File ID: 2024-01947 11/21/2024 **Discussion Item 3.**

HSIP 9: Lampasas Boulevard and Rio Linda Avenue (T15205500) and HSIP 9: Valley Hi Drive and La Mancha Way (T15205300) Update

File ID: 2024-01947

Location:
Lampasas Avenue and Rio Linda Boulevard, District 2, Represented by Councilmember Thao; Valley Hi Drive from Bruceville Road to Mack Road and La Mancha Way from Mack Road to South Elder Creek Court, Districts 5 and 8, Represented by Councilmembers Maple and Vang

Recommendation: Receive and provide feedback.

Contact: James Kragh, Associate Civil Engineer, (916) 808-6842, jmkragh@cityofsacramento.org, Department of Public Works

Presenter: James Kragh, Associate Civil Engineer, (916) 808-6842, jmkragh@cityofsacramento.org, Department of Public Works

Attachments:
1-Description/Analysis
2-65% Plans Lampasas Blvd and Rio Linda Ave
3-65% Plans Valley Hi Dr and La Mancha Way

Description/Analysis
Issue Detail: The California Department of Transportation (Caltrans) Local Highway Safety Improvement Program (HSIP) is a federal aid program that provides funding for safety improvements on public roads to achieve a significant reduction in traffic fatalities and serious injuries. The program requires data-driven, strategic approaches to improving highway safety. Projects are selected for funding based on crash history or crash potential and must demonstrate a Benefit-to-Cost ratio showing the project's effectiveness at reducing fatal and serious injury collisions.

The City of Sacramento has received Highway Safety Improvement Program (HSIP) Cycle 9 funding to implement safety improvements at the intersection of Lampasas Boulevard and Rio Linda Avenue and along the Valley Hi Drive and La Mancha Way corridor.

These locations were selected based on collision frequency and eligibility for federal HSIP funding.

The primary goals of these projects are to:

- Reduce traffic fatalities and serious injuries
- Provide comfortable and controlled crossings for all users
- Increase mobility choices by removing barriers

Lampasas Boulevard and Rio Linda Avenue Intersection
The intersection of Lampasas Boulevard and Rio Linda Avenue is currently a skewed, irregular four-way intersection with two-way stop control. Over the past decade, three pedestrians have been struck by vehicles while attempting to cross this intersection, with one collision resulting in a fatality.

The intersection currently lacks active transportation infrastructure: there is a missing sidewalk segment, no marked crosswalks, and no bike lanes. Along existing sidewalks, utility poles create pinch points that obstruct the walking path. Curb ramps are either deficient or missing. This intersection connects collector and local roads, with dual north/southbound lanes on Rio Linda creating long crossing distances.

To address these issues, the project proposes implementing the following improvements:

- Installation of new sidewalks and enhanced pedestrian crossings
- Overhead hardwired dual Rectangular Rapid-Flashing Beacon (RRFB) system with pedestrian refuge islands
- Enhanced street lighting
- ADA-compliant curb ramps
- Advanced pedestrian warning signs and yield markings
- Lane reduction and Class II bike lanes
- Curb extensions, particularly in areas near utility poles causing pinch points

Valley Hi Drive and La Mancha Way Corridor
The Valley Hi Drive and La Mancha Way corridor extends from South Elder Creek Court to Mack Road on La Mancha Way, and from Mack Road to Bruceville Road on Valley Hi Drive. In the past decade, 16 pedestrians have been struck by vehicles along this corridor, with 12 of these collisions occurring while people attempted to cross the road. Three of these collisions resulted in fatalities.

Valley Hi Drive is a six-lane, 85-foot-wide collector road with a speed limit of 35-40 MPH and a gap between crosswalks of 1,150 feet. Valley Hi Drive also has no bicycle lanes. 24,000 vehicles use Valley Hi Drive on a typical weekday.

To improve safety and accessibility, this project proposes the following improvements:

- New signalized intersection with accessible pedestrian signals (APS)
- ADA-compliant curb ramps
- Lane reduction with Class IV bike lanes
- Curb extensions
- Continuous median with fencing

Both projects are currently in the design and right-of-way phases, scheduled for completion in December 2024. Construction is anticipated to begin in the first half of 2025.

Staff is seeking feedback from the Active Transportation Commission on the proposed safety improvements for both locations as the projects move toward final design.

Policy Considerations: None. The actions requested herein are consistent with the City's goals of improving and expanding public safety, creating walkable communities, and enhancing overall livability. Specific goals the project addresses in the 2040 General Plan include:

> **M-1.16 Barrier Removal:** The City shall remove barriers to walking, where feasible, to remove barriers to allow people of all abilities to move with comfort and convenience throughout the City.
>
> **M-3.3 Traffic:** The City shall support planning and managing traffic from the perspective of all adjacent uses, using traffic management and traffic calming techniques.
>
> **M-4.1 Application of Safety:** The City shall design, plan, and operate streets using complete streets principals to ensure the safety and mobility of all users.

Economic Impacts: Not applicable.

Environmental Considerations: City Environmental Planning Services performed an environmental assessment to satisfy California Environmental Quality Act (CEQA) requirements. Both projects were determined to be Categorically Exempt. Additionally, both projects have been determined to be categorically exempt from National Environmental Policy Act (NEPA).

Sustainability: The project is consistent with sustainability goals of promoting walking and bicycling by developing a universally accessible, safe, convenient, integrated, and well-connected pedestrian system and bicycle network.

Commission/Committee Action: Receive and provide feedback.

Rationale for Recommendation: Design will be completed by the end of 2024. This feedback will shape the final design.

Financial Considerations: Not applicable.

PLOT STAMP:

CAD FILE:

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH: CITY OF SACRAMENTO DESIGN & PROCEDURES MANUAL, DATED SEPTEMBER 2018, CITY STANDARD SPECIFICATIONS, DATED NOVEMBER 2020 WITH APPLICABLE ADDENDA, CALTRANS STANDARD PLANS, 2010 EDITION EXCEPT FOR TRAFFIC SIGNAL POLES AND FOUNDATIONS SHALL BE PER 2006 EDITION, AND THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION.
2. THREE WORKING DAYS PRIOR TO REQUIRING PROJECT STAKING, THE CONTRACTOR SHALL SUBMIT TO THE RESIDENT ENGINEER OR INSPECTOR A COMPLETED CONSTRUCTION STAKING REQUEST FORM.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK, AND FOR PROVIDING PROPER AND SAFE ROUTING OF THE VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO WORKING HOURS. THE USE OF FLAGGERS, BARRICADES AND CONSTRUCTION SIGNING SHALL COMPLY WITH THE CURRENT EDITION OF THE CALIFORNIA MUTCD.
4. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UTILITIES AND PROTECTING AND REPAIRING DAMAGE TO EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (1-800-642-2444) TWO WORKING DAYS PRIOR TO COMMENCING WORK.
5. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SEWER AND/OR DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE PROPOSED SEWER AND/OR DRAINAGE IMPROVEMENTS ARE PLACED AND FUNCTIONING.
6. THE RESIDENT ENGINEER SHALL DETERMINE THE EXACT LIMITS OF PAVEMENT REMOVAL IN THE FIELD. EXISTING ASPHALT AND CONCRETE SHALL BE SAWCUT IN A NEAT STRAIGHT LINE A MINIMUM OF 2-1/2" DEEP. THE EXPOSED VERTICAL EDGES SHALL BE TACKED WITH EMULSION PRIOR TO ASPHALT CONCRETE PAVING.
7. DEMOLITION OF EXISTING FEATURES SHALL BE LIMITED TO THE ITEMS SHOWN ON THE PLANS AND DESCRIBED IN THE SPECIAL PROVISIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE ALL EXISTING FEATURES DAMAGED BY HIS OPERATIONS, AT HIS EXPENSE.
8. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR PROTECTING EXISTING TREES NOT SCHEDULED TO BE REMOVED BY THIS CONTRACT. ANY TREE DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, AT HIS EXPENSE.
9. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR CAPPING AND RELOCATING EXISTING SPRINKLERS AS DIRECTED BY THE ENGINEER.
10. THE CONTRACTOR SHALL HAVE A CURRENT AND ACTIVE CLASS A – GENERAL ENGINEERING CONTRACTOR LICENSE ISSUED BY THE CCSLB AT THE TIME OF THE BID SUBMITTAL AND THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR, AND/OR SUBCONTRACTORS PERFORMING ELECTRICAL WORK, SHALL ALSO HAVE A CURRENT AND ACTIVE CLASS C10 – ELECTRICAL CONTRACTOR LICENSE ISSUED BY THE CCSLB AT THE TIME OF THE BID SUBMITTAL AND THROUGHOUT THE CONSTRUCTION PERIOD.
11. ALL CURB, GUTTER AND SIDEWALK SHOWN TO BE REMOVED SHALL BE REMOVED TO THE NEAREST EXPANSION JOINT OR SCORE MARK. DAMAGE TO EXISTING CURB, GUTTER, AND SIDEWALK WHICH IS SHOWN ON THE PLANS TO REMAIN, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
12. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY & HEALTH (2424 ARDEN WAY SUITE 165, SACRAMENTO, CA PHONE 263-2800) PRIOR TO ANY TRENCHING EXCAVATION 5 FEET OR MORE IN DEPTH. A COPY OF THIS PERMIT SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
13. REPLACEMENT OF LIVE SEWER SERVICES SHALL BE TO THE PROPERTY LINE. REPLACEMENT SEWER CLEANOUTS AND SERVICES SHALL HAVE THE SAME DIAMETER PIPE AS THE EXISTING, WITH THE EXCEPTION OF MAINTAINING A 4" MINIMUM DIAMETER.
14. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR PRESERVING ALL EXISTING MONUMENTS WHICH WILL BE DISTURBED OR REMOVED AS REQUIRED BY CONTRACTOR'S WORK. CONTRACTOR SHALL COORDINATE WITH ENGINEER/SURVEYOR PRIOR TO DISTURBANCE OF EXISTING MONUMENTS, AND SHALL HAVE A LICENSED LAND SURVEYOR RESET MONUMENTS, PROVIDE PERMANENT WITNESS MONUMENTS, AND FILE DOCUMENTATION WITH THE COUNTY SURVEYOR PURSUANT TO THE BUSINESS AND PROFESSIONS CODE.
15. THE CONTRACTOR, SUBCONTRACTOR OR SURVEYOR SHALL NOT CUT PERMANENT CROSSES INTO EXISTING CONCRETE CURBS, GUTTERS OR SIDEWALKS.
16. GUTTER SLOPES FROM THE FLOWLINE TO LIP SHALL BE 5% MAXIMUM FOR THE FULL-WIDTH OF ALL CURB RAMPS. THE 5% CROSS SLOPE SHALL TRANSITION TO THE STANDARD CURB AND GUTTER CROSS-SLOPE OVER A DISTANCE OF 3 FEET UNLESS NOTED OTHERWISE.
17. ANY NEW CONCRETE SURVEY MONUMENT (PER CITY STANDARD SPECIFICATION DETAIL) SHALL BE PLACED BY A LICENSED LAND SURVEYOR.

STANDARD ABBREVIATIONS

AB	— AGGREGATE BASE	(E) or EXIST	— EXISTING	PVC	— POLY VINYL CHLORIDE
AC	— ASPHALT CONCRETE	FH	— FIRE HYDRANT	R	— RADIUS
AP	— ANGLE POINT	FL	— FLOW LINE	RCP	— REINFORCED CONC. PIPE
AVE	— AVENUE	FM	— FORCE MAIN	RP	— RADIUS POINT
BLDG	— BUILDING	FOC	— FACE OF CURB	RT	— RIGHT
BC	— BEGIN CURVE	FOW	— FACE OF WALK	R/W, ROW	— RIGHT-OF-WAY
BOC	— BACK OF CURB	G	— GAS	S =	— SLOPE
BOW	— BACK OF WALK	GB	— GRADE BREAK	SD	— STORM DRAIN
CAB	— CABINET	GD	— GUTTER DRAIN	SDMH	— STORM DRAIN MH
C&G	— CURB AND GUTTER	GV	— GATE VALVE	SHT	— SHEET
CG&S	— CURB, GUTTER AND SIDEWALK	JP	— JOINT POLE	SNS	— STREET NAME SIGN
CL or ℄	— CENTER LINE	LF	— LINEAR FEET	SPECS	— SPECIFICATIONS
CMP	— CORROGATED METAL PIPE	LIP	— LIP OF GUTTER	SS	— SANITARY SEWER
C/O	— CLEANOUT	LT	— LEFT	SSMH	— SANITARY SEWER MH
CONC	— CONCRETE	MB	— MAIL BOX	ST	— STREET
CONST	— CONSTRUCT	MFR'S	— MANUFACTURE'S	STA	— STATION
CTV	— CABLE TV	MH	— MAINTENANCE HOLE	STD	— STANDARD
CR	— CURB RAMP	MAX, MIN	— MAXIMUM, MINIMUM	SW	— SIDEWALK
CS	— COMBINATION SYSTEM	N/A	— NOT APPLICABLE	T or TEL	— TELEPHONE
CSMH	— COMBINATION SYSTEM MH	No., #	— NUMBER	T.O.N.	— TOP OF NAIL
CUT	— CUTLINE	N.T.S.	— NOT TO SCALE	TOB	— TOP OF BANK
DB	— DITCH BOX	PB	— PULL BOX	TOE	— TOE OF SLOPE
DI	— DROP INLET	PG	— PROPOSED GRADE	T.O.P.	— TOP OF PIPE
DRWY	— DRIVEWAY	PI	— POINT OF INTERSECTION	TYP	— TYPICAL
DWG	— DRAWING	PL	— PROPERTY LINE	TS	— TRAFFIC SIGNAL
E or ELECT	— ELECTRICAL	PP	— POWER POLE	W	— WATER
EC	— END CURVE	PCC	— PORTLAND CEMENT CONCRETE	W/	— WITH
EG	— EXISTING GRADE	(P), PROP.	— PROPOSED	WKWY	— WALKWAY
EL or ELEV	— ELEVATION	PERF	— PERFORATED	WM	— WATER METER
EP, EOP	— EDGE OF PAVEMENT	PM	— PARKING METER	WV	— WATER VALVE

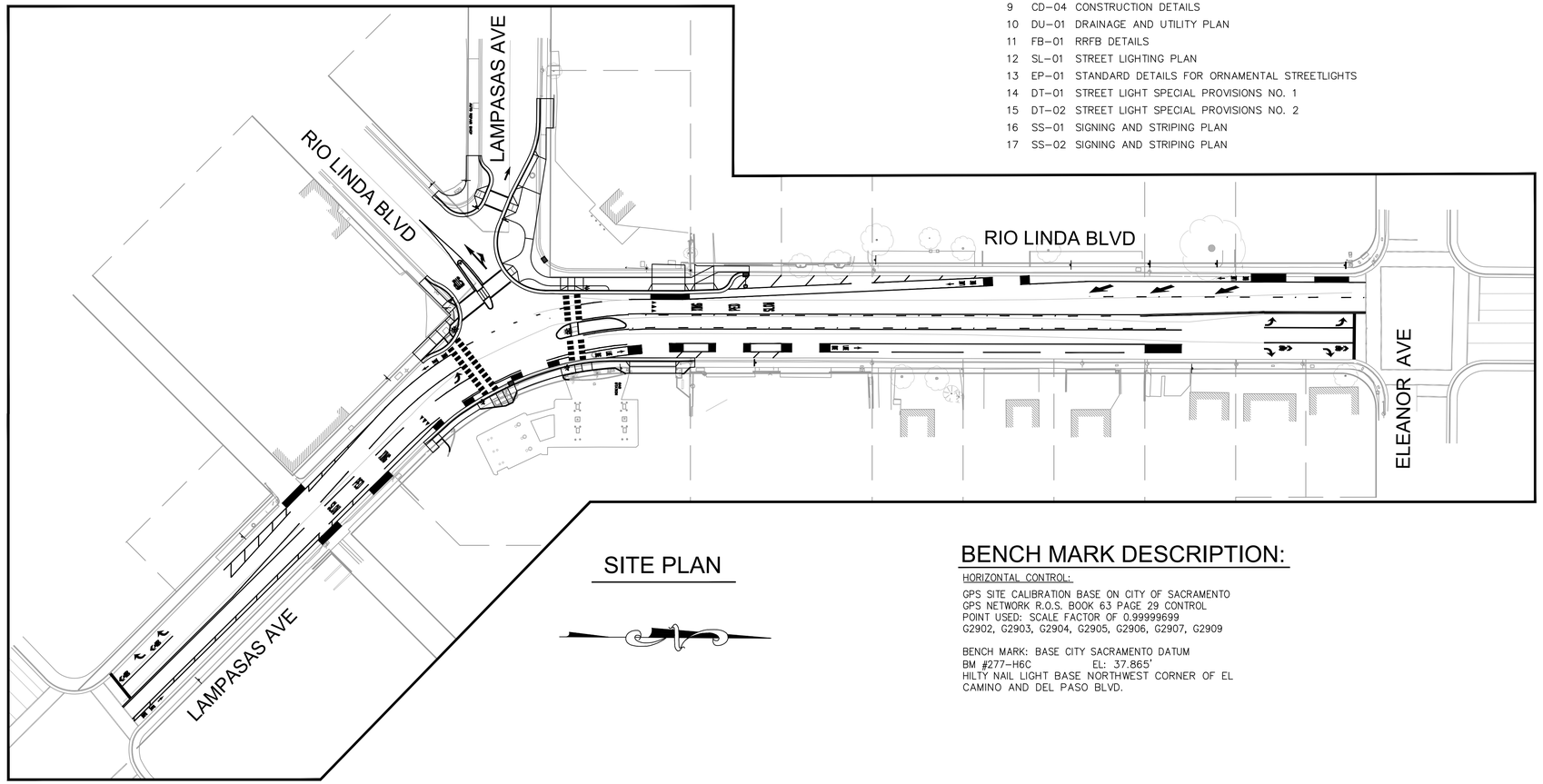
CITY OF SACRAMENTO

IMPROVEMENT PLANS FOR

LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENT PROJECT

APPROVED BY: _____ _____
JUDITH S. MATSUI-DRURY, R.C.E. 59096 — DATE
SUPERVISING ENGINEER
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: _____ _____
KALEB M HAILE, P.E. 15137 — DATE
SUPERVISING ENGINEER
DEPARTMENT OF PUBLIC WORKS



SITE PLAN

LOCATION MAP

INDEX OF SHEETS:

BENCH MARK DESCRIPTION:

HORIZONTAL CONTROL:

GPS SITE CALIBRATION BASE ON CITY OF SACRAMENTO
GPS NETWORK R.O.S. BOOK 63 PAGE 29 CONTROL
POINT USED: SCALE FACTOR OF 0.99999699
G2902, G2903, G2904, G2905, G2906, G2907, G2909

BENCH MARK: BASE CITY SACRAMENTO DATUM
BM #277-H6C EL: 37.865'
HILTY NAIL LIGHT BASE NORTHWEST CORNER OF EL CAMINO AND DEL PASO BLVD.

REVISIONS

NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.865'
DESCRIPTION: HILTY NAIL IN LIGHT BASE AT NORTHWEST CORNER OF EL CAMINO AND DEL PASO.

FIELD BOOK: 1476

SCALE: HORIZ. _____ VERT. _____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: _____ DATE _____
DESIGN BY: _____ R.C.E. _____ DATE _____
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IMPROVEMENT PLANS FOR
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COVER SHEET

PN: 097186043

DWG. NO. CV-01

SHEET 1 OF 17

PLOT STAMP:

DATUM

VERTICAL DATUM: CITY OF SACRAMENTO NAVD 88

BENCHMARK: BM 277–H6C, HILTI NAIL

LOCATED IN TRAFFIC LIGHT BASE NORTHWEST CORNER OF EL CAMINO AND DEL PASO BLVD.

ELEVATION = 37.865'

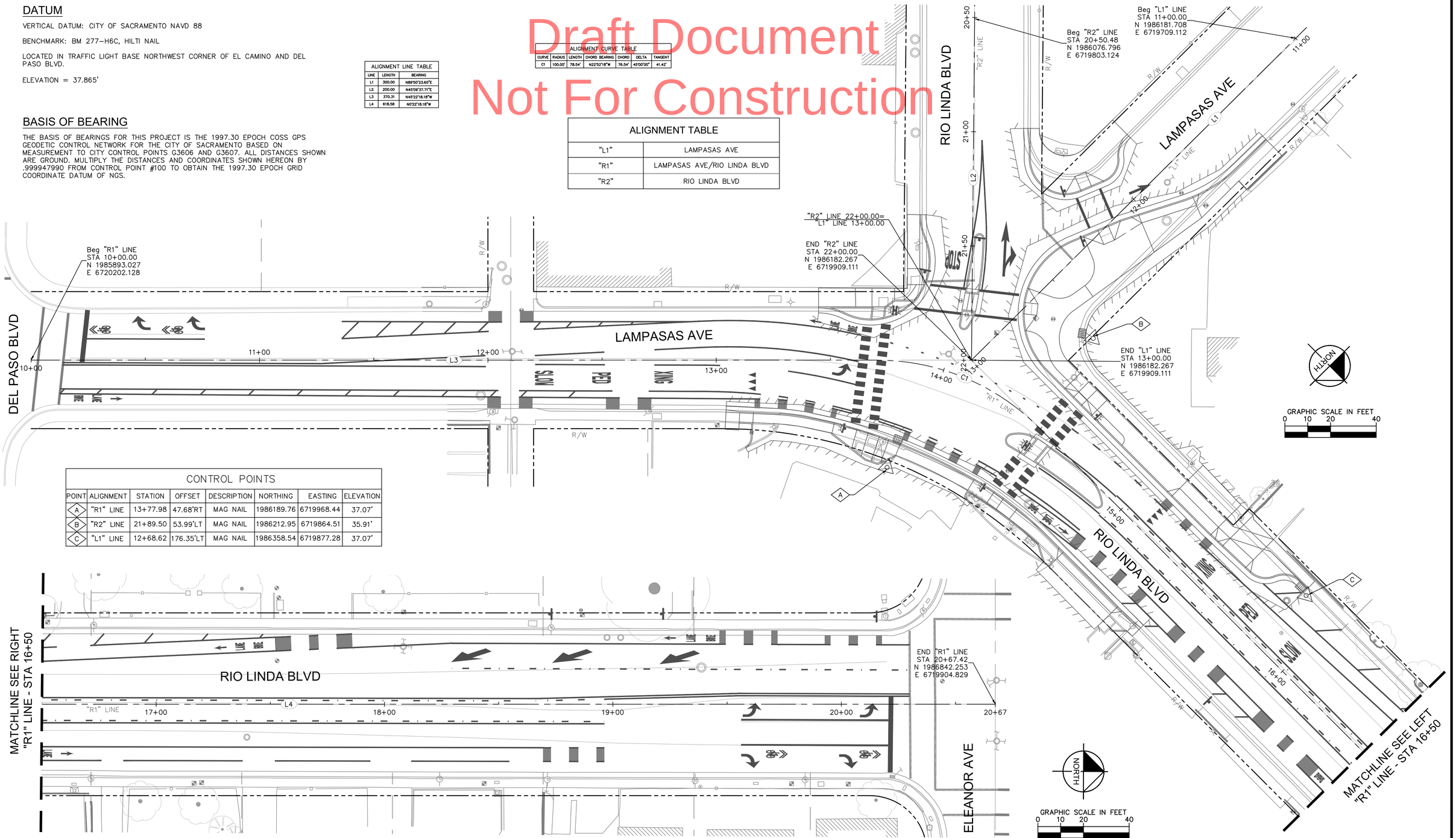
BASIS OF BEARING

THE BASIS OF BEARINGS FOR THIS PROJECT IS THE 1997.30 EPOCH COSS GPS GEODETIC CONTROL NETWORK FOR THE CITY OF SACRAMENTO BASED ON MEASUREMENT TO CITY CONTROL POINTS G3606 AND G3607. ALL DISTANCES SHOWN ARE GROUND. MULTIPLY THE DISTANCES AND COORDINATES SHOWN HEREON BY .999947990 FROM CONTROL POINT #100 TO OBTAIN THE 1997.30 EPOCH GRID COORDINATE DATUM OF NGS.

ALIGNMENT LINE TABLE		
LINE	LENGTH	BEARING
L1	300.00	N89°50'23.60"E
L2	200.00	N45°09'37.71"E
L3	370.31	N45°22'18.18"W
L4	618.58	N0°22'18.18"W

ALIGNMENT CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	100.00'	78.54'	N22°52'18"W	76.54'	45°00'00"	41.42'

ALIGNMENT TABLE	
"L1"	LAMPASAS AVE
"R1"	LAMPASAS AVE/RIO LINDA BLVD
"R2"	RIO LINDA BLVD



CONTROL POINTS							
POINT	ALIGNMENT	STATION	OFFSET	DESCRIPTION	NORTHING	EASTING	ELEVATION
A	"R1" LINE	13+77.98	47.68'RT	MAG NAIL	1986189.76	6719968.44	37.07'
B	"R2" LINE	21+89.50	53.99'LT	MAG NAIL	1986212.95	6719864.51	35.91'
C	"L1" LINE	12+68.62	176.35'LT	MAG NAIL	1986358.54	6719877.28	37.07'

CAD FILE:

REVISIONS			
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FIELD BOOK 1476

SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

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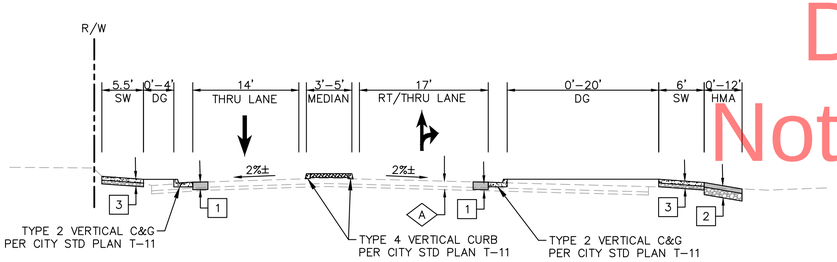
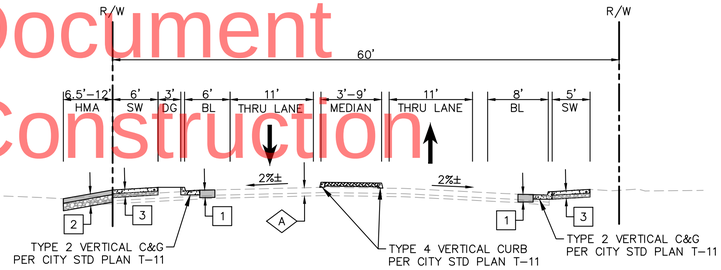
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
HORIZONTAL CONTROL

PN: 097186043

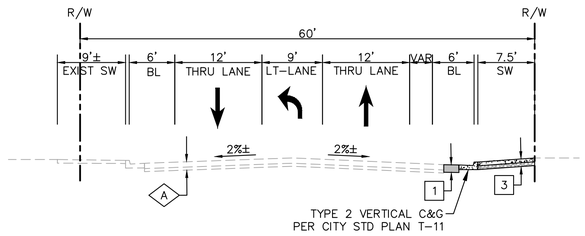
DWG. NO. HC-01
SHEET 2 OF 17



SECTION B-B
RIO LINDA BLVD SOUTHWEST LEG
NTS

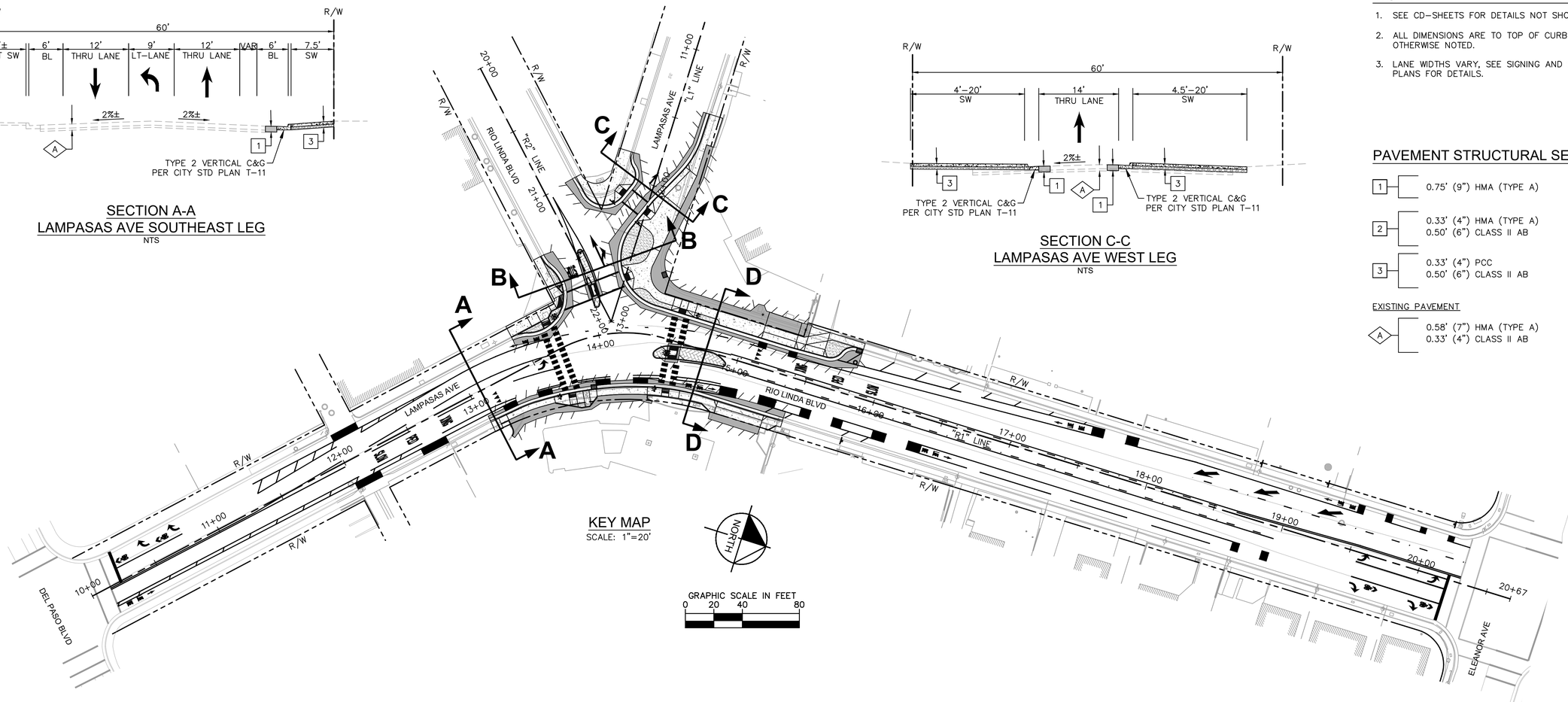


SECTION D-D
RIO LINDA BLVD NORTH LEG
NTS



SECTION A-A
LAMPASAS AVE SOUTHEAST LEG
NTS

SECTION C-C
LAMPASAS AVE WEST LEG
NTS



KEY MAP
SCALE: 1"=20'

GRAPHIC SCALE IN FEET
0 20 40 80

LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE (DG)
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- AGGREGATE BASE
- SAWCUT
- RIGHT-OF-WAY

NOTES

1. SEE CD-SHEETS FOR DETAILS NOT SHOWN HERE.
2. ALL DIMENSIONS ARE TO TOP OF CURB (TC) UNLESS OTHERWISE NOTED.
3. LANE WIDTHS VARY, SEE SIGNING AND STRIPING PLANS FOR DETAILS.

