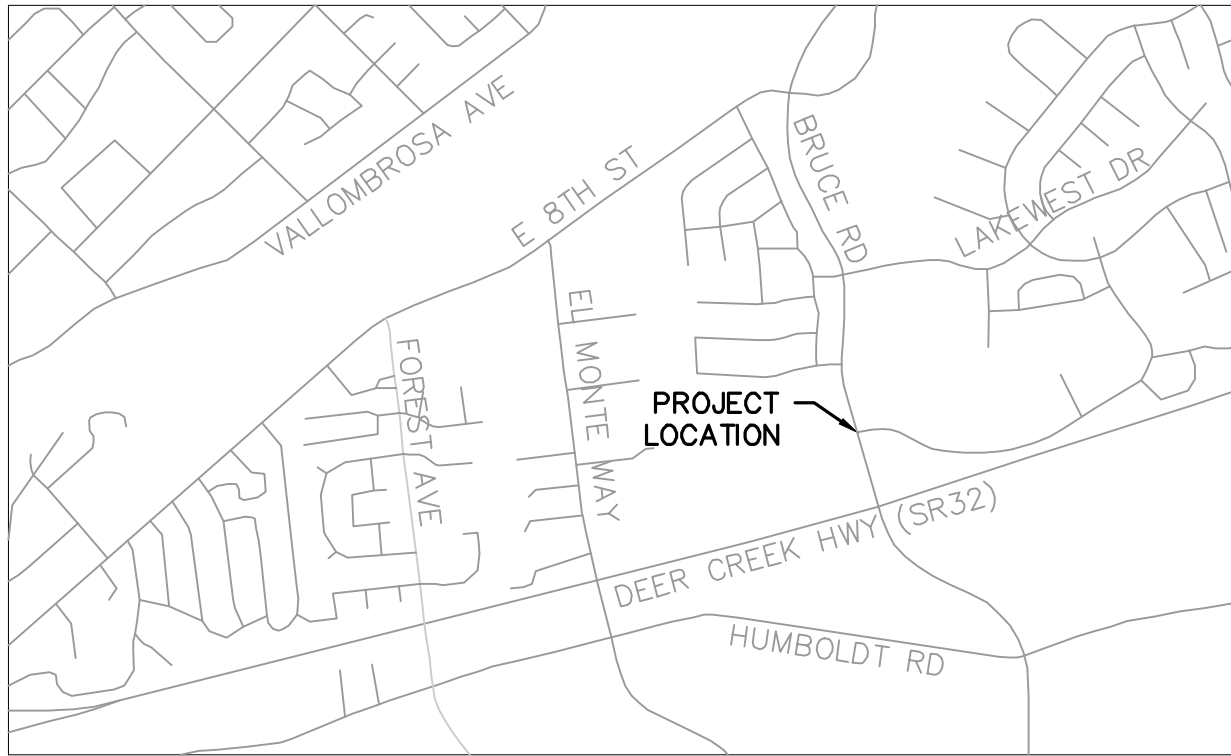


KEY MAP
OF
BUTTE COUNTY



LOCATION MAP

LEGEND:

NEW EXISTING			
		PULL BOX	
		TRAFFIC SIGNAL CONTROLLER CABINET	
		TRAFFIC SIGNAL POLE	
		CONDUIT	
		METERED SERVICE	
		THRU SIGNAL HEAD	
		TURN SIGNAL HEAD	
		PEDESTRIAN SIGNAL HEAD	
		SIGN	
		RADIO ANTENNA	
		DETECTION VIDEO CAMERA	
		INTERNALLY ILLUMINATED STREET NAME SIGN	
		LUMINAIRE	

ABBREVIATIONS:

ABB.	MEANING
AC	ASPHALTIC CONCRETE
AWG	AMERICAN WIRE GAUGE
APS	ACCESSIBLE PEDESTRIAN SIGNAL
CON	CONDUCTOR
DLC	DETECTOR LEAD IN CABLE
EP	EDGE OF PAVEMENT
EX.	EXISTING
FL	FLOW LINE
GB	GRADE BREAK
IMSA	INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION
LED	LIGHT EMITTING DIODE
MA	MAST ARM
MAX	MAXIMUM
MIN	MINIMUM
MMU	MALFUNCTION MANAGEMENT UNIT
OHP	OVERHEAD POWER
PB	PULLBOX
PCC	PORTLAND CEMENT CONCRETE
Q	QUADRANT
R/W	RIGHT OF WAY
SPEC	SPECIFICATION
SW	SIDEWALK
TBD	TO BE DETERMINED
TC	TOP OF CURB
TYP	TYPICAL
Ø	PHASE

CHICO, CALIFORNIA

PLANS FOR THE CONSTRUCTION OF :

BRUCE ROAD AT SIERRA SUNRISE TERRACE
TRAFFIC SIGNAL
PROJECT NO. _____

INDEX OF SHEETS

TITLE	SHEET NO.
TITLE SHEET	1
DEMOLITION PLAN	2
IMPROVEMENT PLAN	3
GRADING PLAN	4
TRAFFIC SIGNAL CONDUIT PLAN	5
TRAFFIC SIGNAL EQUIPMENT PLAN	6
TRAFFIC SIGNAL SCHEDULES	7
NOTES AND SPECIFICATIONS	8

APPLICABLE STANDARD PLANS

CALTRANS:
ES-2D, ELECTRICAL SYSTEMS (SERVICE EQUIPMENT ENCLOSURE AND TYPICAL WIRING DIAGRAM, TYPE III-A SERIES)
ES-3C, ELECTRICAL SYSTEMS (CONTROLLER CABINET FOUNDATION AND PAD DETAILS)
ES-7B, ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, TYPE 1 AND EQUIPMENT IDENTIFICATION CHARACTERS)
ES-7F, ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, CASE 4 MAST ARM LOADING, WIND VELOCITY=100 MPH AND SIGNAL MAST ARM LENGTHS 25' TO 45')
ES-7G, ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, CASE 5 MAST ARM LOADING, WIND VELOCITY=100 MPH AND SIGNAL MAST ARM LENGTHS 50' TO 55')
ES-7N, ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, DETAIL NO. 2)
ES-7P, ELECTRICAL SYSTEMS (INTERNALLY ILLUMINATED STREET NAME SIGN)
ES-7R, ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING, MISCELLANEOUS ATTACHMENT)
ES-8B, ELECTRICAL SYSTEMS (TRAFFIC PULL BOX)

CITY OF CHICO:
S-1, P.C.C. SIDEWALK DETAILS
S-2, P.C.C. CURB AND GUTTER
S-16, STREET NAME SIGN DETAILS
S-27, P.C.C. HANDICAPPED RAMP

PREPARED BY OR UNDER THE SUPERVISION OF:

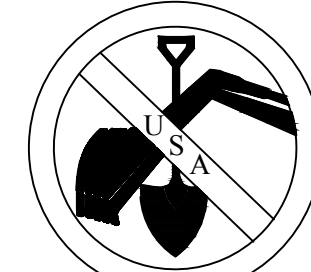


LOREN EDWARD CHILSON, P.E.
C.E. No. 61425

APPROVED BY: _____

BENDAN OTTOBONI, P.E.
PUBLIC WORKS DIRECTOR – ENGINEERING
CITY OF CHICO, CALIFORNIA
DATE: _____

CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TWO (2) WORKING DAYS PRIOR TO GRADING OR DIGGING

Plan Status: ☐ Conceptual, ☐ Approved, ☐ Final, ☐ Record

Designed: RDP	Approved:	Revision	Date	By
Drawn By: RDP	Date: 09-07-21			
Checked: LEC				



BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL
TITLE SHEET

Project Number: _____	Drawing Number T-1
Scale: NA	Sheet 1 of 8

Plan Status: ☐ Conceptual, ☐ Approved Final, ☐ Record

Designed:	RDP	Approved:		Revision	Date	By
Drawn By:	RDP	Date:	09-07-21			
Checked:	LEC					

HEADWAY

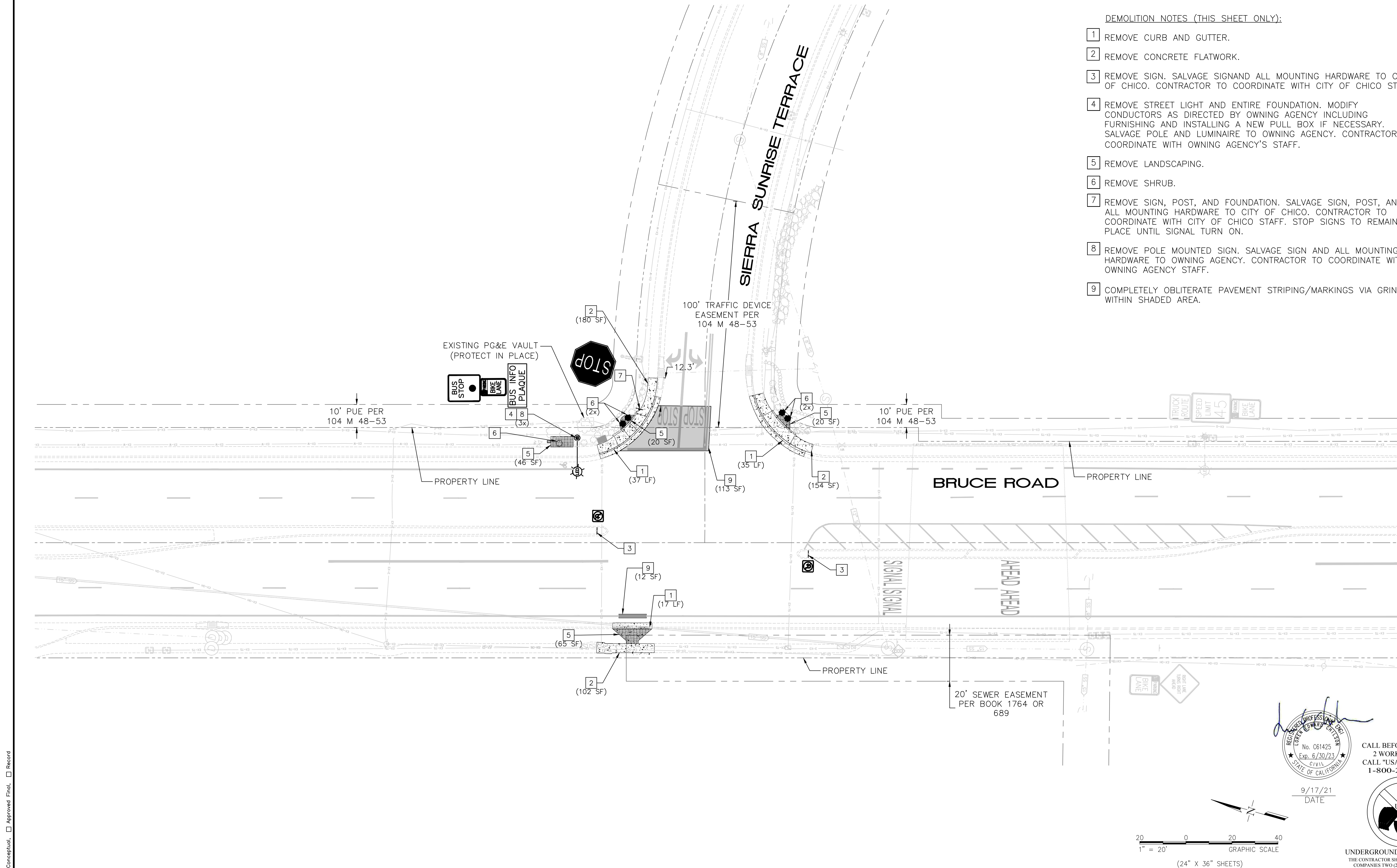
TRANSPORTATION

2240 St. George Lane, Suite 1
Chico, CA 95926

BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL

DEMOLITION PLAN

Project Number:	Drawing Number R-1
Scale: 1"=20'	Sheet 2 of 8



- DEMOLITION NOTES (THIS SHEET ONLY):
- 1 REMOVE CURB AND GUTTER.
 - 2 REMOVE CONCRETE FLATWORK.
 - 3 REMOVE SIGN. SALVAGE SIGN AND ALL MOUNTING HARDWARE TO CITY OF CHICO. CONTRACTOR TO COORDINATE WITH CITY OF CHICO STAFF.
 - 4 REMOVE STREET LIGHT AND ENTIRE FOUNDATION. MODIFY CONDUCTORS AS DIRECTED BY OWNING AGENCY INCLUDING FURNISHING AND INSTALLING A NEW PULL BOX IF NECESSARY. SALVAGE POLE AND LUMINAIRE TO OWNING AGENCY. CONTRACTOR TO COORDINATE WITH OWNING AGENCY'S STAFF.
 - 5 REMOVE LANDSCAPING.
 - 6 REMOVE SHRUB.
 - 7 REMOVE SIGN, POST, AND FOUNDATION. SALVAGE SIGN, POST, AND ALL MOUNTING HARDWARE TO CITY OF CHICO. CONTRACTOR TO COORDINATE WITH CITY OF CHICO STAFF. STOP SIGNS TO REMAIN IN PLACE UNTIL SIGNAL TURN ON.
 - 8 REMOVE POLE MOUNTED SIGN. SALVAGE SIGN AND ALL MOUNTING HARDWARE TO OWNING AGENCY. CONTRACTOR TO COORDINATE WITH OWNING AGENCY STAFF.
 - 9 COMPLETELY OBLITERATE PAVEMENT STRIPING/MARKINGS VIA GRINDING WITHIN SHADED AREA.

REGISTERED PROFESSIONAL ENGINEER

JOHN J. JONES

No. C61425

Exp. 6/30/23

CIVIL

STATE OF CALIFORNIA

9/17/21
DATE

CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600

UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TWO (2) WORKING DAYS PRIOR TO GRADING OR DIGGING

Plan Status: ☐ Conceptual, ☐ Approved Final, ☐ Record

Designed:	RDP	Approved:		Revision	Date	By
Drawn By:	RDP	Date:	09-07-21			
Checked:	LEC					

HEADWAY
TRANSPORTATION
2240 St. George Lane, Suite 1
Chico, CA 95926

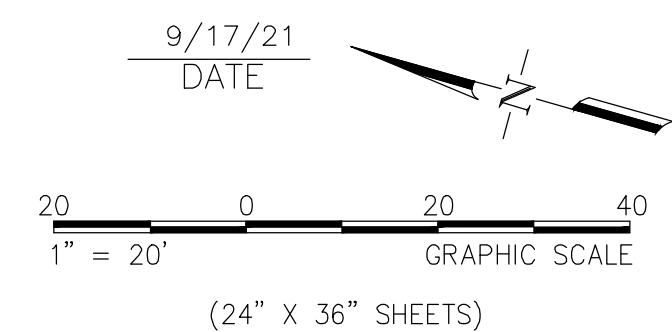
BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL
IMPROVEMENT PLAN

Project Number:	Drawing Number P-1
Scale: 1"=20'	Sheet 3 of 8

CONSTRUCTION NOTES (THIS SHEET ONLY):

- CONSTRUCT VERTICAL CURB AND GUTTER PER CITY OF CHICO STANDARD PLAN S-2.
- CONSTRUCT PEDESTRIAN RAMP PER CITY OF CHICO STANDARD PLAN S-27.
- CONSTRUCT SIDEWALK/CONCRETE FLATWORK PER CITY OF CHICO STANDARD PLAN S-1.
- ADJUST VALVE COVER TO FINISHED GRADE.
- PLACE 4" SOLID DOUBLE YELLOW WATERBORNE PAINT STRIPE.
- PLACE 8" SOLID WHITE WATERBORNE PAINT STRIPE.
- PLACE 12" SOLID WHITE THERMOPLASTIC STRIPE. CROSSWALKS TO PROVIDE MIN. 4' CLEAR IN FRONT OF RAMPS.
- PLACE 8' WHITE THERMOPLASTIC ARROW SYMBOL.
- FURNISH AND INSTALL SIGN(S), POST, AND FOUNDATION PER CITY OF CHICO STANDARD PLAN S-16.
- FURNISH AND INSTALL SIGN ON EXISTING POST.

