City of Lafayette

LAFAYETTE

RELIEZ STATION ROAD SIGNALIZATION IMPROVEMENTS

Project No. 014-9707-1

INDEX TO SHEETS

STANDARD PLANS APPLICABLE TO THIS CONTRACT INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

APPLICABLE CONTRA COSTA COUNTY STANDARD PLANS DATED MARCH 2014 (UNLESS NOTED OTHERWISE)

CA70	STANDARD SIDEWALK DETAILS
CA71	MEDIAN, CURB, AND HMA DIKE DETAILS
CA72	DRIVEWAY RAMP DETAILS
CA74	DOWELING DETAILS FOR CURB AND SIDEWALK
CD20	TYPE "A" INLET
CRS1	SIGNING & STRIPING STANDARDS

APPLICABLE STATE (CALTRANS) STANDARD PLANS DATED OCTOBER 2010

A20A D	PAVEMENT MARKERS AND TRAFFIC LINES – TYPICAL DETAILS
A24A	PAVEMENT MARKINGS – ARROWS
A24D	PAVEMENT MARKINGS – WORDS
A24E	PAVEMENT MARKINGS – WORDS, LIMIT AND YIELD LINES
A87B	HOT MIX ASPHALT DIKES (JANUARY 2016)
A88A	CURB RAMP DETAILS
RSP ES-1A	ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)
RSP ES-1B	ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)
RSP ES-1C	ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)
RSP ES-2D	ELECTRICAL SYSTEMS (SERVICE EQUIPMENT ENCLOSURE AND TYPICAL WIRING DIAGRAM, TYPE III – A SERIES)
ES-3B	ELECTRICAL SYSTEMS (CONTROLLER CABINET ADAPTER, FOUNDATIONS, AND PAD DETAILS)
ES-3C	ELECTRICAL SYSTEMS (CONTROLLER CABINET FOUNDATION AND PAD DETAILS)
RSP ES-4A	ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)
RSP ES-4B	ELECTRICAL SYSTEMS (PEDESTRIAN SIGNAL HEADS)
RSP ES-4C	ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)
RSP ES-4D	ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)
RSP ES-4E	ELECTRICAL SYSTEMS (SIGNAL HEADS AND OPTICAL DETECTOR MOUNTING)
ES-5A	ELECTRICAL SYSTEMS (LOOP DETECTORS)
RSP ES-5B	ELECTRICAL SYSTEMS (DETECTORS)
RSP ES-5C	ELECTRICAL SYSTEMS (ACCESSIBLE PEDESTRIAN SIGNAL AND PUSH BUTTON ASSEMBLIES)
RSP ES-5D	ELECTRICAL SYSTEMS (CURB AND SHOULDER TERMINATION, TRENCH, AND HANDHOLE DETAILS)
RSP ES-7A	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, TYPE TS, AND PUSH BUTTON ASSEMBLY POST)
RSP ES-7B	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD – TYPE 1 AND EQUIPMENT IDENTIFICATION CHARACTERS)
RSP ES-7C	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD – CASE 1 SIGNAL MAST ARM LOADING, WIND VELOCITY=100 MPH AND SIGNAL MAST ARM LENGTHS 15' TO 30')
RSP ES-7D	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD – CASE 2 SIGNAL MAST ARM LOADING, WIND VELOCITY=100 MPH AND SIGNAL MAST ARM LENGTHS 15' TO 30')
RSP ES-7E	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD – CASE 3 SIGNAL MAST ARM LOADING, WIND VELOCITY=100 MPH AND SIGNAL MAST ARM LENGTHS 15' TO 45')
RSP ES-7R	ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING – MISCELLANEOUS ATTACHMENT)
RSP ES-8B	ELECTRICAL SYSTEMS (TRAFFIC PULL BOX)
ES-13A	ELECTRICAL SYSTEMS (SPLICE INSULATION METHODS DETAILS)

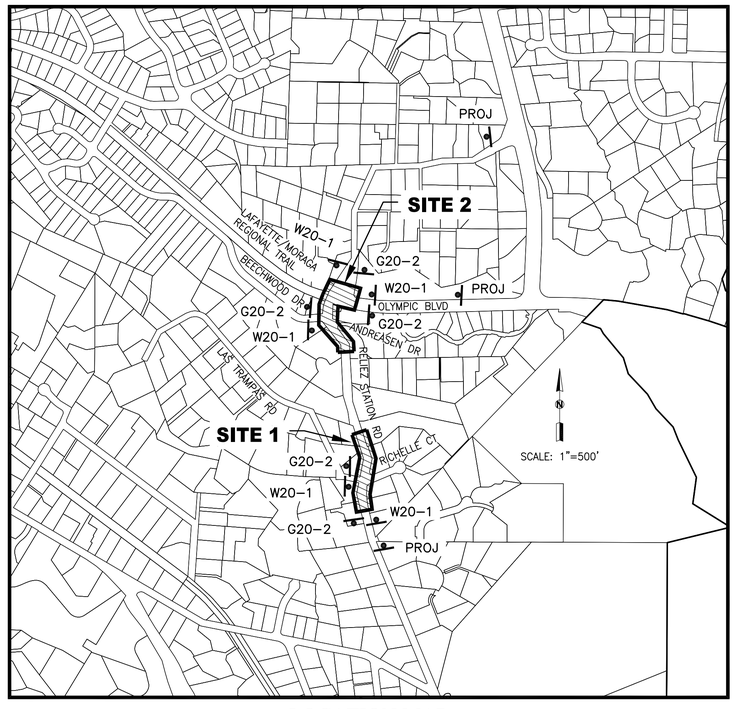
CONSTRUCTION AREA SIGN NOTES

1. ALL CONSTRUCTION SIGNS SHALL BE IN CONFORMANCE WITH THE CALTRANS MANUAL OF TRAFFIC CONTROL.
2. EXACT SIGN LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
3. ALL CONSTRUCTION SIGNS SHALL BE STATIONARY MOUNTED ON 4"x6" WOODEN POSTS.
4. DO NOT STRAP SIGNS TO EXISTING SIGNS OR UTILITY POLES.
5. LOCATION OF PROJECT SIGNS TO BE DETERMINED BY THE ENGINEER.

CONSTRUCTION AREA SIGNS

SYMBOL	DESCRIPTION	SIZE	QUANTITY
G20-2	"END ROAD WORK"	42"X18"	5 EA
W20-1	"ROAD WORK AHEAD"	36"X36"	5 EA
PROJ	PROJECT IDENTIFICATION SIGN PROVIDED BY THE CITY & INSTALLED BY THE CONTRACTOR PER CITY STD. SPEC	36"X48"	3 EA

NOTES:
1. PROJECT IDENTIFICATION SIGN LOCATION SHALL BE AS DIRECTED BY ENGINEER.



LOCATION MAP
AND CONSTRUCTION AREA SIGNS
SCALE: 1"=500'

GENERAL NOTES

1. THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE AT THE TIME THE BID IS OPENED.
2. THE CONTRACTOR SHALL INSPECT THE PROJECT SITE PRIOR TO SUBMITTING A BID IN ORDER TO OBSERVE AND DETERMINE THE EXISTING SITE CONDITIONS.
3. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (U.S.A.) 1-800-227-2600, AT LEAST TWO (2) WORKING DAYS PRIOR TO BEGINNING ANY EXCAVATION.
4. ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES, INCLUDING ALL OVERHEAD UTILITIES, SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL PROCEED WITH DUE CAUTION DURING UNDERGROUND OPERATIONS AND SHALL REPAIR OR REPLACE ALL UTILITIES DAMAGED DURING CONSTRUCTION AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCIES PRIOR TO THE START OF ANY WORK WHICH MAY AFFECT THEIR FACILITIES. THE FOLLOWING UTILITIES AND AGENCIES ARE KNOWN TO HAVE FACILITIES WITHIN THE PROJECT LIMITS:

CENTRAL CONTRA COSTA SANITARY DISTRICT	(925) 228-9500
EAST BAY MUNICIPAL UTILITY DISTRICT (WATER)	(510) 287-0834
AT&T (TELEPHONE)	(415) 542-9000
PACIFIC GAS & ELECTRIC (GAS)	(510) 784-3211
PACIFIC GAS & ELECTRIC (ELECTRIC)	(510) 784-3236
CONSOLIDATED FIRE PROTECTION DISTRICT	(925) 930-5531
COMCAST (CABLE TELEVISION)	(925) 349-3300
SPRINT	(650) 533-3438
REPUBLIC WASTE (GARBAGE SERVICE)	(925) 685-4711

6. THE EXISTING SUBGRADE MATERIAL SHALL BE COMPACTED TO A RELATIVE COMPACTION OF NOT LESS THAT 95% FOR AC PAVEMENT, CURB RAMP, AND CURB AND GUTTER, AND NOT LESS THAN 90% FOR SIDEWALK.
7. ALL STREET MONUMENTS, LOT CORNER PIPES, AND OTHER PERMANENT MONUMENTS DISTURBED DURING CONSTRUCTION THAT WERE SHOWN TO BE PROTECTED SHALL BE REPLACED BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE, INCLUDING FILING THE APPROPRIATE SURVEY DOCUMENT WITH THE COUNTY SURVEYOR, BEFORE THE IMPROVEMENTS ARE ACCEPTED BY THE CITY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE SITE OR THE SURROUNDING AREA AS A RESULT OF THE CONTRACTOR'S WORK OR OPERATIONS. EXISTING CURB, GUTTER AND OTHER IMPROVEMENTS THAT ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
9. BENCHMARK: COUNTY GIS CONTROL POINT 10 (NGS P10 AA3807) SURVEY DISK IN PVC ENCASEMENT BELOW SURFACE IN LANDSCAPE AREA AT NORTHWEST CORNER OF INTERSECTION OF EL CURTOLA BLVD AND OLD TUNNEL ROAD, CITY OF LAFAYETTE. ELEV=382.8 FT NAVD 88 DATUM, GPS OBSERVED. SEE PLAN FOR TEMPORARY CONTROL POINT BENCHMARKS.
10. ALL NOTES APPEARING ON THESE PLANS SHALL BE CONSIDERED INCIDENTAL WORK AS PART OF THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
11. TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. ALL TRAFFIC CONTROL AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES" ISSUED BY THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION.
12. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT. THESE PLANS DO NOT INCLUDE COMPONENTS NECESSARY FOR CONSTRUCTION SAFETY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE FOR THE SAFETY OF ALL PERSONS AND PROPERTY DURING THE COURSE OF THE PROJECT.
13. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF CAL/OSHA. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
14. THE CONTRACTOR SHALL PROVIDE FOR CONTINUOUS INGRESS AND EGRESS TO ALL PUBLIC AND PRIVATE PROPERTIES ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
15. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL CERTIFY THAT ALL WORK WAS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. VARIATIONS SHALL BE DECLARED AND PRESENTED TO THE ENGINEER ON MARKED-UP DRAWINGS (AS-BUILTS) UPON COMPLETION OF THE CONSTRUCTION.
16. NO PARKING OR VEHICLE TURNAROUND ALLOWED ON PRIVATE PROPERTY.

ABBREVIATIONS

AB	AGGREGATE BASE	MH	MANHOLE
AC	ASPHALT CONCRETE	MIN	MINIMUM
ADJ	ADJUST	MON	MONUMENT
AP	ANGLE POINT	OH	OVERHEAD
BC	BEGIN CURVE	PC	POINT OF CURVE
BW	BACK OF WALK	PCC	PORTLAND CEMENT CONCRETE
℄	CENTER LINE	PRC	POINT OF REVERSE CURVE
CB	CATCH BASIN	PRC	PULVERIZED MATERIAL
CMP	CORRUGATED METAL PIPE	PVC	POLYVINYLCHLORIDE PIPE
CMPA	CORRUGATED METAL PIPE ARCH	R	RADIUS
CP	CONTROL POINT	RCB	REINFORCED CONCRETE BOX
COMP	COMPACTION	RCP	REINFORCED CONCRETE PIPE
CONSTR	CONSTRUCT	REL.	RELATIVE
D/W, DWY	DRIVEWAY	RET	RETAINING
DI	DRAIN INLET	RT	RIGHT
EC	END CURVE	S	SLOPE
ELEV	ELEVATION	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	SDMH	STORM DRAIN MANHOLE
(E), EX, EXIST	EXISTING	SO	SIDE OPENING
℄	FLOW LINE	SS	SANITARY SEWER
FG	FINISH GRADE	SSMH	SANITARY SEWER MANHOLE
FL	GUT FLOWLINE GUTTER	STA	STATION
G	GAS	STD	STANDARD
(H), HORIZ	HORIZONTAL	STDS	STANDARDS
INV	INVERT	T/C, TC	TOP OF CURB
IP	IRON PIPE	(V), VERT	VERTICAL
IRR	IRRIGATION	VCP	VITRIFIED CLAY PIPE
JP	JOINT POLE	VIF	VERIFY IN FIELD
LF	LINEAR FEET	W	WATER
LT	LEFT	W/	WITH
MAX	MAXIMUM	WM	WATER METER
MSA	MAX SIZE AGGREGATE	WV	WATER VALVE

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DATE	MARK	REVISION	INIT.