PAVEMENT STRUCTURAL SECTIONS

1. 0.75' (9") HMA (TYPE A)
2. 0.33' (4") HMA (TYPE A)
   0.50' (6") CLASS II AB
3. 0.33' (4") PCC
   0.50' (6") CLASS II AB

EXISTING PAVEMENT

A. 0.58' (7") HMA (TYPE A)
   0.33' (4") CLASS II AB

PLOT STAMP:

CAD FILE:

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.865'
DESCRIPTION
HILTY NAIL IN LIGHT BASE AT NORTHWEST CORNER OF EL CAMINO AND DEL PASO.

FIELD BOOK 1476
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VERT. ____

CITY OF SACRAMENTO
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IMPROVEMENT PLANS FOR
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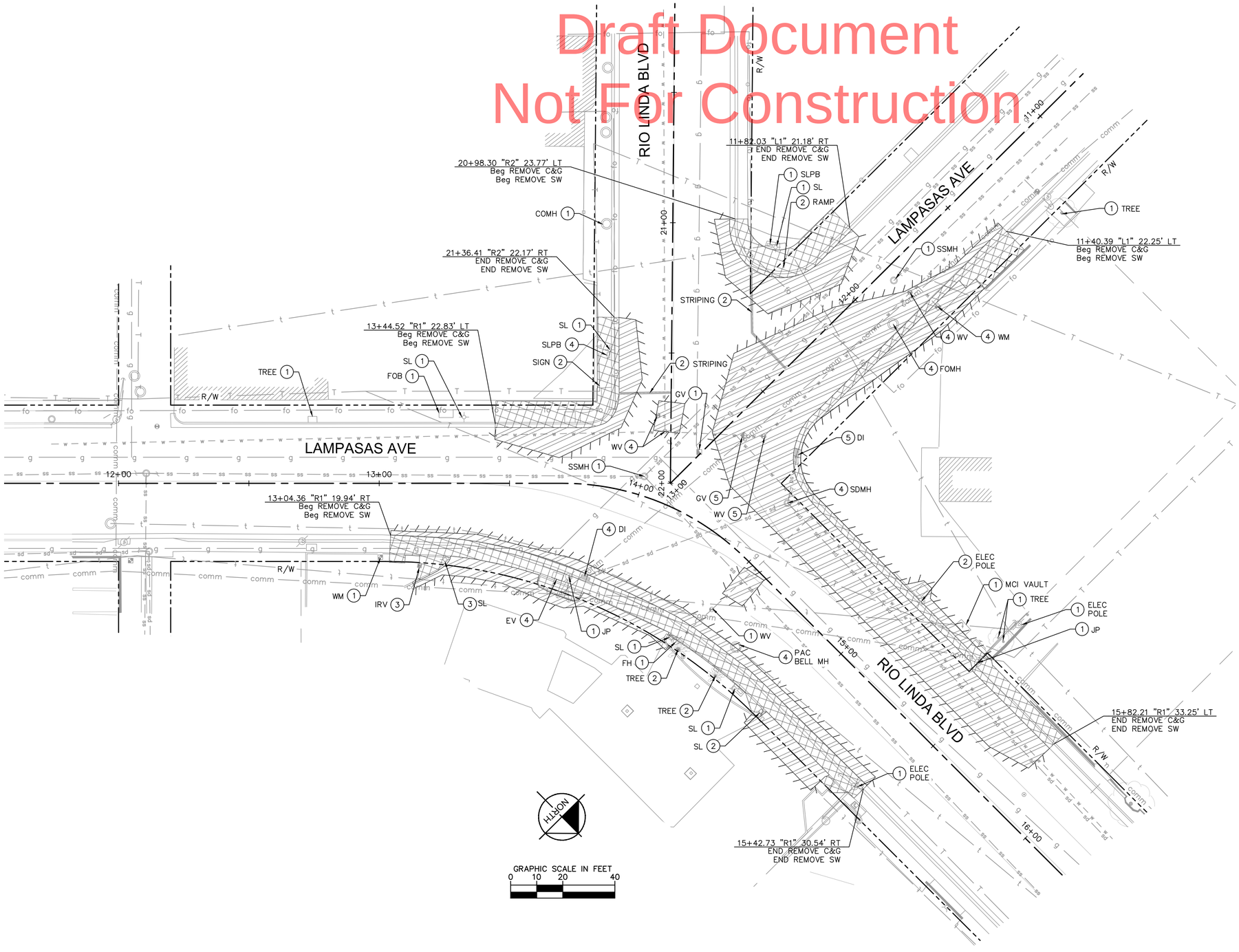
TYPICAL SECTIONS

PN: 097186043
DWG. NO. TX-01
SHEET 3 OF 17

PLOT STAMP:



LEGEND

- REMOVE EXISTING HMA PAVEMENT
- REMOVE EXISTING CONCRETE
- SAWCUT
- RIGHT–OF–WAY
- ss — EXISTING SANITARY SEWER LINE
- g — EXISTING GAS LINE
- fo — EXISTING FIBER OPTIC LINE
- comm — EXISTING COMMUNICATIONS LINE
- T — EXISTING TELEPHONE LINE
- t — EXISTING OVERHEAD TELEPHONE LINE
- w — EXISTING WATER LINE
- sd — EXISTING STORM DRAIN LINE

DEMOLITION NOTES

1. EXISITING TO REMAIN.
2. REMOVE.
3. RELOCATE.
4. ADJUST TO GRADE.
5. RECONSTRUCT TO FIELD INLET.

CAD FILE:

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FIELD BOOK 1476

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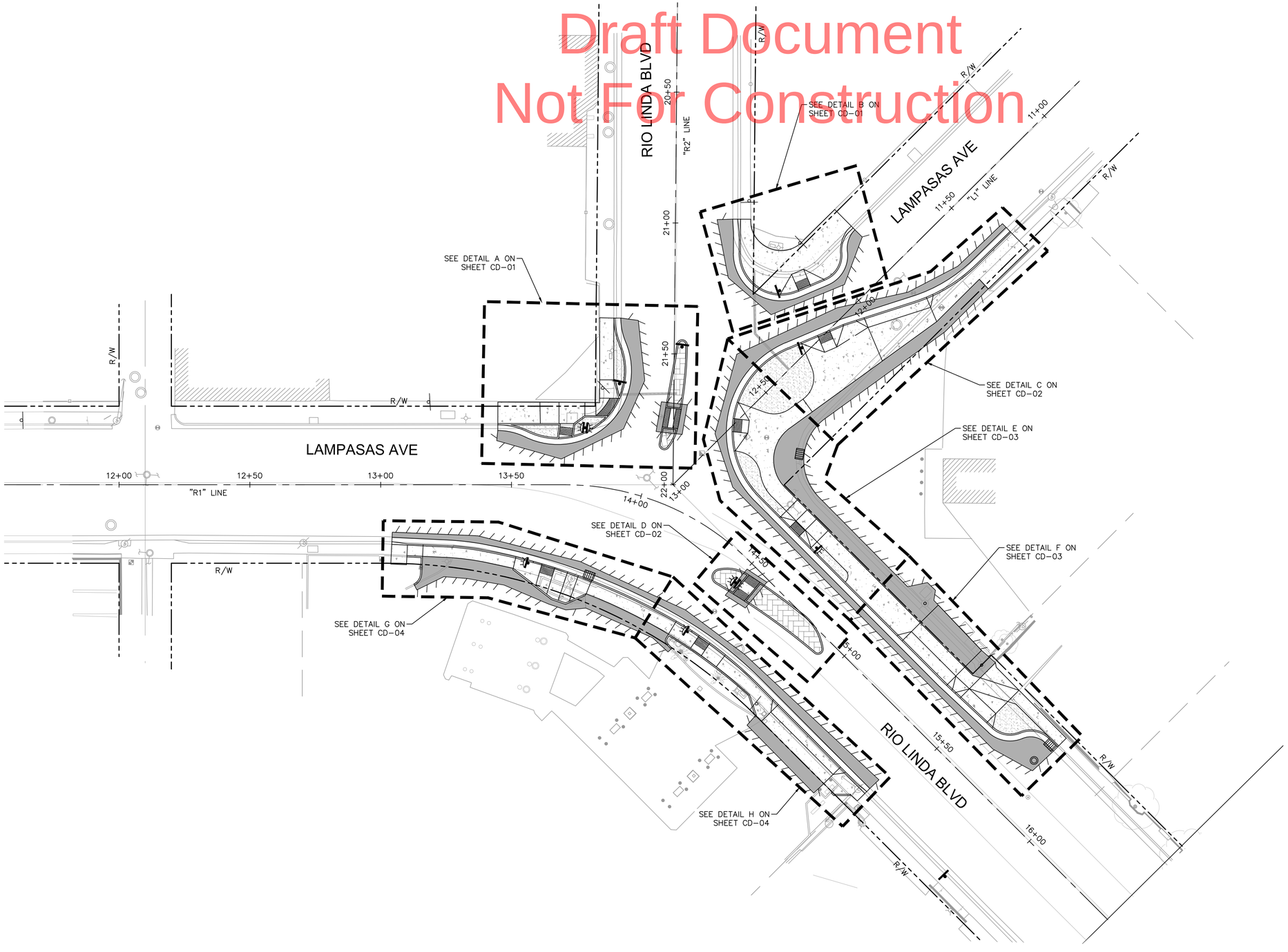
DEMOLITION PLANS

PN: 097186043

DWG. NO. DM-01
SHEET 4 OF 17

PLOT STAMP:



LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY

NOTES

1. SEE SHEET TX-01 FOR ADDITIONAL NOTES.
2. SEE SHEETS CD-01 THROUGH CD-04 FOR MEDIAN AND CURB RAMP DETAILS.
3. ANY UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF SURFACE IMPROVEMENTS.
4. CONTRACTOR SHALL VERIFY AND LOCATE ALL EXISTING UNDERGROUND UTILITIES BEFORE CONSTRUCTION AND PROTECT IN PLACE UNLESS OTHERWISE NOTED.
5. ANY EXISTING STRUCTURE, IMPROVEMENT, OR APPURTENANCE TO REMAIN THAT IS DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE ENGINEER.

GRAPHIC SCALE IN FEET
0 10 20 40

CAD FILE:

REVISIONS NO.	DESCRIPTION	DATE	BY

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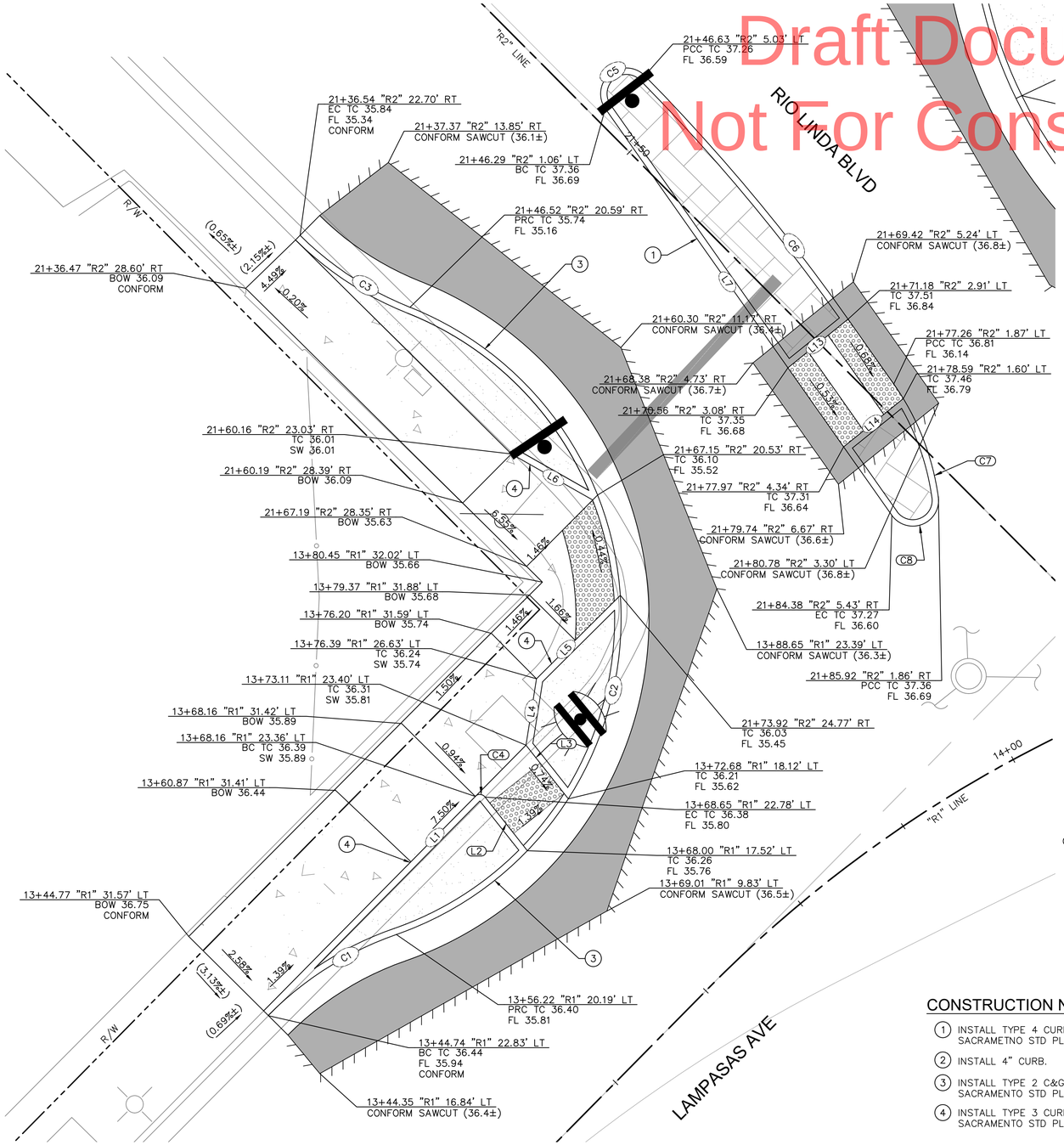
IMPROVEMENT PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
LAYOUT PLAN

PN: 097186043

DWG. NO. L-01

SHEET 5 OF 17



CURVE TABLE

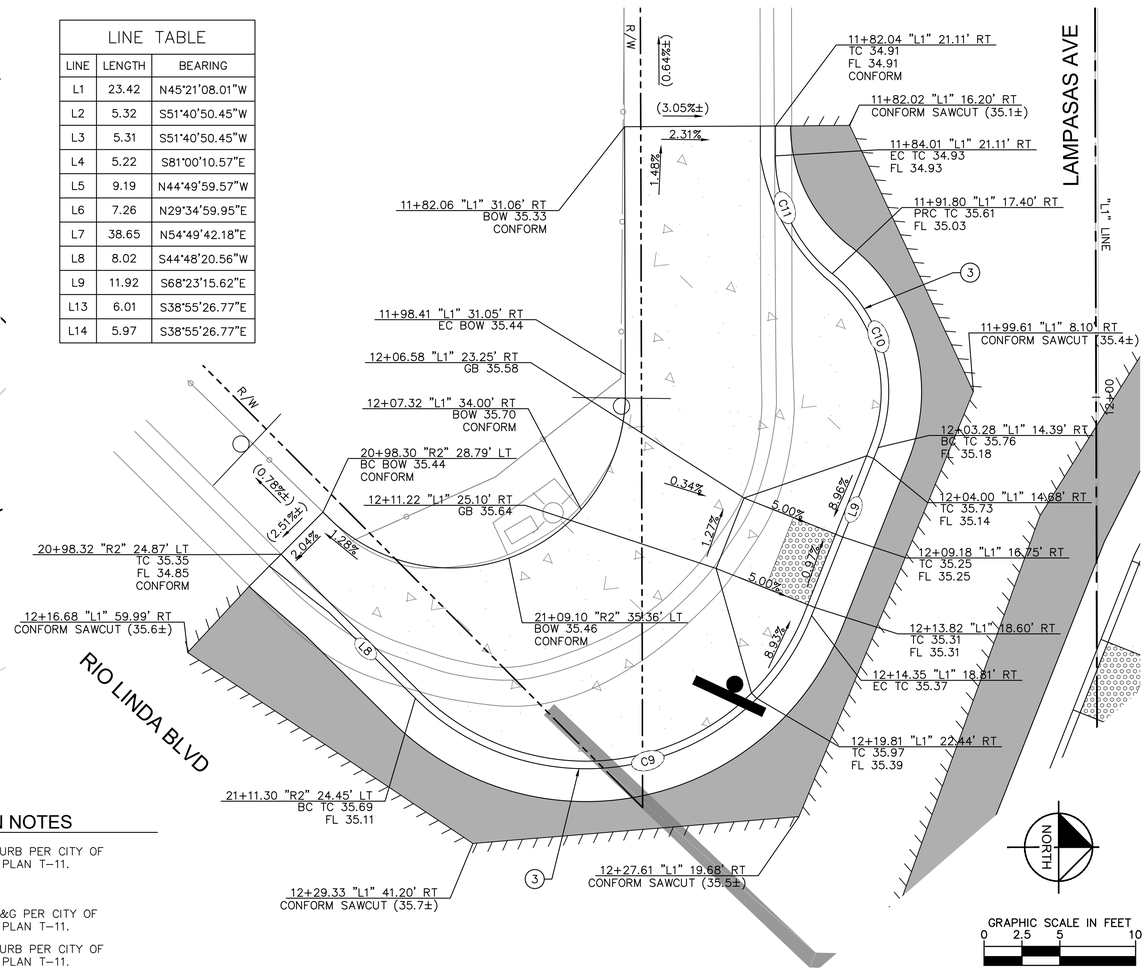
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	26.00'	11.89'	S32°15'13"E	11.78'	26°11'50"	6.05'
C2	26.00'	63.17'	N88°45'24"W	48.74'	139°12'13"	69.92'
C3	25.50'	10.28'	N33°11'10"E	10.21'	23°05'21"	5.21'
C4	0.50'	0.85'	S3°09'51"W	0.75'	97°01'58"	0.57'
C5	2.00'	5.95'	S39°54'10"E	3.99'	170°32'16"	24.17'
C6	149.00'	24.61'	S50°05'50"W	24.58'	9°27'44"	12.33'
C7	20.00'	9.52'	S68°27'41"W	9.43'	27°15'58"	4.85'
C8	2.00'	5.33'	N21°32'19"W	3.89'	152°44'02"	8.25'
C9	16.00'	31.61'	N11°47'28"W	26.71'	113°11'36"	24.26'
C10	10.00'	12.71'	S75°11'45"W	11.87'	72°49'58"	7.38'
C11	10.00'	8.92'	N64°19'47"E	8.63'	51°06'00"	4.78'

LINE TABLE

LINE	LENGTH	BEARING
L1	23.42	N45°21'08.01"W
L2	5.32	S51°40'50.45"W
L3	5.31	S51°40'50.45"W
L4	5.22	S81°00'10.57"E
L5	9.19	N44°49'59.57"W
L6	7.26	N29°34'59.95"E
L7	38.65	N54°49'42.18"E
L8	8.02	S44°48'20.56"W
L9	11.92	S68°23'15.62"E
L13	6.01	S38°55'26.77"E
L14	5.97	S38°55'26.77"E

LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY



CONSTRUCTION NOTES

1. INSTALL TYPE 4 CURB PER CITY OF SACRAMETNO STD PLAN T-11.
2. INSTALL 4" CURB.
3. INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T-11.
4. INSTALL TYPE 3 CURB PER CITY OF SACRAMENTO STD PLAN T-11.

DETAIL A
SCALE: 1"=5'

DETAIL B
SCALE: 1"=5'

GRAPHIC SCALE IN FEET
0 2.5 5 10

NORTH

PLOT STAMP:

CAD FILE:

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.865'
DESCRIPTION
HILTY NAIL IN LIGHT BASE AT NORTHWEST CORNER OF EL CAMINO AND DEL PASO.

FIELD BOOK 1476

SCALE
HORIZ. _____
VERT. _____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: _____ DATE _____
DESIGN BY: _____ R.C.E. _____ DATE _____
CHECKED BY: _____ R.C.E. _____ DATE _____

65% NOT FOR CONSTRUCTION

Kimley»Horn

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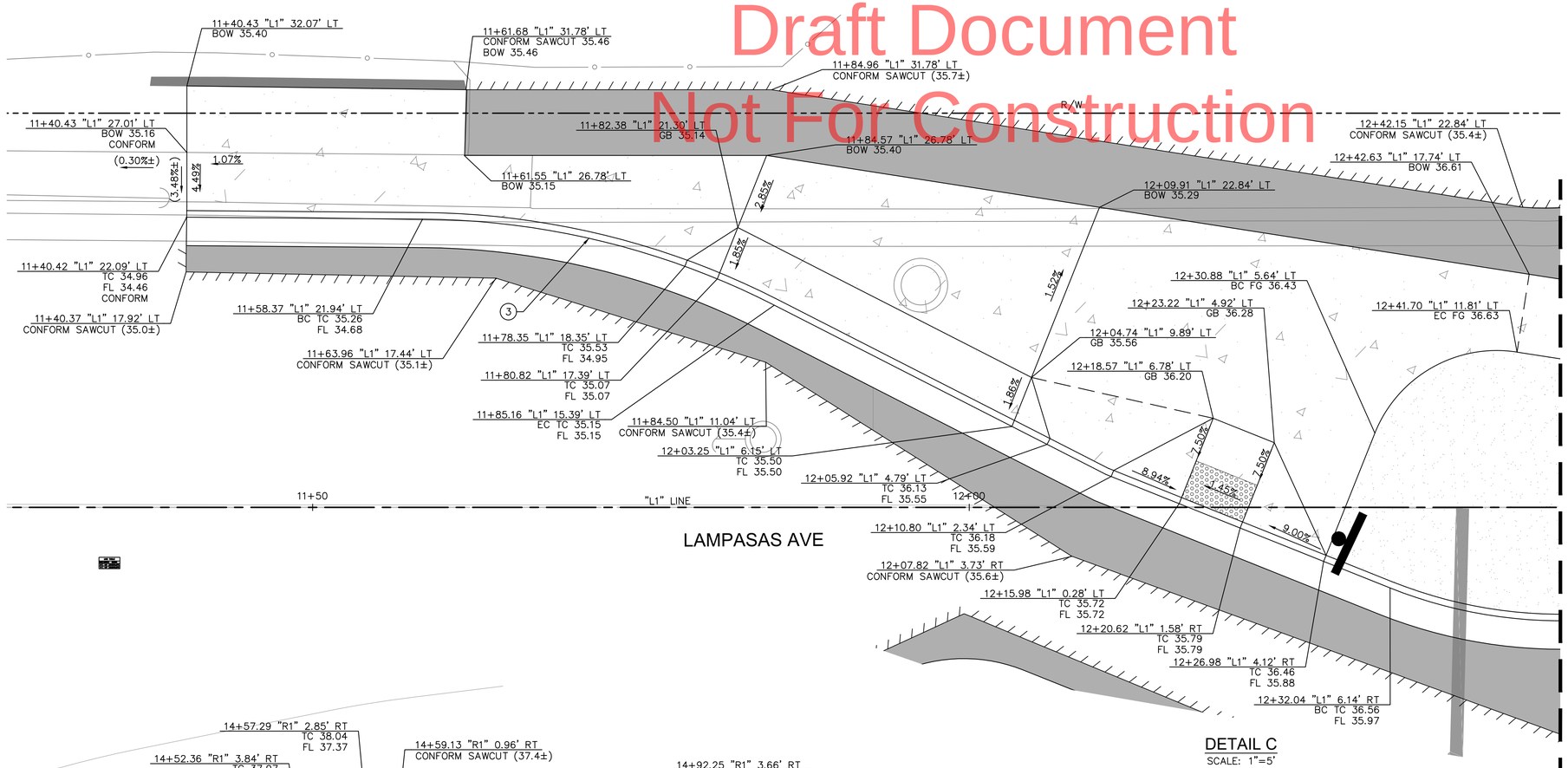
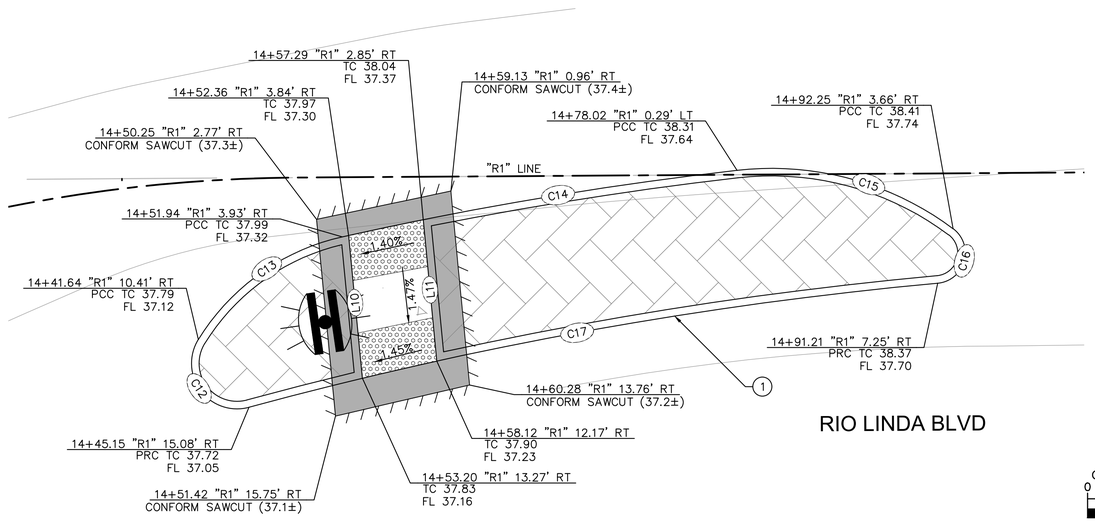
IMPROVEMENT PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
CONSTRUCTION DETAILS

PN: 097186043

DWG. NO. CD-01
SHEET 6 OF 17



DETAIL C
SCALE: 1"=5'



DETAIL D
SCALE: 1"=5'

LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY

CONSTRUCTION NOTES

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2. INSTALL 4" CURB.
3. INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T-11.
4. INSTALL TYPE 3 CURB PER CITY OF SACRAMENTO STD PLAN T-11.