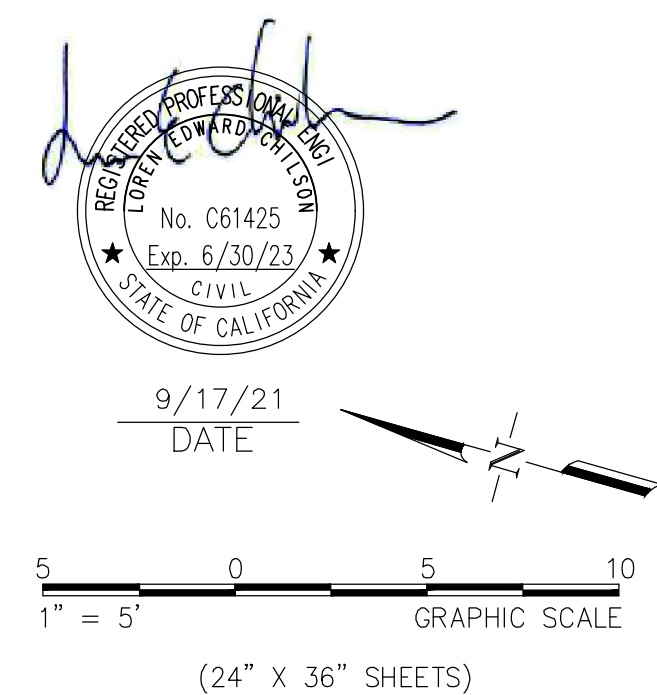
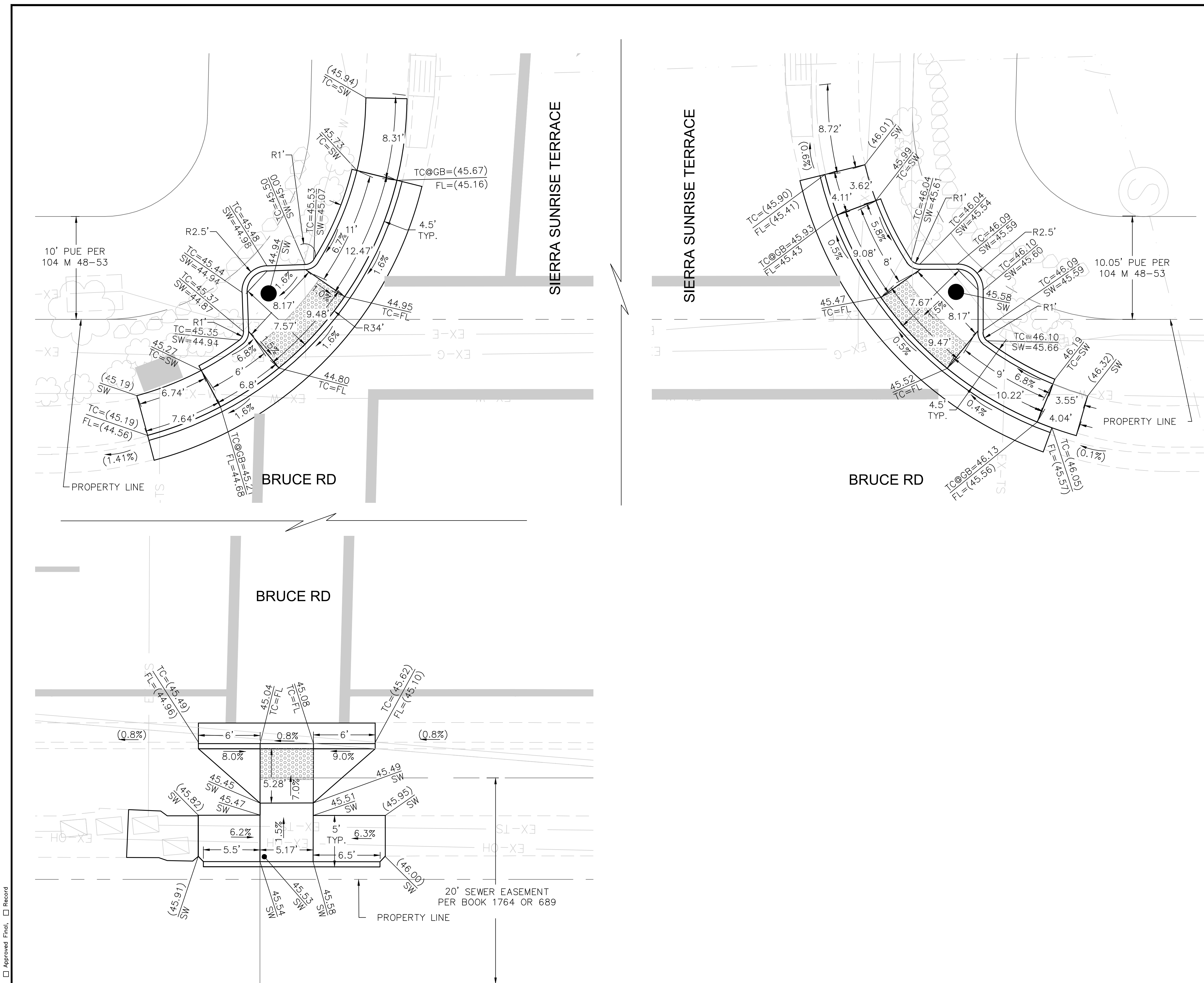
THE LOCATION OF PAVEMENT MARKINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.



CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TWO (2) WORKING DAYS PRIOR TO GRADING OR DIGGING



CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY
COMPANIES TWO (2) WORKING DAYS PRIOR
TO GRADING OR DIGGING

Plan Status:	Designed: RDP	Approved:	Revision	Date	By
	Drawn By: RDP				
	Checked: LEC	Date: 09-07-21			