Designed by: CMP
Drawn by: NBC
Checked by: CMP
Reviewed by: MMV
Date: APRIL 2016

REGISTERED PROFESSIONAL ENGINEER — CHRISTINE M. LEPPER-PARKS — No. 59,081 — CIVIL — STATE OF CALIFORNIA
LICENSED LAND SURVEYOR — CHRISTINE M. LEPPER-PARKS — No. 7893 — STATE OF CALIFORNIA
SIGN: DATE: 04/18/16

LCC ENGINEERING & SURVEYING, INC.
930 Estudillo Street
Martinez, California 94553-1620
(925) 228-4218 Fax (925) 228-4638
www.lcc-inc.com

SCALE: AS SHOWN

LAFAYETTE

REVIEWED BY:
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3675 Mount Diablo Boulevard, Suite 210
Lafayette, California, 94549-1968
(925) 299-3217 Fax (925)284-3169
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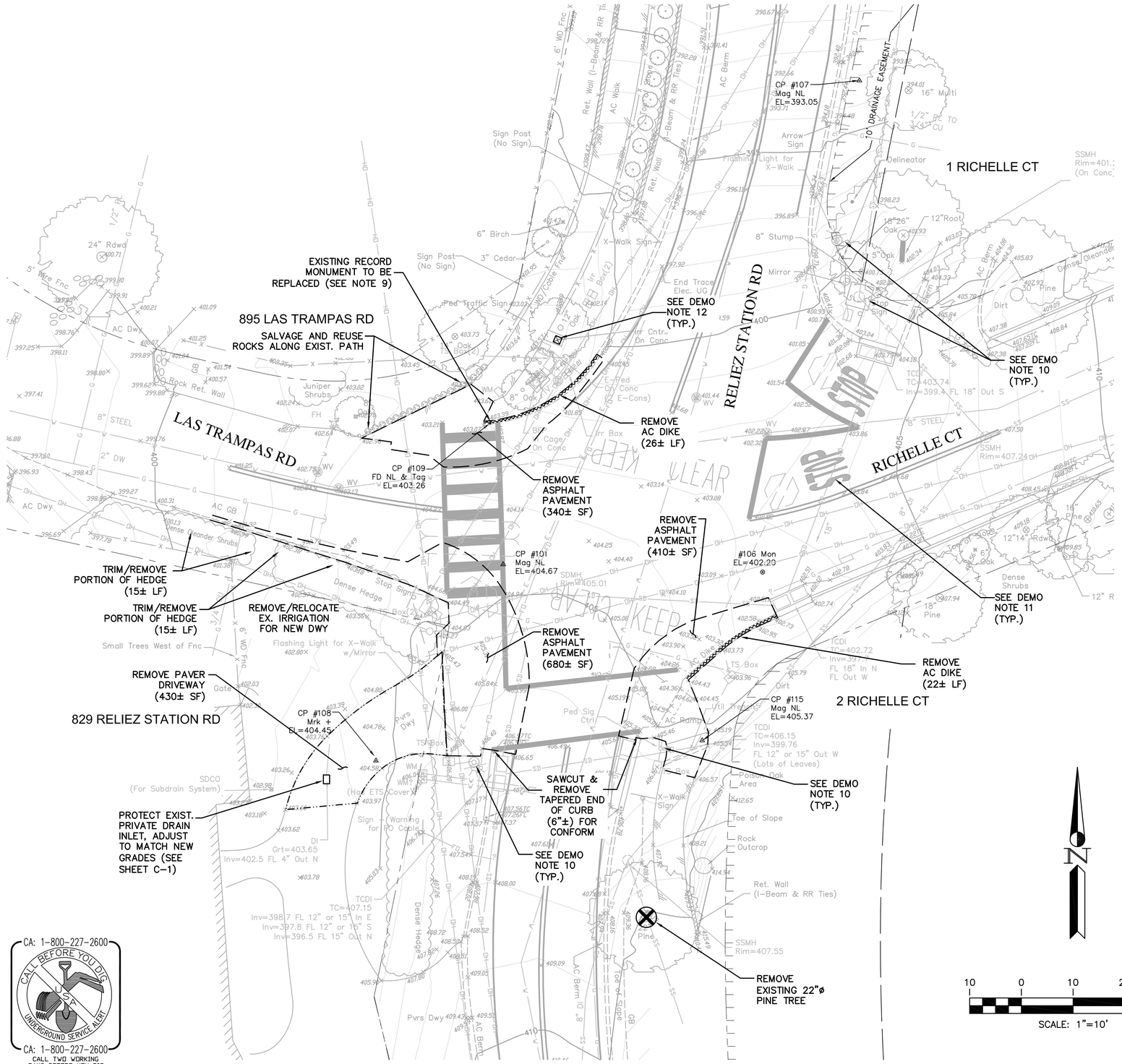
Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014-9707-1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

TITLE SHEET

File: 2015.059.00

SHEET T-1 1 OF 13



DEMOLITION NOTES

1) Contractor shall verify all conditions in the field before commencing any work and report any discrepancies between plans and actual conditions to the Engineer.

2) All underground utilities shown on the drawings are diagrammatically located. It is the Contractor's responsibility to verify actual locations and to protect all underground lines to remain.

3) The Contractor shall confirm with the Engineer precise areas and elements to be removed. All other improvements shall be considered to remain and shall be protected. If the Contractor damages, demolishes and/or removed any items to remain, they shall be repaired or replaced to "like-new" condition, as determined by the Engineer.

4) In areas where existing asphalt, concrete paving, or pavers are to be removed and will not be replaced with new paving materials, the Contractor shall remove all surface pavement, existing aggregate base and gravel, etc. Leave only native soil, and import new clean fill (or clean native excavated soil) as necessary to bring the surface of the excavated area back up to match the surrounding grades, as directed by the Engineer.

5) All shrubbery and plants within the limits of work shall be trimmed as necessary to construct the improvements and shall not be removed unless indicated in the drawings or as directed by the Engineer. Plant debris shall be hauled away and disposed of off-site.

5) Take care to protect and preserve those trees and plantings outside of the demolition limits, and those within the limits designated to remain.

6) All items to be removed, that are not to be stockpiled for later re-use on the project shall be legally disposed of off-site by the Contractor at an approved site or recycling facility.

7) For irrigation valves to be removed or adjusted: Cap at main line as necessary. The Contractor shall construct any necessary temporary irrigation connections as required to maintain the existing park irrigation outside of the project limits of work.

8) Pedestrian access facilities shall be provided around construction areas at all times. A temporary gravel walkway (4'-0" minimum width) shall be provided and maintained if the Contractor's operations require closure of pedestrian walkways until the walkways are permanently restored. The temporary walkway surfacing shall be free from irregularities. Once permanent waolways are restored, temporary walkway areas shall be removed and the area restored to its original condition as directed by the Engineer.

9) The Contractor shall Coordinate with the City prior to demolition of the existing record monument (as shown on the plan) so that the City may arrange to have a licensed land surveyor set reference points to the monument outside of the limits of work prior to any demolition. Upon the completion of construction, the City surveyor will replace the monument with one similar in nature, and will file corner records with the County prior to removal and subsequent to the replacement. Should the Contractor fail to coordinate with the Engineer and/or the City Surveyor to arrange for this work prior to begin demolition, the Contractor will be will be responsible for hiring a Licensed Land surveyor to replace the destroyed monument as required by law, and for all related expenses.

10) Remove & salvage flashing beacon, mirror, push button & pole. Remove conductors including entire run to controller (unless reused by new traffic signal). Remove foundations to 6" below grade. See Traffic Signal Plans for additional Electrical Equipment and/or pull boxes to be removed, relocated, or protected that may exist outside of the pavement demo limits shown on this plan.) Salvaged items to be delivered to the City.

11) See Signing and Striping Plans for signs, sign posts, and striping to be removed, relocated, or protected. (Items to be removed or relocated may exist outside of the pavement demo limits shown on this plan.)

12) Remove and salvage existing irrigation controller (concrete pad to remain), pull wires & plug conduits. Conduits shall be cut flush with conc pad. Salvaged items to be delivered to City.

DEMOLITION LEGEND

REMOVE EXISTING PAVER DRIVEWAY
REMOVE ANY CONCRETE AND UNDERLYING BASE ROCK IN AREAS NOT RECEIVING NEW DRIVEWAY OR WALKWAY

EXISTING AC PAVEMENT TO BE REMOVED (REMOVE UNDERLYING AGGREGATE, IF ANY, AS REQUIRED TO MEET NEW PAVEMENT SUBGRADE, OR IN ENTIRETY FOR AREAS NOT RECEIVING NEW PAVMENT) - SEE LAYOUT PLAN FOR SAWCUT LINE DIMENSIONS

REMOVE EXISTING CONCRETE WALKWAY AND TRUNCATED DOMES (WHEN PRESENT)

ITEM TO BE REMOVED - TYPE AS NOTED

SURVEY CONTROL NOTES:

1) BASIS OF BEARINGS/COORDINATES: THE COORDINATE SYSTEM IS BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III NAD 83, EPOCH 2010.00, HOLDING COUNTY GPS CONTROL POINTS (MONUMENTS) WITH THE NGS PERMANENT IDENTIFIERS PID AA3807. SEE "WWW.NGS.NOAA.GOV" FOR POINT DATA SHEETS AND DESCRIPTIONS. RTK GPS USED TO ESTABLISH LOCAL CONTROL POINTS ON SITE (SEE CONTROL PT. TABLE FOR EACH SITE.) DISTANCES SHOWN ARE GROUND.

2) BENCHMARK/BASIS OF ELEVATIONS: ELEVATIONS ARE BASED ON NAVD 88, PER NGS GPS CONTROL MONUMENT AA3807 (SEE ABOVE). ADDITIONAL LOCAL CONTROL POINTS ARE SHOWN ON THIS MAP. TEMPORARY PROJECT BENCHMARK PER CONTROL POINT TABLE FOR EACH SITE. BENCHMARK ELEVATION AT EACH SITE ESTABLISHED BY GPS.

CONTROL PT. TABLE – SITE 1				
PT#	NORTHING	EASTING	ELEVATION	DESCRIPTION
101	2147747.54	6100781.03	404.67	MAG NAIL (AS SHOWN ON PLAN) (TEMP. BENCHMARK)
105	2147840.35	6101056.13	427.97	BRASS DISK MONUMENT IN CAN AT EAST END OF RICHELLE CT.
106	2147746.05	6100831.20	402.20	BRASS DISK MONUMENT IN CAN (AS SHOWN ON PLAN)
107	2147841.09	6100849.91	393.05	MAG NAIL AS SHOWN ON PLAN)
108	2147709.58	6100756.45	404.45	BLACK MARK "+" ON PAVERS (AS SHOWN ON PLAN)
109	2147774.83	6100778.54	403.26	FOUND NAIL&TAG PROPERTY CORNER (AS SHOWN ON PLAN)
115	2147713.49	6100819.52	405.37	MAG NAIL (AS SHOWN ON PLAN)

N

10 0 10 20 30
SCALE: 1"=10'

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DATE	MARK	REVISION	INIT.

Designed by: CMP
Drawn by: NBC
Checked by: CMP
Reviewed by: MMV
Date: APRIL 2016

REGISTERED PROFESSIONAL ENGINEER CHRISTINE M. LEPTICH-PARKS No. 59,061 CIVIL STATE OF CALIFORNIA
LICENSED LAND SURVEYOR CHRISTINE M. LEPTICH-PARKS No. 7893 STATE OF CALIFORNIA
SIGN: DATE: 04/18/16

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Tony Coe, Engineering Services Manager — Date

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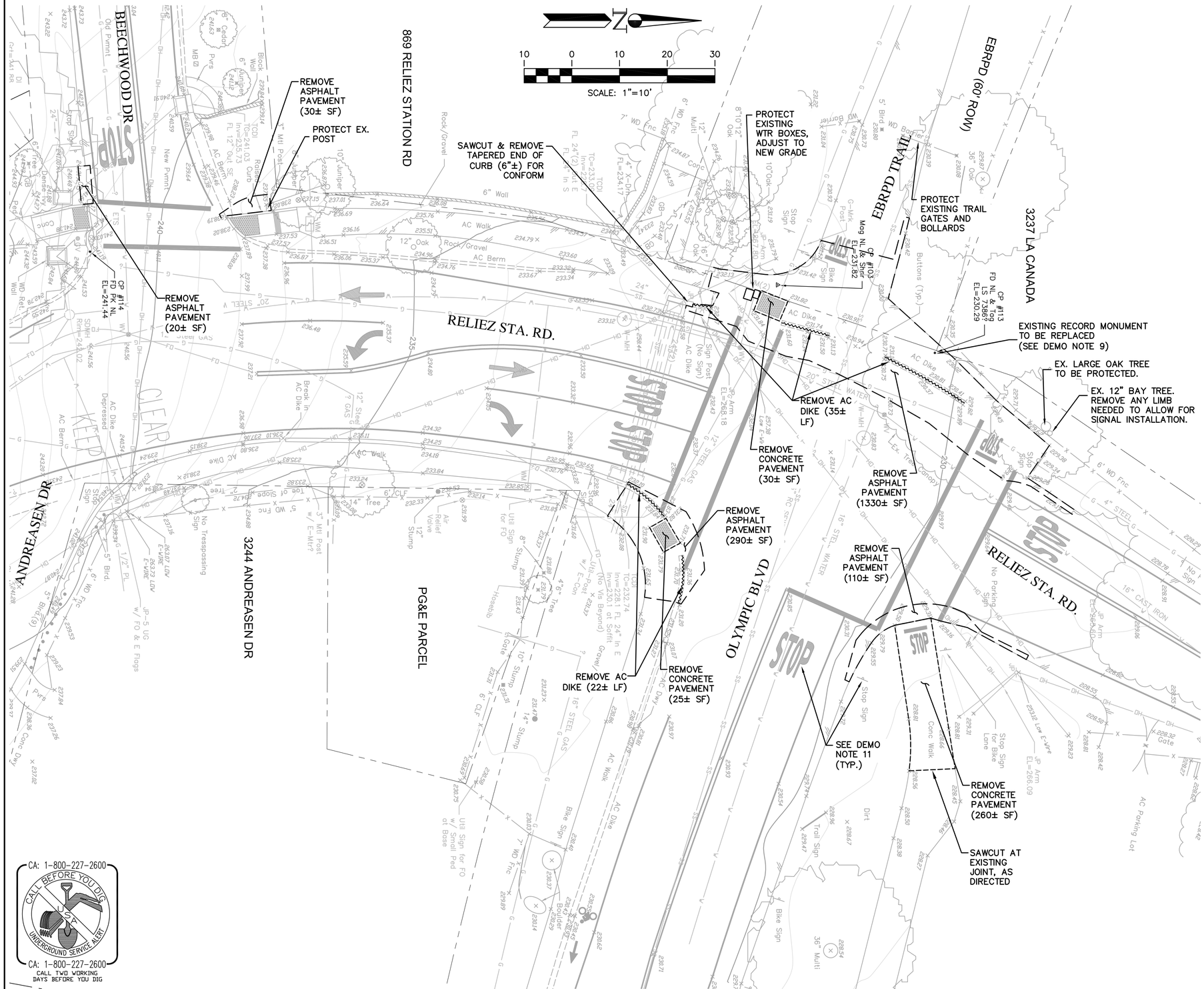
Lafayette, Contra Costa County, California

SITE 1
EXISTING CONDITIONS
SURVEY CONTROL
& DEMOLITION LIMITS

File: 2015.059.00

SHEET DM-1 2 OF 13



CONTROL PT. TABLE – SITE 2				
PT#	NORTHING	EASTING	ELEVATION	DESCRIPTION
103	2149028.92	6100538.16	231.82	MAG NAIL AND SHINER (AS SHOWN ON PLAN) TEMP. BENCHMARK
111	2148946.88	6100837.03	229.17	MAG NAIL IN AC DIKE ON SOUTH SIDE OF OLYMPIC BLVD., APPROX. 245 LF EAST OF SE RETURN
112	2149055.46	6100742.83	226.70	REBAR & PLASTIC KAP IN LANDSCAPE AREA NEAR DRIVEWAY EXIT FOR PARKING LOT AT NW CORNER
113	2149061.91	6100552.41	230.29	FOUND NAIL&TAG PROPERTY CORNER (AS SHOWN ON PLAN)
114	2148884.79	6100531.20	241.44	FD PK NAIL (AS SHOWN ON PLAN)

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Lafayette, Contra Costa County, California

