared a technical memorandum outlining potential biological and wetland constraints and recommended mitigation measures. Also conducted pre-construction surveys for nesting birds along the project alignment. PG&E proposed the installation of 16 power poles along an estimated length of 4,000 ft to extend service between the Logan Creek and Rice Substations located in Glenn/Colusa counties, near the town of Princeton, California (Colusa County). Work performed for Pacific Gas and Electric, San Ramon.

Environmental Services for the Mayhew Levee Improvement Project (2007 - 2008). Biologist who assisted the U.S. Army Corps of Engineers (USACE) in completing a joint NEPA/CEQA document (EIS/EIR) for the highly contentious Mayhew Levee Improvement Project in the City of Sacramento, which involved the scheduled removal of a number of mature oaks and impacts to the adjacent homes and recreational uses affected by the proposed levee improvements. Conducted

field surveys and prepared the biological and wetland resources sections of the document, as well as coordinated with Sacramento Area Flood Control Agency (SAFCA) and USACE. Work performed for SAFCA.

Natomas Levee Improvement Program (NLIP) Sacramento River Levee Reaches 1, 2, 4B, 5A (2010 - 2011). Biologist who attended meetings and site visits to assist the project team with designing the project to avoid impacts to biological resources and waters of the U.S. The project consisted of improving a segment of the Sacramento River levee (east bank) (Reaches 1, 2, 4B, and 5A) in the Natomas area (City of Sacramento), which protects a portion of Reclamation District No. 1000. Levee repairs were needed to retain Federal Emergency Management Agency certification and achieve a 200-year level of flood protection. Work performed for Sacramento Area Flood Control Agency.

New Crystal Springs Bypass Tunnel Construction Management (2009 - 2011). Specialty Biological Monitor who provided on-call support to the environmental inspector(s) during periods when the project had the potential to impact listed species including San Francisco garter snake and California red-legged frog. As a specialty biological monitor, Mr. Stringer was authorized by U.S. Fish and Wildlife Service to handle California red-legged frog if they are observed in the project site of the New Crystal Springs Bypass Tunnel near the community of Crystal Springs (San Mateo County). The project involved construction of a tunnel and a new 96-inch diameter steel pipe to connect to the existing Crystal Springs Bypass Tunnel and Crystal Springs Pipeline. Work performed for San Francisco Public Utilities Commission.

MORE Water Project Phase 3 Feasibility Study (2011). Biologist responsible for conducting biological reconnaissance surveys of the 4,500+ acre project footprint in eastern San Joaquin County and preparing the biological resources section of the feasibility study. Also led a team of biological monitors to monitor geotechnical explorations associated with the feasibility study, in order to avoid impacts to vernal pools. The goal of the Feasibility Study was to examine MORE Water Project alternatives in more detail in order to select a preferred alternative to carry forward into a Project EIR in Phase 4. Work performed for San Joaquin County

Thomes Creek Bridge at 99W Replacement (2008 - 2009). Lead Biologist/arborist who was responsible for preparation of a Natural Environment Study, Biological Assessment, California red-legged frog site assessment, arborist survey report, and Wetland Delineation for the proposed project. Conducted consultation with the USFWS regarding potential project impacts to California red-legged frog. As the lead arborist, Mr. Stringer was responsible for preparation of an arborist survey report to document the species, size, and condition of all trees with the potential to be adversely impacted by the proposed project. The project included hydrology, hydraulics, and scour investigations, as well as utility and railroad coordination and floodplain mapping in support of the proposal to replace a nine-span, 650-foot-long

by 31-foot-wide, reinforced concrete arch bridge over Thomes Creek (Tehama County) founded upon short 15 foot long timber pilings, originally constructed in 1920. Work performed for Tehama County Department of Public Works.