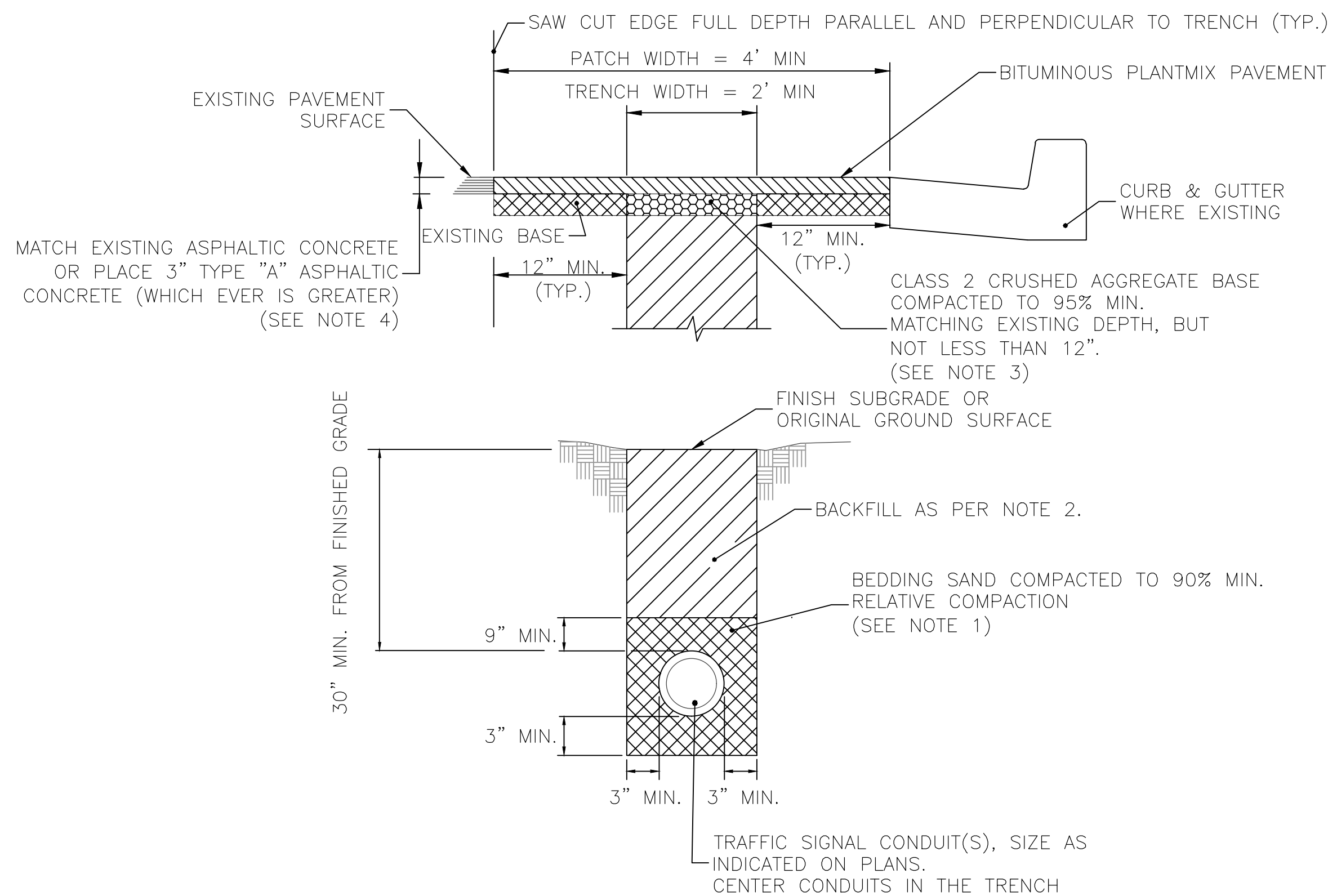
HEADWAY
TRANSPORTATION

2240 St. George Lane, Suite 1
Chico, CA 95926

BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL
GRADING PLAN

Project Number: _____	Drawing Number G-1
Scale: 1"=5'	Sheet <u>4</u> of <u>8</u>

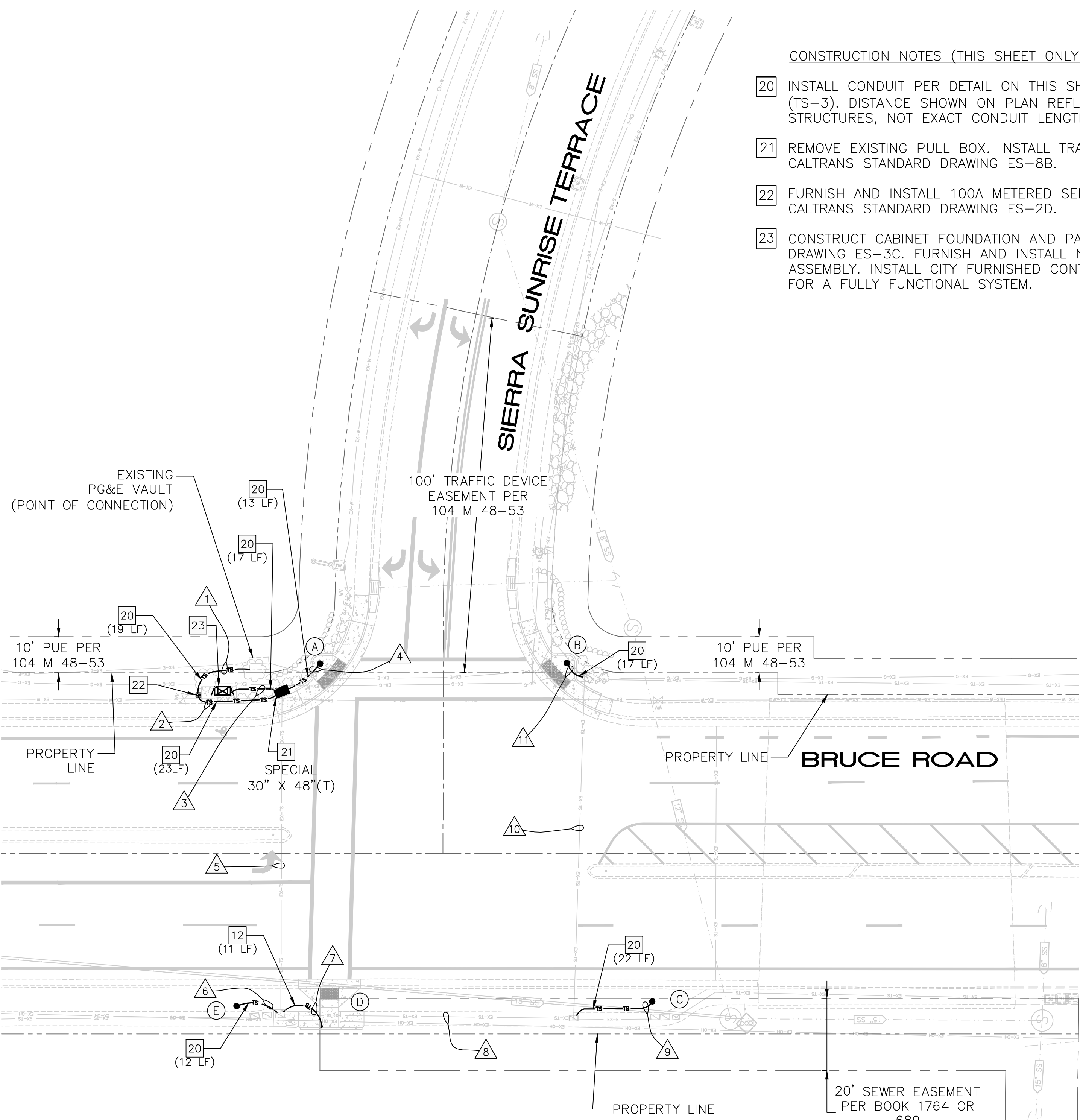
Plan Status: ☐ Conceptual, ☐ Approved Final, ☐ Record



NOTES:

1. BEDDING SAND SHALL CONFORM TO SECTION 19-3.02F(2) OF THE 2015 CALTRANS STANDARD SPECIFICATIONS.
2. TRENCHES SHALL BE BACKFILLED IN CONFORMANCE WITH THE PROVISIONS OF SECTION 19-3 "STRUCTURE EXCAVATION AND BACKFILL" OF THE 2015 CALTRANS STANDARD SPECIFICATIONS.
3. CLASS 2 AGGREGATE BASE SHALL CONFORM TO SECTION 26 OF THE 2015 CALTRANS STANDARD SPECIFICATIONS.
4. TYPE "A" ASPHALTIC CONCRETE SHALL BE 3/4" MAXIMUM AGGREGATE AND CONFORM TO SECTION 39-2.02 OF THE 2015 CALTRANS STANDARD SPECIFICATIONS.