SITE 2
EXISTING CONDITIONS
SURVEY CONTROL & DEMOLITION LIMITS

File: 2015.059.00

SHEET DM-2 3 OF 13

LEGEND

NEW CONCRETE SIDEWALK
SEE CONTRA COSTA COUNTY
STD. PLAN CA70

NEW PAVER DRIVEWAY
(SEE DETAIL 3/DT-1)
PATTERN TO MATCH EXISTING -
SEE SPECIAL PROVISIONS

NEW PAVER WALKWAY
(SEE DETAIL 2/DT-1)
PATTERN TO MATCH DRIVEWAY AND
EXISTING - SEE SPECIAL PROVISIONS

NEW ASPHALT CONFORM PAVING
(SEE DETAIL 6/DT-1)
6" DEEP LIFT HMA

NEW ASPHALT WALKWAY
(SEE DETAIL 1/DT-1)
3" HMA ON 6" CL. 2 AB

FACE / SAWCUT LINE
NEW 6" HIGH TYPE M1-6 CONCRETE CURB
SEE CONTRA COSTA COUNTY
STD. PLAN CA 71 (MOD-ON 6" CL. 2 AB)

NEW FENCE
(SEE DETAIL 4/DT-1)

NEW SIGNAL POLE
(SEE TRAFFIC SIGNAL PLANS)

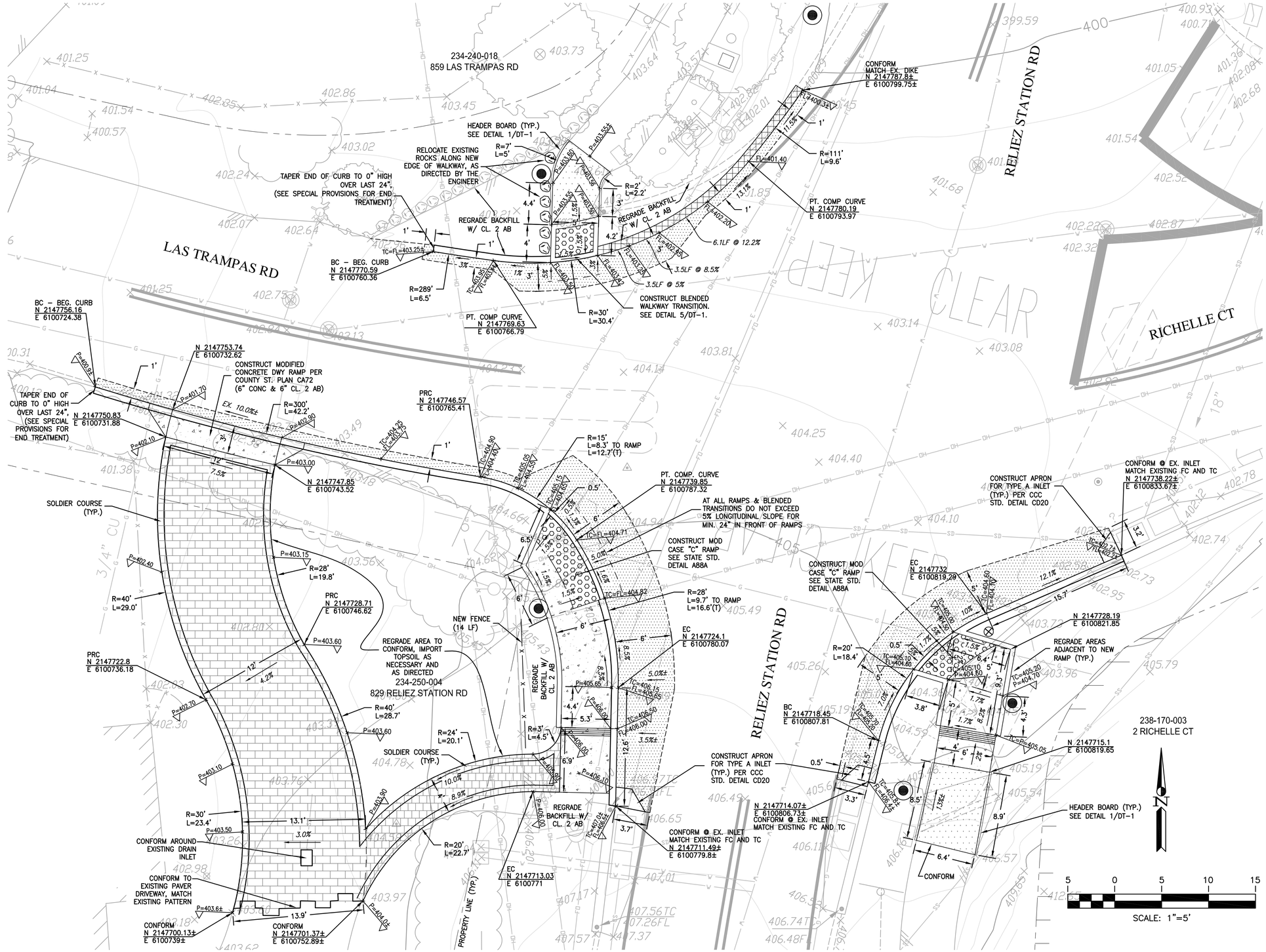
NEW PEDESTRIAN PUSH BUTTON
(SEE TRAFFIC SIGNAL PLANS)

NEW REMOVABLE BOLLARD
(SEE DETAILS 8/DT-1 & 11/DT-1)

NEW AC BERM
(SEE DETAIL 7/DT-1)

NEW AC DIKE TYPE A PER
STATE STD PLAN A87B

NOTES:
1. MODIFIED STATE STD. RAMPS SHALL INCLUDE A 1'-0" WIDE BORDER W/ 1/4" GROOVES, APPROX 3/4" O/C, AS SHOWN ON THIS PLAN (TYP.)
2. BERMS AND DIKES TO BE CONSTRUCTED OVER NEW 6" AC CONFORM SECTION.



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Lafayette, Contra Costa County, California

SITE 1 LAYOUT & GRADING PLAN

File: 2015.059.00

SHEET C-1 4 OF 13

LEGEND

NEW CONCRETE SIDEWALK
SEE CONTRA COSTA COUNTY
STD. PLAN CA70

NEW PAVER DRIVEWAY
(SEE DETAIL 3/DT-1)
PATTERN TO MATCH EXISTING -
SEE SPECIAL PROVISIONS

NEW PAVER WALKWAY
(SEE DETAIL 2/DT-1)
PATTERN TO MATCH DRIVEWAY AND
EXISTING - SEE SPECIAL PROVISIONS

NEW ASPHALT CONFORM PAVING
(SEE DETAIL 6/DT-1)
6" DEEP LIFT HMA

NEW ASPHALT WALKWAY
(SEE DETAIL 1/DT-1)
3" HMA ON 6" CL. 2 AB

FACE
SAWCUT LINE
NEW 6" HIGH TYPE M1-6 CONCRETE CURB
SEE CONTRA COSTA COUNTY
STD. PLAN CA 71 (MOD-ON 6" CL. 2 AB)

NEW FENCE
(SEE DETAIL 4/DT-1)

NEW SIGNAL POLE
(SEE TRAFFIC SIGNAL PLANS)

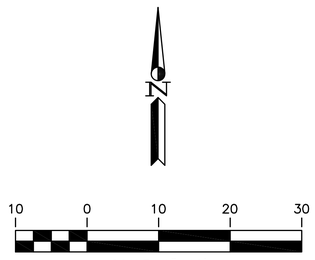
NEW PEDESTRIAN PUSH BUTTON
(SEE TRAFFIC SIGNAL PLANS)

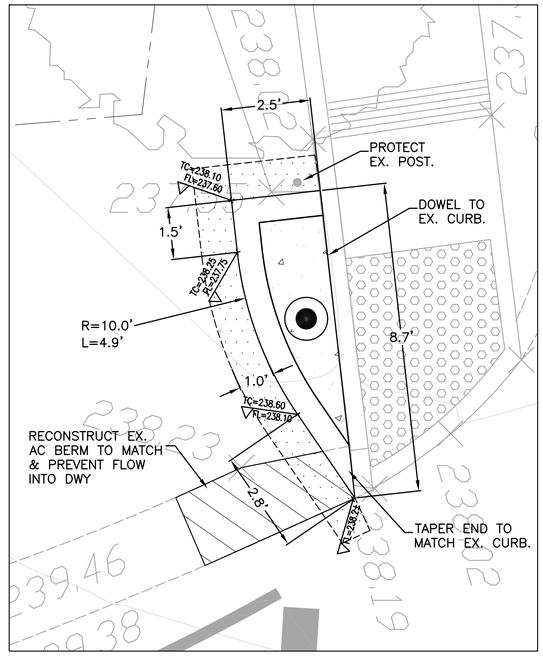
NEW REMOVABLE BOLLARD
(SEE DETAILS 8/DT-1 & 11/DT-1)

NEW AC BERM
(SEE DETAIL 7/DT-1)

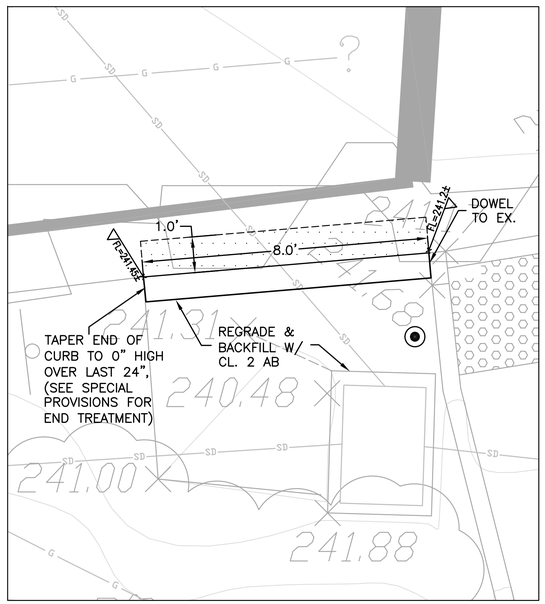
NEW AC DIKE TYPE A PER
STATE STD PLAN A87B

NOTES:
1. MODIFIED STATE STD. RAMPS SHALL INCLUDE A 1'-0" WIDE BORDER W/ 1/4" GROOVES, APPROX 3/4" O/C, AS SHOWN ON THIS PLAN (TYP.)
2. BERMS AND DIKES TO BE CONSTRUCTED OVER NEW 6" AC CONFORM SECTION.





1 ~ NW CORNER OF BEECHWOOD & RELIEZ STATION
SCALE: 1"=2'



2 ~ SW CORNER OF BEECHWOOD & RELIEZ STATION
SCALE: 1"=2'

CA: 1-800-227-2600
CALL BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT
CA: 1-800-227-2600
CALL TWO WORKING DAYS BEFORE YOU DIG

DATE	MARK	REVISION	INIT.

Designed by: CMP
Drawn by: NBC
Checked by: CMP
Reviewed by: MMV
Date: APRIL 2016

REGISTERED PROFESSIONAL ENGINEER — CHRISTINE M. LEPTIEN-PARKS — No. 59,081 — CIVIL — STATE OF CALIFORNIA
LICENSED LAND SURVEYOR — CHRISTINE M. LEPTIEN-PARKS — No. 7893 — STATE OF CALIFORNIA
SIGN: DATE: 04/18/16

LCC ENGINEERING & SURVEYING, INC.
930 Estudillo Street
Martinez, California 94553-1620
(925) 228-4218 Fax (925) 228-4638
www.lcc-inc.com

SCALE: AS SHOWN

LAFAYETTE

REVIEWED BY:
CITY OF LAFAYETTE
3675 Mount Diablo Boulevard, Suite 210
Lafayette, California, 94549-1968
(925) 299-3217 Fax (925)284-3169
www.ci.lafayette.ca.us

Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014-9707-1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

SITE 2 (SOUTH)
LAYOUT &
GRADING PLAN

File: 2015.059.00

SHEET C-2 5 OF 13

LEGEND

- NEW CONCRETE SIDEWALK SEE CONTRA COSTA COUNTY STD. PLAN CA70
- NEW PAVER DRIVEWAY (SEE DETAIL 3/DT-1) PATTERN TO MATCH EXISTING - SEE SPECIAL PROVISIONS
- NEW PAVER WALKWAY (SEE DETAIL 2/DT-1) PATTERN TO MATCH DRIVEWAY AND EXISTING - SEE SPECIAL PROVISIONS
- NEW ASPHALT CONFORM PAVING (SEE DETAIL 6/DT-1) 6" DEEP LIFT HMA
- NEW ASPHALT WALKWAY (SEE DETAIL 1/DT-1) 3" HMA ON 6" CL. 2 AB
- NEW 6" HIGH TYPE M1-6 CONCRETE CURB SEE CONTRA COSTA COUNTY STD. PLAN CA 71 (MOD-ON 6" CL. 2 AB) (FACE / SAWCUT LINE)
- NEW FENCE (SEE DETAIL 4/DT-1)
- NEW SIGNAL POLE (SEE TRAFFIC SIGNAL PLANS)
- NEW PEDESTRIAN PUSH BUTTON (SEE TRAFFIC SIGNAL PLANS)
- NEW REMOVABLE BOLLARD (SEE DETAILS 8/DT-1 & 11/DT-1)
- NEW AC BERM (SEE DETAIL 7/DT-1)
- NEW AC DIKE TYPE A PER STATE STD PLAN A87B