PLOT STAMP:

CAD FILE:

REVISIONS NO.	DESCRIPTION	DATE	BY

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FIELD BOOK 1476

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HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

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CONSTRUCTION DETAILS

PN: 097186043
DWG. NO. CD-02
SHEET 7 OF 17

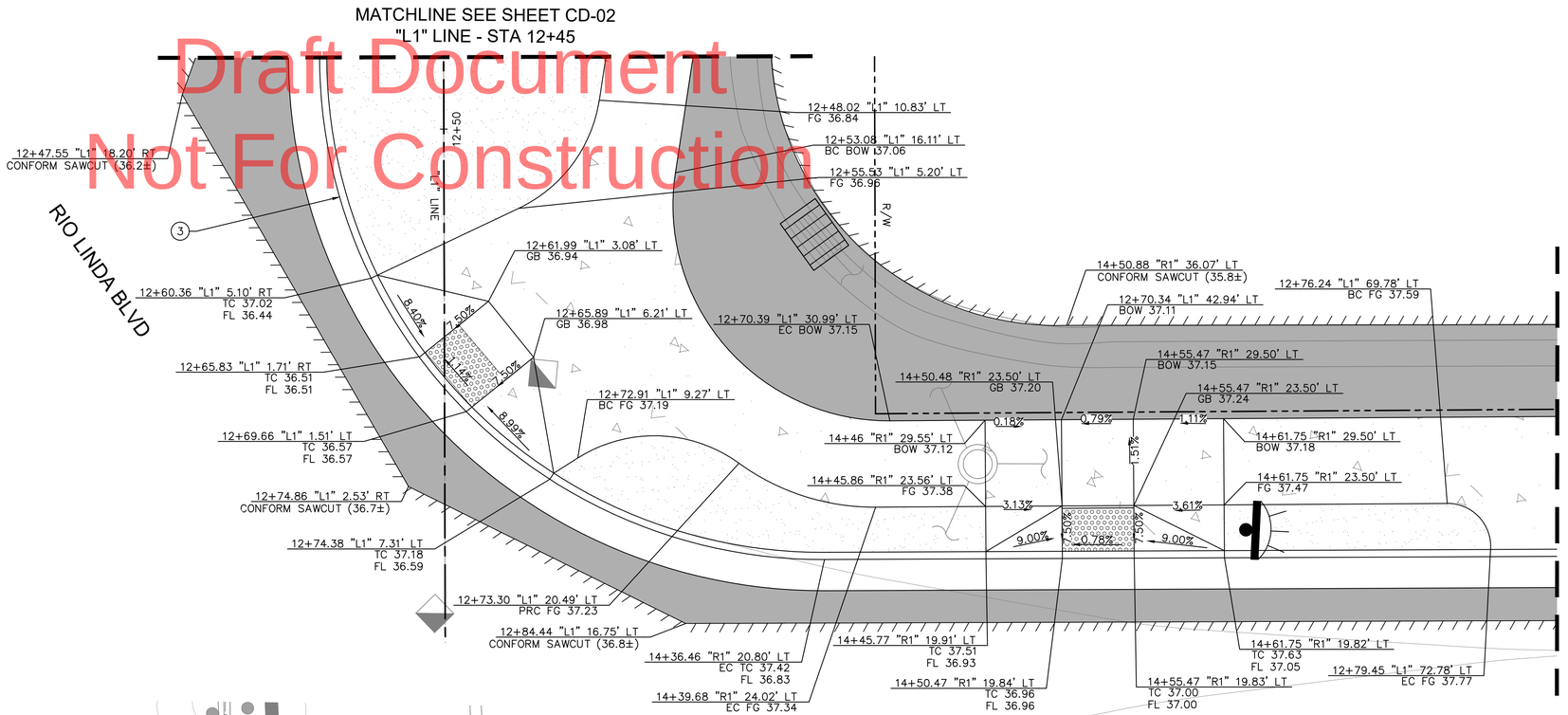
PLOT STAMP:

LEGEND

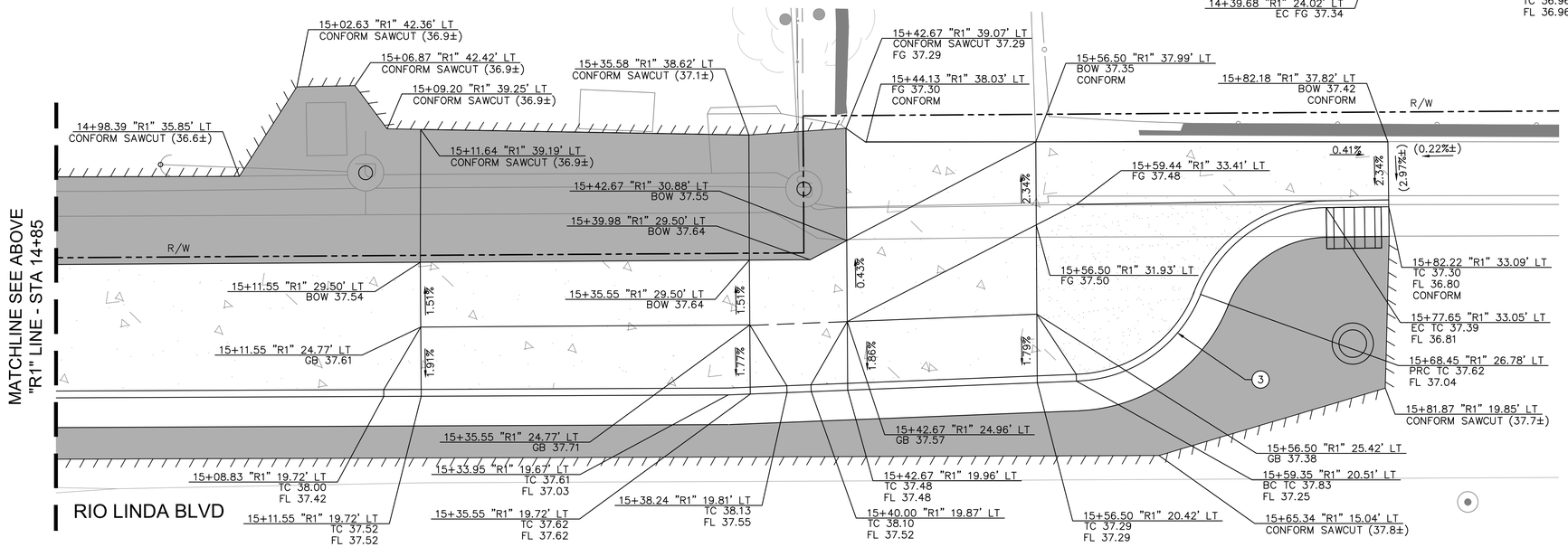
- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT–OF–WAY

CONSTRUCTION NOTES

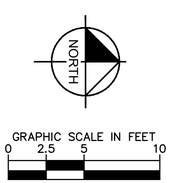
1. INSTALL TYPE 4 CURB PER CITY OF SACRAMETNO STD PLAN T–11.
2. INSTALL 4" CURB.
3. INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T–11.
4. INSTALL TYPE 3 CURB PER CITY OF SACRAMENTO STD PLAN T–11.



DETAIL E
SCALE: 1"=5'



DETAIL F
SCALE: 1"=5'



GRAPHIC SCALE IN FEET
0 2.5 5 10

CAD FILE:

REVISIONS NO.	DESCRIPTION	DATE	BY

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IMPROVEMENT PLANS FOR
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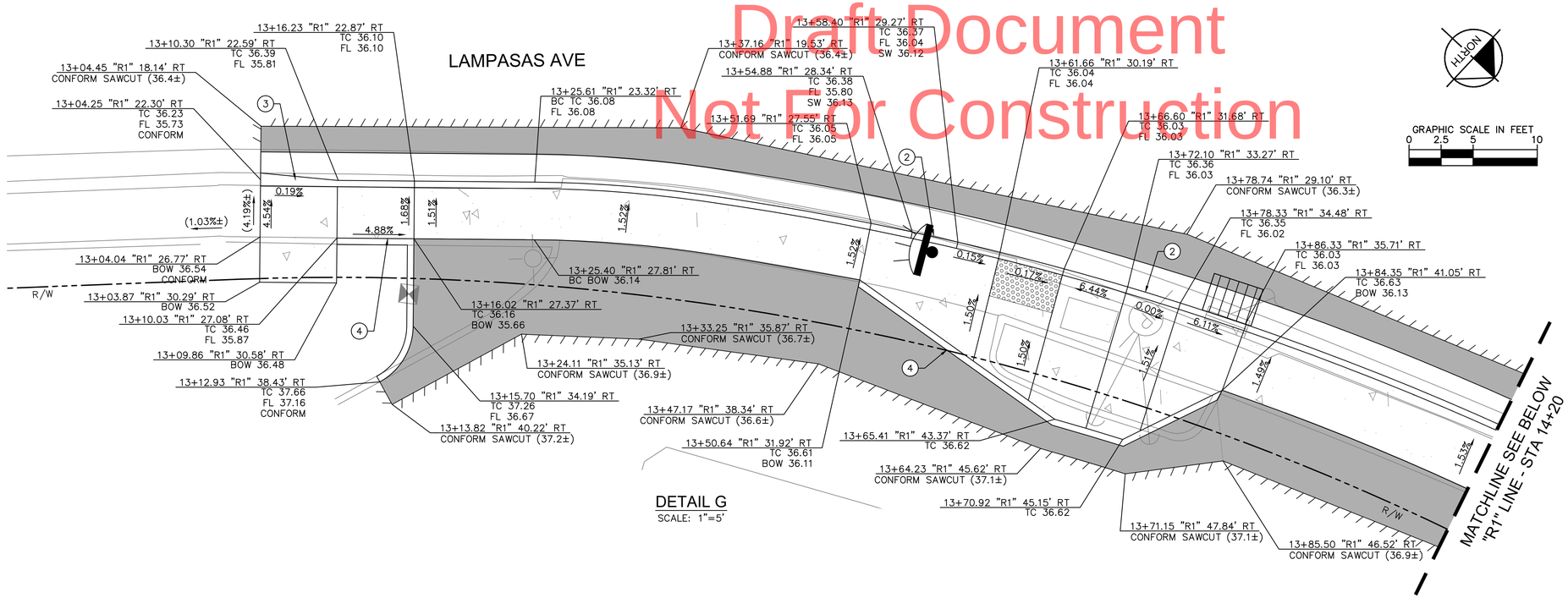
CONSTRUCTION DETAILS

PN: 097186043
DWG. NO. CD-03
SHEET 8 OF 17



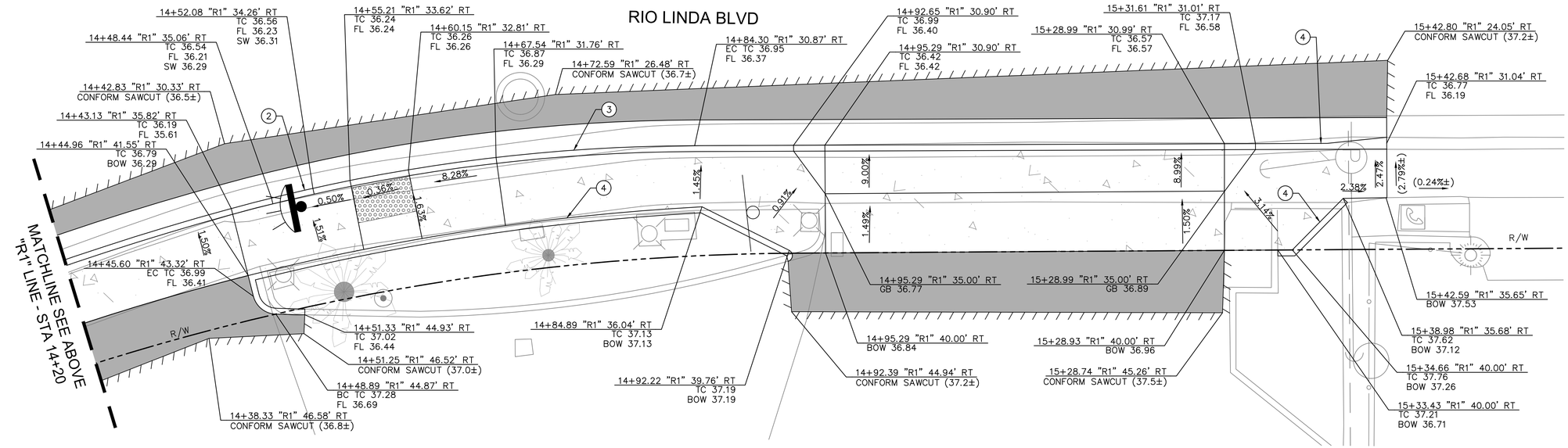
DETAIL G
SCALE: 1"=5'

LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY

CONSTRUCTION NOTES

1. INSTALL TYPE 4 CURB PER CITY OF SACRAMETNO STD PLAN T-11.
2. INSTALL 4" CURB.
3. INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T-11.
4. INSTALL TYPE 3 CURB PER CITY OF SACRAMENTO STD PLAN T-11.



DETAIL H
SCALE: 1"=5'

REVISIONS			
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VERT. ____

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IMPROVEMENT PLANS FOR
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CONSTRUCTION DETAILS

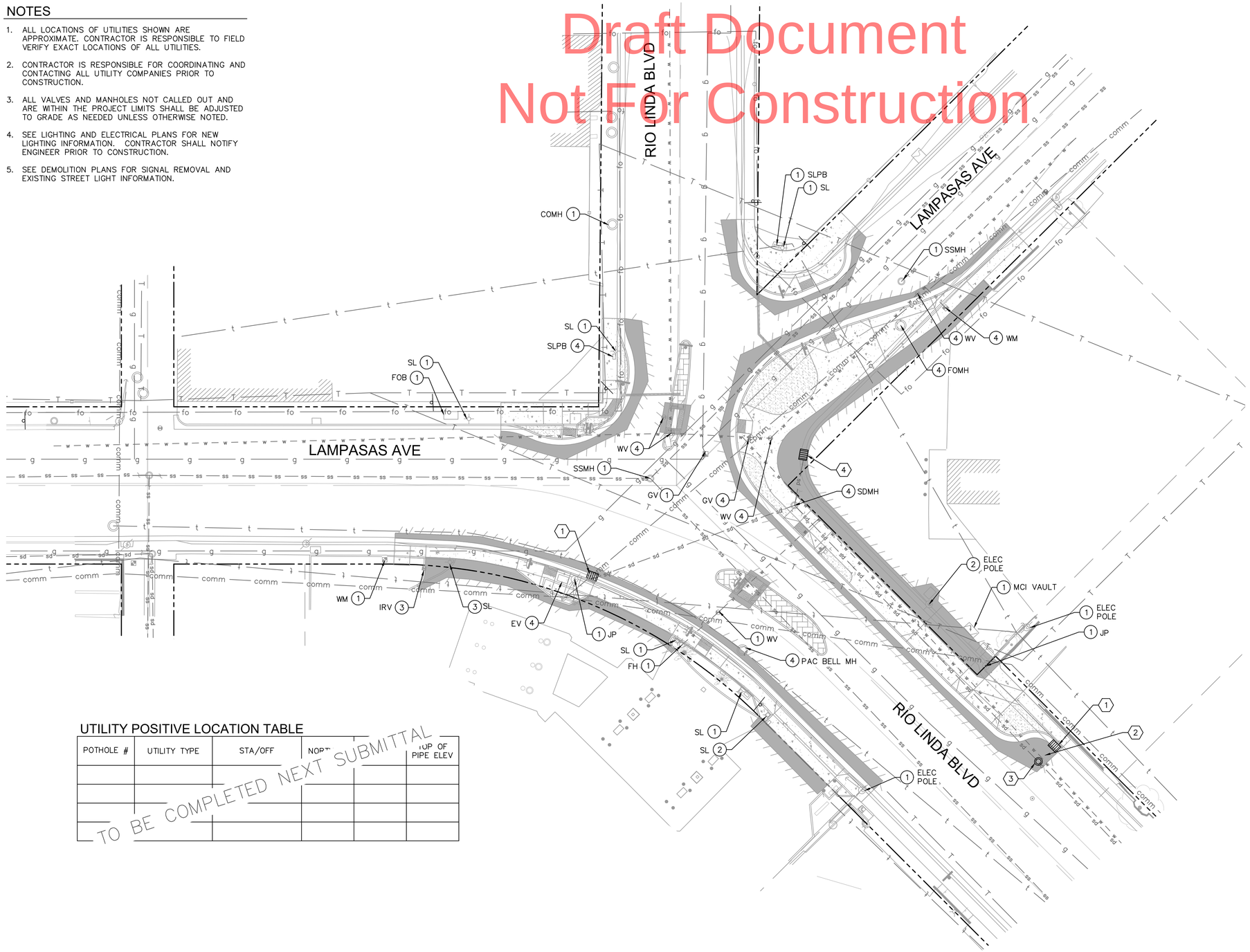
PN: 097186043
DWG. NO. CD-04
SHEET 9 OF 17

PLOT STAMP:
CAD FILE:

PLOT STAMP:

NOTES

1. ALL LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXACT LOCATIONS OF ALL UTILITIES.
2. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND CONTACTING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION.
3. ALL VALVES AND MANHOLES NOT CALLED OUT AND ARE WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO GRADE AS NEEDED UNLESS OTHERWISE NOTED.
4. SEE LIGHTING AND ELECTRICAL PLANS FOR NEW LIGHTING INFORMATION. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION.
5. SEE DEMOLITION PLANS FOR SIGNAL REMOVAL AND EXISTING STREET LIGHT INFORMATION.



UTILITY POSITIVE LOCATION TABLE

POTHOLE #	UTILITY TYPE	STA/OFF	NORT	TOP OF PIPE ELEV

TO BE COMPLETED NEXT SUBMITTAL

LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY
- ss — EXISTING 12" SANITARY SEWER LINE
- g — EXISTING 2" GAS LINE
- fo — EXISTING FIBER OPTIC LINE
- comm — EXISTING COMMUNICATIONS LINE
- T — EXISTING TELEPHONE LINE
- t — EXISTING OVERHEAD TELEPHONE LINE
- w — EXISTING 6" WATER LINE
- sd — EXISTING 18" STORM DRAIN LINE
- EXISTING STREET LIGHT
- EXISTING MANHOLE
- EXISTING WATER VALVE

DRAINAGE NOTES

1. INSTALL TYPE "B" DRAINAGE INLET PER CITY OF SACRAMENTO STD PLAN S-10.
2. INSTALL NEW CONNECTION TO EXISTING WATER MAIN.
3. INSTALL STANDARD STORM DRAIN MANHOLE PER CITY OF SACRAMENTO STD PLAN S-140.
4. RECONSTRUCT INLET TOP TO FIELD INLET PER CITY STD S-45.

UTILITY NOTES

1. EXISITING TO REMAIN.
2. REMOVE.
3. RELOCATE.
4. ADJUST TO GRADE.

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

CAD FILE:

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IMPROVEMENT PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
DRAINAGE AND UTILITY PLANS

PN: 097186043
DWG. NO. DU-01
SHEET 10 OF 17

RRFB POLE AND EQUIPMENT SCHEDULE

INSTALLATION NUMBER	STANDARD TYPE	STANDARD HEIGHT	PPB	SIGNS	RRFB	ADDITIONAL EQUIPMENT
(A)	1–B	15'		2 x W11–2 W16–7P(RIGHT) W16–7P(LEFT)	2	RRFB CONTROL ENCLOSURE
(B)	1–B	15'		W11–2 W16–7P(LEFT)	1	
(C)	1–B	15'		W11–2 W16–7P(LEFT)	1	
(D)	1–B	15'		2 x W11–2 W16–7P(RIGHT) W16–7P(LEFT)	2	
(E)	1–B	15'		W11–2 W16–7P(LEFT)	1	RRFB CONTROL ENCLOSURE.

ELECTRICAL NOTES

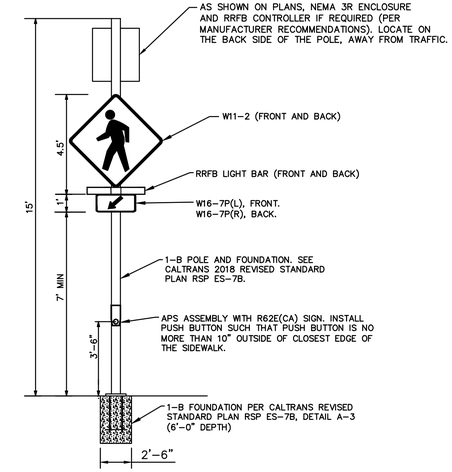
1. FURNISH AND INSTALL RRFB ASSEMBLY PER DETAIL 'A' THIS SHEET.
2. FURNISH AND INSTALL RRFB ASSEMBLY PER DETAIL 'B' THIS SHEET.

LEGEND

- CARMANAH SC315–G RECTANGULAR RAPID FLASHING BEACON POLE ASSEMBLY. SEE DETAIL 'A' OR 'B'. THIS SHEET.
- RRFB CONTROL ENCLOSURE
- PROPOSED #5 PULL BOX

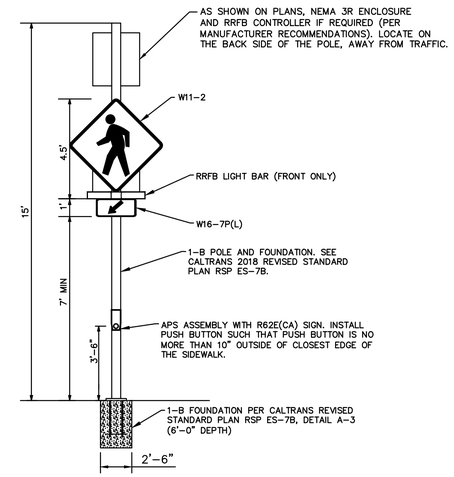
NOTES

1. CONTRACTOR TO CONFIRM RRFB PLACEMENT WITH ENGINEER. CONFIRM VERTICAL CLEARANCE FROM UTILITY CONFLICTS.
2. RRFB PLACEMENT TO MAINTAIN 1.5' MINIMUM CLEARANCE FROM FACE OF CURB, 4' PREFERRED CLEARANCE FROM BACK OF WALK, AND 10" MAXIMUM OFFSET FROM CROSSWALK PER ADA REQUIREMENTS
3. CONTRACTOR TO RESTORE MEDIAN AND SIDEWALK DAMAGES AS A RESULT OF RRFB CALTRANS 1–B FOUNDATION INSTALLATION.



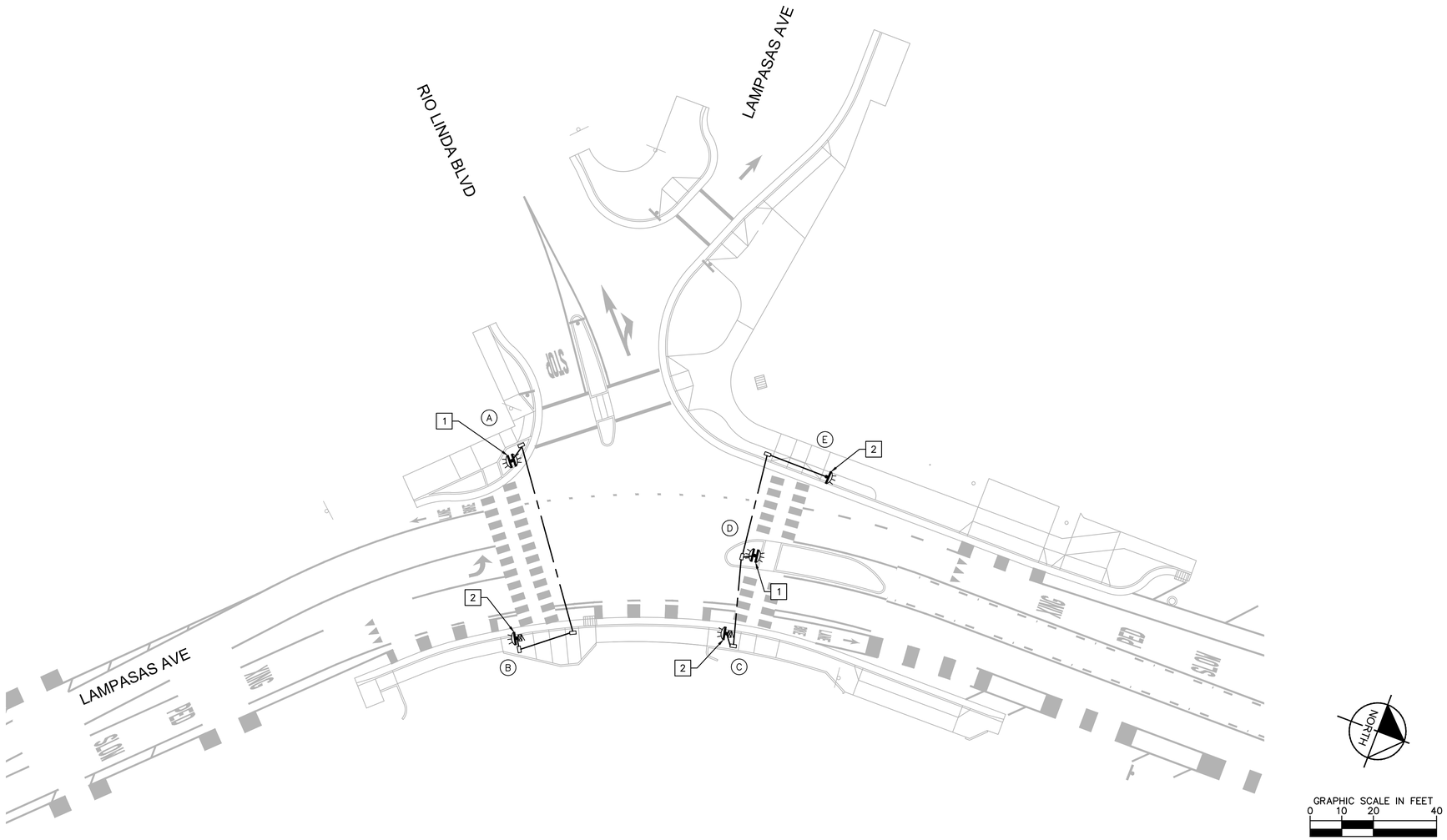
DETAIL 'A'
RRFB ASSEMBLY ON 1-B POLE

N.T.S.



DETAIL 'B'
RRFB ASSEMBLY ON 1-B POLE

N.T.S.



GRAPHIC SCALE IN FEET
0 10 20 40

PLOT STAMP:

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IMPROVEMENT PLANS FOR
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RRFB DETAILS

PN: 097186043

DWG. NO. FB-01

SHEET 11 OF 17

LUMINAIRE SCHEDULE

SERVICE No. XXXX

EX. SERVICE No. XXXX (120/240V) LOCATION TO BE DETERMINED NEXT SUBMITTAL. CONNECT NEW LUMINAIRES TO 120 VOLT CIRCUIT.

CIRCUIT NUMBER	EX 110W LED MAST ARM	EX 34W LED ACORN ORNAMENTAL	PROP 71W LED MAST ARM	PROP 34W LED ACORN ORNAMENTAL
#	1	3	–	–
2	–	–	1	1
3	–	–	1	1
TOTAL:	1	3	2	2

LEGEND

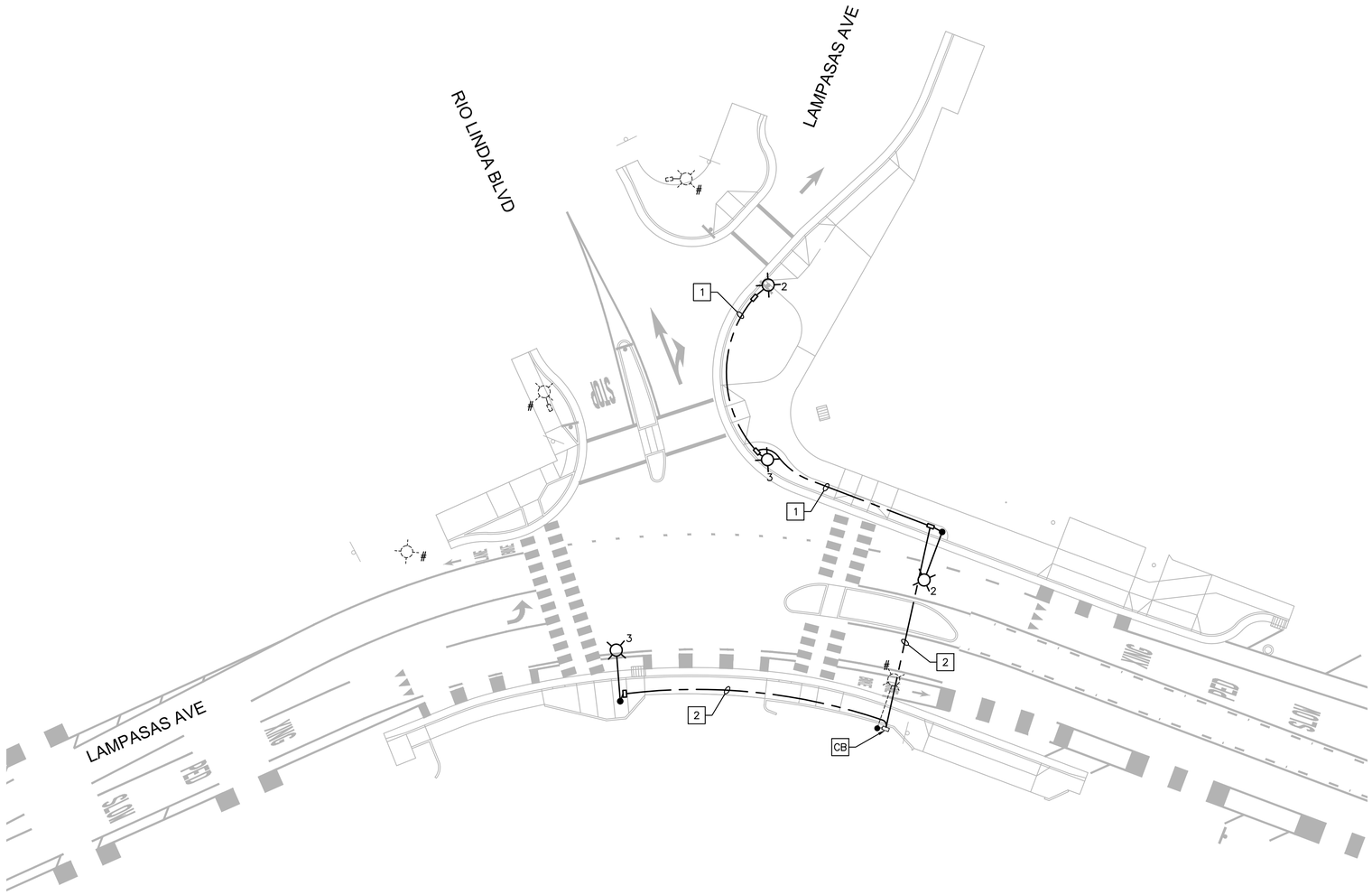
- PROPOSED 34W LED ORNAMENTAL 'ACORN' STREET LIGHT, PER APPROVED CITY DETAILS AND SPECIAL PROVISIONS
- EXISTING 34W LED ORNAMENTAL 'ACORN' STREET LIGHT
- PROPOSED 71W LED MAST ARM STREET LIGHT, PER APPROVED CITY DETAILS AND SPECIAL PROVISIONS
- EXISTING 110W MAST ARM STREET LIGHT
- PROPOSED No. 5 PULL BOX
- EXISTING PULL BOX
- PROPOSED CONDUIT
- EXISTING CONDUIT

CONSTRUCTION NOTES

1. INSTALL 2"C, 4#8 (CKT 2,3), 1#8 (GND).
2. INSTALL 2"C, 2#8 (CKT 3), 1#8 (GND).
CB. INSTALL CONDUIT INTO EXISTING PULL BOX.