CONDUIT TRENCH DETAIL

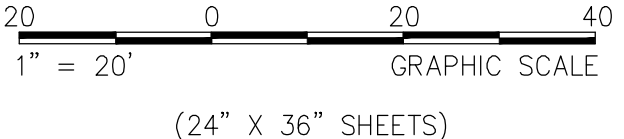


CONSTRUCTION NOTES (THIS SHEET ONLY):

- 20 INSTALL CONDUIT PER DETAIL ON THIS SHEET AND SCHEDULE ON SHEET 7 (TS-3). DISTANCE SHOWN ON PLAN REFLECTS DISTANCE BETWEEN STRUCTURES, NOT EXACT CONDUIT LENGTH.
- 21 REMOVE EXISTING PULL BOX. INSTALL TRAFFIC RATED PULL BOX PER CALTRANS STANDARD DRAWING ES-8B.
- 22 FURNISH AND INSTALL 100A METERED SERVICE, FOUNDATION AND PAD PER CALTRANS STANDARD DRAWING ES-2D.
- 23 CONSTRUCT CABINET FOUNDATION AND PAD PER CALTRANS STANDARD DRAWING ES-3C. FURNISH AND INSTALL NEW 332 L CONTROLLER CABINET ASSEMBLY. INSTALL CITY FURNISHED CONTROLLER. MAKE ALL CONNECTIONS FOR A FULLY FUNCTIONAL SYSTEM.



9/17/21
DATE



CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



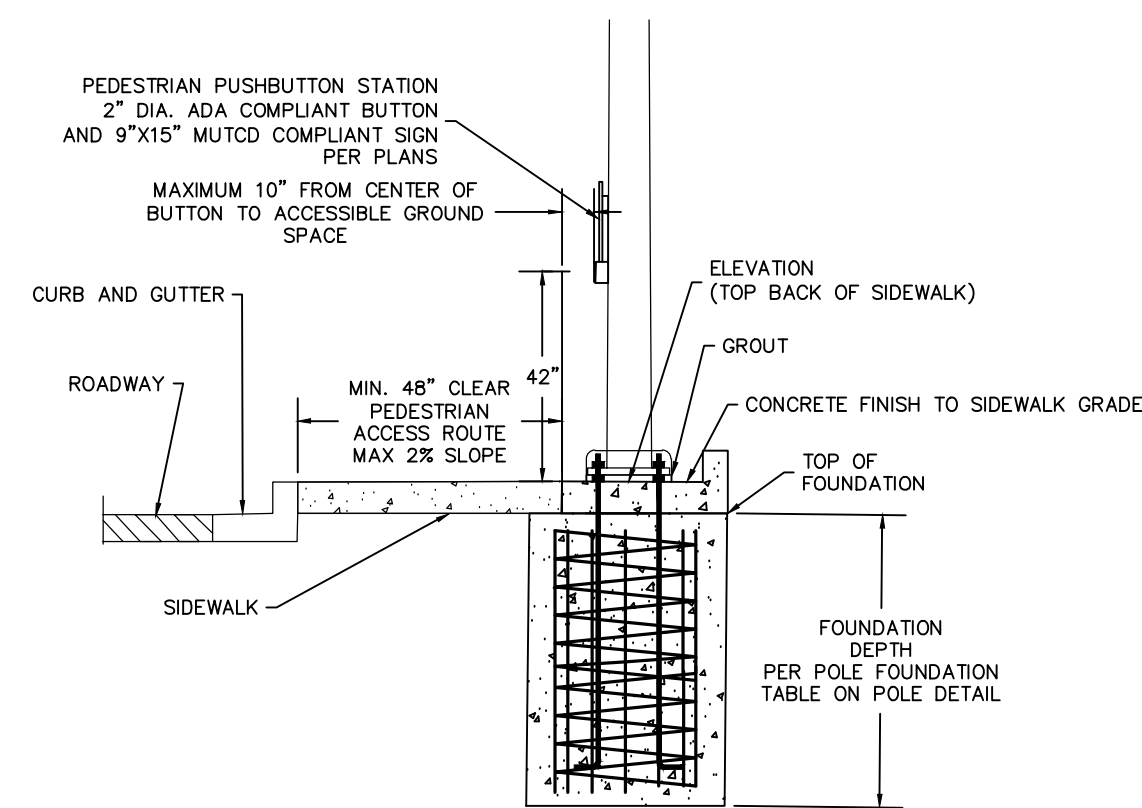
UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TWO (2) WORKING DAYS PRIOR TO GRADING OR DIGGING

Designed: RDP	Approved:	Revision	Date	By
Drawn By: RDP	Date: 09-07-21			
Checked: LEC				

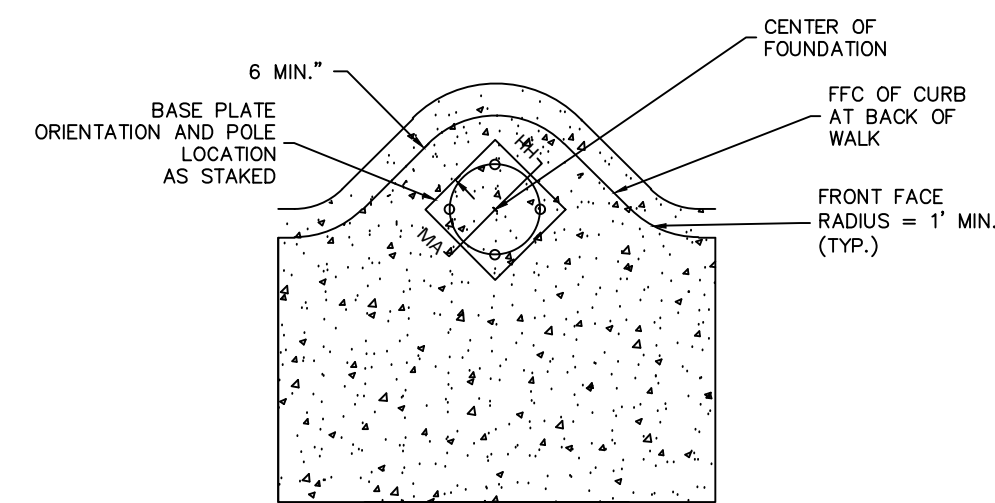
HEADWAY
TRANSPORTATION
2240 St. George Lane, Suite 1
Chico, CA 95926

BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL
TRAFFIC SIGNAL CONDUIT PLAN