NOTES:
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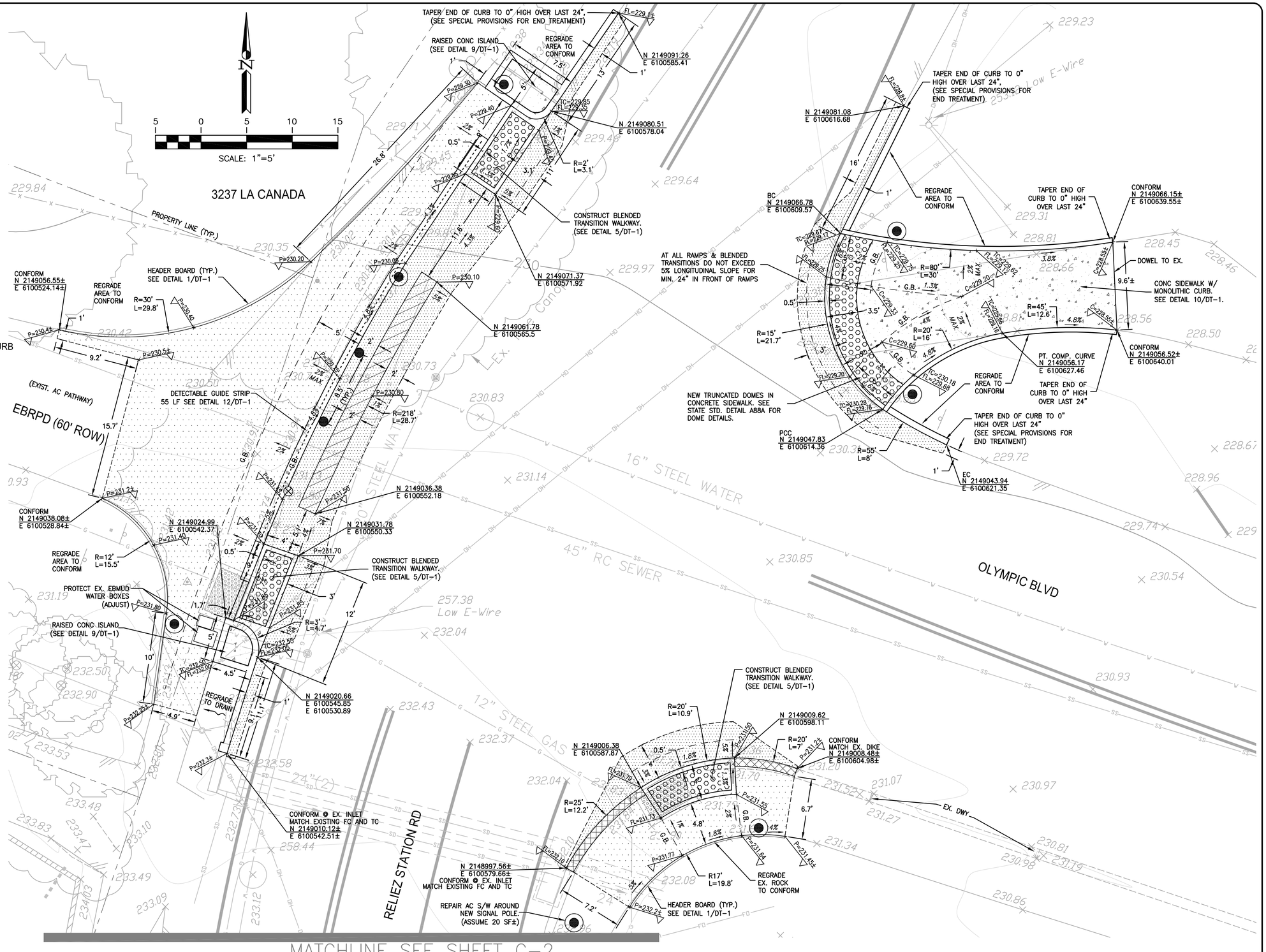
2. BERMS AND DIKES TO BE CONSTRUCTED OVER NEW 6" AC CONFORM SECTION.



MATCHLINE SEE SHEET C-2

CA: 1-800-227-2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT CA: 1-800-227-2600
CALL TWO WORKING DAYS BEFORE YOU DIG

DATE	MARK	REVISION	INIT.

Designed by: CMP
Drawn by: NBC
Checked by: CMP
Reviewed by: MMV
Date: APRIL 2016

CHRISTINE M. LEPTICH-PARKS No. 59,081 CIVIL STATE OF CALIFORNIA — REGISTERED PROFESSIONAL ENGINEER
CHRISTINE M. LEPTICH-PARKS No. 7893 STATE OF CALIFORNIA — LICENSED LAND SURVEYOR
SIGN: _____ DATE: 04/18/16

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SCALE: AS SHOWN

LAFAYETTE

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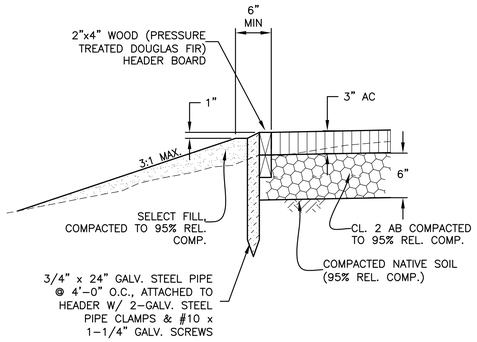
Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014-9707-1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

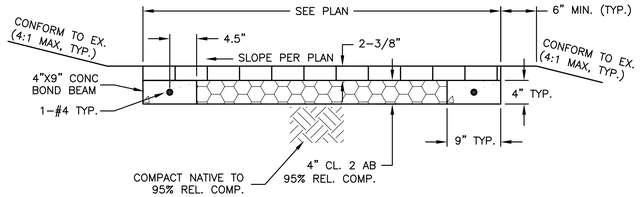
SITE 2 (NORTH)
LAYOUT & GRADING PLAN

File: 2015.059.00 SHEET C-3 6 OF 13



1 HEADER BOARD AT AC WALK

NOT TO SCALE

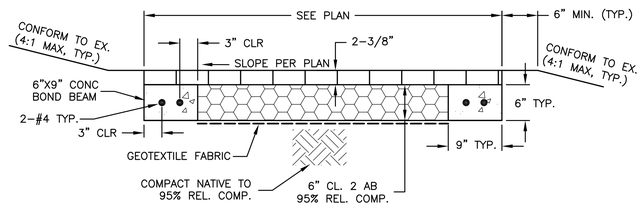


2 BRICK PAVER WALK

NOT TO SCALE

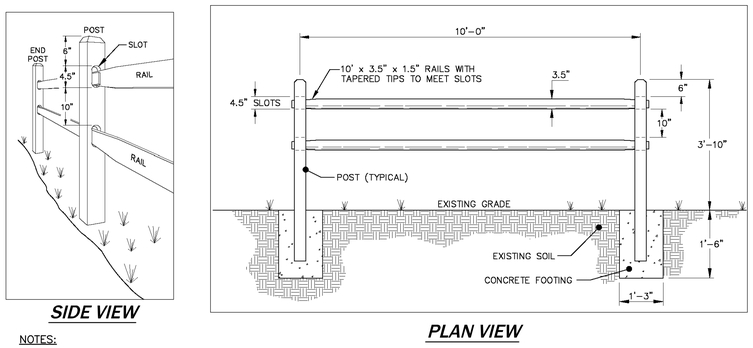
NOTES:

1) PAVERS SHALL BE CASTLELITE COBBLE STONE, MOJAVE BLEND, & MISSION 3 PATTERN.



3 BRICK PAVER DRIVEWAY

NOT TO SCALE



NOTES:

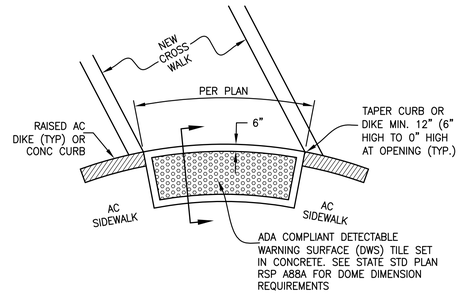
1) ALL POSTS SHALL BE PRESSURE TREATED.

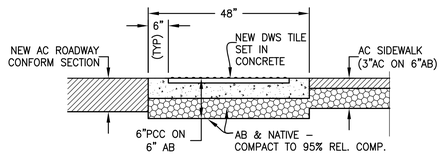
2) ALL END POSTS SHALL BE TERMINAL POSTS.

3) POSTS SHALL BE 5"X5".

4 SPLIT RAIL FENCE

NOT TO SCALE

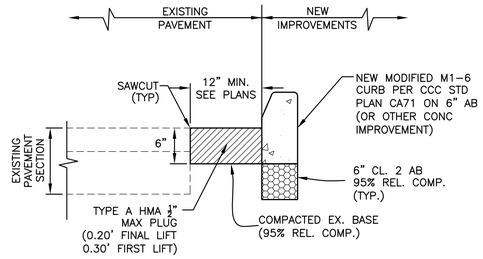




NOTE: ALL CURB RAMPS (INCLUDING MOD. STATE STD. RAMPS) SHALL BE 6" PCC ON 6" AB

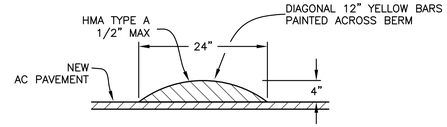
5 BLENDED WALKWAY TRANSITION

NOT TO SCALE



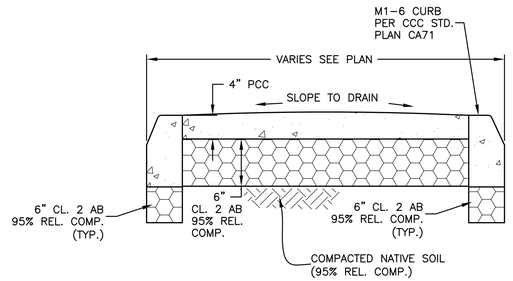
6 AC CONFORM

NOT TO SCALE



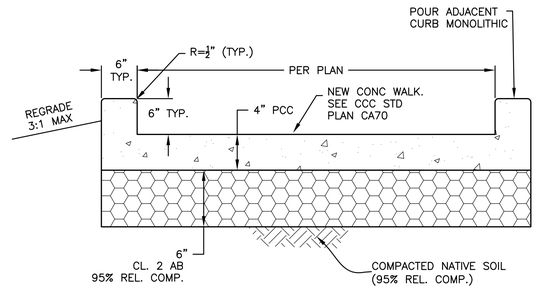
7 AC BERM

NOT TO SCALE



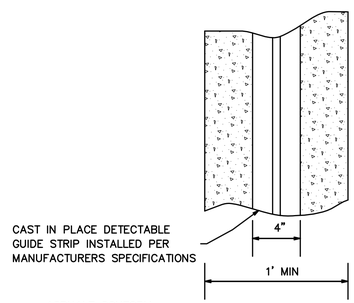
9 RAISED CONC ISLAND

NOT TO SCALE



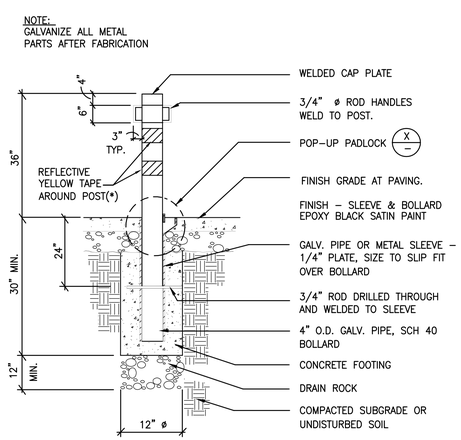
10 CONCRETE WALK W/ MONOLITHIC CURB

NOT TO SCALE



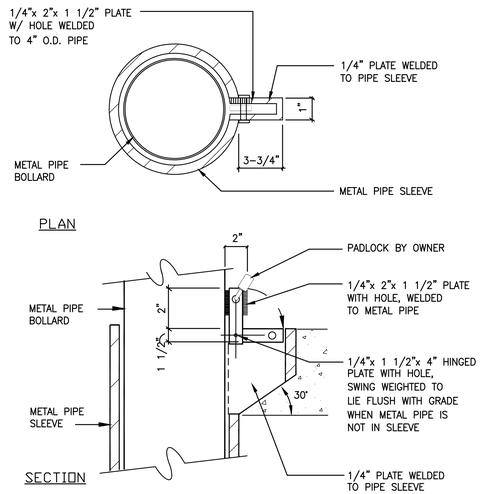
12 ADA DETECTABLE GUIDE STRIP

NOT TO SCALE



8 REMOVABLE BOLLARD

NOT TO SCALE



11 POP-UP PADLOCK

NOT TO SCALE

DATE	MARK	REVISION	INIT.

Designed by: CMP
Drawn by: NBC
Checked by: CMP
Reviewed by: MMV
Date: APRIL 2016

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SCALE: AS SHOWN

LAFAYETTE

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Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014-9707-1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

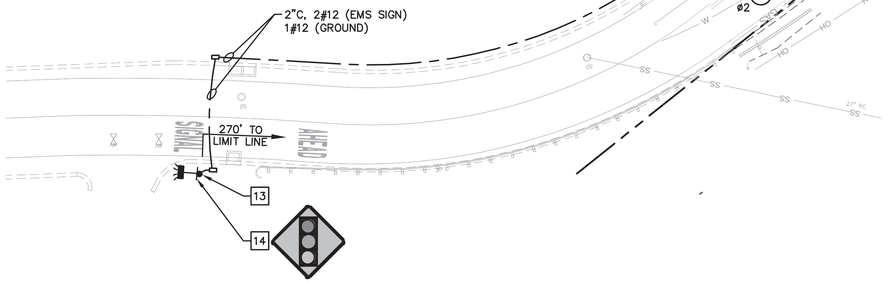
CIVIL DETAILS

File: 2015.059.00

SHEET DT-1 7 OF 13

CONSTRUCTION NOTES (SHEETS TS-1 & TS-2 ONLY)

1. FURNISH AND INSTALL TYPE 332 CABINET ASSEMBLY AND MODEL MACCAIN 2070 CONTROLLER W/ MCCAIN OMNI EX FIRMWARE. FRONT DOOR OF THE CABINET SHALL FACE EAST.
2. FURNISH AND INSTALL TYPE III-AF SERVICE CABINET. PROVIDE SERVICE ITEMS FOR TRAFFIC SIGNAL OPERATION AS SHOWN ON THE PLANS.
3. FURNISH AND INSTALL ITERIS RZ-4 WDR OR APPROVED EQUAL VIDEO DETECTION CAMERA PER DETAIL ON SHEET TS-2. CONTRACTOR TO COORDINATE WITH MANUFACTURER'S REPRESENTATIVE FOR THE SETUP OF VIDEO DETECTION CAMERA AND LOCATIONS OF THE VIDEO DETECTION ZONES.
4. FURNISH AND INSTALL 5-SECTION SIGNAL HEAD PER DETAIL 'A' ON THIS SHEET.
5. FURNISH AND INSTALL 3-SECTION BIKE SIGNAL HEAD PER DETAIL 'B' ON THIS SHEET.
6. FURNISH AND INSTALL R3-4 SIGN ON SIGNAL MAST ARM.
7. FURNISH AND INSTALL R10-12 SIGN ON SIGNAL POLE OR SIGNAL MAST ARM AS SHOWN ON THE PLANS.
8. FURNISH AND INSTALL R13-A (CA) SIGN ON SIGNAL POLE OR SIGNAL MAST ARM AS SHOWN ON THE PLANS.
9. FURNISH AND INSTALL R10-10B SIGN ON SIGNAL POLE OR SIGNAL MAST ARM AS SHOWN ON THE PLANS.
10. FURNISH AND INSTALL EMERGENCY VEHICLE DETECTOR, COMPLETE WITH MOUNTING HARDWARE AND CABLE, ON SIGNAL MAST ARM PER DETAIL 'C' ON THIS PAGE.
11. FURNISH AND INSTALL EMERGENCY VEHICLE DETECTOR ON TOP OF TRAFFIC SIGNAL HEAD PER DETAIL 'B' ON CALTRANS STANDARD PLAN RSP ES-4E.
12. CONSTRUCT CONTROLLER PAD (8'x2.5'x6") AND FOUNDATION FOR TRAFFIC SIGNAL CABINET AND SERVICE CABINET. RELOCATE EXISTING BOULDERS AS NECESSARY TO ACCOMMODATE CONSTRUCTION. FOUNDATION SHALL BE CONSTRUCTED AS INDICATED BY DETAIL 'D' ON CALTRANS STANDARD PLAN ES-3C.
13. FURNISH AND INSTALL NEW EXTINGUISHABLE MESSAGE SIGN WITH MESSAGE "PREPARE TO STOP" ON TYPE 1B POLE PER CALTRANS STANDARD PLAN ES-7B. FOUNDATION LOCATION TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION. WIRE THE SIGN TO SIGNAL CONTROLLER AT RELIEZ STATION ROAD/OLYMPIC BOULEVARD. SIGN TO BE ACTIVATED WHEN "ø2" RED AND YELLOW IS ON.
14. FURNISH AND INSTALL W3-3 SIGN ON 1-B POLE. SEE DETAIL ON SHEET TS-4.
15. INSTALL REFLECTIVE YELLOW TAPE ON PEDESTRIAN PUSH BUTTON POST. SEE DETAIL 8 ON SHEET DT-1.
16. FURNISH AND INSTALL R3-18 SIGN ON SIGNAL MAST ARM.
17. FURNISH AND INSTALL MODIFIED R9-6 SIGN ON SIGNAL POLE PER DETAIL 'D' ON THIS SHEET.