NOTES

1. CONTRACTOR TO CONFIRM STREET LIGHT PLACEMENT WITH ENGINEER. CONFIRM VERTICAL CLEARANCE FROM UTILITY CONFLICTS.
2. STREET LIGHT PLACEMENT TO MAINTAIN 1.5' MINIMUM CLEARANCE FROM FACE OF CURB, 4' PREFERRED CLEARANCE FROM BACK OF WALK, PER ADA REQUIREMENTS
3. CONTRACTOR TO RESTORE MEDIAN AND SIDEWALK DAMAGES AS A RESULT OF STREET LIGHT FOUNDATION INSTALLATION.



PLOT STAMP:

CAD FILE:

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VERT. ____

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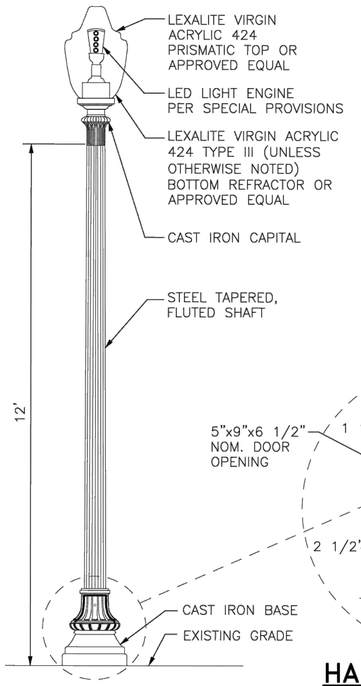
IMPROVEMENT PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
STREET LIGHTING

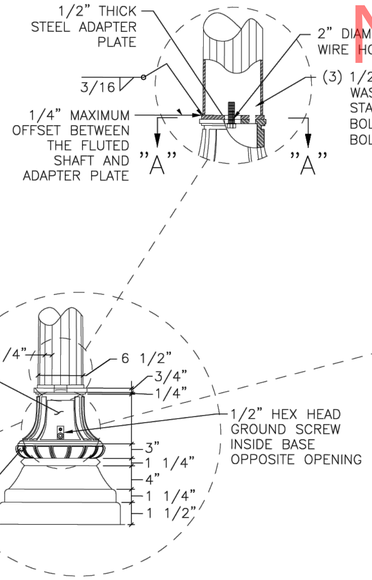
PN: 097186043

DWG. NO. SL-01

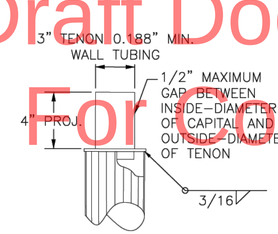
SHEET 12 OF 17



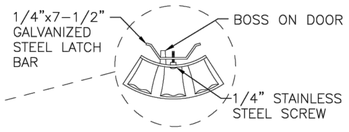
STYLE 1
NO SCALE



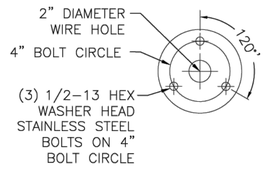
HANDHOLE COVER FRONT VIEW



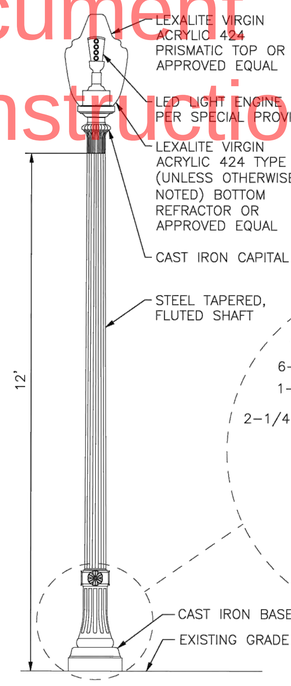
TENON DETAIL
NO SCALE



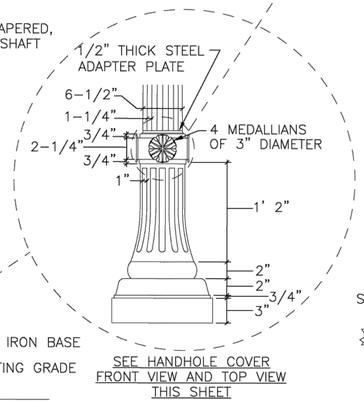
HANDHOLE COVER AND LATCH BAR TOP VIEW
NO SCALE



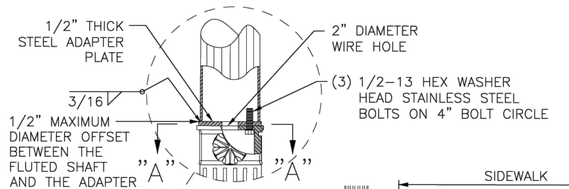
STEEL ADAPTER PLATE VIEW "A–A"
NO SCALE

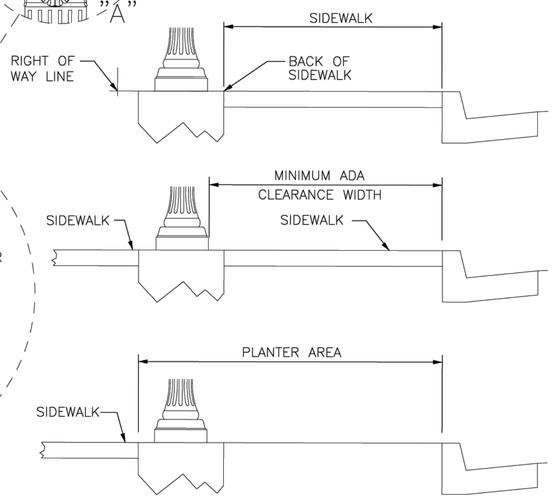


STYLE 2
NO SCALE



SEE HANDHOLE COVER FRONT VIEW AND TOP VIEW THIS SHEET





STREETLIGHT LOCATIONS
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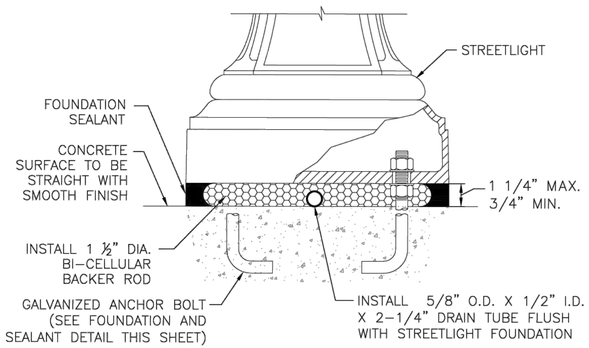

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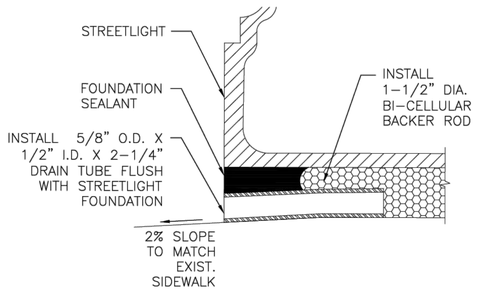

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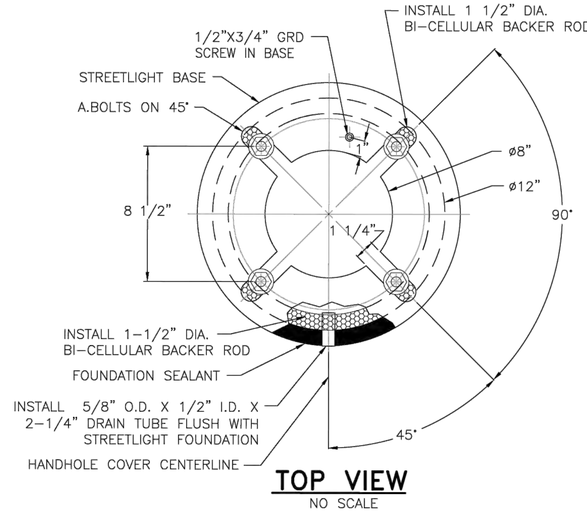

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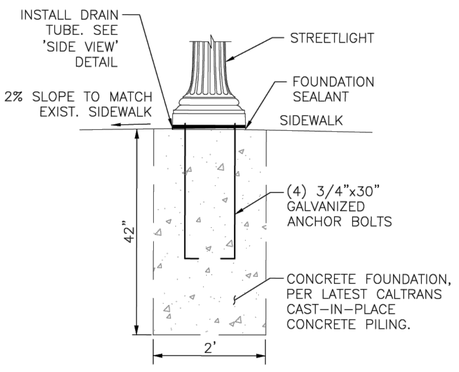

FOUNDATION AND SEALANT DETAIL
NO SCALE

APPROVED BY : Kaleb K. Haile
KALEB HAILE, SENIOR ELECTRICAL ENGINEER — E–15137 P.E. — 06/15/2021 DATE

CAD FILE: P:\Engineering Services\TechElec\Drawings\Standard Details for Traffic Signals and StreetLights\2021 Electrical Standards\WORKING\Standard Details for Ornamental Streetlights 2021.dwg Monday, June 14, 2021 4:18:34 PM

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. _____ DESCRIPTION _____

FIELD BOOK N/A

SCALE HORIZ. N/A VERT. N/A

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: STAFF DATE _____
DESIGNED BY: STAFF R.E.E. _____ DATE 06/14/21
CHECKED BY: K. HAILE R.E.E. E–15137 DATE 06/15/21

PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
STANDARD DETAILS FOR ORNAMENTAL STREETLIGHTS

PN: 097186043 DWG. NO. DT-01 SHEET 13 OF 17

1. SPECIFICATIONS

The work to be performed under this contract shall be done in accordance with the Special Provisions contained herein. In these Special Provisions, reference is made to the most current edition of Standard Specifications of the City of Sacramento referred to herein as Standard Specifications and the most current edition of the State Specifications, State of California, both of which shall apply to the work. The General Conditions of the contract shall be governed by Sections 1 through 8 of the Standard Specifications. The Special Provisions shall govern first, followed by the Standard Specifications and State Specifications, State of California. For Specifications of a technical nature not covered by the City Standard Specifications or these Special Provisions, the most current edition of the Standard Specifications and Standard Plans of the State of California, Department of Transportation shall apply. All mention of, and reference to, the State Standard Specifications shall specifically mean the most current edition of the Standard Specifications of the State of California, Department of Transportation. All mention of, and reference to, the State Standard Plans shall specifically mean the most current edition of the Standard Plans of the State of California, Department of Transportation. In the State Standard Specifications and the State Standard Plans, all mention of the "State" shall be construed to mean the City of Sacramento and all mention of the Engineer shall mean the Director of Public Works or his assistant, who may have been assigned to the supervision of this project by the Director of Public Works.

2. SCOPE OF WORK

The work to be performed under these Special Provisions, in general, includes furnishing and installing all necessary equipment and material to construct or modify the street lighting systems as shown on the Plans.

3. SCHEDULING OF WORK

Shall be in accordance with Section 34–4 of the Standard Specifications, except that the contractor shall furnish written notices to the property owners involved informing them of the proposed work at least twenty–four (24) hours prior to commencing work on any sheet.

4. EXISTING UTILITIES

All known underground utilities within the construction area are shown on the Plans. Contractor is required to ascertain the exact location of all utilities prior to doing work that may damage such facilities or interfere with their services.

5. MODIFICATION OF EXISTING IMPROVEMENTS

When existing grades are change, all existing utilities shall be raised or lowered accordingly, including but not limited to, pull boxes, conduits, traffic signal standards, street lighting standards, traffic signal controllers, service pedestals, fire alarm pedestals, and all other utilities located in the effected area.

Contractor shall be responsible for the protection of the existing electrical facilities and shall repair any damages to the facilities that occur during construction. Repair shall be in accordance with the Standard Specifications and any damaged item shall be replaced in–kind at the expense of the contractor.

6. CONDUCTORS

Conductors shall be in accordance with Section 34_12 of the Standard Specifications, except for the following:

1. If the existing ground wire (green 1#10 THW) is used as a pullwire, a new ground wire shall be pulled with the new conductors or cables, unless otherwise specified.
2. Unless otherwise noted, insulation Types THHN and THWN are not approved for installation.
3. The electrolier leads from base to lamp socket shall be No. 12 THW solid wire with 45 mils insulation suitable for 600–volt service for historic decorative, post top and mast arm electroliers.
4. All conductors of AWG #10 or larger shall be identified by printed and embossed labels. #1, #6, #8, #10 conductors shall be printed and embossed.
   a) Both printed and embossed labels shall clearly identify the UL listing, insulation type, voltage rating, AWG number, and the City of Sacramento.
   b) The printed label and the embossed label shall be placed at approximately 90 degrees separation around the center of the conductors.
   c) Labels shall appear every one foot interval. Embossed labels shall be between 0.002" to 0.003" in depth and shall not damage the conductors. Label heights shall be no less than 3/32" for AWG #8 or larger, and shall be no less than 2/32" for AWG #10.

7. CONDUITS

Conduit to be installed underground shall be Schedule 40 polyvinyl chloride (PVC) or Schedule 40 polyethylene conduit as described herein unless otherwise indicated or specified. PVC conduit shall comply with the specifications in Section 34–10 of the City Standard Specifications. High–density polyethylene conduit shall comply with the following specifications:

Conduit shall be fabricated from polyethylene shall be in conformance with applicable ASTM and NEMA standards and Article 347 of the National Electrical Code. Non–black polyethylene conduit shall contain not less than 2500 parts per million (ppm) of a hindered amain ultraviolet light stabilizer. Ultraviolet stabilization additive for black polyethylene conduit shall consist of a carbon black loading of 2.5% 0.5% by weight. Conduit shall be manufactured from high–density polyethylene resin designated as Type III, Category 5, Class C, Grade P34 material in accordance with ASTM D1248. Duct seal shall be installed on all conduits. All new conduits starting/terminating in pull boxes shall have End Bells. Conduit installation shall be in accordance with Section 34–9, 34–10 of the Standard Specifications and as modified by these Special Provisions. "Jet–rodding" is not permitted.

7. CONDUITS (continued)

Conduits terminating in pull boxes, standards, pedestals and cabinets shall rise vertically and shall not slope in any direction. Conduits terminating in standards, pedestals, and cabinets shall terminate one and one–half inches (1½") above finished grade. Conduits shown on the Plans to be adjacent and parallel to each other shall be installed in the same trench or drill hole unless otherwise specified or directed by the Engineer. Under the sidewalk, conduit shall be laid to a depth of not less than eighteen inches (18") below the sidewalk grade.

Conduits shall be installed by trenching or directional drilling method.

All applicable requirements in these Special Provisions to locate, and to protect existing utilities, utility laterals, obstructions, and other facilities in the area shall be conformed to and no additional compensation will be allowed therefor. Contractor is responsible for any damage and the repair of any existing facilities damaged by his/her trenching or drilling operations. Contractor is responsible for any potholing necessary and cost for potholing shall also be included in price paid for applicable items of work and no additional compensation will be allowed therefor. All trenching or drilling work shall be contained within the City right–of–way. If utilities or other obstacles are encountered at the specified conduit depth, any additional drilling required to avoid the obstacle shall be made at the Contractor's expense and no additional compensation will be allowed therefor. Location of trenching and drill holes shall take into consideration minimal impact to the street pavement while still meeting the requirements of these Special Provisions.

Contractor shall replace roadway striping and markings with same material if damaged by directional drilling, bore pits, potholes, or trenching. Replacement striping and markings shall be thermoplastic or paint, per the City of Sacramento Standards.

Contractor shall use the following PVC pipe cement to join conduits and fittings: Premier Cement PVC All Temperature One Step Blue or Christy's Red Hot Blue Glue for Schedule 80 thru 4" diameter.

A. Trenching Method

Installation of conduit by trenching shall be in conformance with the Plans and these Special Provisions. See plan sheets for trench details. Trenches shall be backfilled or covered at the end of each work day. All conduit installed by trenching shall be anchored every 15 feet to the bottom of the trench, with an approved method, so as to prevent the conduit from floating when the concrete is backfilled into the trench.

1. Trenches in new roadways and reconstructed roadways shall be backfilled with slurry portland cement per cubic yard and fine type aggregate as defined in the Standard Specifications Section 10–5. A red oxide in the amount of 5 lbs. per cubic yard shall be mixed uniformly throughout the slurry cement. See plan sheets for amount of sack slurry and depth of conduit(s). Minimum shall be a 3 sack slurry.

2. Trenches in existing roadways shall use the "T–Trench" method. The portion over the trench shall be paved with asphalt concrete, Type A with ¾" aggregate (coarse); except on residential streets where the base course shall be Type A, ¾" aggregate (coarse) and surface coarse shall be Type B, ½" aggregate, (medium), per Section 22 of the City Standard Specifications, unless otherwise directed by the Engineer. See plan sheets for width and thickness of asphalt concrete over trench. Trenches shall be backfilled with slurry portland cement per cubic yard and fine type aggregate as defined in the Standard Specifications Section 10–5. A red oxide in the amount of 5 lbs. per cubic yard shall be mixed uniformly throughout the slurry cement. See plan sheets for amount of sack slurry.

B. Directional Drilling Method

Installation of conduit by directional drilling shall be in conformance with the Plans and these Special Provisions.

Conduits shall be installed such that the top of the conduit(s) are not less than eighteen inches (18") below the finished grade in sidewalk areas and not less than thirty inches (30") in all other areas except as otherwise specified or directed by the Engineer.

Prior to the start of directional drilling, the Contractor shall submit a plan which identifies location and size of proposed drill holes, describes process for identifying/locating existing utility services and other underground utilities or obstructions, identifies a proposed "drilling corridor" to avoid conflicts with existing utilities, services and other facilities. This plan shall be submitted to the Engineer a minimum of ten (10) working days prior to the start of work. The Contractor will not be allowed to directional drill until an approved plan is on file with the Engineer

Directional drilling shall be performed by the technique of creating and directing a bore hole along a predetermined path to a specified targeted location where indicated on the plans to install conduits. The technique shall involve the use of mechanical and hydraulic equipment to change the boring course and shall use instrumentation to monitor the location and orientation of the boring head assembly along the predetermined course. Drilling shall be accomplished with fluid–assisted mechanical cutting. Unless otherwise approved, boring fluids shall be a mixture of bentonite and water or polymers and additives. Bentonite sealants and water will be used to lubricate the drilling head. It is mandatory that minimum pressures and flow rates be used during drilling operations so as not to fracture the subgrade material around and/or above the bore. Uncontrolled jetting (where the primary purpose is to use fluid force to erode soil for creation of the final bore hold diameter) is prohibited. The drilling system shall utilize small–diameter fluid jets to fracture, and mechanical cutters to cut and excavate the soil as the head advances forward.

All drilling shall be located a minimum of three feet (3') from the center of all existing maintenance holes. Drilling that run parallel to any sanitary sewer or storm drainage lines shall maintain a minimum clearance of three feet (3') measured from the centerline of the sewer or drainage line to the adjacent side of the drill hole. Drilling that crosses any sewer or drainage line shall cross at 90 degrees to the line or at a minimum of 45 degrees if a 90 degree crossing is not possible.

8. INSPECTION

Inspection shall be in accordance with Section 34–22 of the Standard Specifications and these Specifications.

9. PULL BOXES

Shall be in accordance with Section 34–11 of the Standard Specifications, except for the following:

All new pull boxes shall be set in place prior to pouring any new sidewalk. Existing pull boxes damaged by the installation of new conduits shall be removed and replaced at the Contractor's expense as directed by the Engineer. All pull boxes shall be placed in sidewalk areas unless otherwise specified on the plans or directed by the Engineer, and shall not be placed in driveways, in vehicular traveled lanes, or in any part of a new sidewalk handicap ramp areas. Contractor shall cut, removed and replace the concrete to the nearest joint when installing new pull boxes. New pull boxes shall have a minimum of 6" of new concrete around all sides in the sidewalks. For pull boxes to be removed, holes or depressions resulting from the removed pull box shall be filled, compacted, brought to grade, and filled to match surrounding materials. A crushed rock foundation shall be installed prior to placing pull box. The crushed rock foundation shall have a minimum of 12" in depth and continue to extend a minimum of 6" beyond the outside edge of the pull box. Crushed rock foundation shall be compacted. Compact crush rock while maintaining integrity of conduit. Then, install pull box on top of crushed rock foundation. Adjust pull box to grade. Conduit and pull boxes shall not be damage nor cracked.

For streetlights system, the pull boxes shall have steel security lids with locking key bolt. For traffic signals installation. All No. 5 and No. 6 Pull Boxes shall have reinforce concrete lids with locking key bolt. Lid shall be 1/4" thick minimum galvanized steel. Lid shall be manufactured with slip resistant surface. Lid shall be non–traffic rated, unless otherwise specified. Lid shall be equipped with a lock mechanism which can be secured from the top of the lid. Lock shall be recessed in a 1 inch diameter circle. Lock shall be Secured Keyed Bryce Fastener, or approved equal. A steel welding plug shall be provided by the manufacturer to be inserted into the 1 inch diameter recessed lock. Lid shall be flush with top of the pull box when lid is completely secured and locked to the pull box. No. 5 pull boxes shall have a single cam locking system, or approved equal. No. 6 pull boxes shall have a double cam locking system, or approved equal. Lid shall have a grounding lug. Lid shall be new and free of scratches, defects, and debris.

10. WIRING

Shall be in accordance with Section 34–13 of the Standard Specifications, except for the following:

After taping, all splices shall be painted with an approved electrical coating which will resist oil, acids, alkalis, and adverse environmental conditions. Pull ropes used to pull conductors in conduit shall be a minimum of three–eights inch (3/8") in diameter.

11. MASTARM STREETLIGHT

A. GENERAL

Mastarm streetlights standards, Type 15, and foundation shall be in accordance with the latest California Department of Transportation Standard Plans, unless otherwise specified in these Special Provisions and Plans.

B. LUMINAIRE

Luminaires to be installed shall be specifically designed for LED use and rated for up to 100,000 hours of operation. Luminaires shall be designed to produce asymmetric distributions conforming to the Illuminating Engineering Society light pattern Type III unless otherwise specified. Luminaire shall utilize a heat sink to efficiently draw heat away from the LED chipset. The units shall be suitable for two–inch (2") slip filter and mounting. All new luminaires to be installed shall be inspected by the Engineer prior to installation. Luminaires shall be supplied without photo cell receptacles unless otherwise called for the Plans. All luminaires supplied with photo cell receptacles that will not be used shall be required to completely bypass the receptacle and a shorting plug shall be securely installed in the receptacle.

C. LED

Luminaire shall be EOI E–LIGHTSTAR ESU–D A01 3M 032 40 M 1050 for intersection lighting or approved equal. The luminaire shall be type III with a minimum CRI of 70 and a CCT of 4000K, unless otherwise specified.

12. METERED SERVICE PEDESTAL

The new metered service pedestal shall be supplied and installed as shown on the Plans and shall conform to the serving utility requirements. Service shall be wired for 120/208 volts or 120/240 volts and single phase as shown on the Plans. The Contractor shall connect the luminaires to the circuits designated on the Plans. Contractor shall also install the service conduit and wires to the SMUD service point in accordance with SMUD's requirements. The Contractor shall protect and lock the service pedestal during construction. After construction is completed, the Contractor shall provide for each pedestal a master lock which will accept a Type 2214 key.

The service pedestal shall be fabricated in accordance with the dimensions shown on the service pedestal detail drawing in the traffic signals / street lighting standard details in the plan sheets. The service pedestal shall consist of a separate metering section and a service section. The meter section shall have a removable cover–top, side, and front sections welded together so that it is rain tight and padlockable.

The service pedestal shall be fabricated from 14 gauge Type 304D stainless steel and as described under the following paragraph in the Caltrans Standard Specifications section 86–3.07A, "Cabinets fabricated from stainless steel shall conform to the following:". The mounting brackets shall be 10 gauge Type 304D stainless steel. All welds shall be of highest quality and ground smooth and finished so that grind marks are not visible.

The enclosure shall be rain tight and dust tight. All welds shall be ground smooth and finished so that grind marks are not visible. A hinged dead front plate with cutouts for the handles of the breakers and the switch shall be provided in addition to a hinged outside door equipped with a draw latch suitable for padlocking. Galvanized anchor bolts shall be inside or outside the service pedestal as shown on the Plans. 5/8" x 18" x 4" Anchor bolts (set of 4) shall also be provided. The enclosure shall have no screws, nuts, or bolts on the exterior, except utility sealing screws. All screws, nuts, bolts, and washers shall be stainless steel. All hinges and hinge pins shall be stainless steel. No surface of the pedestal shall be deflected inward or outward more than 1/16" measured from the intended plane of the surface.

A hinged dead front plate with cutouts for the handles of the breakers and the switch shall be provided. A hinged outside door equipped with a heavy duty draw latch and two (2) heavy duty hasps suitable for padlocking shall be provided for the service section. The dead front panel on the service enclosure shall have a continuous stainless steel piano hinge.

Service enclosures shall be factory wired and conform to NEMA Standards. All control wiring shall be stranded copper, No. 14 AWG THHN/THWN rated for 600 Volts. All control wiring shall be marked with permanent clip sleeve wire markers. Felt, pencil, or stick back markers will not be acceptable. A copy of the wiring diagram for the service pedestal shall be enclosed in plastic and mounted on the inside of the service section.

The terminal lugs or strips shall be copper or alloyed aluminum. All terminals shall be compatible with either aluminum or copper conductors.

The service pedestal shall have provisions for the installation of up to a total of 16 single–pole circuit breakers, including brass links and mounting hardware. All copper wiring used for main bussing shall be No. 2 AWG THHN/THWN and rated for 125 amperes. Branch circuit panel shall use loop wiring rated for 105 amperes with THHN/THWN insulation. All circuit breakers, contactors, and wire shall be listed by UL or ETL. The pedestal shall conform to the NEMA 3–R standard.

Nameplates of a reasonable size identifying the control unit therein shall be installed on the dead front panel. Nameplates shall be black laminated with a white plastic center. All nameplates shall be fastened by screws.

The entire service pedestal shall be constructed with the highest quality workmanship and shall meet all applicable codes. Complete submittal drawings on all substitutions shall be submitted to the Engineer in accordance with Section 34_3 of the Standard Specifications. If the proposed substitute is rejected or if the submittal is not made within the specified time, the specified equipment shall be furnished.

Street light "ON" and "OFF" control will be by photo–electric cell. All conduits and wires shall be furnished and installed by the Contractor. Photocell 120 VAC by Tork (5001M) or approved equal.