Upper Yuba River Levee Improvement Project (2009 - 2011). Lead Biologist who prepared biological and wetland technical studies in support of the proposed project, prepared the biological resources section of the NEPA/CEQA document, conducted U.S. Fish and Wildlife Service (USFWS) protocol surveys for vernal pool branchiopods and valley elderberry longhorn beetle, conducted a habitat assessment for giant garter snake, conducted raptor pre-construction surveys, conducted worker awareness training for the construction crews, attended weekly construction meetings, led a team of construction monitors to assist the project proponent with permit compliance throughout construction, and prepared post-construction reports for submittal to the USFWS as required by the project's Biological Opinion. Prepared a Biological Assessment, a Jurisdictional Delineation Report, an Elderberry Mitigation Plan, a vernal pool branchiopod survey report, a pre-construction survey report, worker awareness training materials, and a post-construction compliance report. Assisted with consultation with USFWS for Valley elderberry longhorn beetle, vernal pool fairy shrimp, and vernal pool tadpole shrimp. The project consisted of repairs of a reach along an approximately 4-mile long segment of the Yuba River South Levee (from SR-70 to Yuba Gold Fields) in Yuba County in order to achieve FEMA certification. Work performed for Three Rivers Levee Improvement Authority.

South Sacramento County Streams, Unionhouse Creek 30% Conceptual Design and Environmental Assessment Project (2009). Lead Biologist responsible for conducting biological and wetland surveys of the project site and preparation of a Wetland Delineation as well as the biological resources sections of the Environmental Assessment. Included conducting protocol surveys for Valley elderberry longhorn beetle and coordination with the U.S. Army Corps of Engineers (USACE) and the Sacramento County Regional Sanitation District (SCRSD) with regards to potential impacts to biological resources. The proposed project consisted of modifications to an approximately one mile long segment of Unionhouse Creek between Franklin Blvd. and Center Parkway, in Sacramento County, which was a component of the South Sacramento County Streams Flood Control Project. A portion of the levee improvements were located on the SCRSD Bufferlands. Work performed for USACE Sacramento District.

Abernathy Road Bridge (23C-183) at Ledgewood Creek Project (2004 - 2005). Biologist who conducted biological reconnaissance surveys, a site assessment and protocol surveys for California red-legged frog according to USFWS protocol, and a jurisdictional delineation, and assisted with the preparation of a Natural Environment Study and Jurisdictional Delineation Report. The purpose of the project was to replace the Abernathy Road Bridge at Ledgewood Creek in Solano County. Work performed for Solano County Public Works Department.

Aladdin Depot Water Rights Application Tree Survey (2006). Biologist/arborist who conducted supplementary biological surveys, arborist surveys, and rare plant surveys to update an outdated biological resource assessment for the Aladdin Depot water rights project in Napa County. Conducted USFWS protocol surveys for Valley elderberry longhorn beetle. Prepared a technical memorandum for the State Water Board, reporting the results of the surveys. Work performed for Aladdin Depot.

Carbondale Road Bridge Improvements Project (2005 - 2006). Lead biologist who conducted preconstruction surveys and monthly monitoring visits for raptors, western pond turtle, and California red-legged frog and prepared a report documenting the results of the surveys. Assisted Amador County with development of mitigation measures to prevent impacts to nesting swallows. Prepared a Revegetation Plan to restore native vegetation in the creek once construction was completed. Work performed for Amador County Public Works.

Circle S Ranch Erosion Control Plan (2006). Lead Biologist who conducted a site assessment for California red-legged frog according to USFWS protocol for the Circle S Ranch in Napa County. Conducted USFWS protocol surveys for Valley elderberry longhorn beetle. Assisted with rare plant surveys. Attended project scoping meetings with the Client and resource agencies to assist with developing project design to avoid sensitive biological resources to the maximum extent practicable. Consulted with Napa County and CDFG to develop mitigation strategies for special-status animal species. Conducted onsite meetings with CDFG and USFWS to evaluate the potential for the project to support special-status species. Work performed for Circle S Ranch.