GENERAL NOTES (SHEETS TS-1 THROUGH TS-2)

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE 2010 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND CALTRANS STANDARD SPECIFICATIONS.
2. ALL SIGN CODES REFER TO THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD) UNLESS OTHERWISE NOTED.
3. STREET NAME SIGNS SHALL CONFORM TO CITY OF LAFAYETTE STREET NAME SIGN STANDARDS DATED 5-16-2014.
4. REFER TO REVISED CALTRANS STANDARD PLANS ES-IA AND ES-IB FOR KEY TO SYMBOLS AND ABBREVIATIONS.
5. ALL NEW PEDESTRIAN HEADS SHALL BE COUNTDOWN TYPE. ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPLIANT AND AS SHOWN ON THE PLANS IN SPECIAL SITUATIONS.
6. CONDUIT ROUTING SHOWN IS DIAGRAMMATIC. CONTRACTOR SHALL VERIFY EXISTING CONDUITS AND LAY OUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF UTILITIES OR ANY OTHER TRADES.
7. ALL NEW PULL BOXES SHALL BE #5 UNLESS OTHERWISE NOTED ON THE PLANS.
8. ALL SIGNAL POLES AND SIGNAL STANDARDS SHALL BE FURNISHED BY THE CITY AND INSTALLED BY THE CONTRACTOR.
9. ALL NEW SIGNAL EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS SPECIFIED ON THESE PLANS AND SPECIAL PROVISIONS.
10. EXISTING STOP SIGNS SHALL BE REMOVED ONLY AFTER TRAFFIC SIGNAL IS ENERGIZED.
11. TRAFFIC SIGNAL POLES SHALL BE SET BACK FROM FACE OF CURB NO LESS THAN 30 INCHES TO FACE OF STANDARD OR POLE, AND THE BASE PLATE INSTALLED PARALLEL TO THE STOP BAR UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
12. TRAFFIC SIGNAL POLE LOCATIONS SHOWN ARE DIAGRAMMATIC. CONTRACTOR SHALL CHECK FOR ANY UTILITY CONFLICTS IN THE FIELD VIA POTHOLING AND MOVE THE POLES AS NECESSARY. FINAL LOCATION SHALL BE APPROVED BY THE ENGINEER.

CA: 1-800-227-2600
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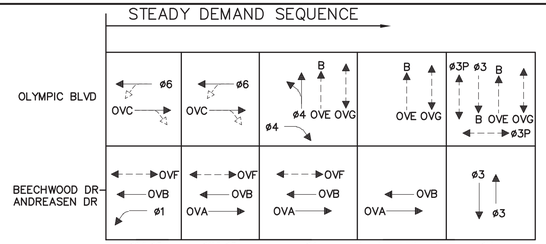
CA: 1-800-227-2600
CALL TWO WORKING DAYS BEFORE YOU DIG

STEADY DEMAND SEQUENCE

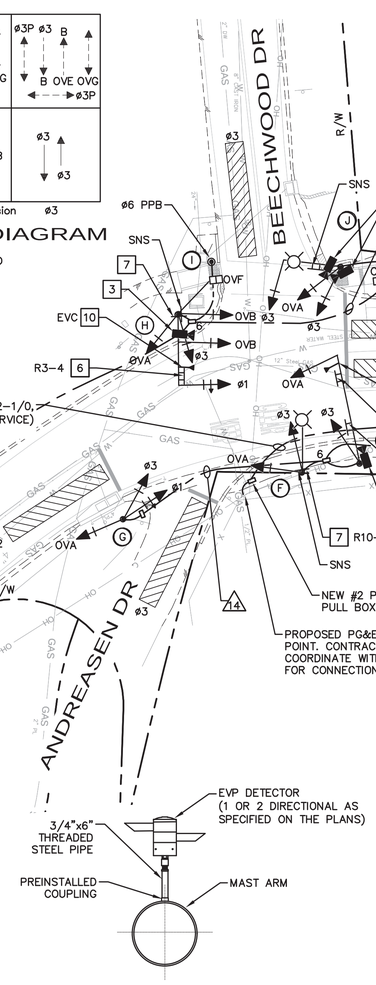


TRAFFIC SIGNAL PHASE DIAGRAM

* OVA = ø2 + ø4
* OVB = ø6 + ø4
** OVC = ø1 + ø2
** OVD = ø6
OVE = ø3 + ø4 (BIKE)
OVF = ø4P + ø6P (PED)
OVG = ø3P + ø7P (PED)

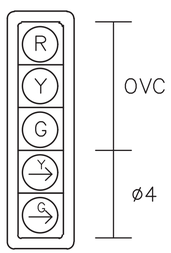
EVA = ø2 + ø5 + OVC + OVD
EVB = ø4 + ø1 + OVB
EVC = ø1 + ø6 + OVB

* OVERLAP SHALL EXTEND WHEN ø4 TERMINATES
** OVERLAP SHALL ALWAYS EXTEND WHEN ø2 OR ø6 TERMINATES



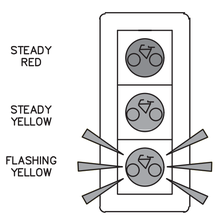
DETAIL 'C' INSTALLATION OF EVP ON SIGNAL MAST ARM

NOT TO SCALE



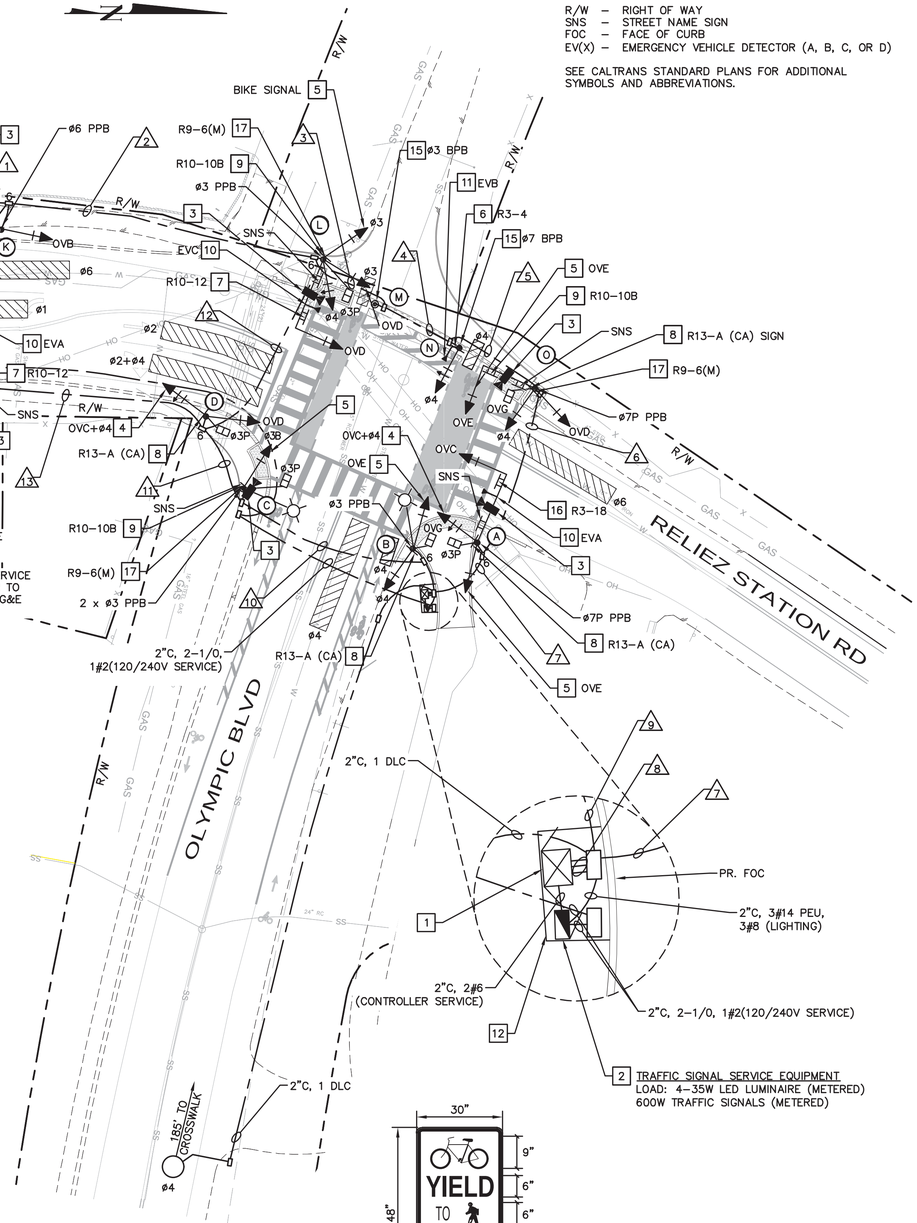
DETAIL 'A' 5 SECTION SIGNAL HEAD DETAILS

NOT TO SCALE



DETAIL 'B' BIKE SIGNAL HEAD DIAGRAM

NOT TO SCALE



DETAIL 'D' MODIFIED TYPE R9-6 SIGN

NOT TO SCALE

LEGEND (THIS SHEET ONLY)

- VIDEO DETECTION ZONE

R/W - RIGHT OF WAY
SNS - STREET NAME SIGN
FOC - FACE OF CURB
EV(X) - EMERGENCY VEHICLE DETECTOR (A, B, C, OR D)

SEE CALTRANS STANDARD PLANS FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS.

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

DATE	MARK	REVISION	INIT.

Designed by:
Drawn by: NAP
Checked by: BES
Reviewed by: BES
Date (of Survey): APR. 2016

REGISTERED PROFESSIONAL ENGINEER BRIAN E. SOWERS No. 60296 06/30/2016 STATE OF CALIFORNIA CIVIL
04/19/2016

Kimley»Horn

4637 CHABOT DR, STE 300 PLEASANTON, CA 94588
PHONE: 925-398-4840
WWW.KIMLEY-HORN.COM
SCALE: 1"=20'

LAFAYETTE

REVIEWED BY:
CITY OF LAFAYETTE
3675 Mount Diablo Boulevard, Suite 210
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Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014-9707-1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

TRAFFIC SIGNAL PLAN AT RELIEZ STATION ROAD AND OLYMPIC BOULEVARD

File: 2015.059.00
SHEET TS-1 8 OF 13

CONDUCTOR SCHEDULE

AWG OR CABLE		NUMBER OF CONDUCTORS — RUN NUMBER													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
NO. 14	ø1	3	3	3	3	3	3	3	6	3	3	3		3	3
	ø3	3	3	3	3	3	3	3	6	3	3	3		3	3
	ø3B								3	3	3				
	ø4			3	3	3	3	3	6	3	3	3			
	ø6														
	OVA	3	3	3	3	3	3	3	6	3	3	3		3	3
	OVB	3	3	3	3	3	3	3	3						
	OVC							3	6	3	3	3			
	OVD			3	3	3	3	3	6	3	3	3			
	OVE						3	3	6	3					
	ø3P			2	2	2	2	2	4	2	2	2			
	OVF (PED)	2	2	2	2	2	2	2	2						
	OVG (PED)						2	2	4	2					
	ø3 PPB			1	1	1	1	1	2	1	1				
	ø3 BPB				1	1	1	1	1						
	ø6 PPB	1	1	1	1	1	1	1	1						
	ø7 PPB					1	1	1	1						
	ø7 BPB														
	PPB COMMON	1	1	1	1	1	1	1	2	1	1	1			
	SPARES	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	PEU									3					
	TOTAL #14	19	19	28	29	30	35	38	68	36	28	24	3	12	12
NO. 12	EMS SIGN	2	2	2	2	2	2	2	2						
NO. 8	LIGHTING	2	2	2	2	2	2	2		2	2	2		2	
	SIGNAL NEUTRAL	1	1	1	1	1	1	1	1	1	1	1		1	1
	SYSTEM GROUND	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	TOTAL NO. 8	4	4	4	4	4	4	4	2	4	4	4		4	2
ADVANCED DETECTION LOOP CABLE	ø2	1	1	1	1	1	1	1	1						
	ø4								1						
	TOTAL CABLE	1	1	1	1	1	1	1	2						
DETECTION VIDEO CABLE	ø1 & ø6	1	1	1	1	1	1	1	1						
	ø2		1	1	1	1	1	1	1						
	ø2 & ø4							1	1						
	ø3		1	1	1	1	1	1	2	1	1	1		1	
	ø3 & ø4								1	1	1				
	ø4						1	1	1						
	ø6			1	1	1	1	1	1						
	TOTAL CABLE	1	3	4	4	4	5	6	8	2	2	1		1	
EMERGENCY VEHICLE PREEMPTION	EVA							1	2	1	1	1		1	
	EVB						1	1	1						
	EVC	1	1	1	1	1	1	1	1						
	TOTAL EVP CABLE	1	1	1	1	1	2	3	4	1	1	1		1	
	CONDUIT FILL (%)	12%	14%	18%	18%	18%	12%	14%	12%	17%	14%	12%	1%	9%	5%
	CONDUIT SIZE (IN)	3"	3"	3"	3"	3"	4"	4"	3–3"	3"	3"	3"	3"	3"	3"

ALL CONDUITS, CABLES, AND CONDUCTORS SHALL BE NEW.