Mounted in each metered service pedestal shall be the following equipment:

1. Two (2) 100 Amp, 2 Pole, 120/240V, 10KAIC circuit breakers. Each main breaker shall have internal common trip. Each pole shall have individual on–off control and handle tie for common operation. Breaker shall be Siemens or approved equal.
2. One (1) 15 Amp, 1 Pole, 120/240V, 10KAIC circuit breaker for control circuitry. Breaker shall be Siemens or approved equal.
3. Two (2) 60 Amp, 1 Pole, 120/240V, 10KAIC circuit breakers for traffic signal. Breakers shall be Siemens or approved equal.
4. Six (6) 40 Amp, 1 Pole, 120/240V, 10KAIC circuit breakers for street lighting. Breakers shall be Siemens or approved equal.
6. Two (2) 60 Amp, 3–pole, 120/240V contactors. Normally open, mercury contactors. Contactors shall be Durakool, or approved equal.
7. One oil tight "Hand_Off_Auto" selector switch.
8. One solid copper neutral bus.
9. Incoming terminals (landing lugs).
10. Solid neutral terminal strip.
11 Terminal strips for conductors within the cabinet.

APPROVED BY : Kaleb K. Haile — E–15137 — 06/15/2021

KALEB HAILE, SENIOR ELECTRICAL ENGINEER — P.E. — DATE

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REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. _____
DESCRIPTION _____

FIELD BOOK N/A

SCALE HORIZ. N/A VERT. N/A

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: STAFF DATE _____ | DESIGNED BY: STAFF R.E.E. _____ DATE 06/14/21 | CHECKED BY: K. HAILE R.E.E. E–15137 DATE 06/15/21

PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
STREETLIGHT SPECIAL PROVISIONS No. 1

PN: 097186043 | DWG. NO. DT-02 | SHEET 14 OF 17

13. ORNAMENTAL STREETLIGHT

1. Streetlight Assembly

The streetlight manufacturer shall provide all required components to assemble a streetlight as shown in the attached drawing and as described in the following Special Provisions. The manufacturer shall guarantee that all components provided, when assembled, shall constitute a complete functioning streetlight.

The streetlight capital, globe holder, light engine base, fluted shaft, and base shall be delivered as a single unit, fully assembled and painted as describe in the following Special Provisions. The luminaire assembly, Light Emitting Diode (LED) light engine, and anchor bolts, if required, may be delivered in a separate shipment or container.

Optionally, streetlight assembly shall have weatherproof UL listed GFI electrical receptacles mounted at the top of the pole shaft.

2. Luminaire Assembly

The luminaire assembly shall include a 424 Lexalite Acrylic Prismatic Top, GE8–9 globe, Formed Plastic FP 199, or National Lighting NL199 globe or approved equal as shown on the drawing. The luminaire assembly shall be UL listed for wet/damp locations and shall be furnished prewired.

The Lexalite 424 globe shall have IES Distribution Type III or V as specified by the City Engineer. Assembly of top and bottom parts of the globe shall be by a stainless steel band. Globe top shall not include a factory installed Lexalite spike aluminum finial. The globe shall be provided with a neck ring so that the tightening of the screws will not damage the globe collar.

Unless otherwise specified, the lamp assembly shall be delivered with a light engine. The light engine shall be of LED manufactured by CREE model DPT A SB FR A 30K UL UF, VEGA D4A model D4A–30G–30K–TSM–NA–E39D–STD or approved equal.

3. Cast Iron Capital and Globe Holder

The capital and globe holder shall be of the design and dimensions as shown on the drawing and shall be of cast iron per ASTM A48 CL30 standards. The globe holder shall have four (4) 5/16" stainless steel set screws (90 degrees) for mounting of the globe. Set screws shall be square head. Allen or Phillips set screws are not acceptable. The capital shall be prewired with a light engine base. The light engine base shall be of porcelain mogul type. The capital shall be attached to a 3" tenon mounted on top of the steel fluted shaft with four (4) 5/16" stainless steel screws.

4. Steel Fluted Shaft

The fluted shaft shall be of the dimensions shown on the drawing and shall be tapered 0.14" per foot. The fluted shaft shall have the chemical and physical properties of A595 grade A. The fluted shaft shall be fabricated from a single length of a minimum 11–gauge steel sheet, rolled into a fluted shaft on a steel mandrill and finished with a single longitudinal weld. No transverse or intermediate welds or joints shall be permitted.

The fluted shaft shall have sixteen (16) equally spaced Doric flutes, sharp and clear–cut throughout the entire length of the shaft. The radius of the flute's crest shall not exceed the thickness of the shaft material. Individually rolled flutes or round poles with a separate fluted sheathing are not acceptable. Shaft shall be formed true to the pattern and complete in detail. The interior surface shall be smooth with no protrusions or sharp edges. There shall be a minimum of 2" internal clearance extending the fluted shaft's length to permit internal wiring from an underground source.

At the top of the fluted shaft, a steel tenon shall be welded and sized to accept the capital and globe holder. The maximum gap between the inside–diameter of the capital and outside–diameter of the tenon shall be ½".

A ½" steel adapter plate, of 36,000 psi minimum yield strength, shall be welded to the bottom of the fluted shaft. The adapter plate shall include three (3) tapped holes on a 4" bolt–circle to accept ½" –13 stainless steel bolts for attachment to the streetlight pole base. The stainless steel bolts shall be per ASTM F593. The bolts shall be with a minimum yield strength of 92,000 psi. The maximum diameter offset between the bottom of the fluted shaft and the adapter plate shall be as shown in the drawing.

All welds shall meet AWS D1.1.

The complete fluted shaft shall be hot–dipped galvanized per ASTM A123 prior to painting.

13. ORNAMENTAL STREETLIGHT (continued)

5. Cast Iron Base

The streetlight base shall be of the design and dimensions as shown on the drawing and shall be of cast iron per ASTM A48 CL30 standardswith a minimum thickness of ½".

The base shall have an opening for the hand hole of the dimensions shown on the drawing with the cover cast of the same material, and attached with a 1/4" stainless steel, button head hex socket cap screw. The base shall have three (3) holes integrally cast into its top to be attached to the shaft. A minimum of 2" wiring access hole shall also be provided.

The base shall be furnished with a 12"–13 UNC grounding bolt.

6. Anchor Bolts

Unless otherwise specified, each streetlight assembly shall include four (4) galvanized steel anchor bolts of the dimensions as shown on the drawing. Anchor bolts shall meet ASTM – A36 with 55,000 psi minimum yield strength. The threaded portion shall be galvanized. Each anchor bolt shall include two (2) galvanized hex nuts and two (2) flat washers. All galvanized parts shall meet ASTM A153.

7. Surface Coating

The exterior and interior surfaces of the streetlight base, fluted shaft, and capital shall have surface preparation, primer coating, and two coats of paint. The surfaces of the base, fluted shaft, and capital shall have a smooth finish that shall be uniform along the entire length of the streetlight pole assembly. All surface preparation, primer coating, and painting application shall be performed inside a shop or plant before shipment to jobsite.

The manufacturer shall provide Manufacturer Certification that all primer coating and paint application was performed per coating manufacturer specifications for the selected coating, prior to delivery of streetlight pole. Minor field coating touch–up may be permitted at the City's discretion.

All work shall be performed in strict accordance with these specifications and the manufacturer's directions for the materials to be used on this project.

A. Surface Preparation

The exterior and interior surfaces of the pole shall be prepared as follows:

a) All sharp edges shall be removed or rounded.
b) Contaminants such as oil, grease, dirt, etc., shall be removed by solvent cleaning per SSPC–SP1 (solvent cleaning).
c) All non–galvanized surfaces shall be blasted per SSPC–SP10 (Near White Metal Blast) to remove all rust, mill scales, slags, and foreign matters.
d) Streetlight base, fluted shaft, and capital shall be primed on the same day the surface preparation is completed.

B. Primer Coating

After surface preparation is completed, the cast iron streetlight assembly shall have a primer coating as follows:

a) Use Sherwin Williams Macropoxy 646 Fast Cure Epoxy – Black (OR Mill White primer if Sacramento Green is specified as the paint color) or approved equal.
b) Mix Macropoxy per manufacturer directions.
c) Apply primer to each streetlight component separately, including the interior and exterior surfaces.
d) Apply a fog coat of primer of 1.0 – 2.0 mils, approximately 1 hour prior to full prime coat.
e) Apply full prime coat at the recommended spreading rate per coat for the Macropoxy 646 Primer; wet mills (7 minimum, 13.5 Maximum), dry Mills (5 minimum, 10.0 Maximum). See manufacturer product information for drying schedule and application conditions.

C. Paint Application

After primer coating, the streetlight assembly shall be painted as follows:

a) Use Sherwin Williams Hi–Solids Polyurethane 100 – Gloss Black (OR Sacramento green color if specified on the drawing) or approved equal.
b) Apply two (2) coats of paint to the entire streetlight assembly, including the interior and exterior surfaces.
c) Apply the paint at the recommended film thickness and spreading rate per coat; wet mills 3.6 minimum, 4.8 maximum; dry mills 3.0 minimum, 4.0 maximum. See manufacturer product information for drying schedule and application conditions.

13. ORNAMENTAL STREETLIGHT (continued)

Paint application shall be in accordance with the principles of good workmanship described in SSPC–PA1, Paint Application Specification No. 1, Shop Field and Maintenance Painting. The Quality Control/Specifications are as follows: Dry Film test per ASTM D7378–07, Holiday Porosity Test per ASTM D5162–01, Cross Hatch Adhesion per ASTM D6677–01, Pencil Hardness test per ASTM D3363, Impact Resistance per ASTM D2794, Visual Gloss Inspection, and Final Visual Inspection.

8. Design Standards

Streetlight assembly and all materials used in its manufacture shall meet the requirements of the most current adopted version of the American Association of State Highway and Transportation Officials (AASHTO) "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" and this specification.

In addition to the requirements of the AASHTO Specification, the post and anchorage shall be designed with a minimum safety factor of two (2) and shall not deflect more than five (5%) percent of the above ground height at full wind loading.

9. Factory Certification

Each streetlight assembly shall be certified by the manufacturer to meet all requirements specified herein. The manufacturer shall make factory and all manufacturing processes open for City Quality Control Inspection if requested by the City Engineer. City shall incur all inspection cost.

10. Identification

Each pole shall bear an identification tag which shall list the manufacturer model number of the pole and year and location of manufacture. The identification tag shall be placed inside of the base, facing the hand hole, and clearly visible from the outside when installed and the hand hole cover is removed.

11. Material Availability

Pole manufacturer shall certify to the City that the accepted pole base, capital, shaft, and luminaire is or will become a stock item, readily available with replacement parts for a minimum ten (10) year.

12. Material Certification

Material certifications shall be provided for all components referred to in the drawing and these Special Provisions.

13. Packaging

Each streetlight assembly and luminaire shall be individually packaged to prevent damage with sufficient packaging strength for protection during shipping and storage. Small parts shall be packaged in boxes. Individual components shall be packaged in the same manner as the poles and luminaries. All handling shall be done with rope or nylon slings to prevent surface damage. Use of chains, wire slings or unprotected forks or hooks is prohibited.
Packing list and assembly instruction sheet shall be included.

14. Acceptance

After packaging is removed and prior to installation, each streetlight assembly shall be inspected for manufacturing or paint defects by the City Engineer. No streetlight assembly is to be installed without the expressed approval of the City.

15. Testing

Factory testing shall be provided at the request of the City Engineer in accordance with manufacturer's testing procedures.

16. Warranty

The streetlight manufacturer shall warrant against any defects and shall replace all defective parts or streetlight assemblies for a period of five (5) years from the date received by the City. Pole manufacturer shall provide written warranty with shipment of poles.

17. Welding

Welding shall be conducted by certified welders in compliance with the latest edition of the American Welding Society D1.1, Structural Welding Code – Steel. All parts shall be cleaned prior to welding by an approved industry standard method.

18. Wind Resistance

Entire pole and luminaire to be rated to withstand AASHTO requirements for a minimum 70 mile and hour wind load with a 30% gust factor.

13. ORNAMENTAL STREETLIGHT (continued)

19. Sealing of Streetlight Pole Foundation

The concrete for the foundation shall be finished so that the top surface is straight and smooth with a 2% grade conforming to the adjoining sidewalk.

Remove concrete forms on streetlight foundation upon project completion. Remove all plywood, forms, excess and leftover concrete, and other debris as a result from construction upon project completion.

Once the pole is installed and leveled on the anchor bolts, the gap between the base of the pole and the top of the foundation shall be sealed using the following procedure:

The bottom surface of the pole base shall be primed using Pecora P–120 or approved equal and the top of the foundation shall be primed using a Pecora P–150 or approved equal. The curing of the concrete used for the foundation or pavement and the application of the primer shall follow the guidelines provided by the manufacturer of the primer and sealant.

The gap to be sealed shall be partially filled by pushing in a 1.5" diameter Bi–Cellular Backer Rod (SOF Rod), cut to size, and installed around the bottom perimeter of the pole base, pushed against the anchor bolts. The backer road product shall be made by Construction Foam Products or approved equal.

A one half–inch (1/2") inside diameter drain tube shall be placed in the gap between the base of the pole and its foundation to prevent standing water. The drain tube shall be placed under the backer rod, flush with the finished surface of the concrete, and extending about 2.25" toward the center of the pole base. It shall be placed so that it is following the downward slope of the surrounding sidewalk and top of foundation (about 2%). The drain tube shall be made of PVC with a wall thickness of 1/16" or as approved by the engineer.

Once the primer is dry as recommended by the manufacturer, and the backer rod is installed, the Contractor shall apply a silicone sealant, with a minimum thickness of 0.5inch. Use a pre–tinted black color silicone, model number Pecora 890NST or approved equal. Completely seal the gap between the base of the pole and the top of the foundation with the silicone sealant. Use a masking tape when applying the sealant, in order not to smear the outside of the pole, and the surrounding pavement with the sealant material. The sealant shall be smoothed out around the base of the pole, and any excess material removed before it is set to cure as required by the sealant manufacturer.

The sealant shall be smoothed out around the base of the pole, and any excess material removed before it is set to cure as required by the sealant manufacturer.

14. POST TOP STREETLIGHT

A. General

Post top streetlights shall be in accordance with the latest City of Sacramento Standard Specifications, unless otherwise specified in these Special Provisions or Plans. All post top streetlights shall have an LED light engine.

B. Specifications for Luminaire

The LED light fixture shall be Acuitybrands Contempo LED Series Model 245L P45 AS 30k R3 RNA (blank–gray color) Style A (hood) P7 SH or approved equal. Hood Style A and Gray finish, as shown in the Acquitybrands Contempo LED Series 245L. No photocontrol receptacle.

The post top streetlight standard and luminaire shall conform to the following:
1) LED light engine. 46 input watts.
2) Multi–voltage driver. 120–277volts.
3) Color Temperature 3000K.
4) Type III distribution
5) Acrylic Rain Panel
6) Paint: Grey exterior finish.
7) Luminaire canopy shall be 22 inches in diameter.
8) LED light engine greater than 100,000 hours at 25 degree C.
9) CSA listed and suitable for up to 40 degree C.
10) Complies with ANSI: C136.2, C136.10, C136.15
11) Cone mounting fitter with three set screws to install to pole tenon. 3" diameter pole tenon. Set screws shall be hex or square head screws. Slotted or Allen set screws are not acceptable.
12) Hinged hood and captive screw latching.
13) Multi–gasketing to provide weatherproof protection of assembly.
14) Die–cast aluminum housing and spun aluminum hood.
15) All external hardware shall be stainless steel or other corrosion resistant metal.

C. Specification for Pole and Foundation
The post top pole, anchor bolt configuration, and foundation specifications and details are shown in the latest City of Sacramento Standards, page E–70.

APPROVED BY : Kaleb K. Haile — E–15137 P.E. — 06/15/2021 DATE
KALEB HAILE, SENIOR ELECTRICAL ENGINEER

CAD FILE: P:\Engineering Services\TechElec\Drawings\1Standard Details for Traffic Signals and StreetLights\2021 Electrical Standards\WORKING\New SpecialProvisions No.2.dwg Monday, June 14, 2021 3:18:07 PM

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. _____
DESCRIPTION

FIELD BOOK N/A

SCALE HORIZ. N/A VERT. N/A

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: STAFF DATE
DESIGNED BY: STAFF R.E.E. DATE 06/14/21
CHECKED BY: K. HAILE R.E.E. E–15137 DATE 06/15/21

PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
STREETLIGHT SPECIAL PROVISIONS No. 2

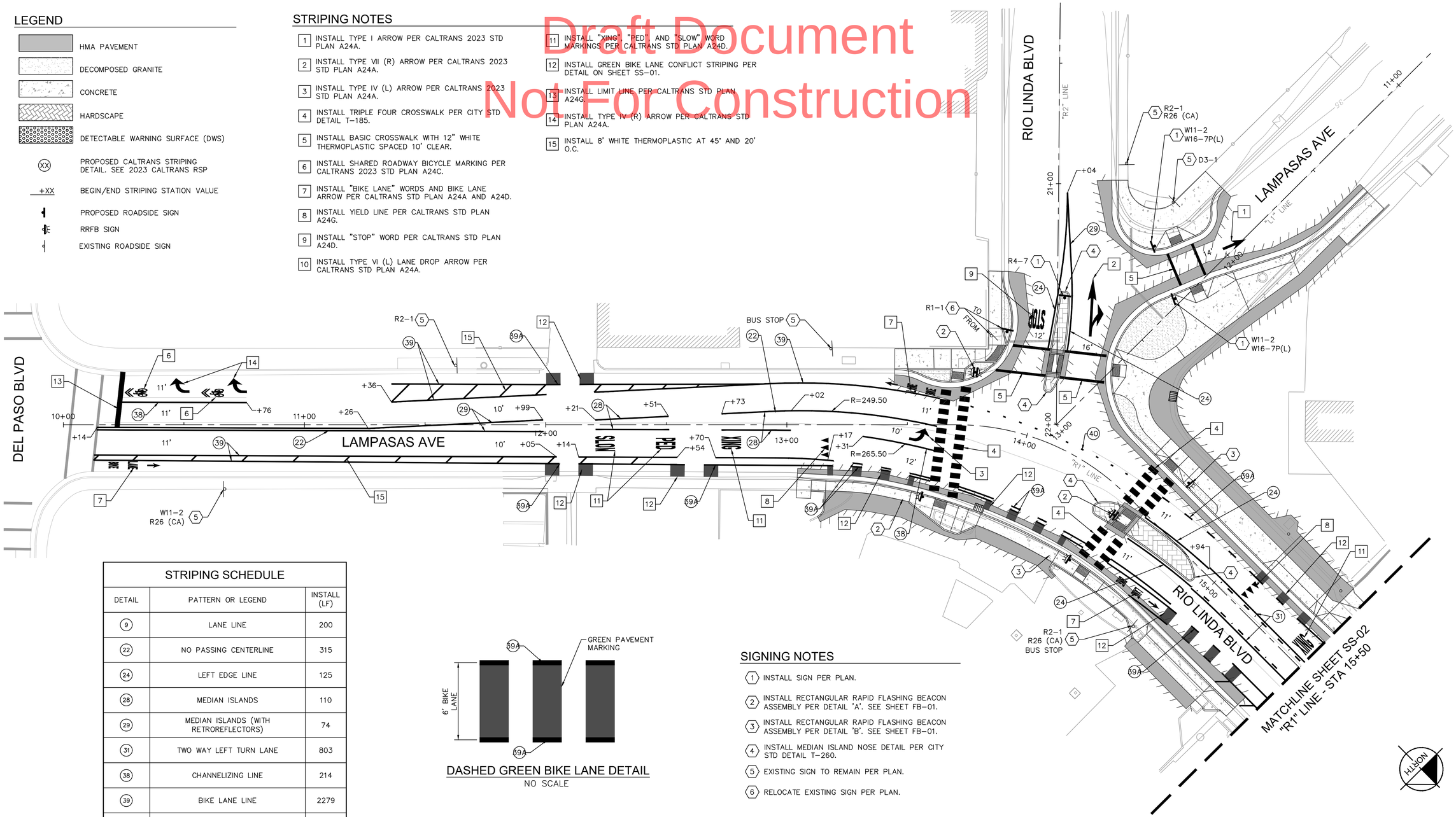
PN: 097186043 DWG. NO. DT-03 SHEET 15 OF 17

LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- (XX) PROPOSED CALTRANS STRIPING DETAIL. SEE 2023 CALTRANS RSP
- +XX BEGIN/END STRIPING STATION VALUE
- PROPOSED ROADSIDE SIGN
- RRFB SIGN
- EXISTING ROADSIDE SIGN

STRIPING NOTES

1. INSTALL TYPE I ARROW PER CALTRANS 2023 STD PLAN A24A.
2. INSTALL TYPE VII (R) ARROW PER CALTRANS 2023 STD PLAN A24A.
3. INSTALL TYPE IV (L) ARROW PER CALTRANS 2023 STD PLAN A24A.
4. INSTALL TRIPLE FOUR CROSSWALK PER CITY STD DETAIL T-185.
5. INSTALL BASIC CROSSWALK WITH 12" WHITE THERMOPLASTIC SPACED 10' CLEAR.
6. INSTALL SHARED ROADWAY BICYCLE MARKING PER CALTRANS 2023 STD PLAN A24C.
7. INSTALL "BIKE LANE" WORDS AND BIKE LANE ARROW PER CALTRANS STD PLAN A24A AND A24D.
8. INSTALL YIELD LINE PER CALTRANS STD PLAN A24G.
9. INSTALL "STOP" WORD PER CALTRANS STD PLAN A24D.
10. INSTALL TYPE VI (L) LANE DROP ARROW PER CALTRANS STD PLAN A24A.
11. INSTALL "XING", "PED", AND "SLOW" WORD MARKINGS PER CALTRANS STD PLAN A24D.
12. INSTALL GREEN BIKE LANE CONFLICT STRIPING PER DETAIL ON SHEET SS-01.
13. INSTALL LIMIT LINE PER CALTRANS STD PLAN A24C.
14. INSTALL TYPE IV (R) ARROW PER CALTRANS STD PLAN A24A.
15. INSTALL 8' WHITE THERMOPLASTIC AT 45° AND 20' O.C.



STRIPING SCHEDULE

DETAIL	PATTERN OR LEGEND	INSTALL (LF)
(9)	LANE LINE	200
(22)	NO PASSING CENTERLINE	315
(24)	LEFT EDGE LINE	125
(28)	MEDIAN ISLANDS	110
(29)	MEDIAN ISLANDS (WITH RETROREFLECTORS)	74
(31)	TWO WAY LEFT TURN LANE	803
(38)	CHANNELIZING LINE	214
(39)	BIKE LANE LINE	2279
(39A)	INTERSECTION BIKE LANE LINE	672
(40)	LANE LINE EXTENSION THROUGH INTERSECTION	78

DASHED GREEN BIKE LANE DETAIL
NO SCALE

SIGNING NOTES

1. INSTALL SIGN PER PLAN.
2. INSTALL RECTANGULAR RAPID FLASHING BEACON ASSEMBLY PER DETAIL 'A'. SEE SHEET FB-01.
3. INSTALL RECTANGULAR RAPID FLASHING BEACON ASSEMBLY PER DETAIL 'B'. SEE SHEET FB-01.
4. INSTALL MEDIAN ISLAND NOSE DETAIL PER CITY STD DETAIL T-260.
5. EXISTING SIGN TO REMAIN PER PLAN.
6. RELOCATE EXISTING SIGN PER PLAN.

PLOT STAMP:

CAD FILE:

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.865'
DESCRIPTION
HILTY NAIL IN LIGHT BASE AT NORTHWEST CORNER OF EL CAMINO AND DEL PASO.

FIELD BOOK 1476

SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: ____ DATE ____
DESIGN BY: ____ R.C.E. ____ DATE ____
CHECKED BY: ____ R.C.E. ____ DATE ____

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Kimley»Horn

4637 CHABOT DRIVE, STE 300, PLEASANTON, CA 94588
PHONE: 925-398-4840
WWW.KIMLEY-HORN.COM

IMPROVEMENT PLANS FOR
LAMPASAS AVE AT RIO LINDA BLVD HSIP AND SAFETY IMPROVEMENTS PROJECT
SIGNING & STRIPING PLANS

PN: 097186043

DWG. NO. SS-01

SHEET 16 OF 17

LEGEND

- HMA PAVEMENT
- DECOMPOSED GRANITE
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- (XX) PROPOSED CALTRANS STRIPING DETAIL. SEE 2023 CALTRANS RSP
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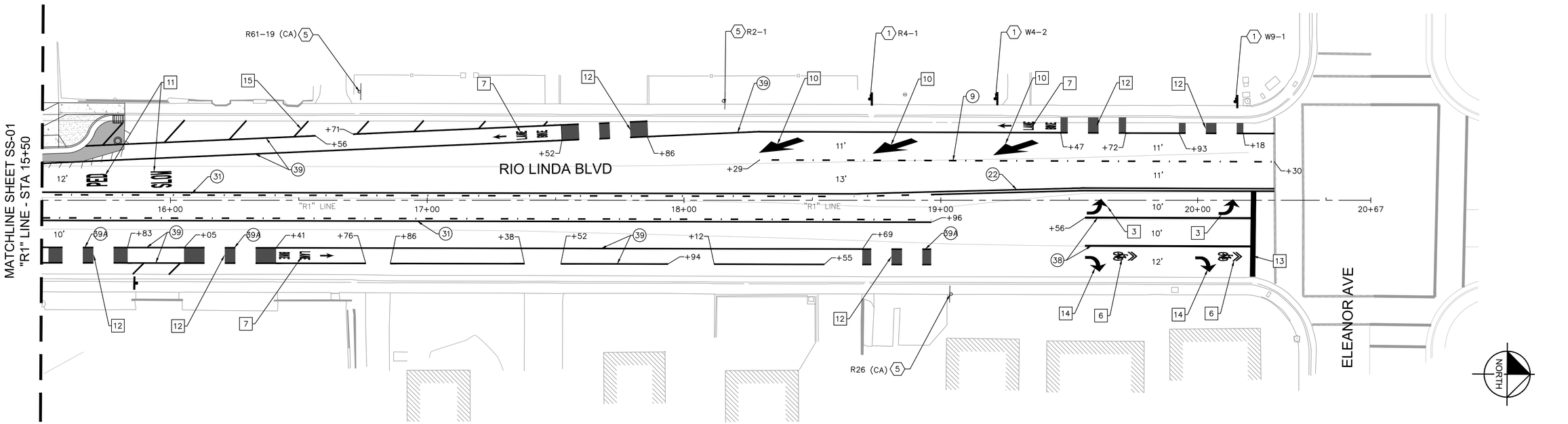
4. INSTALL MEDIAN ISLAND NOSE DETAIL PER CITY STD DETAIL T-260.
5. EXISTING SIGN TO REMAIN PER PLAN

SIGN SCHEDULE

CALLOUT	MUTCD CODE	DESCRIPTION	INSTALL
	W11-2	PEDESTRIAN CROSSING SIGN	13
	W16-7PR	RIGHT DIAGONAL ARROW SIGN	7
	W16-7PL	LEFT DIAGONAL ARROW SIGN	6
STOP	R1-1	STOP SIGN	1
	R4-7	KEEP RIGHT SIGN	1
		TOTAL	28

PAVEMENT MARKING SCHEDULE

PATTERN OR LEGEND	INSTALL	
	No.	TOTAL SQ. FT.
LIMIT LINE	2	57
TYPE I ARROW	1	13
TYPE VII (R) ARROW	1	44
TYPE IV (L) ARROW	3	45
TYPE IV (R) ARROW	4	60
SHARROW MARKING	4	28
BIKE LANE MARKING	6	86
YIELD LINE	2	18
"STOP" MARKING	1	22
TYPE VI (L) ARROW	3	117
"XING" MARKING	2	40
"PED" MARKING	2	34
"SLOW" MARKING	2	40
GREEN BIKE CONFLICT MARKING	13	978



GRAPHIC SCALE IN FEET
0 10 20 40

PLOT STAMP:

CAD FILE:

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. 37.865'
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FIELD BOOK 1476

SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: ____ DATE ____
DESIGN BY: ____ R.C.E. ____ DATE ____
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IMPROVEMENT PLANS FOR
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SIGNING & STRIPING PLANS

PN: 097186043

DWG. NO. SS-02
SHEET 17 OF 17

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH: CITY OF SACRAMENTO DESIGN & PROCEDURES MANUAL, DATED SEPTEMBER 2018, CITY STANDARD SPECIFICATIONS, DATED NOVEMBER 2020 WITH APPLICABLE ADDENDA, CALTRANS STANDARD PLANS, 2023 EDITION EXCEPT FOR TRAFFIC SIGNAL POLES AND FOUNDATIONS SHALL BE PER 2006 EDITION, AND THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION.
2. THREE WORKING DAYS PRIOR TO REQUIRING PROJECT STAKING, THE CONTRACTOR SHALL SUBMIT TO THE RESIDENT ENGINEER OR INSPECTOR A COMPLETED CONSTRUCTION STAKING REQUEST FORM.
3. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK, AND FOR PROVIDING PROPER AND SAFE ROUTING OF THE VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO WORKING HOURS. THE USE OF FLAGGERS, BARRICADES AND CONSTRUCTION SIGNING SHALL COMPLY WITH THE CURRENT EDITION OF THE CALIFORNIA MUTCD.
4. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UTILITIES AND PROTECTING AND REPAIRING DAMAGE TO EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (1-800-642-2444) TWO WORKING DAYS PRIOR TO COMMENCING WORK.
5. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SEWER AND/OR DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE PROPOSED SEWER AND/OR DRAINAGE IMPROVEMENTS ARE PLACED AND FUNCTIONING.
6. THE RESIDENT ENGINEER SHALL DETERMINE THE EXACT LIMITS OF PAVEMENT REMOVAL IN THE FIELD. EXISTING ASPHALT AND CONCRETE SHALL BE SAWCUT IN A NEAT STRAIGHT LINE A MINIMUM OF 2-1/2" DEEP. THE EXPOSED VERTICAL EDGES SHALL BE TACKED WITH EMULSION PRIOR TO ASPHALT CONCRETE PAVING.
7. DEMOLITION OF EXISTING FEATURES SHALL BE LIMITED TO THE ITEMS SHOWN ON THE PLANS AND DESCRIBED IN THE SPECIAL PROVISIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE ALL EXISTING FEATURES DAMAGED BY HIS OPERATIONS, AT HIS EXPENSE.
8. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR PROTECTING EXISTING TREES NOT SCHEDULED TO BE REMOVED BY THIS CONTRACT. ANY TREE DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, AT HIS EXPENSE.
9. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR CAPPING AND RELOCATING EXISTING SPRINKLERS AS DIRECTED BY THE ENGINEER.
10. THE CONTRACTOR SHALL HAVE A CURRENT AND ACTIVE CLASS A – GENERAL ENGINEERING CONTRACTOR LICENSE ISSUED BY THE CCSLB AT THE TIME OF THE BID SUBMITTAL AND THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR, AND/OR SUBCONTRACTORS PERFORMING ELECTRICAL WORK, SHALL ALSO HAVE A CURRENT AND ACTIVE CLASS C10 – ELECTRICAL CONTRACTOR LICENSE ISSUED BY THE CCSLB AT THE TIME OF THE BID SUBMITTAL AND THROUGHOUT THE CONSTRUCTION PERIOD.
11. ALL CURB, GUTTER AND SIDEWALK SHOWN TO BE REMOVED SHALL BE REMOVED TO THE NEAREST EXPANSION JOINT OR SCORE MARK. DAMAGE TO EXISTING CURB, GUTTER, AND SIDEWALK WHICH IS SHOWN ON THE PLANS TO REMAIN, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
12. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY & HEALTH (2424 ARDEN WAY SUITE 165, SACRAMENTO, CA PHONE 263-2800) PRIOR TO ANY TRENCHING EXCAVATION 5 FEET OR MORE IN DEPTH. A COPY OF THIS PERMIT SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
13. REPLACEMENT OF LIVE SEWER SERVICES SHALL BE TO THE PROPERTY LINE. REPLACEMENT SEWER CLEANOUTS AND SERVICES SHALL HAVE THE SAME DIAMETER PIPE AS THE EXISTING, WITH THE EXCEPTION OF MAINTAINING A 4" MINIMUM DIAMETER.
14. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR PRESERVING ALL EXISTING MONUMENTS WHICH WILL BE DISTURBED OR REMOVED AS REQUIRED BY CONTRACTOR'S WORK. CONTRACTOR SHALL COORDINATE WITH ENGINEER/SURVEYOR PRIOR TO DISTURBANCE OF EXISTING MONUMENTS, AND SHALL HAVE A LICENSED LAND SURVEYOR RESET MONUMENTS, PROVIDE PERMANENT WITNESS MONUMENTS, AND FILE DOCUMENTATION WITH THE COUNTY SURVEYOR PURSUANT TO THE BUSINESS AND PROFESSIONS CODE.
15. THE CONTRACTOR, SUBCONTRACTOR OR SURVEYOR SHALL NOT CUT PERMANENT CROSSES INTO EXISTING CONCRETE CURBS, GUTTERS OR SIDEWALKS.
16. GUTTER SLOPES FROM THE FLOWLINE TO LIP SHALL BE 5% MAXIMUM FOR THE FULL-WIDTH OF ALL CURB RAMPS. THE 5% CROSS SLOPE SHALL TRANSITION TO THE STANDARD CURB AND GUTTER CROSS-SLOPE OVER A DISTANCE OF 3 FEET UNLESS NOTED OTHERWISE.
17. ANY NEW CONCRETE SURVEY MONUMENT (PER CITY STANDARD SPECIFICATION DETAIL) SHALL BE PLACED BY A LICENSED LAND SURVEYOR.