Project Number:	Drawing Number TS-1
Scale: 1"=20'	Sheet 5 of 8

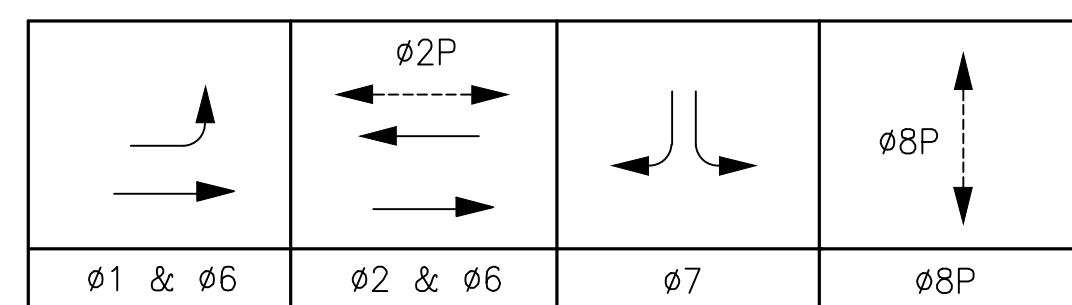
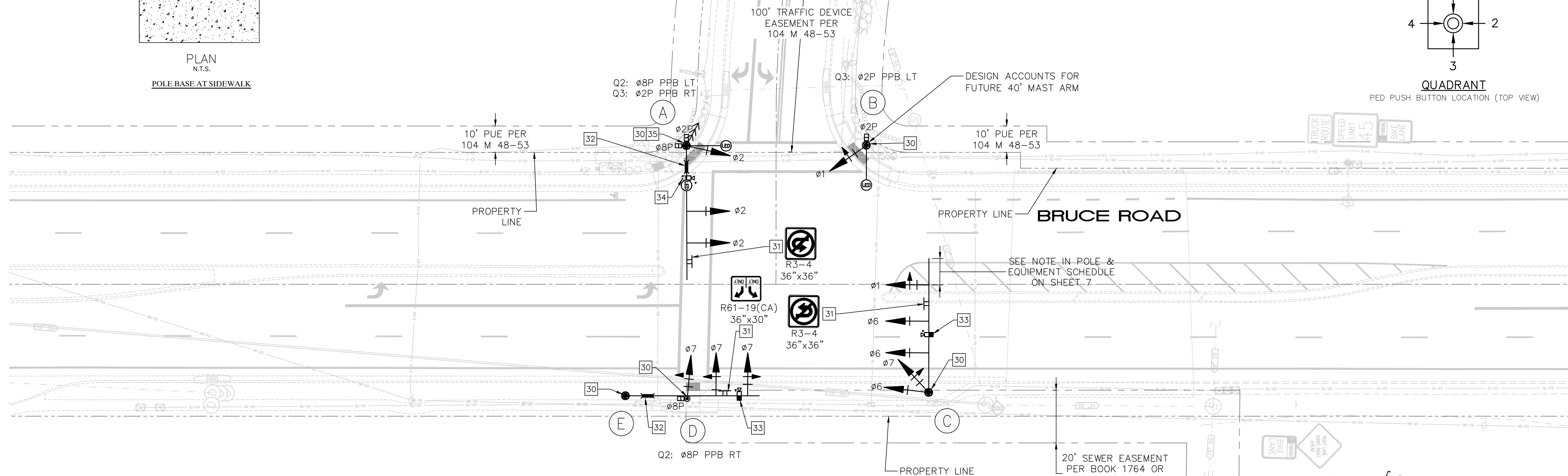


PROFILE
N.T.S.



PLAN
N.T.S.

POLE BASE AT SIDEWALK



PROPOSED PHASE DIAGRAM

FLASHING OPERATION: ALL RED

Item Status:	Designed: RDP	Approved:	Revision	Date	By
	Drawn By: RDP				
	Checked: LEC		Date: 09-07-21		

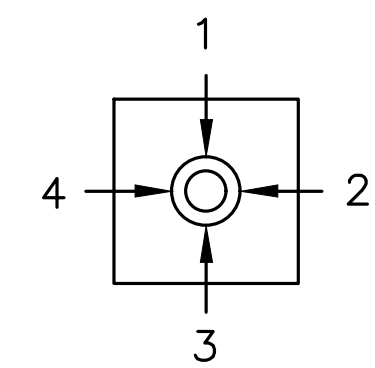


BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL
TRAFFIC SIGNAL EQUIPMENT PLAN

Project Number: _____	Drawing Number TS-2
Scale: 1"=20'	Sheet <u>6</u> of <u>8</u>

CONSTRUCTION NOTES:

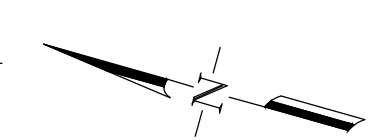
- 30 FURNISH AND INSTALL NEW SIGNAL POLE AND FOUNDATION PER CALTRANS STANDARD DRAWINGS ES-7A THROUGH ES-7G, DETAIL SHOWN ON THIS SHEET, AND SCHEDULE ON SHEET 7 (TS-3).
- 31 FURNISH AND INSTALL MAST ARM MOUNTED SIGN PER CALTRANS STANDARD DRAWING ES-7N.
- 32 FURNISH AND INSTALL INTERNALLY ILLUMINATED STREET NAME SIGN PER CALTRANS STANDARD DRAWING ES-7P AND SCHEDULE ON SHEET 7 (TS-3).
- 33 FURNISH AND INSTALL VIDEO CAMERA ON MAST ARM WITH 2.5' EXTENSION PER CALTRANS STANDARD DRAWING ES-7R AND VIDEO CAMERA MANUFACTURER'S RECOMMENDATIONS.
- 34 FURNISH AND INSTALL VIDEO CAMERA ON LUMINAIRE ARM PER CALTRANS STANDARD DRAWING ES-7R AND VIDEO CAMERA MANUFACTURER'S RECOMMENDATIONS.
- 35 FURNISH AND INSTALL NEW RADIO INTERCONNECT SYSTEM INCLUDING ALL ANTENNAS, COMMUNICATION EQUIPMENT, WIRING, AND MAKING ALL CONNECTIONS FOR A FULLY OPERATIONAL WIRELESS COMMUNICATION SYSTEM. RECEIVING ANTENNA TO BE INSTALLED ON CITY OF CHICO RADIO TOWER LOCATED APPROXIMATELY 1.85 MILES NORTH OF THE PROJECT SITE. COORDINATE WITH CITY OF CHICO STAFF PRIOR TO INSTALLING.

QUADRANT

PED PUSH BUTTON LOCATION (TOP VIEW)



9/17/21
DATE



20 0 20 40
1" = 20' GRAPHIC SCALE












(24" X 36" SHEETS)

CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY
COMPANIES TWO (2) WORKING DAYS PRIOR
TO GRADING OR DIGGING

Plan Status: ☐ Conceptual, ☐ Approved Final, ☐ Record

CONDUCTOR & CONDUIT SCHEDULE													
CONDUCTOR/ CONDUCTOR CABLE	CONDUIT RUN CONDUIT SIZE												
		3"	3"	(4)3"	(2)3"	4"	(2)3"	3"	4"	(2)3"	4"	(2)3"	
25+NEUTRAL	SIGNAL CABLE			4	1	3	1		2	1	1	1	
	TOTAL 25+N CABLE			4	1	3	1		2	1	1	1	
10+NEUTRAL	SIGNAL CABLE			1		1		1					
	TOTAL 10+N CABLE			1		1		1					
#10 AWG	LUMINAIRES / IISNS			4	4	2	4	2		2		2	2
	TOTAL #10 AWG			4	4	2	4	2		2		2	2
#8 AWG	GROUND			1	1	1	1	1	1	1	1	1	
	TOTAL #8 AWG			1	1	1	1	1	1	1	1	1	
#6 AWG	SERVICE			3	3								
	TOTAL #6 AWG			3	3								
VIDEO DETECTOR CABLE	VIDEO CABLE			3	1	2	1		1	1			
	TOTAL CABLE			3	1	2	1		1	1			
INTERCONNECT WIRELESS RADIO	RADIO CABLE			1	1								
	TOTAL CABLE			1	1								
TOTAL	ALL CABLE	0	0	9	3	6	2	1	3	2	1	1	
	ALL CONDUCTOR	0	7	8	3	5	3	1	3	1	3	3	
	PERCENT CONDUIT FILL	0.0	19.7	23.4	15.0	34.0	10.4	11.9	19.1	8.1	11.7	10.4	

NOTE: DARK TEXT = NEW
SHADED TEXT = EXISTING
ALL CABLE AND CONDUCTORS SHOWN ARE TO BE FURNISHED NEW AND INSTALLED BY THE CONTRACTOR.