POLE & EQUIPMENT SCHEDULE

LOCATION	STANDARD [1] TYPE	STANDARD [1] SIGNAL MAST ARM	STANDARD [1] LUMINAIRE MAST ARM	LED LUMINAIRE WATTAGE	VEHICLE SIGNAL MOUNTING MAST ARM	VEHICLE SIGNAL MOUNTING POLE	PEDESTRIAN SIGNAL MOUNT	PEDESTRIAN SIGNAL POLE QUAD	PEDESTRIAN PUSH BUTTON ø	PEDESTRIAN PUSH BUTTON ARROW	PEDESTRIAN PUSH BUTTON POLE QUAD	SNS LEGEND [2]	SPECIAL NOTES
Ⓐ	16–3–100	20'	–	–	1 MAS	SV–2–T	SP–1–T	N W E S	ø7	←	N W E S	Olympic Boulevard	FURNISH AND INSTALL R3–18 SIGN ON SIGNAL MAST ARM. FURNISH AND INSTALL R13–A (CA) SIGN ON SIGNAL POLE AND ORIENT TO THE SOUTH. FURNISH AND INSTALL APS PEDESTRIAN PUSH BUTTON.
Ⓑ	TYPE 15TS	–	12'	35	–	SV–2–T	SP–1–T	N W E S	ø3	→	N W E S	–	FURNISH AND INSTALL R13–A (CA) SIGN ON SIGNAL POLE AND ORIENT TO THE EAST. FURNISH AND INSTALL APS PEDESTRIAN PUSH BUTTON.
Ⓒ	TYPE 15TS	–	12'	35	–	SV–1–T	SP–1–T	N W E S	ø3 → / ø3 ←	→ / ←	N W E S	Reliez Station Road	FURNISH AND INSTALL R10–10b SIGN ON SIGNAL POLE AND ORIENT TO THE WEST. FURNISH AND INSTALL R9–6 MODIFIED SIGN ON SIGNAL POLE AS SHOWN ON THE PLANS. FURNISH AND INSTALL 2–APS PEDESTRIAN PUSH BUTTONS. PUSH BUTTON SHALL ACTIVATE BOTH CROSSWALKS.
Ⓓ	1–B	–	–	–	–	TV–2–T	SP–1–T	N W E S	–	–	–	–	FURNISH AND INSTALL R13–A (CA) SIGN ON SIGNAL POLE AND ORIENT TO THE SOUTH.
Ⓔ	18–4–100	30'	–	–	1 MAS	SV–1–T	–	–	–	–	–	Andreasen Dr –> <– Beechwood Dr	FURNISH AND INSTALL R10–12 SIGN ON SIGNAL MAST ARM.
Ⓕ	TYPE 15TS	–	12'	35	–	TV–2–T	–	–	–	–	–	Reliez Station Road	FURNISH AND INSTALL R10–12 SIGN ON SIGNAL POLE AND ORIENT TO THE WEST.
Ⓖ	1–B	–	–	–	–	TV–3–T	–	–	–	–	–	–	
Ⓗ	16–3–100	20'	–	–	2 MAS	SV–3–T	SP–1–T	N W E S	–	–	–	Beechwood Dr –> <– Andreasen Dr	FURNISH AND INSTALL R3–4 SIGN ON SIGNAL MAST ARM. FURNISH AND INSTALL APS PEDESTRIAN PUSH BUTTON.
Ⓘ	PPB	–	–	–	–	–	–	–	ø6	→	N W E S	–	
Ⓙ	17–3–100	15'	12'	35	1 MAS	SV–2–T	–	–	–	–	–	Reliez Station Road	FURNISH AND INSTALL R10–12 SIGN ON SIGNAL MAST ARM.
Ⓚ	1–B	–	–	–	–	SV–1–T	SP–1–T	N W E S	ø6	→	N W E S	–	
Ⓛ	16–3–100	20'	–	–	1 MAS	SV–3–T	SP–1–T	N W E S	ø3	←	N W E S	Moraga Regional Trail –> <– Olympic Blvd	FURNISH AND INSTALL R10–12 SIGN ON SIGNAL MAST ARM. FURNISH AND INSTALL R9–6 MODIFIED SIGN ON SIGNAL POLE AS SHOWN ON THE PLANS. FURNISH AND INSTALL R10–10B SIGN ON SIGNAL POLE AS SHOWN ON THE PLANS.
Ⓜ	PPB POST	–	–	–	–	–	–	–	ø3 BPB	→	N W E S	–	FURNISH AND INSTALL BIKE PEDESTRIAN PUSH BUTTON. WIRE IT TO PHASE 3 PEDESTRIAN PHASE.
Ⓝ	1–B	–	–	–	–	SV–1–T	–	–	ø7 BPB	←	N W E S	–	FURNISH AND INSTALL BIKE PEDESTRIAN PUSH BUTTON. WIRE IT AS SHOWN ON THE PLANS. FURNISH AND INSTALL R3–4 SIGN ON SIGNAL POL.E.
Ⓞ	16–3–100	15'	–	–	1 MAS	SV–2–T	SP–1–T	N W E S	ø7	→	N W E S	Reliez Station Road	FURNISH AND INSTALL R10–10B SIGN ON SIGNAL MAST ARM AS SHOWN ON THE PLANS. FURNISH AND INSTALL R9–6 MODIFIED SIGN ON SIGNAL POLE AS SHOWN ON THE PLANS. FURNISH AND INSTALL R13–A (CA) SIGN ON SIGNAL POLE. FURNISH AND INSTALL APS PEDESTRIAN PUSH BUTTON.

ALL POLES AND EQUIPMENT ARE NEW.

OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS AND CALTRANS STANDARD SPECIFICATIONS. FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN MOUNTING, SEE REVISED 2010 CALTRANS STANDARD PLANS.

1. ALL SIGNAL POLES SHALL BE FURNISHED BY THE CITY AND INSTALLED BY CONTRACTOR.
2. STREET NAME SIGNS WILL BE PROVIDED BY THE CITY AND INSTALLED BY THE CONTRACTOR.

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CALL TWO WORKING DAYS BEFORE YOU DIG

DATE	MARK	REVISION	INIT.

Designed by:
Drawn by: NAP
Checked by: BES
Reviewed by: BES
Date (of Survey): APR. 2016

REGISTERED PROFESSIONAL ENGINEER BRIAN E. SOWERS No. 60296 06/30/2016 STATE OF CALIFORNIA CIVIL
04/19/2016

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LAFAYETTE

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Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014–9707–1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

TRAFFIC SIGNAL SCHEDULE AT RELIEZ STATION ROAD AND OLYMPIC BOULEVARD

File: 2015.059.00
SHEET TS–2 9 OF 13

CONSTRUCTION NOTES (SHEETS TS-3 & TS-4 ONLY)

1. INSTALL CITY FURNISHED TRAFFIC SIGNAL CONTROLLER IN EXISTING CABINET. MAKE ALL THE CONNECTIONS REQUIRED.
2. DISCONNECT EXISTING SERVICE ENCLOSURE AT SERVICE PULL BOX. REMOVE AND SALVAGE EXISTING SERVICE ENCLOSURE FROM THE SIDE OF THE CONTROLLER CABINET. FURNISH AND INSTALL NEW SERVICE ENCLOSURE WITH METER. DRILL A HOLE IN THE CONTROLLER CABINET AND RUN SERVICE WIRE THROUGH THE SIDE OF THE CONTROLLER CABINET. MAKE SURE THE WHOLE IS WATERTIGHT AND ISOLATED TO THE SATISFACTION OF THE ENGINEER. CONNECT NEW SERVICE ENCLOSURE TO EXISTING SERVICE POINT.
3. FURNISH AND INSTALL ITERIS RZ-4 WDR OR APPROVED EQUAL VIDEO DETECTION CAMERA PER DETAIL ON SHEET TS-4. CONTRACTOR TO COORDINATE WITH MANUFACTURERS REPRESENTATIVE FOR THE SETUP OF VIDEO DETECTION CAMERA AND LOCATIONS OF THE VIDEO DETECTION ZONES.
4. FURNISH AND INSTALL R10-12 SIGN ON SIGNAL MAST ARM OR SIGNAL POLE, AS SHOWN ON THE PLANS.
5. FURNISH AND INSTALL EMERGENCY VEHICLE DETECTOR, COMPLETE WITH MOUNTING HARDWARE AND CABLE, ON SIGNAL MAST ARM PER DETAIL 'C' ON SHEET TS-1.
6. REMOVE AND SALVAGE EXISTING IRRIGATION CONTROLLER. ABANDON FOUNDATION. CAP THE CONDUITS. REMOVE ALL CONDUCTORS TO IRRIGATION CONTROLLER.
7. REPLACE EXISTING PULL BOX COVER WITH NEW COVER LABELED "SERVICE".
8. REPLACE EXISTING BROKEN PULL BOX COVER WITH NEW COVER LABELED "TRAFFIC SIGNAL".
9. REPROGRAM EXISTING EXTINGUISHABLE MESSAGING SIGN TO SAY "PREPARE TO STOP". SIGN TO BE ACTIVATED DURING THE RED AND YELLOW INTERVAL OF PHASE 2. REPLACE EXISTING W11-2 SIGN WITH NEW W3-3 SIGN. SEE "EXTINGUISHABLE MESSAGE SIGN" DETAIL ON SHEET TS-4.
10. REPROGRAM EXISTING EXTINGUISHABLE MESSAGING SIGN TO SAY "PREPARE TO STOP". SIGN TO BE ACTIVATED DURING THE RED AND YELLOW INTERVAL OF PHASE 6. REPLACE EXISTING W11-2 SIGN WITH NEW W3-3 SIGN. SEE "EXTINGUISHABLE MESSAGE SIGN" DETAIL ON SHEET TS-4.
11. DETECTIONS ZONES TO BE PROGRAMMED IN THE CONTROLLER WITH 10 SECOND PRESENCE DELAY TO ACTIVATE ADVANCE EXTINGUISHABLE MASSAGING SIGN. CONTRACTOR TO COORDINATE WITH ENGINEER FOR EXACT PROGRAMMING REQUIREMENTS.

GENERAL NOTES (SHEETS TS-3 THROUGH TS-4)

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE 2010 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND CALTRANS STANDARD SPECIFICATIONS.
2. ALL SIGN CODES REFER TO THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD) UNLESS OTHERWISE NOTED.
3. STREET NAME SIGNS SHALL CONFORM TO CITY OF LAFAYETTE STREET NAME SIGN STANDARDS DATED 5-16-2014.
4. REFER TO REVISED CALTRANS STANDARD PLANS ES-IA AND ES-IB FOR KEY TO SYMBOLS AND ABBREVIATIONS.
5. ALL NEW PEDESTRIAN HEADS SHALL BE COUNTDOWN TYPE. ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPLIANT AND AS SHOWN ON THE PLANS IN SPECIAL SITUATIONS. SEE SPECIAL PROVISIONS FOR PAINTING AND ADDITIONAL INFORMATION.
6. CONDUIT ROUTING SHOWN IS DIAGRAMMATIC. CONTRACTOR SHALL VERIFY EXISTING CONDUITS AND LAY OUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF UTILITIES OR ANY OTHER TRADES.
7. ALL NEW PULL BOXES SHALL BE #5 UNLESS OTHERWISE NOTED ON THE PLANS.
8. ALL SIGNAL POLES AND SIGNAL STANDARDS SHALL BE FURNISHED BY THE CITY AND INSTALLED BY THE CONTRACTOR.
9. ALL NEW SIGNAL EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS SPECIFIED ON THESE PLANS AND SPECIAL PROVISIONS.
10. EXISTING STOP SIGNS SHALL BE REMOVED ONLY AFTER TRAFFIC SIGNAL IS ENERGIZED.
11. TRAFFIC SIGNAL POLES SHALL BE SET BACK FROM FACE OF CURB NO LESS THAN 30 INCHES TO FACE OF STANDARD OR POLE, AND THE BASE PLATE INSTALLED PARALLEL TO THE STOP BAR UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
12. LOCATION OF THE TRAFFIC SIGNAL POLES SHOWN ON PLANS IS DIAGRAMMATIC. CONTRACTOR SHALL CHECK FOR ANY UTILITY CONFLICTS IN THE FIELD VIA POTHOLING PRIOR TO ORDERING AND INSTALLING POLES. FINAL POLE LOCATION SHALL BE APPROVED BY THE ENGINEER.

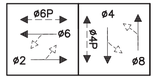
LEGEND (THIS SHEET ONLY)

▨ – VIDEO DETECTION ZONE

R/W – RIGHT OF WAY
RLVD – RED LIGHT VIOLATOR DETECTOR UNIT
SNS – STREET NAME SIGN
FOC – FACE OF CURB
EV(X) – EMERGENCY VEHICLE DETECTOR (A, B, C, OR D)

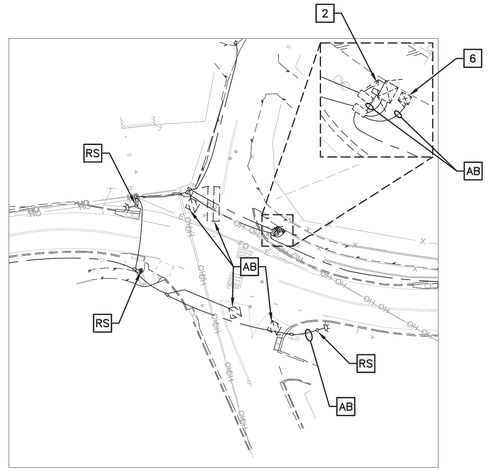
SEE CALTRANS STANDARD PLANS FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS.