STANDARD ABBREVIATIONS

AB	— AGGREGATE BASE	(E) or EXIST	— EXISTING	PVC	— POLY VINYL CHLORIDE
AC	— ASPHALT CONCRETE	FH	— FIRE HYDRANT	R	— RADIUS
AP	— ANGLE POINT	FL	— FLOW LINE	RCP	— REINFORCED CONC. PIPE
AVE	— AVENUE	FM	— FORCE MAIN	RP	— RADIUS POINT
BLDG	— BUILDING	FOC	— FACE OF CURB	RT	— RIGHT
BC	— BEGIN CURVE	FOW	— FACE OF WALK	R/W, ROW	— RIGHT-OF-WAY
BOC	— BACK OF CURB	G	— GAS	S =	— SLOPE
BOW	— BACK OF WALK	GB	— GRADE BREAK	SD	— STORM DRAIN
CAB	— CABINET	GD	— GUTTER DRAIN	SDMH	— STORM DRAIN MH
C&G	— CURB AND GUTTER	GV	— GATE VALVE	SHT	— SHEET
CG&S	— CURB, GUTTER AND SIDEWALK	JP	— JOINT POLE	SNS	— STREET NAME SIGN
CL or ℄	— CENTER LINE	LF	— LINEAR FEET	SPECS	— SPECIFICATIONS
CMP	— CORROGATED METAL PIPE	LIP	— LIP OF GUTTER	SS	— SANITARY SEWER
C/O	— CLEANOUT	LT	— LEFT	SSMH	— SANITARY SEWER MH
CONC	— CONCRETE	MB	— MAIL BOX	ST	— STREET
CONST	— CONSTRUCT	MFR'S	— MANUFACTURE'S	STA	— STATION
CTV	— CABLE TV	MH	— MAINTENANCE HOLE	STD	— STANDARD
CR	— CURB RAMP	MAX, MIN	— MAXIMUM, MINIMUM	SW	— SIDEWALK
CS	— COMBINATION SYSTEM	N/A	— NOT APPLICABLE	T or TEL	— TELEPHONE
CSMH	— COMBINATION SYSTEM MH	No., #	— NUMBER	T.O.N.	— TOP OF NAIL
CUT	— CUTLINE	N.T.S.	— NOT TO SCALE	TOB	— TOP OF BANK
DB	— DITCH BOX	PB	— PULL BOX	TOE	— TOE OF SLOPE
DI	— DROP INLET	PG	— PROPOSED GRADE	T.O.P.	— TOP OF PIPE
DRWY	— DRIVEWAY	PI	— POINT OF INTERSECTION	TYP	— TYPICAL
DWG	— DRAWING	PL	— PROPERTY LINE	TS	— TRAFFIC SIGNAL
E or ELECT	— ELECTRICAL	PP	— POWER POLE	W	— WATER
EC	— END CURVE	PCC	— PORTLAND CEMENT CONCRETE	W/	— WITH
EG	— EXISTING GRADE	(P), PROP.	— PROPOSED	WKWY	— WALKWAY
EL or ELEV	— ELEVATION	PERF	— PERFORATED	WM	— WATER METER
EP, EOP	— EDGE OF PAVEMENT	PM	— PARKING METER	WV	— WATER VALVE

CITY OF SACRAMENTO

IMPROVEMENT PLANS FOR

LA MANCHA WAY - VALLEY HI DRIVE CORRIDOR IMPROVEMENTS

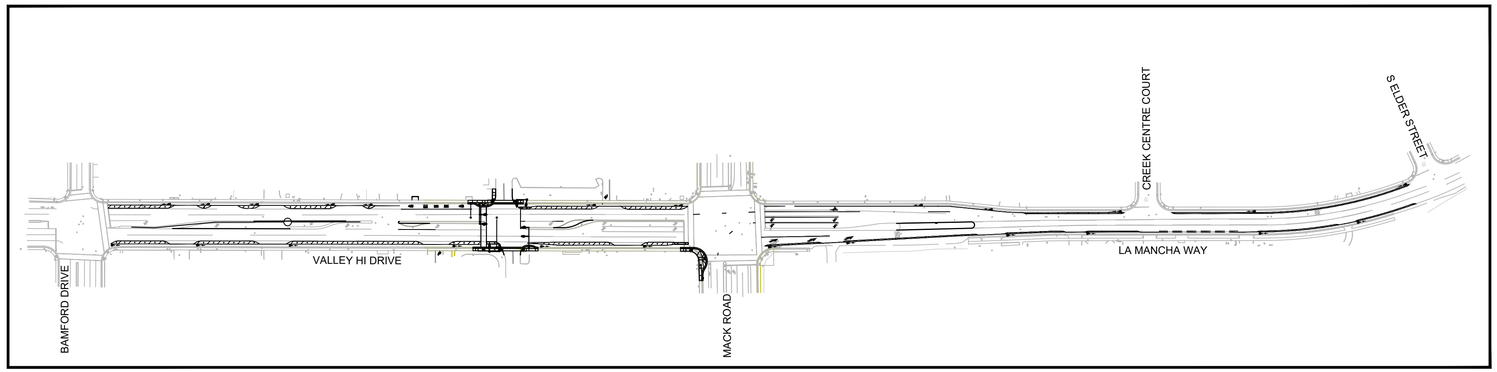
APPROVED BY: _____ _____
JUDITH S. MATSUI-DRURY, R.C.E. 59096 — DATE
SUPERVISING ENGINEER
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: _____ _____
KALEB M HAILE, P.E. 15137 — DATE
SUPERVISING ENGINEER
DEPARTMENT OF PUBLIC WORKS

LOCATION MAP

TBD

INDEX OF SHEETS:



SITE PLAN

N.T.S

BENCH MARK DESCRIPTION:

HORIZONTAL CONTROL:

TBD

PLOT STAMP:

CAD FILE: K:\SAC_TPTO\Sacramento LaMancha-Valley Hi Safety Improvements - 197xxxxx\08 CADD\PlanSheets\COVER SHEET.dwg 3/25/2024 1:49 PM

REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. –
DESCRIPTION
–
–

FIELD BOOK -

SCALE
HORIZ. _____
VERT. _____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: KL, MT, TC — DESIGN BY: DC, TC — CHECKED BY: DC
DATE 3/6/2024 — R.C.E. _____ DATE _____ — R.C.E. _____ DATE _____

65% NOT FOR CONSTRUCTION

Kimley»Horn
KIMLEY-HORN AND ASSOCIATES, Inc.
555 CAPITOL MALL, SUITE 300
SACRAMENTO, CA 95814

IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
COVER SHEET

PN: 097186046

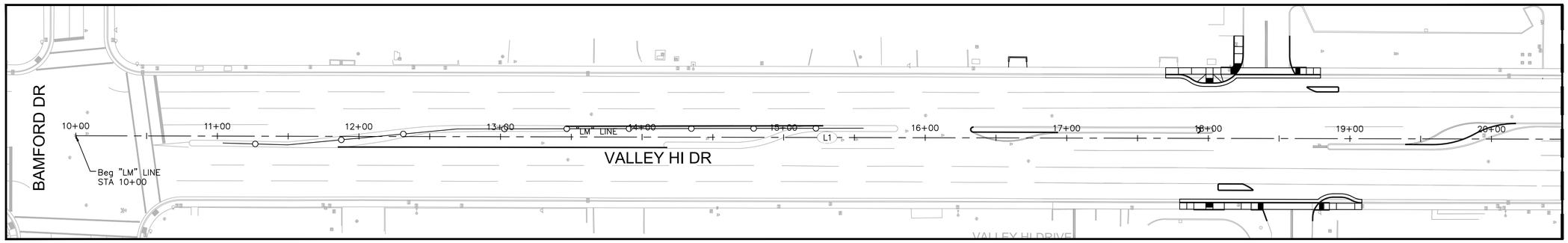
DWG. NO. CV-01
SHEET 1 OF 21

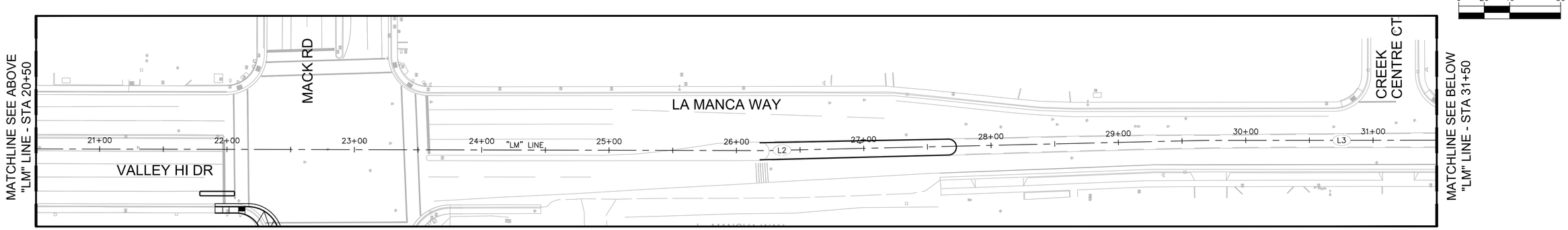
DATUM

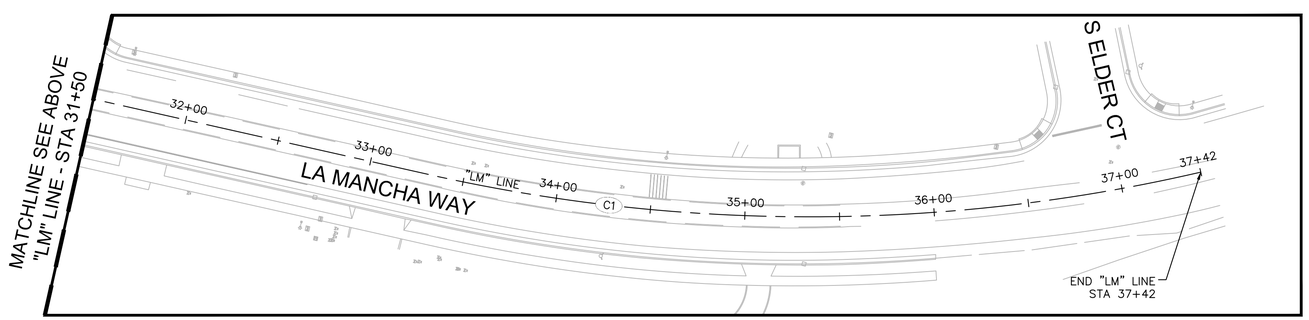
BASIS OF BEARING

LINE TABLE		
LINE	LENGTH	BEARING
L1	1623.37	N0°14'23.62"W
L2	344.97	N1°42'10.05"W
L3	368.56	N0°25'28.62"W

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	916.64'	405.60'	N13°26'05"W	402.30'	25°21'10"	206.18'







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KIMLEY-HORN AND ASSOCIATES, Inc.
555 CAPITOL MALL, SUITE 300
SACRAMENTO, CA 95814

IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
HORIZONTAL CONTROL PLAN

PN: 097186046
DWG. NO. HC-01
SHEET 2 OF 21

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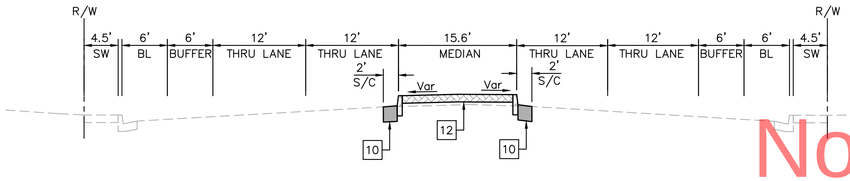
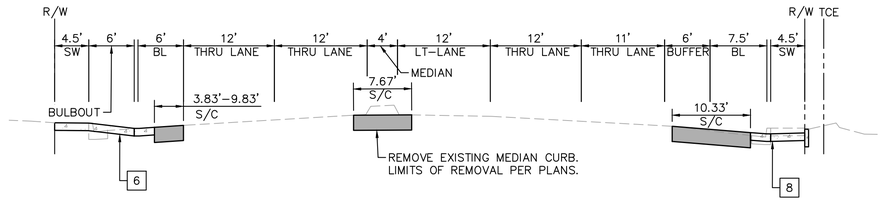
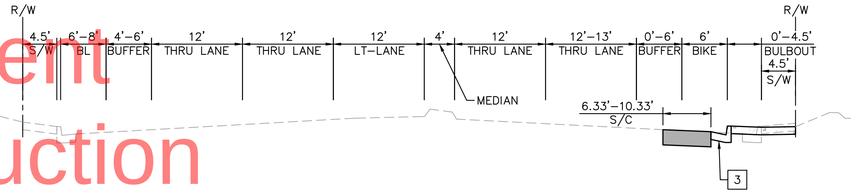


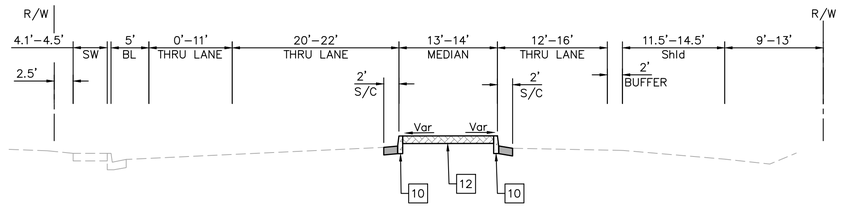
SECTION A-A
VALLEY HI DR SOUTHERN MEDIAN CLOSURE
NTS



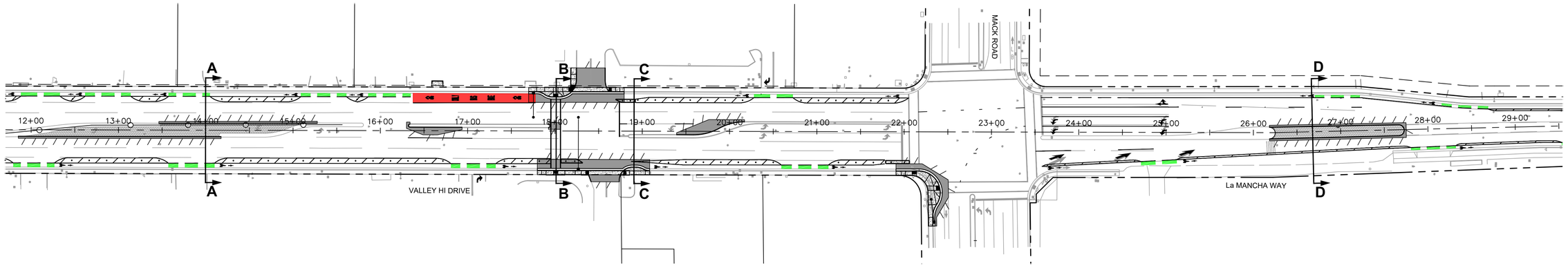
SECTION B-B
VALLEY HI DR INTERSECTION SOUTH
NTS



SECTION C-C
VALLEY HI DR INTERSECTION NORTH
NTS



SECTION D-D
VALLEY HI DR NORTHERN MEDIAN CLOSURE
NTS



CONSTRUCTION NOTES

3	INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T–11.
6	INSTALL SINGLE FLARE CURB RAMP PER CITY OF SACRAMENTO STD PLAN T–73.
8	INSTALL SINGLE PAN CURB RAMP PER CITY OF SACRAMENTO STD PLAN T–71
10	INSTALL TYPE 14 CURB PER CITY OF SACRAMENTO STD PLAN T–11.
12	INSTALL MEDIAN PAVING PER XX. GRADE TO DRAIN.

LEGEND

- HMA PAVEMENT (10" THICK, TYPE A)
- PCC (SIDEWALK, C&G, etc.)
- HARDSCAPE
- SAWCUT
- RIGHT–OF–WAY

NORTH

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555 CAPITOL MALL, SUITE 300
SACRAMENTO, CA 95814

IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
TYPICAL SECTIONS

PN: 097186046
DWG. NO. TX-01
SHEET - OF 21

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DEMOLITION NOTES (ALL DEMOLITION PLAN SHEETS):

1. ALL EXISTING SIGNS WITHIN AREAS OF SIDEWALK REMOVAL SHALL BE SALVAGED WHEN NO LONGER REQUIRED FOR TRAFFIC CONTROL OR WHEN IN CONFLICT WITH CONSTRUCTION SIGNS.
2. REMOVE SIDEWALK TO THE NEAREST JOINT OR SCOREMARK BEYOND STA/OFF SHOWN, AS DIRECTED BY ENGINEER.
3. EXISTING UTILITIES ARE TO REMAIN AND/OR BE ADJUSTED BY OWNER, UNLESS OTHERWISE NOTED. SEE DRAINAGE AND UTILITY PLANS FOR DETAILS.
4. EXISTING AMENITIES WITHIN CITY RIGHT OF WAY TO BE SALVAGED BY THE CONTRACTOR AND DELIVERED TO THE CITY.
5. CONTRACTOR TO PREPARE AND SUBMIT DETAILED CONSTRUCTION PHASING AND TRAFFIC HANDLING PLANS FOR CITY APPROVAL PRIOR TO CONSTRUCTION.
6. EXISTING ASPHALT CONCRETE MAY CONTAIN PAVEMENT FABRIC, ENGINEERED PAVING MAT, OR OTHER CONTAMINATED MATERIALS. CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF ENCOUNTERED MATERIALS.
7. COORDINATE WITH ALL ADJACENT PARCELS OWNERS AND OCCUPANTS REGARDING CONSTRUCTION OPERATIONS TO SAID OWNER/TENANT'S PROPERTY AND ACCESS RESTRICTIONS A MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF DEMOLITION ACTIVITIES.
8. CONTRACTOR TO SALVAGE ALL EXISTING SIGNAL EQUIPMENT TO THE CITY. ALL EXISTING TRAFFIC SIGNAL CONDUITS SHALL BE ABANDONED IN PLACE OR REMOVED WITH SUBSEQUENT CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING TRAFFIC SIGNAL CONDUCTORS.

DEMOLITION NOTES

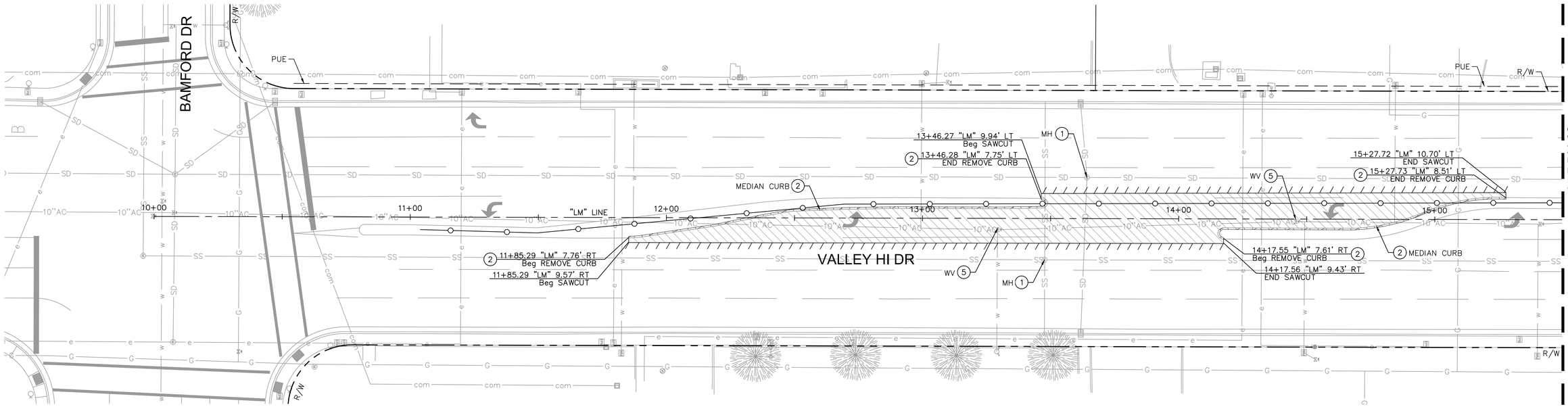
(1) EXISITING TO REMAIN.

(2) REMOVE.

(5) ADJUST TO GRADE.

LEGEND

- REMOVE EXISTING HMA PAVEMENT
- REMOVE EXISTING CONCRETE
- CLEAR AND GRUB
- SAWCUT
- w — EXISTING 8" AC LINE
- 10"AC — EXISTING 10" AC LINE
- W — EXISTING 12" AC LINE
- SS — EXISTING SANITARY SEWER LINE
- SD — EXISTING STORM DRAIN LINE
- G — EXISTING GAS LINE
- e — EXISTING UNDERGROUND ELECTRIC LINE
- com — EXISTING UNDERGROUND COMMUNICATIONS LINE
- COM — EXISTING OVERHEAD COMMUNICATIONS LINE



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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
DEMOLITION PLANS

PN: 097186046
DWG. NO. DM-01
SHEET 4 OF 21

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DEMOLITION NOTES

SEE SHEET DM-01 FOR DEMOLITION NOTES.

DEMOLITION NOTES

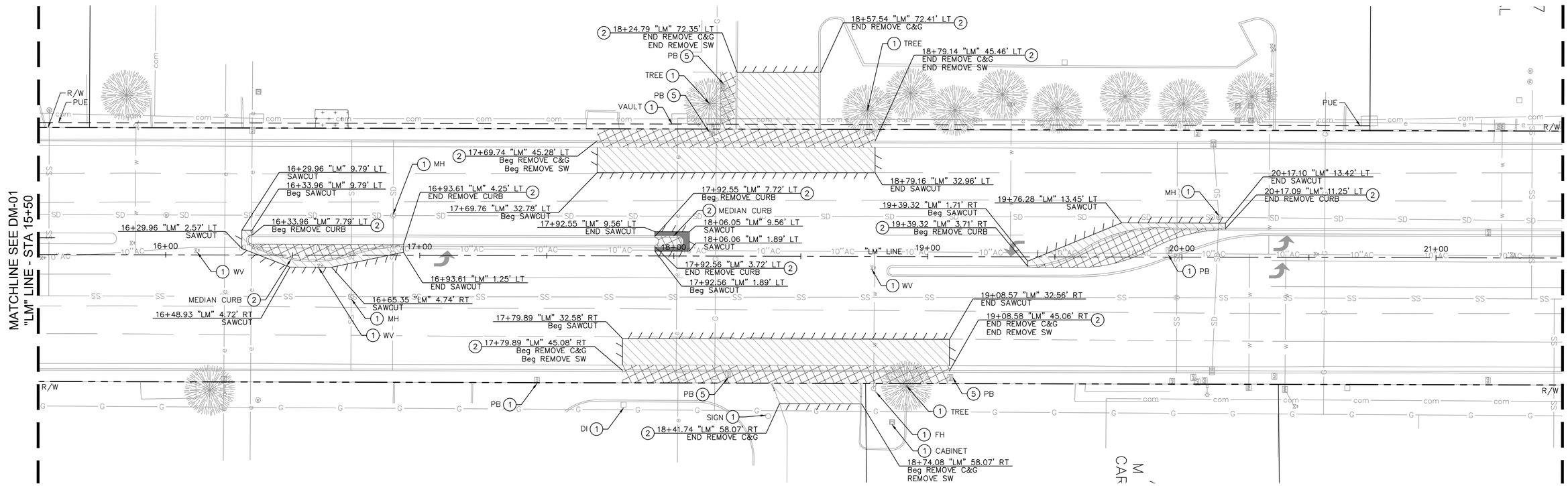
(1) EXISITING TO REMAIN.

(2) REMOVE.

(5) ADJUST TO GRADE.