Clayton Regency Mobile Home Park Water Treatment Plant (2005). Biologist/arborist who conducted preconstruction surveys required by 404 Permit requirements for California red-legged frog, California tiger salamander, San Joaquin k t fox, burrowing owl, and raptor nests. Prepared a wildlife survey plan for future surveys to be conducted post-construction. Conducted arborist surveys and prepared a tree preservation plan in accordance with the Contra Costa County Tree Protection Ordinance. Work performed for Clayton Regency Mobile Home Park.

Cordelia Road Bridge (23C-037) Replacement Project (2005). Biologist who conducted USFWS protocol surveys for Valley elderberry longhorn beetle and assisted with preparation of a VELB mitigation and monitoring plan for this road/bridge replacement project in Solano County. Work performed for Solano County Public Works.

Enterprise Rancheria Housing Project (2006). Biologist who conducted USFWS protocol site assessments and field surveys for California red-legged frog and

assisted with report preparation for this housing project located in Butte County. Work performed for the Estom Yumeka Maidu Indians of the Enterprise Rancheria.

Gateway Hotel and Gas Station Project (2005). Biologist who conducted USFWS protocol field surveys for California red-legged frog and assisted with a CRLF field survey report. Also assisted with preparation of a mitigation and monitoring plan for impacts to waters of the U.S. for this hotel and gas station project located near the City of Placerville in El Dorado County. Work performed for Mr. Ed Mackay of Smith Flat Construction Inc.

Guenoc Winery/ Langtry Estates (2006). Lead Biologist. Conducted biological reconnaissance surveys of the 21,349 acre Langtry Estate in Napa and Lake Counties, one of the largest contiguous private land holdings in California. Also conducted and led focused biological surveys on the site including a site assessment for California red-legged frog according to USFWS protocol and USFWS protocol surveys for Valley elderberry longhorn beetle. Prepared biological reports to support a water right application to the Regional Water Quality Control Board (RWQCB) and associated CEQA documentation. Attended project scoping meetings with the Client and resource agencies to assist with developing project design to avoid sensitive biological resources to the maximum extent practicable. Consulted with the RWQCB and California Dept. of Fish and Game to develop mitigation strategies for special-status species. \

Home Depot at Hangtown Creek (2003 - 2004). Biologist who conducted pre-construction surveys for California red-legged frog, and raptors and other migratory birds as well as USFWS protocol surveys for Valley elderberry longhorn beetle at the site of a proposed Home Depot facility in the City of Placerville, El Dorado County. Conducted amphibian/fish salvage and relocation during dewatering of the creek; conducted benthic macroinvertebrate sampling and water quality sampling; conducted construction biological monitoring. Assisted with the preparation of a revegetation plan for Hangtown Creek and assisted with the as-built report upon completion of restoration. Also assisted with preparation of biological reports. Work performed for The Home Depot U.S.A Inc.

Ione Band of Miwok Indians Fee-to-Trust Application, Amador County, California (2006 - 2007). Biologist who conducted USFWS protocol surveys for vernal pool branchiopods (fairy and tadpole shrimp), Valley elderberry longhorn beetle, and California red-legged frog for this project located in Amador County. Conducted a site assessment for California tiger salamander according to USFWS protocol. Conducted fieldwork for a jurisdictional delineation. Prepared a California red-legged frog Site Assessment Report and a Report of Findings from Wet Season Vernal Pool Branchiopod Surveys. Assisted with preparation of the jurisdictional delineation report. Also conducted onsite meetings with USFWS to evaluate the

potential for the project to support California red-legged frog and fairy shrimp. Work performed for the Ione Band of Miwok Indians.

Jackson Hills Golf Club and Community (2003). Arborist who inventoried over 3,000 oak trees and prepared an arborist survey report for this proposed 500 acre golf course project located in Amador County. Work performed for Jackson Hills Golf Club.