STEADY DEMAND SEQUENCE



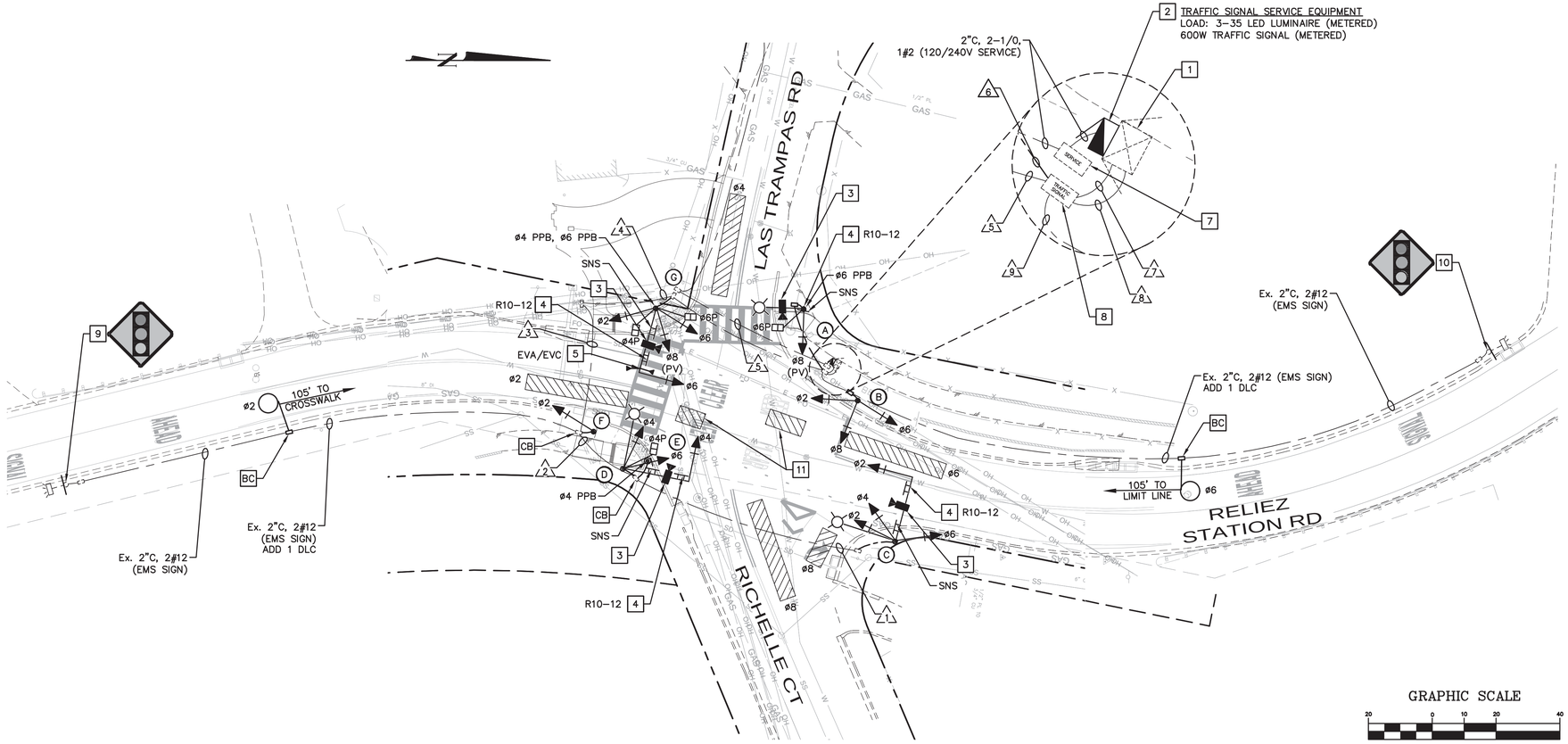
TRAFFIC SIGNAL PHASE DIAGRAM

EVA = ø2
EVC = ø6



EXISTING SIGNAL EQUIPMENT

SCALE: 1" = 40'



GRAPHIC SCALE

20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

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DATE	MARK	REVISION	INIT.

Designed by:
Drawn by: NAP
Checked by: BES
Reviewed by: BES
Date (of Survey): APR. 2016

REGISTERED PROFESSIONAL ENGINEER BRIAN E. SOBE No. 60296 06/30/2016 STATE OF CALIFORNIA CIVIL
04/19/2016

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SCALE: 1"=20'

LAFAYETTE

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Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014-9707-1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

TRAFFIC SIGNAL PLAN AT RELIEZ STATION ROAD AND LAS TRAMPAS ROAD

File: 2015.059.00
SHEET TS-3 10 OF 13

CONDUCTOR SCHEDULE

AWG OR CABLE		NUMBER OF CONDUCTORS RUN NUMBER 1	2	3	4	5	6	7	8	9
NO. 14	ø2	3	3	3	3	3		6		3
	ø4	3	3	3	3	3		3		
	ø6	3	3	3	3	3		6		3
	ø8					3	3	9		3
	ø4P		2	2	2	2		2		
	ø6P					2	2	4		
	ø4 PPB		1	1	1	1		1		
	ø6 PPB					1	1	2		
	PPB COMMON		1	1	1	1	1	2		
	SPARES	3	3	3	3	3	3	9		3
	PEU									
	TOTAL #14	12	16	16	16	22	10	44		12
NO. 12	EMS SIGN			2	2	2		4		2
NO. 8	LIGHTING	2	2	2	2	2	2			
	SIGNAL NEUTRAL	1	1	1	1	1	1			1
	SYSTEM GROUND	1	1	1	1	1	1	1	1	1
	TOTAL NO. 8	4	4	4	4	4	4	1	1	2
ADVANCED DETECTION LOOP CABLE	ø2			1	1	1			1	
	ø6								1	1
	TOTAL CABLE			1	1	1			2	1
DETECTION VIDEO CABLE	ø2	1	1	1	1	1			1	
	ø4		1	1	1	1			1	
	ø6					1			1	
	ø8						1		1	
	TOTAL CABLE	1	2	2	2	3	1		4	
EMERGENCY VEHICLE PREEMPTION	EVA					1			1	
	EVC					1			1	
	TOTAL EVP CABLE		#	#	#	2	#		2	
	CONDUIT FILL (%)	17%	24%	28%	28%	39%	18%	33%	24%	15%
	CONDUIT SIZE (IN)	2"	2"	2"	2"	2"	2"	2"	2"	2"

ALL CONDUITS ARE EXISTING UNLESS OTHERWISE NOTED.

ALL CONDUCTORS ARE NEW UNLESS OTHERWISE NOTED.

ALL EXISTING CONDUITS, TO BE USED OR REUSED, SHALL BE CLEANED OUT BY REMOVING THE EXISTING CONDUCTORS, PULLING A MANDRILL OF APPROPRIATE SIZE THROUGH THE CONDUIT RUN AND THEN THE CONDUIT RUN SHALL BE BLOWN OUT USING COMPRESSED AIR. NO EXISTING OR NEW CONDUCTORS SHALL BE PULLED INTO EXISTING CONDUIT UNTIL THE EXISTING CONDUIT IS CLEANED OUT.

△ – EXISTING CONDUIT

△ – NEW CONDUIT

POLE & EQUIPMENT SCHEDULE

LOCATION	STANDARD [1] TYPE	SIGNAL MAST ARM	LUMINAIRE MAST ARM	LED LUMINAIRE WATTAGE	VEHICLE SIGNAL MOUNTING MAST ARM	POLE	PEDESTRIAN SIGNAL MOUNT	POLE QUAD	PEDESTRIAN PUSH BUTTON ø	ARROW	POLE QUAD	SNS LEGEND [2]	SPECIAL NOTES
Ⓐ	TYPE 15TS	–	12'	35	–	SV–1–T	SP–1–T	NW	ø6	←	NW	Reliez Station Road	
Ⓑ	1–B	–	–	–	–	SV–3–T	–	–	–	–	–	–	
Ⓒ	17–3–100	20'	15'	35	1 MAS	SV–3–T	–	–	–	–	–	Richelle Ct –> <– Las Trampas Rd	FURNISH AND INSTALL R10–12 SIGN ON SIGNAL MAST ARM. LUMINAIRE MAST ARM SHALL BE INSTALLED AT 90 DEGREES TO SIGNAL MAST ARM AND ORIENTED TO THE SOUTH. TRIM OVERHEAD TREE CANOPY FOR BETTER VISIBILITY OF THE SIGNAL HEAD AND FOR INSTALLATION OF THE LUMINAIRE.
Ⓓ	17–3–100	20'	15'	35	1 MAS	SV–2–T	SP–1–T	NW	–	–	–	Reliez Station Road	FURNISH AND INSTALL R10–12 SIGN ON SIGNAL MAST ARM. LUMINAIRE MAST ARM SHALL BE INSTALLED AT 90 DEGREES TO SIGNAL MAST ARM AND ORIENTED TO THE WEST.
Ⓔ	PPB	–	–	–	–	–	–	–	ø4	←	NW	–	
Ⓕ	1–B	–	–	–	–	TV–1–T	–	–	ø4	→	NW	–	
Ⓖ	16–3–100	20'	–	–	1 MAS	SV–3–T	SP–2–T	NW	ø4 ø6	← →	NW	Las Trampas Rd –> <– Richelle Ct	FURNISH AND INSTALL R10–12 SIGN ON SIGNAL MAST ARM.

ALL POLES AND EQUIPMENT ARE NEW.

OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS AND CALTRANS STANDARD SPECIFICATIONS. FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN MOUNTING, SEE REVISED 2010 CALTRANS STANDARD PLANS.

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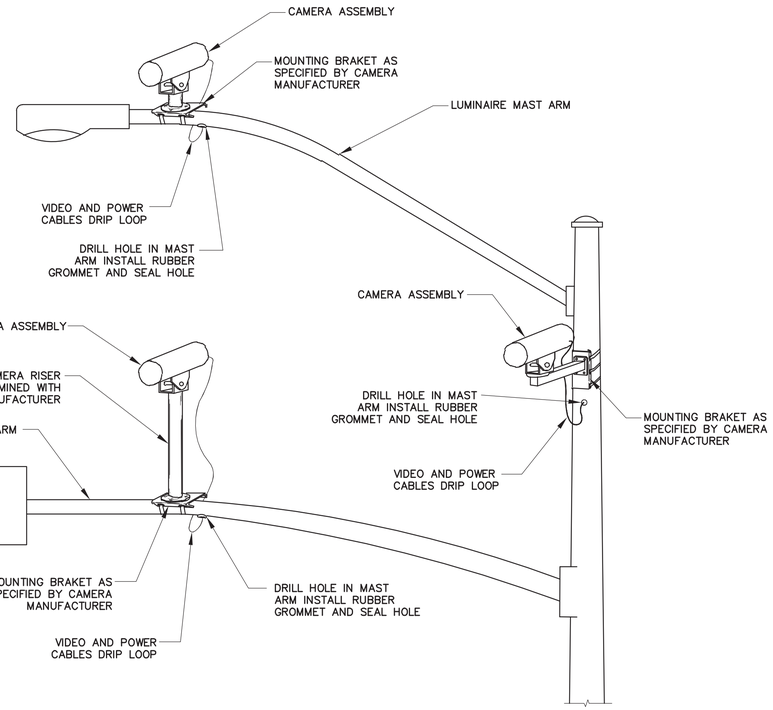
2. STREET NAME SIGNS WILL BE PROVIDED BY THE CITY AND INSTALLED BY THE CONTRACTOR.

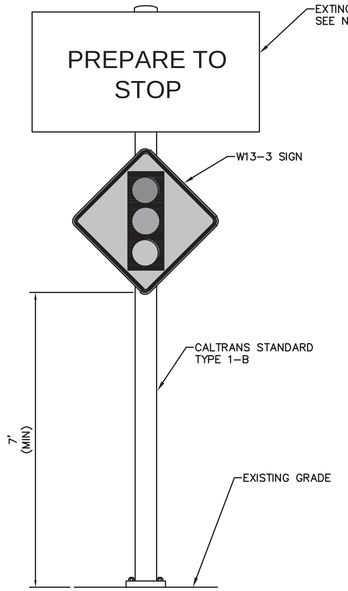


VIDEO IMAGE SENSOR UNIT (VID) MOUNTING DETAIL

NOT TO SCALE

VID NOTES

1. MOUNTING DETAILS PROVIDED FOR REPRESENTATIVE PURPOSES. ACTUAL MOUNTING BRACKET TO BE DEFINED BY THE EQUIPMENT VENDOR. SEE VENDOR SYSTEM INSTALLATION GUIDE FOR DETAILED INSTALLATION REQUIREMENTS.
2. MOUNTING LOCATIONS SHALL BE AS SHOWN ON PROJECT PLANS AND AS APPROVED BY FIELD ENGINEER PRIOR TO INSTALLATION.
3. ALL CABLES SHALL HAVE WATER–TIGHT FITTINGS FOR CABLE ENTRANCE AND DRIP LOOP IN CABLE.
4. ALL CABLES SHALL BE RUN INSIDE MAST ARMS AND POLES.



EXTINGUISHABLE MESSAGE SIGN DETAIL

NOT TO SCALE

NOTES:

1. MINIMUM LETTER SIZE SHALL BE 5".
2. ALUMINUM HOUSING, POWDER COAT BLACK FINISH; 3/8" POLYCARBONATE NON–GLARE COVER.
3. PROVIDE SUBMITTAL OF SIGN ENCLOSURE FOR APPROVAL PRIOR TO FABRICATION.

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04/19/2016

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SCALE: 1"=20'

LAFAYETTE

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Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014–9707–1

RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS

Lafayette, Contra Costa County, California

TRAFFIC SIGNAL SCHEDULE AT RELIEZ STATION ROAD AND LAS TRAMPAS ROAD

File: 2015.059.00

SHEET TS–4 11 OF 13

STRIPING LEGEND

- PROPOSED MARKING PER CALTRANS STANDARD DETAILS
- EXISTING MARKING TO REMAIN
- EXISTING MARKING TO BE REMOVED
- PROPOSED STRIPING
- EXISTING STRIPING TO REMAIN
- EXISTING STRIPING TO BE REMOVED
- MATCH EXISTING STRIPING

STRIPING NOTES (THIS SHEET ONLY)

(XX) INSTALL STRIPING DETAIL NUMBER "XX" PER CALTRANS STANDARD PLANS A20A, A20B, A20D, AND A24A.

(R) REMOVE EXISTING MARKING BY GRINDING. GRIDING OF MARKING SHALL BE IN A BLOCK CONFIGURATION.

[1] INSTALL ZEBRA CROSSWALK WITH 12" WIDE LONGITUDINAL LINES (8' OR 10' ON CENTER AS SHOWN ON THE PLANS) AND 24" WIDE TRANSVERSE LINES (4' ON CENTER) – (SKID RESISTANT THERMOPLASTIC).

[2] INSTALL 12" WIDE WHITE LINE (THERMOPLASTIC).

[3] INSTALL 12" WIDE WHITE LINE (THERMOPLASTIC) 10' APART ON CENTER.

[4] INSTALL GREEN COLORED BIKE LANE TREATMENT. BIKE LANE SHALL BE PAINTED GREEN BETWEEN TWO DETAIL 39A STRIPES. PAINT SHALL BE NON SKID.

[5] INSTALL CALTRANS STANDARD PAVEMENT LEGEND (SKID RESISTANT THERMOPLASTIC).

[6] PAINT TAPERED END OF PROPOSED CURB WHITE AND INSTALL WHITE REFLECTOR ON TOP OF CURB. SEE SHEET C–2 AND C–3 FOR CURB TREATMENT.

[7] REFRESH EXISTING YELLOW CENTERLINE IN KIND (25' TO CROSSWALK).

[8] INSTALL 12" WIDE DIAGONAL STRIPING LINE (THERMOPLASTIC) 7' APART ON CENTER, AND INSTALL 4" WHITE 27B STRIPING TO MARK EDGE OF TRAVELED WAY, AS SHOWN ON THE PLANS.

[9] PAINT 12" WIDE YELLOW PERPENDICULAR STRIPES 4' APART ON CENTER ON NEW AC–BERM.

SIGNING NOTES (THIS SHEET ONLY)

⟨1⟩ REMOVE AND SALVAGE EXISTING R1–1 SIGN AND STREET NAME SIGNS AFTER THE SIGNAL IS ENERGIZED. POST AND FOUNDATION TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.

⟨2⟩ REMOVE AND SALVAGE EXISTING W3–1 SIGN AND REPLACE IT WITH W3–3 SIGN.