LEGEND

- REMOVE EXISTING HMA PAVEMENT
- REMOVE EXISTING CONCRETE
- CLEAR AND GRUB
- SAWCUT
- w — EXISTING 8" AC LINE
- 10"AC — EXISTING 10" AC LINE
- W — EXISTING 12" AC LINE
- SS — EXISTING SANITARY SEWER LINE
- SD — EXISTING STORM DRAIN LINE
- G — EXISTING GAS LINE
- e — EXISTING UNDERGROUND ELECTRIC LINE
- com — EXISTING UNDERGROUND COMMUNICATIONS LINE
- COM — EXISTING OVERHEAD COMMUNICATIONS LINE



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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
DEMOLITION PLANS

PN: 097186046

DWG. NO. DM-02
SHEET 5 OF 21

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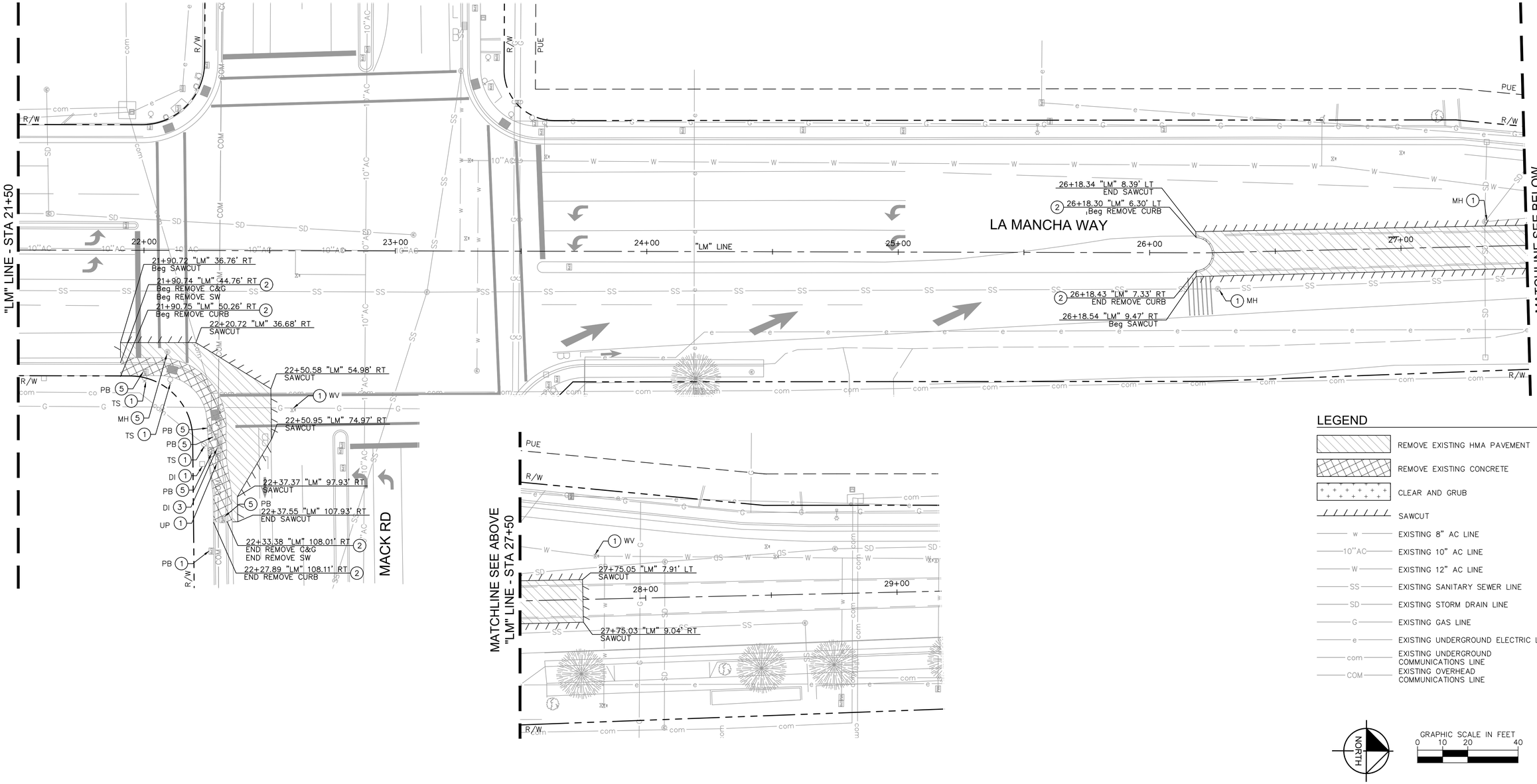
DEMOLITION NOTES

SEE SHEET DM-01 FOR DEMOLITION NOTES.

DEMOLITION NOTES

1. EXISITING TO REMAIN.
2. REMOVE.
3. SALVAGE
5. ADJUST TO GRADE.



LEGEND

- REMOVE EXISTING HMA PAVEMENT
- REMOVE EXISTING CONCRETE
- CLEAR AND GRUB
- SAWCUT
- w — EXISTING 8" AC LINE
- 10"AC — EXISTING 10" AC LINE
- W — EXISTING 12" AC LINE
- SS — EXISTING SANITARY SEWER LINE
- SD — EXISTING STORM DRAIN LINE
- G — EXISTING GAS LINE
- e — EXISTING UNDERGROUND ELECTRIC LINE
- com — EXISTING UNDERGROUND COMMUNICATIONS LINE
- COM — EXISTING OVERHEAD COMMUNICATIONS LINE

NORTH

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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
DEMOLITION PLANS

PN: 097186046

DWG. NO. DM-03
SHEET 6 OF 21

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CONSTRUCTION NOTES

1. SEE SHEET TX-01 FOR ADDITIONAL NOTES.
2. SEE SHEETS CD-01 THROUGH CD-03 FOR MEDIAN AND CURB RAMP DETAILS.
3. ANY UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF SURFACE IMPROVEMENTS.
4. CONTRACTOR SHALL VERIFY AND LOCATE ALL EXISTING UNDERGROUND UTILITIES BEFORE CONSTRUCTION AND PROTECT IN PLACE UNLESS OTHERWISE NOTED.
5. ANY EXISTING STRUCTURE, IMPROVEMENT, OR APPURTENANCE TO REMAIN THAT IS DAMAGED DURING DEMOLITION OR CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE ENGINEER.

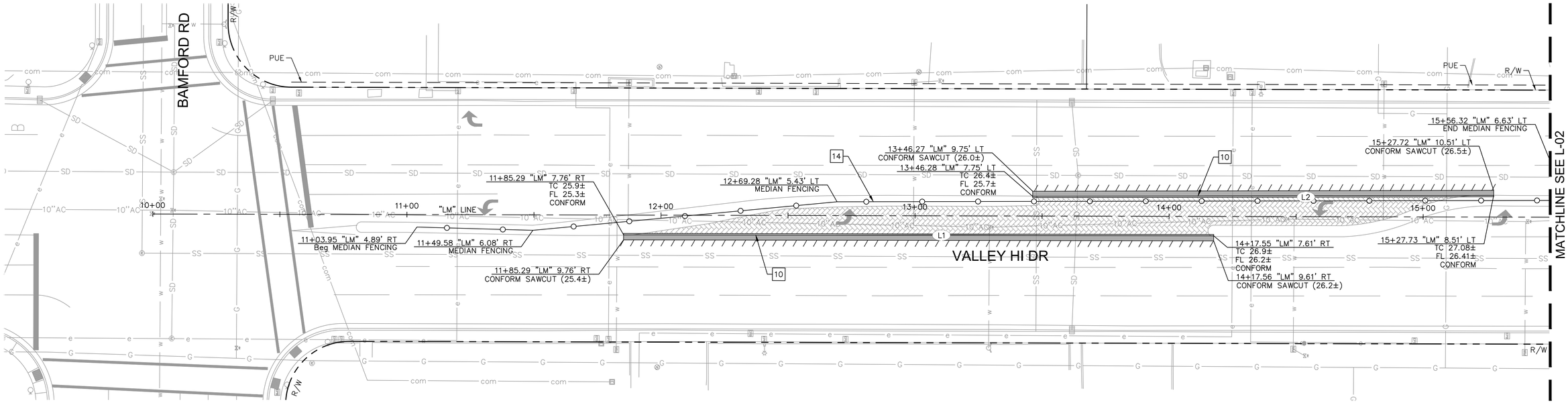
CONSTRUCTION NOTES

10 INSTALL TYPE 14 CURB PER CITY OF SACRAMENTO STD PLAN T-11.

14 INSTALL IRON MEDIAN PEDESTRIAN FENCING.

LEGEND

- HMA PAVEMENT (10" THICK, TYPE A)
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY



LINE TABLE		
LINE	LENGTH	BEARING
L1	232.26	N0°16'30.20"W
L2	181.44	S0°28'50.22"E

NORTH

GRAPHIC SCALE IN FEET
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555 CAPITOL MALL, SUITE 300
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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
LAYOUT PLANS

PN: 097186046

DWG. NO. L-01
SHEET 7 OF 21

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CONSTRUCTION NOTES

SEE SHEET L-01 FOR DEMOLITION NOTES.

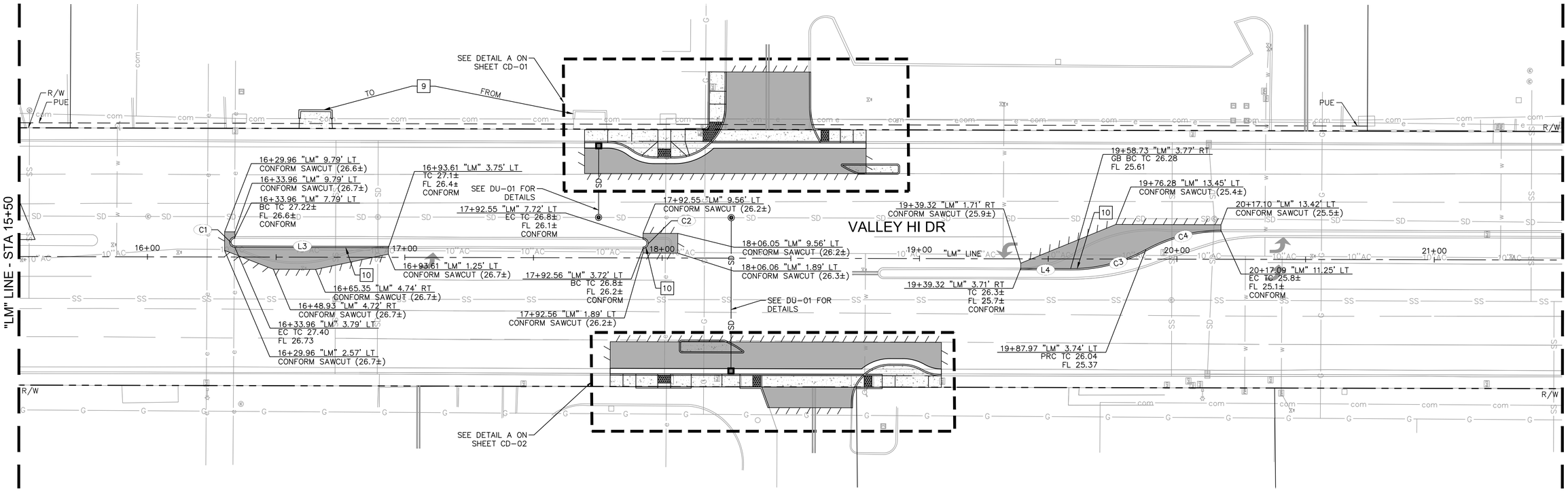
CONSTRUCTION NOTES

9 RELOCATE BUS STOP

10 INSTALL TYPE 14 CURB PER CITY OF SACRAMENTO STD PLAN T-11.

LEGEND

- HMA PAVEMENT
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY



LINE TABLE

LINE	LENGTH	BEARING
L3	59.66	N0°12'07.49"W
L4	19.41	S0°04'27.81"E

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	1.50'	4.71'	N89°47'53"E	3.00'	180°00'00"	INFINITY'
C2	2.00'	6.28'	S89°44'41"W	4.00'	180°00'00"	INFINITY'
C3	60.50'	30.77'	S14°38'42"E	30.44'	29°08'27"	15.73'
C4	59.50'	30.15'	S14°42'03"E	29.82'	29°01'45"	15.40'

NORTH

GRAPHIC SCALE IN FEET
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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
LAYOUT PLANS

PN: 097186046
DWG. NO. L-02
SHEET 8 OF 21

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CONSTRUCTION NOTES

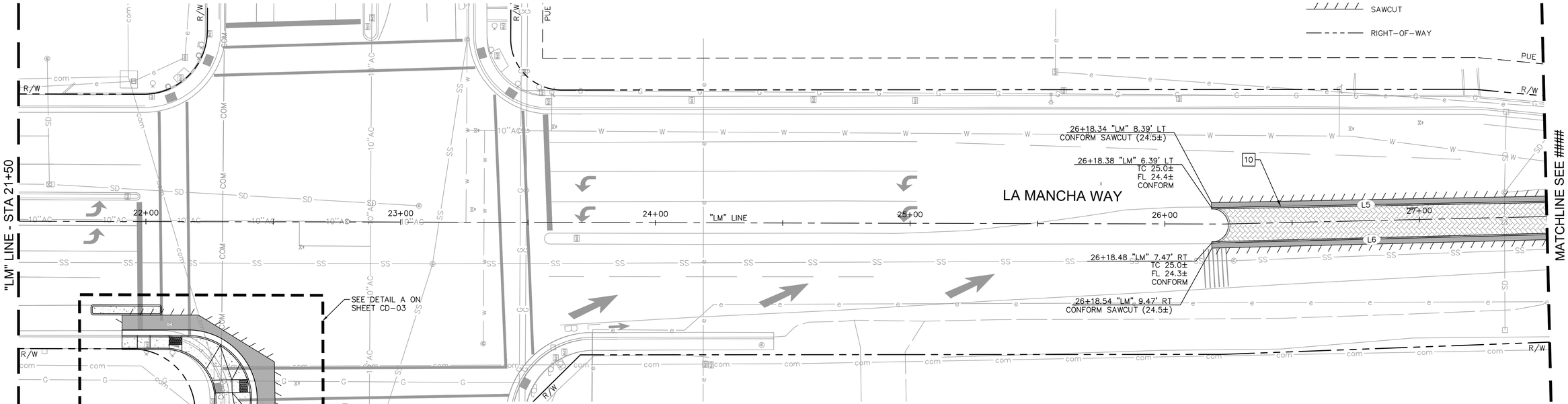
SEE SHEET L-01 FOR DEMOLITION NOTES.

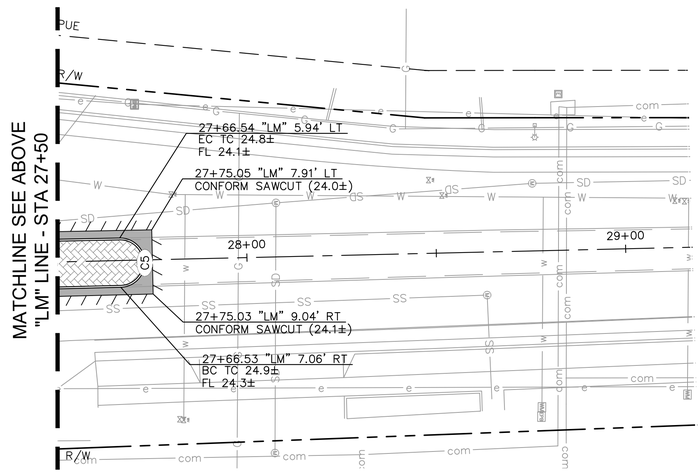
CONSTRUCTION NOTES

10 INSTALL TYPE 14 CURB PER CITY OF SACRAMENTO STD PLAN T-11.

LEGEND

- HMA PAVEMENT
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY





LINE TABLE		
LINE	LENGTH	BEARING
L5	148.00	S1°28'56.74"E
L6	65.98	N1°57'31.05"W

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C5	6.50'	20.38'	S88°21'10"W	13.00'	179°40'13"	2258.69'

NORTH

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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
LAYOUT PLANS

TPN: 097186046
DWG. NO. L-03
SHEET 9 OF 21

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CONSTRUCTION NOTES

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C1	15.00'	9.65'	N18°06'07"E	9.49'	36°52'12"	5.00'
C2	15.00'	9.65'	N18°06'07"E	9.49'	36°52'12"	5.00'
C3	20.00'	31.29'	N45°09'03"W	28.19'	89°38'08"	19.87'
C4	25.00'	14.72'	N72°38'57"E	14.51'	33°44'06"	7.58'

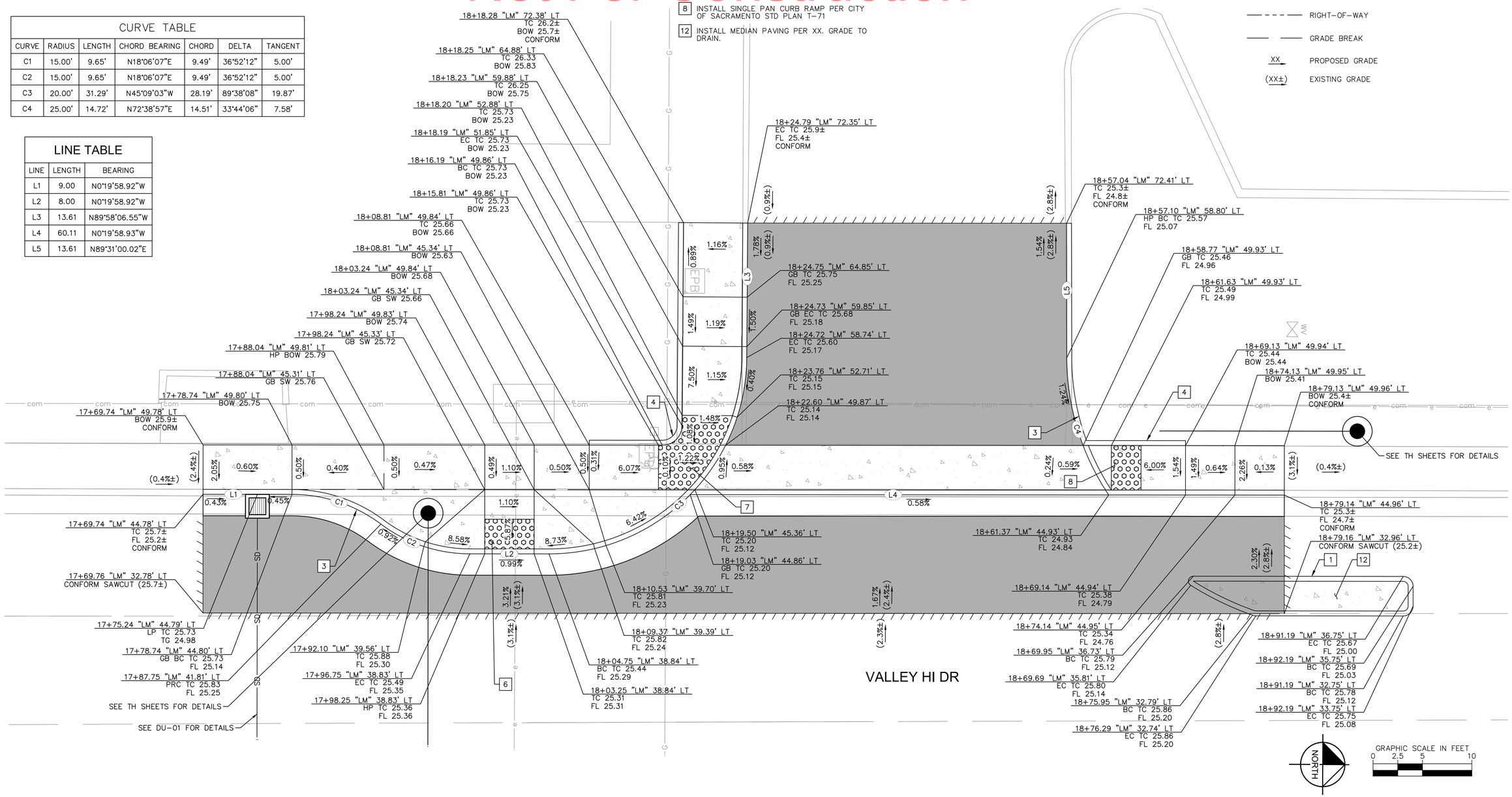
LINE TABLE		
LINE	LENGTH	BEARING
L1	9.00	N0°19'58.92"W
L2	8.00	N0°19'58.92"W
L3	13.61	N89°58'06.55"W
L4	60.11	N0°19'58.93"W
L5	13.61	N89°31'00.02"E

CONSTRUCTION NOTES

1. INSTALL TYPE 4 CURB PER CITY OF SACRAMENTO STD PLAN T-11.
3. INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T-11.
4. INSTALL TYPE 3 CURB PER CITY OF SACRAMENTO STD PLAN T-11.
6. INSTALL SINGLE FLARE CURB RAMP PER CITY OF SACRAMENTO STD PLAN T-73.
7. INSTALL SINGLE COMBINATION CURB RAMP PER CITY OF SACRAMENTO STD PLAN T-75.
8. INSTALL SINGLE PAN CURB RAMP PER CITY OF SACRAMENTO STD PLAN T-71
12. INSTALL MEDIAN PAVING PER XX. GRADE TO DRAIN.

LEGEND

- HMA PAVEMENT
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY
- GRADE BREAK
- XX — PROPOSED GRADE
- (XX±) — EXISTING GRADE



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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
CONSTRUCTION DETAILS

PN: 097186046
DWG. NO. CD-01
SHEET 10 OF 21

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CONSTRUCTION NOTES

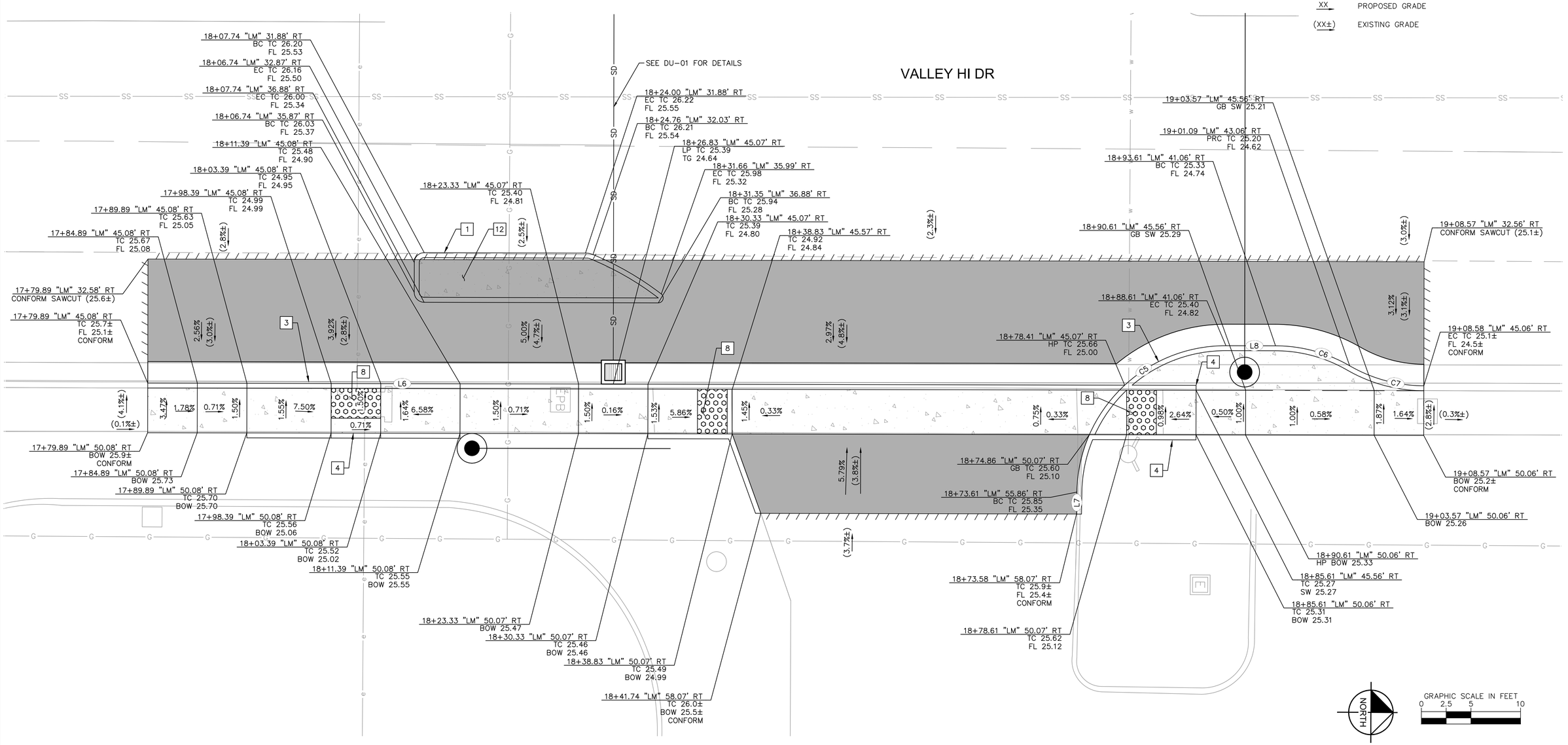
1	INSTALL TYPE 4 CURB PER CITY OF SACRAMENTO STD PLAN T-11.
3	INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T-11.
4	INSTALL TYPE 3 CURB PER CITY OF SACRAMENTO STD PLAN T-11.
8	INSTALL SINGLE PAN CURB RAMP PER CITY OF SACRAMENTO STD PLAN T-71
12	INSTALL MEDIAN PAVING PER XX. GRADE TO DRAIN.

LEGEND

- HMA PAVEMENT
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY
- GRADE BREAK
- XX — PROPOSED GRADE
- (XX±) — EXISTING GRADE

LINE TABLE		
LINE	LENGTH	BEARING
L6	98.52	N0°14'58.50"W
L7	2.21	S89°26'37.20"E
L8	5.00	S0°14'58.50"E

CURVE TABLE						
CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C5	15.00'	23.35'	S44°50'48"E	21.06'	89°11'39"	14.79'
C6	15.00'	7.83'	S14°42'49"W	7.75'	29°55'35"	4.01'
C7	15.00'	7.83'	S14°42'49"W	7.75'	29°55'35"	4.01'



REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. –
DESCRIPTION
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FIELD BOOK
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SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

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65% NOT FOR CONSTRUCTION

Kimley»Horn
KIMLEY-HORN AND ASSOCIATES, Inc.
555 CAPITOL MALL, SUITE 300
SACRAMENTO, CA 95814

IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
CONSTRUCTION DETAILS

PN: 097186046
DWG. NO. CD-02
SHEET 11 OF 21

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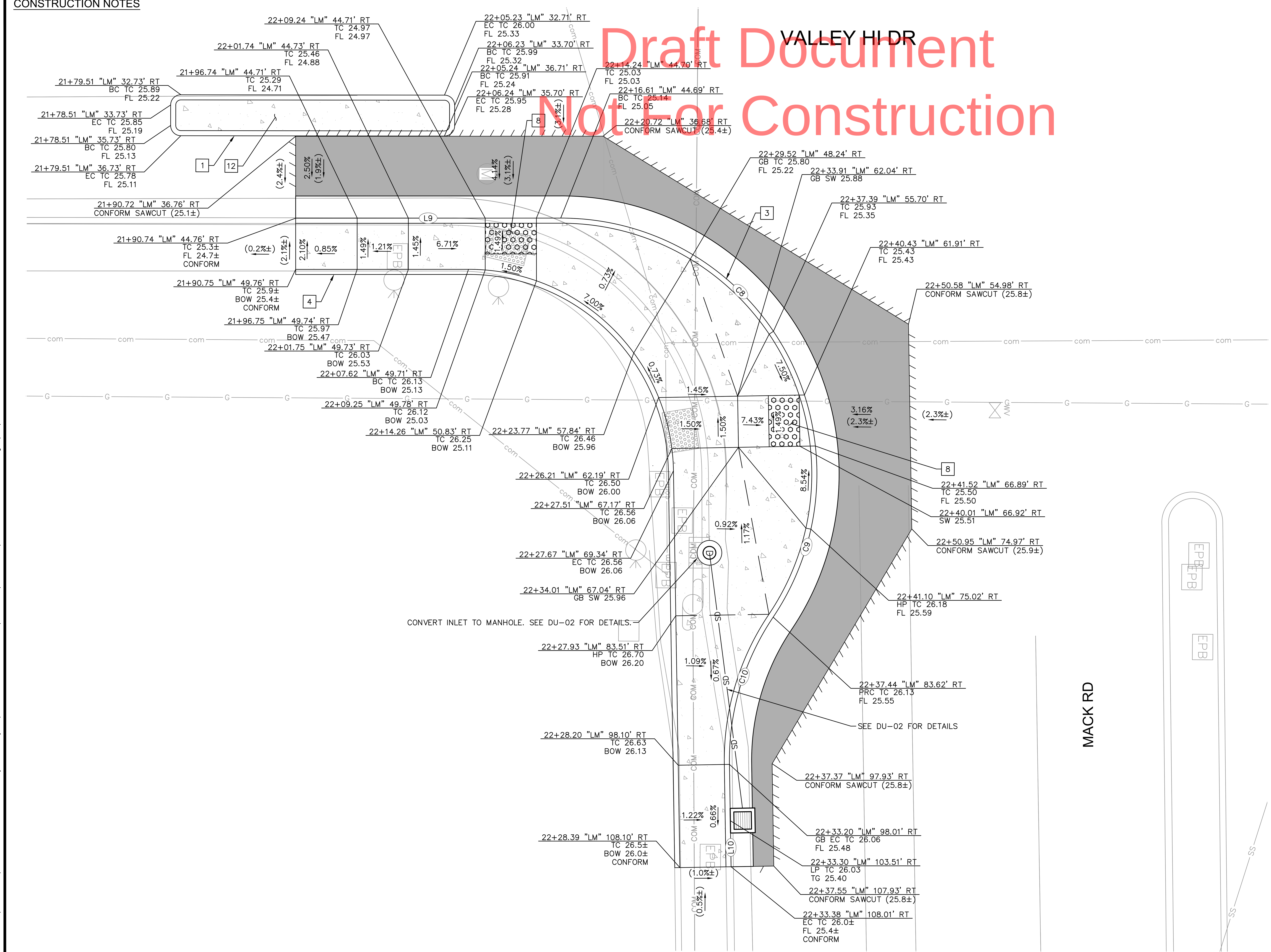
CONSTRUCTION NOTES



LEGEND

- HMA PAVEMENT
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY
- XX — PROPOSED GRADE
- (XX±) — EXISTING GRADE

CONSTRUCTION NOTES

1. INSTALL TYPE 4 CURB PER CITY OF SACRAMENTO STD PLAN T-11.
3. INSTALL TYPE 2 C&G PER CITY OF SACRAMENTO STD PLAN T-11.
4. INSTALL TYPE 3 CURB PER CITY OF SACRAMENTO STD PLAN T-11.
8. INSTALL SINGLE PAN CURB RAMP PER CITY OF SACRAMENTO STD PLAN T-71
12. INSTALL MEDIAN PAVING PER XX. GRADE TO DRAIN.