METERED SERVICE EQUIPMENT SCHEDULE	
SERVICE LOCATION	BRUCE/SIERRA SUNRISE
OWNERSHIP	CITY OF CHICO
VOLTAGE	120/240V
MAIN BREAKER	100A, 240V, 2P
PHASE	SINGLE
SIGNAL BREAKER	20A, 120V, 1P
LIGHTING BREAKER	30A, 120V, 2P
SPARE BREAKER	30A, 120V, 1P
GFI RECEPTACLE	15A, 120V, 1P
LIGHTING PEU	15A, 120V, 1P
TEST SWITCH	15A, 1P, SWITCH
LIGHTING CONTACTOR	35A–2PNO MERC

POLE & EQUIPMENT SCHEDULE													
LOC	STANDARD			VEHICLE SIGNALS			PED SIGNALS			PED PUSH BUTTON			NOTES
	TYPE	MAST	LUM. ARM	Ø	TYPE	MTG	Ø	TYPE	MTG	Ø	QUAD	ARROW	
A	29–5–100	50'	15' 15'	2 2 2	1W3C 1W3C 1W3C	MAS MAS SV–1–T	2P 8P	1W2L 1W2L	SP–2–T	2P 8P	3 2	RT LT	INSTALL R3–4 SIGN ON MAST ARM. INSTALL CAMERA ON LUMINAIRE ARM PER CALTRANS STANDARD PLAN ES–7R, DETAIL B. INSTALL IISNS (SIERRA SUNRISE TER.) ON MAST ARM. INSTALL RADIO ANTENNA AT TOP OF POLE.
B	26–4–100	–	15'	–	1W3C	SV–1–T	2P	1W2L	SP–1–T	2P	3	LT	LUMINAIRE ARM 90° FROM MAST ARM PLATE.
C	28–5–100	50'	–	1 6 6 6 7	1W3C 1W3C 1W3C 1W3C 1W3C	MAS MAS MAS SV–2–TB	–	–	–	–	–	–	IF REQUIRED BY THE CITY, CUT AND CAP MAST ARM AT 40' OR AS DIRECTED AFTER FOUNDATION CONSTRUCTION. INSTALL CAMERA ON MAST ARM RISER PER CALTRANS STANDARD PLAN ES–7R, DETAIL A. INSTALL R3–4 SIGN ON MAST ARM.
D	1–A	–	–	7	1W3C	TV–1–T	8P	1W2L	SP–1–T	8P	2	RT	
E	28–5–100	50'	–	7 7	1W3C 1W3C	MAS MAS	–	–	–	–	–	–	INSTALL 61–19CA SIGN ON MAST ARM. INSTALL IISNS (BRUCE RD.) ON MAST ARM. INSTALL CAMERA ON MAST ARM RISER PER CALTRANS STANDARD. PLAN ES–7R, DETAIL A.

ALL EQUIPMENT SHOWN IS TO BE FURNISHED NEW AND INSTALLED BY THE CONTRACTOR.



CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY
COMPANIES TWO (2) WORKING DAYS PRIOR
TO GRADING OR DIGGING

Designed: RDP	Approved:	Revision	Date	By
Drawn By: RDP				
Checked: LEC	Date: 09-07-21			



BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL
TRAFFIC SIGNAL SCHEDULES

Project Number:	Drawing Number TS–3
Scale: NA	Sheet 7 of 8

Plan Status: ☐ Conceptual, ☐ Approved Final, ☐ Record

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE CITY OF CHICO AT (530) 879-6910, 72 HOURS PRIOR TO THE INTENTION TO BEGIN CONSTRUCTION.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF CHICO IMPROVEMENT STANDARDS AND SPECIFICATIONS, APPLICABLE PORTIONS OF THE BUTTE COUNTY IMPROVEMENT STANDARDS AND APPLICABLE PORTIONS OF THE 2015 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND SPECIFICATIONS. APPROVAL BY THE CITY IS REQUIRED. CONTRACTOR SHALL HAVE SIGNED PLANS IN THEIR POSSESSION PRIOR TO COMMENCEMENT OF WORK.
3. LOCATIONS AND DEPTHS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL UNDERGROUND FACILITIES OR OTHER BURIED OBJECTS WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) AT (800) 227-2600 OR 811 AT LEAST 3 DAYS PRIOR TO CONSTRUCTION. THE CITY OF CHICO IS NOT A MEMBER OF UNDERGROUND SERVICE ALERT (USA). THE CONTRACTOR SHALL CALL THE CITY OF CHICO AT (530) 894-4200 AND REQUEST MARKING OF CITY OWNED FACILITIES AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.
5. ALL PERMITS REQUIRED FOR THIS JOB ARE TO BE ACQUIRED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
6. AC SURFACES TO BE JOINED, SHALL BE SAW CUT TO A NEAT STRAIGHT LINE AND THE EXPOSED EDGES SHALL BE TACKED WITH EMULSION PRIOR TO PAVING.
7. CONCRETE FLATWORK SHALL BE REMOVED AND REPLACED, IN KIND, TO EXISTING JOINT LINES. TRENCHING THROUGH, AND PATCHING OF, SIDEWALK PANEL(S) OR CURB & GUTTER WILL NOT BE PERMITTED.
8. TRANSITION ALL DRIVEWAYS, SIDEWALKS AND RAMPS TO EXISTING SURFACE. TRANSITION SHALL MATCH EXISTING MATERIAL (AC, CONCRETE, SOD, ETC.). THIS WORK SHALL BE CONSIDERED INCLUDED IN OTHER ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE ALLOWED UNLESS NOTED ON PLANS.
9. TRENCH SHEETING, SHORING AND BRACING SHALL BE INSTALLED FOR ANY TRENCH FIVE FEET OR MORE IN DEPTH. SHORING SYSTEM SHALL CONFORM TO THE LATEST EDITION OF THE STATE DIVISION OF INDUSTRIAL SAFETY CONSTRUCTION SAFETY ORDERS, SECTIONS 1539 – 1542 PURSUANT TO STATE ASSEMBLY BILL NO. 150 DATED OCTOBER 2, 1973 AND CAL OSHA STANDARDS.
10. ANY PRIVATE FACILITIES OR UTILITIES IN CONFLICT WILL BE RELOCATED AT THE CONTRACTORS EXPENSE.
11. AB IS DEFINED AS CLASS 2 AGGREGATE BASE $\frac{3}{4}$ " MAXIMUM GRADE. AGGREGATE BASE SHALL CONFORM TO SECTION 26 OF THE 2015 CALTRANS STANDARD SPECIFICATIONS.
12. ALL HARDWARE AND SIGNS REMOVED THROUGH THE COURSE OF WORK SHALL BE DELIVERED TO THE MAINTAINING AGENCY'S CORPORATE YARD. NO DIRECT PAYMENT.
13. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ITEMS AND PERFORM ALL WORK AS NECESSARY TO COMPLETE A FULLY FUNCTIONAL TRAFFIC SIGNAL SYSTEM.
14. PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT ONE FULL SIZE SET (24"x36") OF AS-BUILT PLANS TO THE CITY.