Palisades Vineyards Water Rights Application (2006). Biologist who conducted supplementary biological surveys, arborist surveys, and rare plant surveys to update an outdated biological resource assessment for Palisades Vineyards located in Napa County in support of CEQA documentation for a water rights application. Also conducted USFWS protocol surveys for Valley elderberry longhorn beetle and prepared a mitigation plan for oak trees and elderberry shrubs that were scheduled for removal. Also prepared a technical memorandum evaluating the potential for onsite wetlands to support federally-listed vernal pool branchiopods. Work performed for Palisades Vineyards.

Pleasant Valley Road Bridge (23C-010) at Pleasants Creek Retrofit Project (2004 - 2005). Biologist who conducted a USFWS protocol Valley elderberry longhorn beetle (VELB) survey and assisted with the preparation of VELB mitigation and monitoring plan and a Natural Environment Study for this road/bridge project located in Solano County. Work performed for Solano County Public Works.

River Gold Ranch Equestrian Estates Project (2004 – 2005). Biologist who conducted fieldwork for a biological resources evaluation for this proposed equestrian estates project located in Calaveras County. Also conducted USFWS protocol surveys for California red-legged frog and jurisdictional delineation surveys and prepared a Site Assessment and Field Survey Report for California red-legged frog and a Jurisdictional Delineation Report. Work performed for River Gold Ranch.

Santa Fe Riverbank Bridge (1096.719) Improvement Project (2003 - 2005). Biologist who assisted with the preparation of an Elderberry Mitigation, Monitoring, and Maintenance Plan for this bridge improvement project in Stanislaus and San Joaquin counties. Conducted elderberry shrub annual mitigation monitoring for the mitigation site for Santa Fe Railway Company and prepared annual monitoring reports. Work performed for Santa Fe Railway Company.

Silva Valley Parkway Water Main and Sewer Force Main (2004). Biologist who conducted USFWS California red-legged frog protocol surveys and assisted with vernal pool crustacean surveys for proposed water and sewer force main installation sites in El Dorado County. The project consisted of the installation of approximately 13,000 lineal feet of 42-inch water main & 6,800 lineal feet of 16-inch sewer force main. Also assisted with the preparation of the California red-legged frog site

assessment and field survey reports, and vernal pool habitat analysis for submittal to USFWS. Work performed for El Dorado Irrigation District.

Suisun Valley Road Bridge (23C-077) at Suisun Creek Project (2004 - 2005). Biologist who conducted a USFWS site assessment and protocol surveys for California red-legged frog and assisted with preparation of a Natural Environment Study and jurisdictional delineation report for the Suisun Valley Road Bridge Project in Solano County. Work performed for Solano County Public Works.

Sumps 28 & 70 Outfall Stabilization Project (2005). Biologist who conducted a biological resources survey and prepared a Biological Assessment for Valley elderberry longhorn beetle and delta smelt for submittal to USFWS for this outfall stabilization project on the Sacramento River near Freeport in Sacramento County. Work performed for the City of Sacramento.

Temple Vineyards Water Rights Application (2006 - 2007). Biologist who conducted supplementary biological surveys, arborist surveys, and rare plant surveys to update an outdated biological resource assessment for the Temple Vineyards in Napa County in support of CEQA documentation for a water rights application. Conducted U.S. Fish & Wildlife Service (USFWS) protocol surveys for Valley elderberry longhorn beetle. Prepared a technical memorandum for the State Water Board reporting the results of the surveys. Work performed for Temple Vineyards.

Union Public Utility District Water Storage Tank Project (2004 - 2005). Biologist who conducted USFWS protocol site assessment and field surveys for California red-legged frog, and prepared the report for submittal to USFWS for this water storage tank project near the City of Murphys in Calaveras County. Assisted with jurisdictional delineation fieldwork and preparation of the jurisdictional delineation report. Work performed for Union Public Utility District.

Waterman Road Properties Elk Grove Project (2003). Biologist who conducted Valley Elderberry Longhorn Beetle surveys according to USFWS protocol and prepared the report for submittal to the USFWS for the subdivision project in Sacramento County. Work performed for Waterman Road Properties.