⟨3⟩ INSTALL NEW SIGN ON NEW METAL POST.

⟨4⟩ NEW SIGN TO BE INSTALLED AT NEW 1–B POLE AS SHOWN ON SHEET TS–1 AND AS DETAILED ON SHEET TS–4.

SIGN SCHEDULE

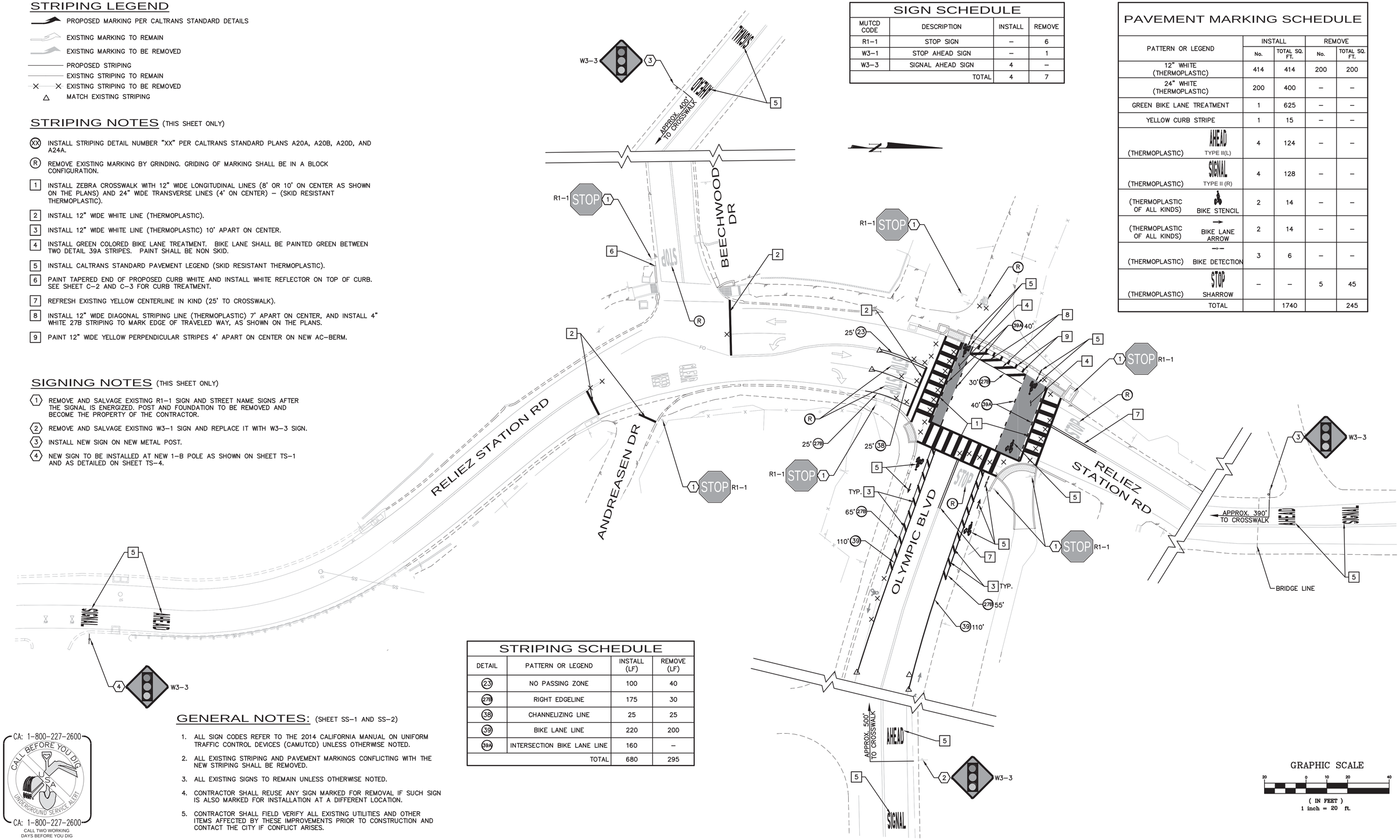
MUTCD CODE	DESCRIPTION	INSTALL	REMOVE
R1–1	STOP SIGN	–	6
W3–1	STOP AHEAD SIGN	–	1
W3–3	SIGNAL AHEAD SIGN	4	–
	TOTAL	4	7

PAVEMENT MARKING SCHEDULE

PATTERN OR LEGEND		INSTALL No.	INSTALL TOTAL SQ. FT.	REMOVE No.	REMOVE TOTAL SQ. FT.
12" WHITE (THERMOPLASTIC)		414	414	200	200
24" WHITE (THERMOPLASTIC)		200	400	–	–
GREEN BIKE LANE TREATMENT		1	625	–	–
YELLOW CURB STRIPE		1	15	–	–
(THERMOPLASTIC)	AHEAD TYPE II(L)	4	124	–	–
(THERMOPLASTIC)	SIGNAL TYPE II (R)	4	128	–	–
(THERMOPLASTIC OF ALL KINDS)	BIKE STENCIL	2	14	–	–
(THERMOPLASTIC OF ALL KINDS)	BIKE LANE ARROW	2	14	–	–
(THERMOPLASTIC)	BIKE DETECTION	3	6	–	–
(THERMOPLASTIC)	STOP SHARROW	–	–	5	45
	TOTAL		1740		245

STRIPING SCHEDULE

DETAIL	PATTERN OR LEGEND	INSTALL (LF)	REMOVE (LF)
(23)	NO PASSING ZONE	100	40
(27B)	RIGHT EDGELINE	175	30
(38)	CHANNELIZING LINE	25	25
(39)	BIKE LANE LINE	220	200
(39A)	INTERSECTION BIKE LANE LINE	160	–
	TOTAL	680	295



GENERAL NOTES: (SHEET SS–1 AND SS–2)

1. ALL SIGN CODES REFER TO THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD) UNLESS OTHERWISE NOTED.
2. ALL EXISTING STRIPING AND PAVEMENT MARKINGS CONFLICTING WITH THE NEW STRIPING SHALL BE REMOVED.
3. ALL EXISTING SIGNS TO REMAIN UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL REUSE ANY SIGN MARKED FOR REMOVAL IF SUCH SIGN IS ALSO MARKED FOR INSTALLATION AT A DIFFERENT LOCATION.
5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND OTHER ITEMS AFFECTED BY THESE IMPROVEMENTS PRIOR TO CONSTRUCTION AND CONTACT THE CITY IF CONFLICT ARISES.

CA: 1–800–227–2600 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT CA: 1–800–227–2600
CALL TWO WORKING DAYS BEFORE YOU DIG

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20 ft.

DATE	MARK	REVISION	INIT.

Designed by:
Drawn by: NAP
Checked by: BES
Reviewed by: BES
Date (of Survey): APR. 2016

BRYAN E. SOTH No. 60296 06/30/2016 CIVIL STATE OF CALIFORNIA
04/19/2016

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PHONE: 925–398–4840
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SCALE: 1"=20'

LAFAYETTE

REVIEWED BY:
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www.ci.lafayette.ca.us

Tony Coe, Engineering Services Manager — Date

CITY OF LAFAYETTE
PROJECT 014–9707–1
RELIEZ STATION ROAD
SIGNALIZATION IMPROVEMENTS
Lafayette, Contra Costa County, California

SIGNING AND STRIPING PLAN AT RELIEZ STATION ROAD AND OLYMPIC BOULEVARD

File: 2015.059.00
SHEET SS–1 12 OF 13

STRIPING LEGEND

- PROPOSED MARKING PER CALTRANS STANDARD DETAILS
- EXISTING MARKING TO REMAIN
- EXISTING MARKING TO BE REMOVED
- PROPOSED STRIPING
- EXISTING STRIPING TO REMAIN
- EXISTING STRIPING TO BE REMOVED
- MATCH EXISTING STRIPING

STRIPING NOTES (THIS SHEET ONLY)

(XX) INSTALL STRIPING DETAIL NUMBER "XX" PER CALTRANS STANDARD PLANS A20A, A20B, A20D, AND A24A.

(R) REMOVE EXISTING MARKING BY GRINDING. GRIDING OF MARKING SHALL BE IN A BLOCK CONFIGURATION.

[1] INSTALL ZEBRA CROSSWALK WITH 12" WIDE LONGITUDINAL LINES (10' ON CENTER) AND 24" WIDE TRANSVERSE LINES (4' ON CENTER) – (SKID RESISTANCE THERMOPLASTIC).

[2] INSTALL 12" WIDE WHITE LINE (THERMOPLASTIC).

[3] INSTALL 12" WIDE WHITE LINE (THERMOPLASTIC) 4' APART ON CENTER.

[4] INSTALL CALTRANS TYPE STANDARD PAVEMENT LEGEND (THERMOPLASTIC).

[5] REMOVE EXISTING CALTRANS TYPE PAVEMENT LEGEND BY GRINDING. INSTALL PROPOSED CALTRANS TYPE STANDARD PAVEMENT LEGEND AS SHOWN ON THE PLANS.

[6] PAINT TAPERED END OF PROPOSED CURB WHITE AND INSTALL WHITE REFLECTOR ON TOP OF CURB. SEE SHEET C-2 AND C-3 FOR CURB TREATMENT.

[7] REFRESH EXISTING YELLOW CENTERLINE IN KIND (25' TO CROSSWALK).

SIGNING NOTES (THIS SHEET ONLY)

(1) REMOVE AND SALVAGE EXISTING R1-1 SIGN AND STREET NAME SIGNS AFTER THE SIGNAL IS ENERGIZED. POST AND FOUNDATION TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.

(2) REMOVE AND SALVAGE EXISTING W11-2 MODIFIED SIGN AND "XING" SIGN. POST AND FOUNDATION TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.

(3) NEW SIGN TO BE INSTALLED AT NEW 1-B POLE AS SHOWN ON SHEET TS-1[3] AND AS DETAILED ON SHEET TS-4.

(4) REMOVE AND DISPOSE OF EXISTING POST AND FOUNDATION.

STRIPING SCHEDULE

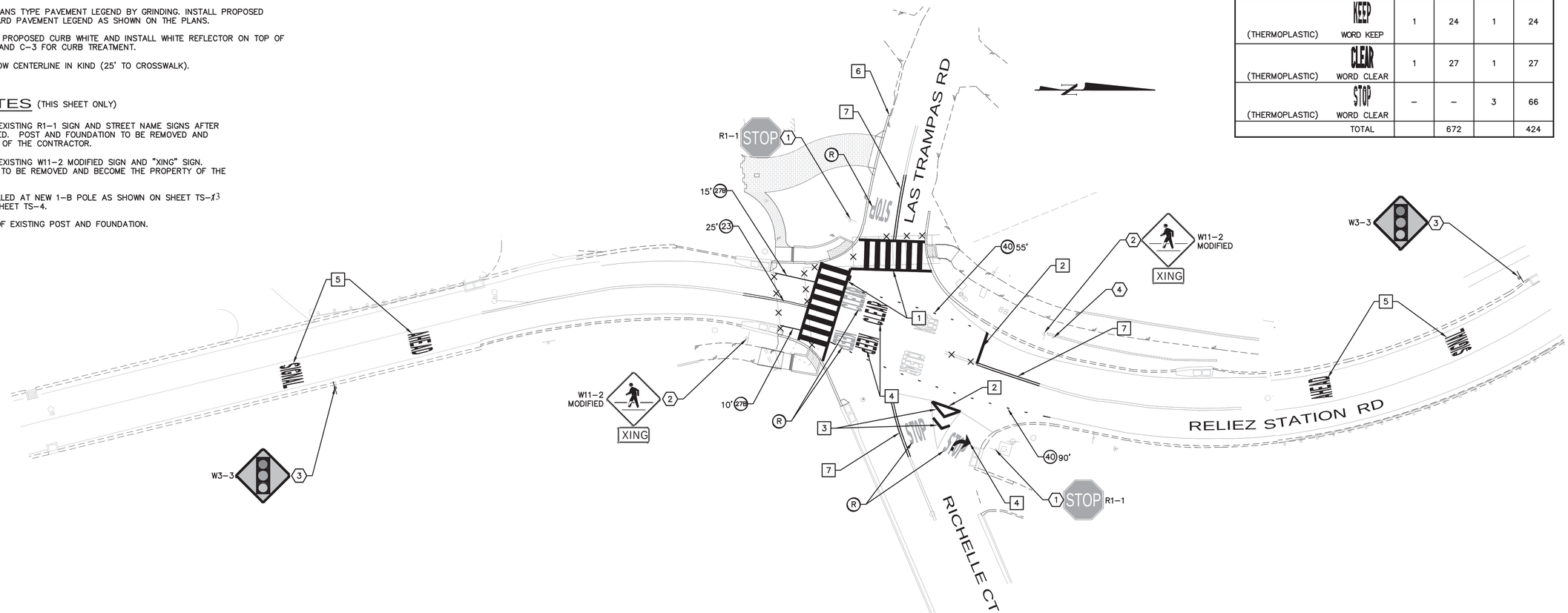
DETAIL	PATTERN OR LEGEND	INSTALL (LF)	REMOVE (LF)
(23)	NO PASSING ZONE	100	15
(27B)	RIGHT EDGELINE	25	–
(40)	LANE LINE EXTENSION	145	–
	TOTAL	270	15

SIGN SCHEDULE

MUTCD CODE	DESCRIPTION	INSTALL	REMOVE
R1-1	STOP SIGN	–	2
W3-3	SIGNAL AHEAD SIGN	2	–
W11-2	PEDESTRIAN CROSSING SIGN	–	2
"XING"	CROSSING SIGN	–	2
	TOTAL	2	6

PAVEMENT MARKING SCHEDULE

PATTERN OR LEGEND	INSTALL No.	INSTALL TOTAL SQ. FT.	REMOVE No.	REMOVE TOTAL SQ. FT.
12" WHITE (THERMOPLASTIC)	170	170	145	145
24" WHITE (THERMOPLASTIC)	155	310	75	150
(THERMOPLASTIC) WORD AHEAD	2	62	–	–
(THERMOPLASTIC) WORD SIGNAL	2	64	–	–
(THERMOPLASTIC) WORD PED	–	–	2	36
(THERMOPLASTIC) WORD XING	–	–	2	42
(THERMOPLASTIC) TYPE IV ARROW	1	15	–	–
(THERMOPLASTIC) WORD KEEP	1	24	1	24
(THERMOPLASTIC) WORD CLEAR	1	27	1	27
(THERMOPLASTIC) WORD CLEAR	–	–	3	66
TOTAL		672		424



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Checked by: BES
Reviewed by: BES
Date (of Survey): APR. 2016

REGISTERED PROFESSIONAL ENGINEER BRIAN E. SOWERS No. 60296 06/30/2016 CIVIL STATE OF CALIFORNIA

04/19/2016

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Tony Coe, Engineering Services Manager — Date

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SHEET SS-2 13 OF 13