SPECIFICATIONS:

1. THE CONTRACT WORK SHALL INCLUDE ALL CABINET AND EQUIPMENT WIRING CONFIGURATIONS AND INCIDENTALS AS NECESSARY TO COMPLETE A FULLY FUNCTIONAL SYSTEM.
2. METERED UNDERGROUND ELECTRICAL SERVICE SHALL BE TESCO CONTROLS MODEL 26-000 TYPE III AF, OR APPROVED EQUAL. CONSTRUCT SERVICE CABINET FOUNDATION PER CALTRANS STANDARD DRAWING ES-2D AND MANUFACTURER'S BOLT PATTERN TEMPLATE. CABINET SHALL BE 508 RATED. METERED SERVICE SHALL HAVE OWNING AGENCY LABELS INDICATING CITY OWNERSHIP AND ADDRESS.
3. TRAFFIC SIGNAL CABINET SHALL BE TYPE 332L WITH FOUNDATION AND PAD PER CALTRANS STANDARD DRAWING ES-3C.
4. CITY OF CHICO TO FURNISH SAFETRAN ATC MODEL 2070E TRAFFIC SIGNAL CONTROLLER AND SOFTWARE.
5. CONFLICT MONITOR SHALL EDI MODEL 2010EClip, OR APPROVED EQUAL.
6. VIDEO DETECTION SYSTEM SHALL BE ITERIS VANTAGE NEXT, OR APPROVED EQUAL AND SHALL INCLUDE ALL EQUIPMENT AND MATERIALS NECESSARY FOR A COMPLETELY FUNCTIONAL SYSTEM.
7. DETECTION ZONES, INCLUDING ADVANCE DETECTION (NOT SHOWN ON THE PLANS) SHALL BE SET BY THE CITY OF CHICO.
8. ALL CONDUIT SHALL BE PVC SCHEDULE 40 MINIMUM WITH BELL ENDS INSTALLED PRIOR TO PULLING ANY CONDUCTORS. AFTER CONDUCTORS HAVE BEEN INSTALLED, THE ENDS OF CONDUITS SHALL BE SEALED WITH AN APPROVED TYPE OF SEALING COMPOUND.
9. SERVICE CONDUCTORS FROM METER TO CONTROLLER SHALL BE (3) #6 AWG THWN-2 OR LARGER. SEE CONDUIT & CONDUCTOR SCHEDULES ON SHEET 7 (TS-3).
10. SIGNAL HEAD BRACKETS SHALL HAVE ADEQUATE EXTENSIONS TO ALLOW SIGNAL HEAD ADJUSTMENT/ROTATION FOR DIRECT ALIGNMENT TO THE STOP BAR AT THE VIEWING LANE.
11. THE LOCATION OF NEW SIGNAL HEADS SHALL BE APPROVED BY THE ENGINEER AND OWNING AGENCY. SIGNAL HEAD TENONS SHALL BE FIELD WELDED, BY A CERTIFIED WELDER, AND LOCATED IN THE CENTER OF THE VIEWING LANE, UNLESS APPROVED OTHERWISE.
12. ALL NEW SIGNAL HEADS SHALL BE EQUIPPED WITH BACKPLATES AND FULL-CIRCLE TYPE VISORS, WITH BLACK FACTORY FINISHES. BOTH BACKPLATES AND VISORS SHALL NOT INCLUDE LOUVERS. INSTALL RETROREFLECTIVE STRIPS ON BACKPLATES PRIOR TO INSTALLATION.
13. ALL NEW SIGNAL LENSES SHALL BE 12" DIAMETER LED. ALL NEW PEDESTRIAN SIGNALS SHALL BE 18" LED CA MUTCD COMPLIANT COUNTDOWN INTERNATIONAL SYMBOL TYPE. EQUIPMENT SHALL BE LISTED IN THE CALTRANS QUALIFIED PRODUCT LIST, CURRENT EDITION.
14. SIGNAL CABLE SHALL CONFORM TO IMSA SPEC 19-1 OR 20-1 AND BE COLOR CODED. CABLES SHALL BE RUN FROM CONTROLLER TO POLE TERMINAL BLOCK WITHOUT SPLICING. IN-POLE CONDUCTORS PAST THE TERMINAL BLOCK SHALL BE INDIVIDUAL #14 AWG THHN/THWN-2 OR APPROVED EQUAL. SIGNAL CABLES CONTAINING 15 OR MORE CONDUCTORS SHALL INCLUDE A #10 AWG NEUTRAL/COMMON CONDUCTOR.
15. PULL BOXES SHALL NOT BE INSTALLED IN PEDESTRIAN RAMPS WITHOUT THE ENGINEER'S PRIOR APPROVAL.
16. THE FINAL LOCATION OF ALL POLES, PULL BOXES, CABINETS, AND CONDUIT RUNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. CONDUIT RUNS SHOWN ON THE PLANS ARE SCHEMATIC FOR THE PURPOSE OF PLAN LEGIBILITY.
17. A FACTORY REPRESENTATIVE FROM THE MANUFACTURER OF THE SIGNAL CABINET, CONTROLLER, MMU, AND ALL NEW SIGNAL EQUIPMENT MUST BE PRESENT FOR SIGNAL TURN-ON.
18. ALL NEW HARDWARE SHALL HAVE A FLAT BLACK POWDERCOAT FACTORY FINISH. COLOR AND FINISH SHALL BE APPROVED BY THE OWNING AGENCY PRIOR TO ORDERING.
19. ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE 2" DIAMETER. UTILIZE POLARA BULLDOG III PUSH BUTTON STATION (BDL3) SYSTEM OR APPROVED EQUAL. THE COLOR OF THE STATION SHALL BE YELLOW. NEW PUSH BUTTON STATIONS SHALL HAVE CA MUTCD COMPLIANT 9"x15" SIZE "POINTING FINGER" (R10-3E) SIGNS. THE ARROW SHALL POINT IN THE SAME DIRECTION AS THE ARROW AND THE SIGN SHALL BE ALIGNED WITH THE CROSSWALK.
20. NEW SIGNS SHALL CONFORM TO SECTION 82 OF CALTRANS STANDARD SPECIFICATIONS.
21. INTERNALLY ILLUMINATED STREET NAMES SIGNS SHALL BE EDGE-LIT, TEMPLE RAZOR OR APPROVED EQUAL. SIGN HEIGHT SHALL BE 18" HIGH, WIDTH TO BE DETERMINED BY THE VENDOR, AND SIGN LAYOUT SHALL CONFORM TO CALIFORNIA SPECIFICATION FOR G7-1.
22. LUMINAIRES SHALL BE CREE XSP SERIES C, TYPE III MEDIUM, 3000K CCT, OR APPROVED EQUAL.
23. WHERE SPLICES ARE ALLOWED, CONDUCTORS SHALL BE SPLICED BY THE USE OF "C" SHAPED COMPRESSION CONNECTORS. SPLICES SHALL BE INSULTATED BY "METHOD B".
24. WIRELESS RADIO SYSTEM SHALL BE ETHERWAN EASYLINK SYSTEM, OR APPROVED EQUAL. RADIO SYSTEM SHALL INCLUDE ANTENNAS, ETHERNET SWITCHES, CABLES, FITTINGS, AND POWER ADAPTERS FOR A FULLY FUNCTIONAL WIRELESS RADIO SYSTEM COMPATIBLE WITH EXISTING CITY OF CHICO COMMUNICATION SYSTEMS. CONTRACTOR TO OBTAIN CITY APPROVAL PRIOR TO ORDERING.

Designed:	RDP	Approved:		Revision	Date	By
Drawn By:	RDP	Date:	09-07-21			
Checked:	LEC					



BRUCE ROAD AT SIERRA SUNRISE TERRACE TRAFFIC SIGNAL
NOTES AND SPECIFICATIONS

Project Number:	Drawing Number N-1
Scale: NA	Sheet <u> 8 </u> of <u> 8 </u>



CALL BEFORE YOU DIG
2 WORKING DAYS
CALL "USA" TOLL FREE
1-800-227-2600



UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY
COMPANIES TWO (2) WORKING DAYS PRIOR
TO GRADING OR DIGGING