LINE TABLE

LINE	LENGTH	BEARING
L9	25.87	S0°23'34.29"E
L10	10.00	S88°42'13.86"W

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C8	25.00'	38.88'	S44°09'20"W	35.08'	89°05'48"	24.61'
C9	25.00'	15.23'	N73°50'19"W	15.00'	34°54'55"	7.86'
C10	25.00'	15.23'	N73°50'19"W	15.00'	34°54'55"	7.86'

NORTH

GRAPHIC SCALE IN FEET 0 2.5 5 10

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SACRAMENTO, CA 95814

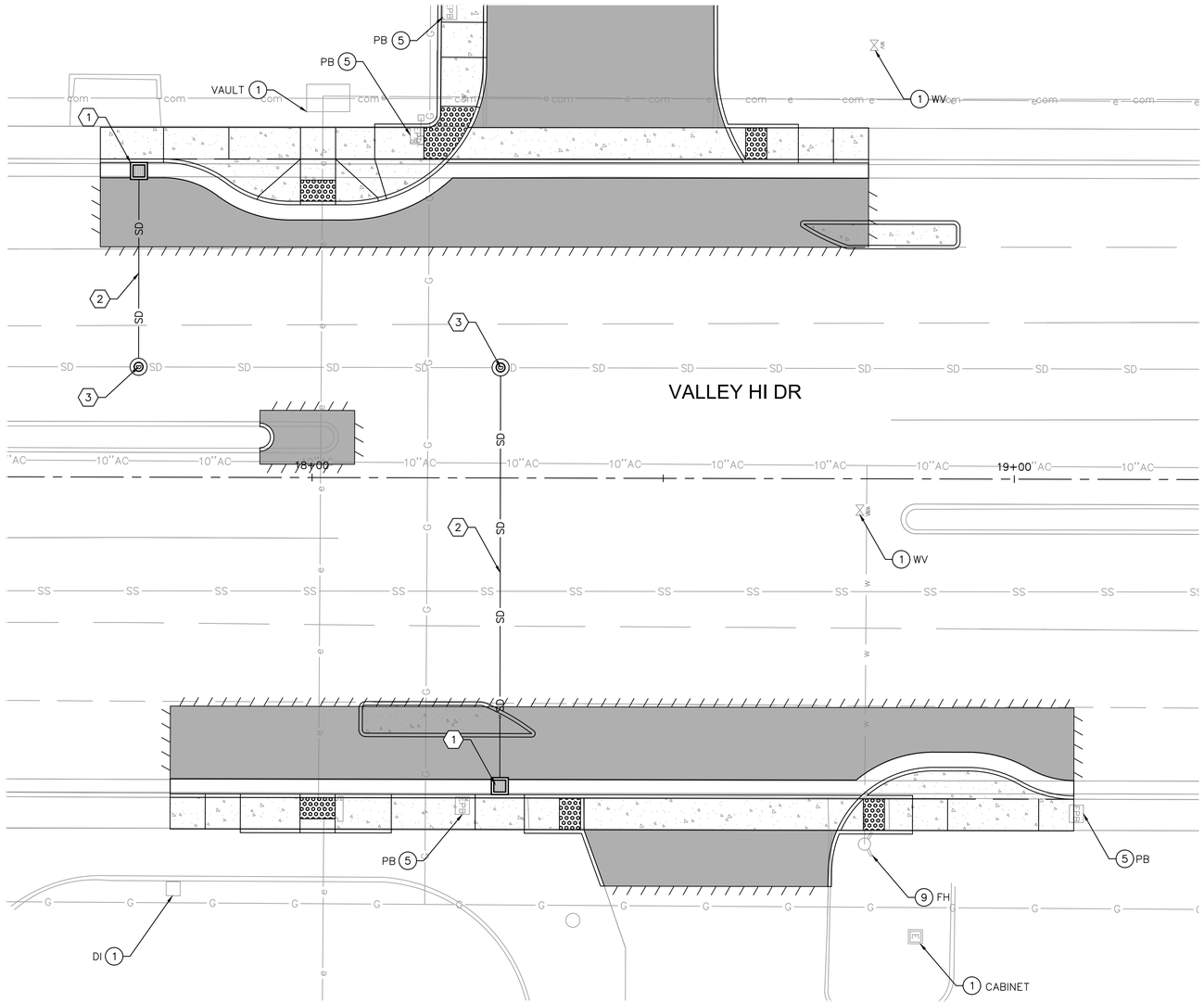
IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE
CORRIDOR IMPROVEMENTS
CONSTRUCTION DETAILS

PN: 097186046

DWG. NO. CD-03
SHEET 12 OF 21

NOTES

1. ALL LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY EXACT LOCATIONS OF ALL UTILITIES.
2. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND CONTACTING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION.
3. ALL VALVES AND MANHOLES NOT CALLED OUT AND ARE WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO GRADE AS NEEDED UNLESS OTHERWISE NOTED.
4. SEE LIGHTING AND ELECTRICAL PLANS FOR NEW LIGHTING INFORMATION. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CONSTRUCTION.
5. SEE DEMOLITION PLANS FOR SIGNAL REMOVAL AND EXISTING STREET LIGHT INFORMATION.



LEGEND

- HMA PAVEMENT
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT-OF-WAY
- SD — PROPOSED STORM DRAIN LINE
- 10"AC — EXISTING 10" AC LINE

UTILITY NOTES

1. EXISITING TO REMAIN.
5. ADJUST TO GRADE.
9. PROTECT IN PLACE.

DRAINAGE NOTES

1. INSTALL TYPE "B" DRAINAGE INLET PER CITY OF SACRAMENTO STD PLAN S-10.
2. INSTALL 12" RCP
3. INSTALL STANDARD STORM DRAIN MANHOLE PER CITY OF SACRAMENTO STD PLAN S-140.

UTILITY POSITIVE LOCATION TABLE

POTHOLE #	UTILITY TYPE	STA/OFF	NORT	TOP OF PIPE ELEV

TO BE COMPLETED NEXT SUBMITTAL

NORTH

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0 5 10 20

REVISIONS NO.	DESCRIPTION	DATE	BY

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CITY OF SACRAMENTO
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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
DRAINAGE AND UTILITY PLANS

PN: 097186046
DWG. NO. DU-01
SHEET 13 OF 21

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NOTES

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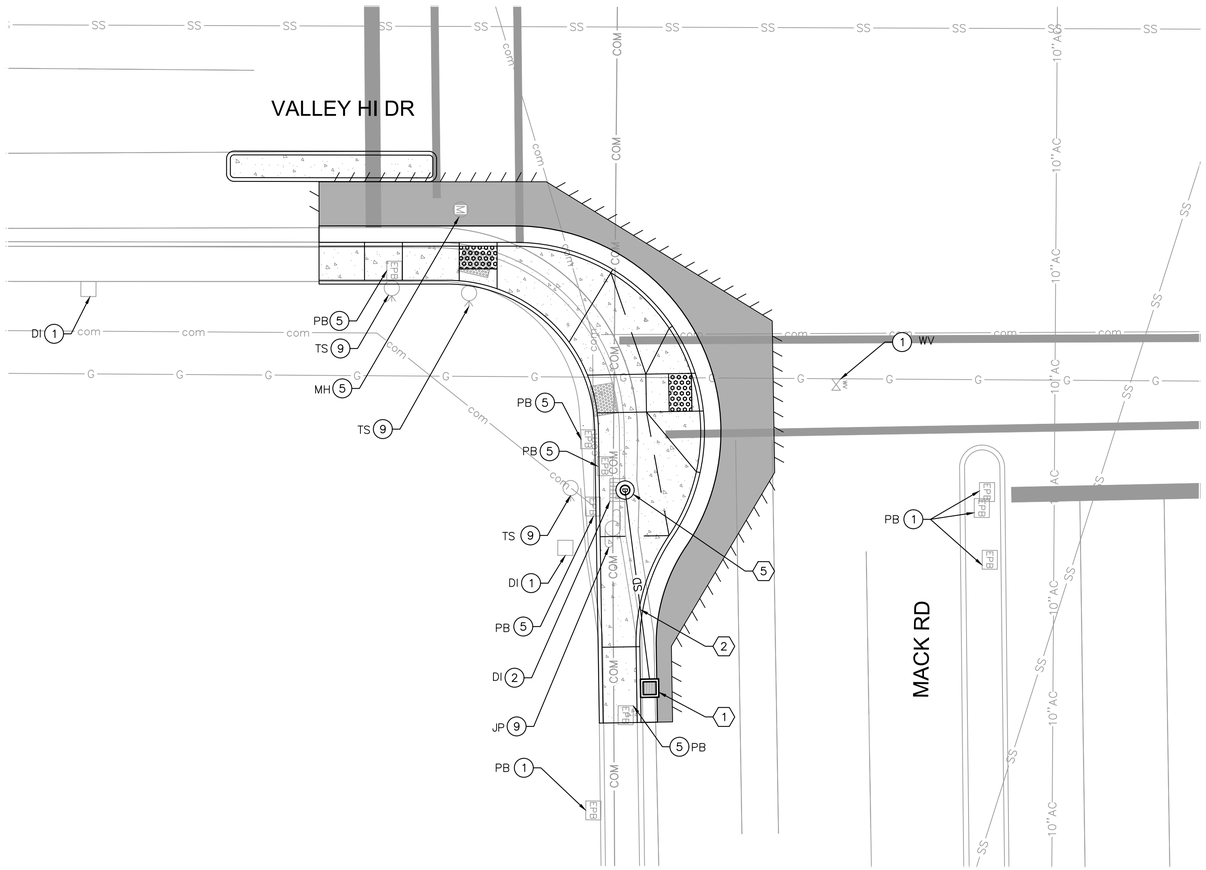

LEGEND

- HMA PAVEMENT
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- SAWCUT
- RIGHT–OF–WAY
- SD — PROPOSED STORM DRAIN LINE
- 10"AC — EXISTING 10" AC LINE

UTILITY NOTES

1. EXISITING TO REMAIN.
2. REMOVE.
5. ADJUST TO GRADE.
9. PROTECT IN PLACE.

DRAINAGE NOTES

1. INSTALL TYPE "B" DRAINAGE INLET PER CITY OF SACRAMENTO STD PLAN S–10.
2. INSTALL 12" RCP
5. MODIFY EXIST INLET TO STANDARD STORM DRAIN MANHOLE PER CITY OF SACRAMENTO STD PLAN S–140.

NORTH

GRAPHIC SCALE IN FEET
0 5 10 20

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SACRAMENTO, CA 95814

IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS

TPN: 097186046

DWG. NO.

SHEET
OF
21

STRIPING NOTES

12 INSTALL GREEN BIKE LANE CONFLICT STRIPING PER DETAIL ON SHEET SS-01.

15 INSTALL 6" WHITE THERMOPLASTIC AT 45 DEGREES AND 20' O.C.

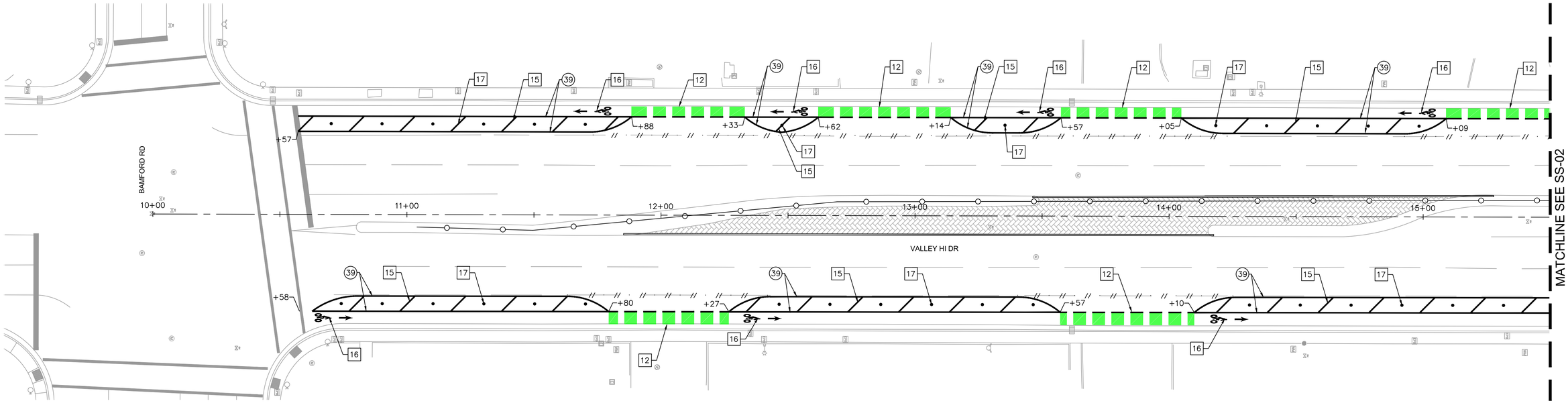
16 INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS 2023 STD PLAN A24C

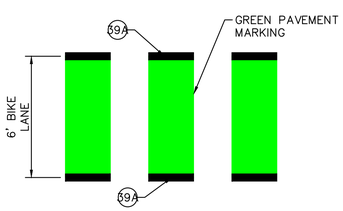
17 INSTALL CLASS 1 FLEXIBLE POST PER CALTRANS 2024 STD PLAN A73C

(39) INSTALL CALTRANS STRIPING DETAIL "XX" PER CALTRANS STANDARD PLANS.

LEGEND

- HMA PAVEMENT (10" THICK, TYPE A)
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- REMOVE STRIPING





DASHED GREEN BIKE LANE DETAIL
NO SCALE

NORTH

GRAPHIC SCALE IN FEET
0 10 20 40

REVISIONS NO.	DESCRIPTION	DATE	BY

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VERT. ____

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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
SIGNING AND STRIPING PLANS

PN: 097186046
DWG. NO. SS-01
SHEET 15 OF 21

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PLOT STAMP:

STRIPING NOTES

5 INSTALL BASIC CROSSWALK WITH 12" WHITE THERMOPLASTIC SPACED 10' CLEAR.

6 INSTALL SHARED ROADWAY BICYCLE MARKING PER CALTRANS 2023 STD PLAN A24C.

11 INSTALL "BIKE", "BUS", AND "ONLY" WORD MARKING PER CALTRANS STD PLAN A24D

12 INSTALL GREEN BIKE LANE CONFLICT STRIPING PER DETAIL ON SHEET SS-01.

13 INSTALL LIMIT LINES PER CALTRANS STD PLAN A24G.

14 INSTALL TYPE IV (R) ARROW PER CALTRANS STD PLAN A24A.

15 INSTALL 8' WHITE THERMOPLASTIC AT 45 DEGREES AND 20' O.C.

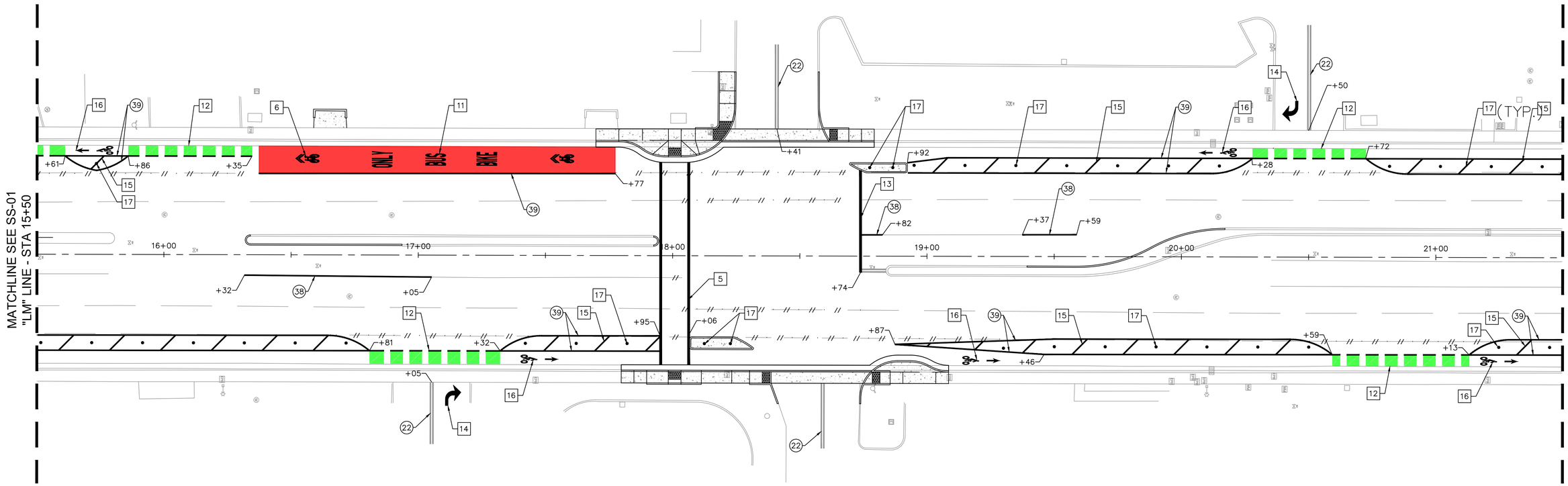
16 INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS 2023 STD PLAN A24C

17 INSTALL CLASS 1 FLEXIBLE POST PER CALTRANS 2024 STD PLAN A73C

(39) INSTALL CALTRANS STRIPING DETAIL "XX" PER CALTRANS STANDARD PLANS.

LEGEND

- HMA PAVEMENT (10" THICK, TYPE A)
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- REMOVE STRIPING



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SACRAMENTO, CA 95814

IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
SIGNING AND STRIPING PLANS

PN: 097186046

DWG. NO. SS-02
SHEET 16 OF 21

STRIPING NOTES

3 INSTALL TYPE IV (L) ARROW PER CALTRANS 2023 STD PLAN A24A

4 INSTALL TYPE VII (R) ARROW PER CALTRANS 2023 STD PLAN A24A

10 INSTALL TYPE VI (L) LANE DROP ARROW PER CALTRANS STD PLAN A24A.

12 INSTALL GREEN BIKE LANE CONFLICT STRIPING PER DETAIL ON SHEET SS-01.

15 INSTALL 8' WHITE THERMOPLASTIC AT 45 DEGREES AND 20' O.C.

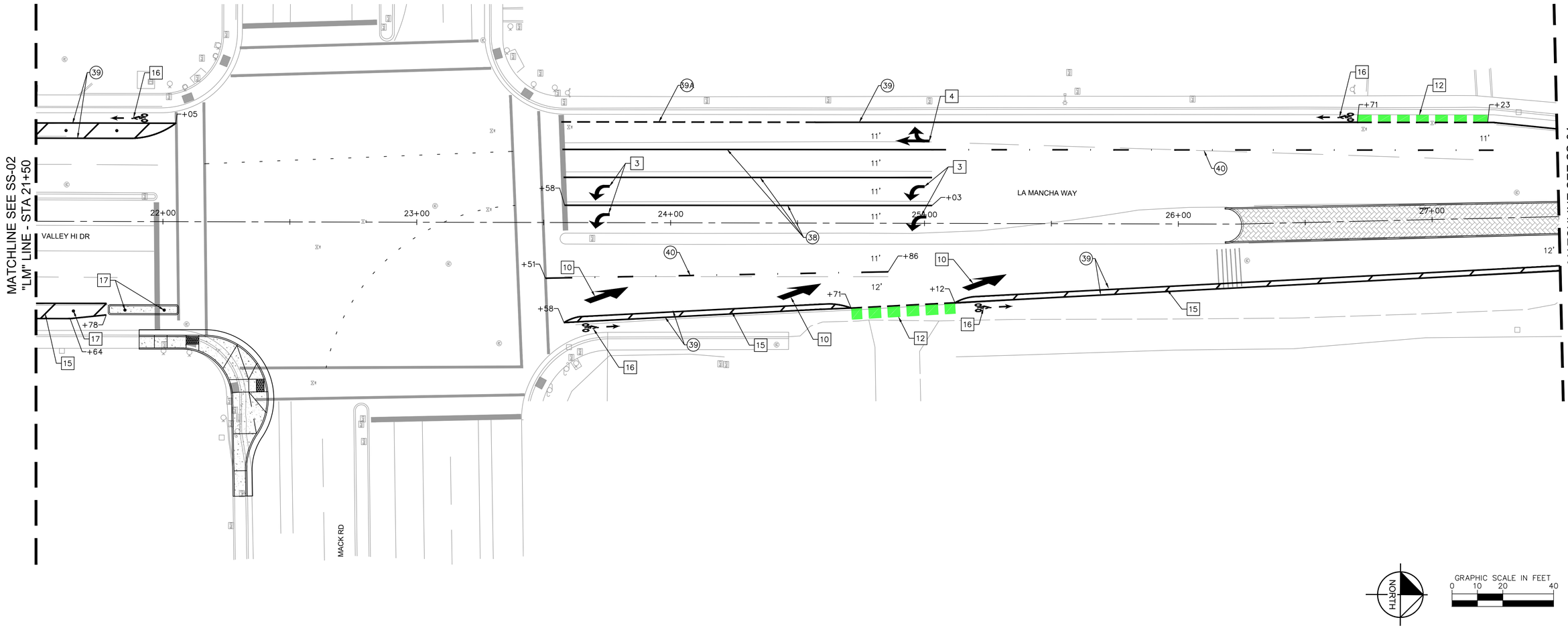
16 INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS 2023 STD PLAN A24C

17 INSTALL CLASS 1 FLEXIBLE POST PER CALTRANS 2024 STD PLAN A73C

(39) INSTALL CALTRANS STRIPING DETAIL "XX" PER CALTRANS STANDARD PLANS.

LEGEND

- HMA PAVEMENT (10" THICK, TYPE A)
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- // · // · REMOVE STRIPING



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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
SIGNING AND STRIPING PLANS

PN: 097186046

DWG. NO. SS-03

SHEET 17 OF 21

STRIPING NOTES

12 INSTALL GREEN BIKE LANE CONFLICT STRIPING PER DETAIL ON SHEET SS-01.

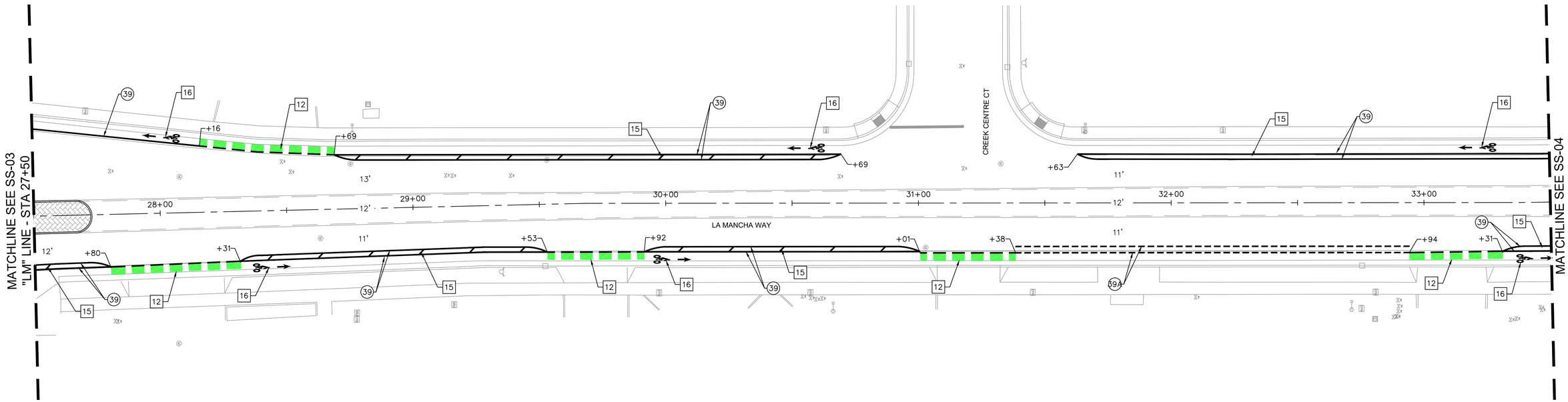
15 INSTALL 6" WHITE THERMOPLASTIC AT 45 DEGREES AND 20' O.C.

16 INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS 2023 STD PLAN A24C

39 INSTALL CALTRANS STRIPING DETAIL "XX" PER CALTRANS STANDARD PLANS.

LEGEND

- HMA PAVEMENT (10" THICK, TYPE A)
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- // · // · REMOVE STRIPING



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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
SIGNING AND STRIPING PLANS

PN: 097186046

DWG. NO. SS-04
SHEET 18 OF 21

STRIPING NOTES

12 INSTALL GREEN BIKE LANE CONFLICT STRIPING PER DETAIL ON SHEET SS-01.

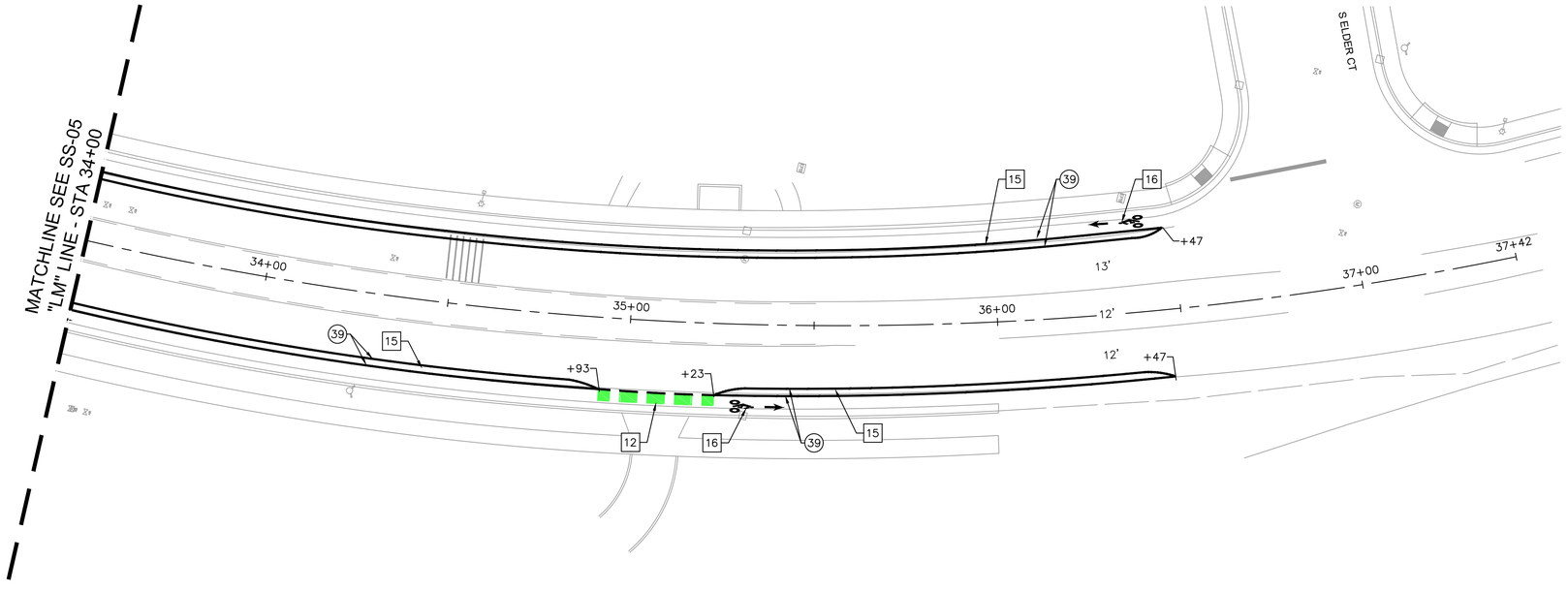
15 INSTALL 6" WHITE THERMOPLASTIC AT 45 DEGREES AND 20' O.C.

16 INSTALL BIKE LANE SYMBOL WITH PERSON PER CALTRANS 2023 STD PLAN A24C

(39) INSTALL CALTRANS STRIPING DETAIL "XX" PER CALTRANS STANDARD PLANS.

LEGEND

- HMA PAVEMENT (10" THICK, TYPE A)
- CONCRETE
- HARDSCAPE
- DETECTABLE WARNING SURFACE (DWS)
- REMOVE STRIPING



NORTH

GRAPHIC SCALE IN FEET
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REVISIONS NO.	DESCRIPTION	DATE	BY

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DESCRIPTION
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FIELD BOOK -

SCALE
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VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

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IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE CORRIDOR IMPROVEMENTS
SIGNING AND STRIPING PLANS

PN: 097186046
DWG. NO. SS-05
SHEET 19 OF 21

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PLOT STAMP:

LEGEND

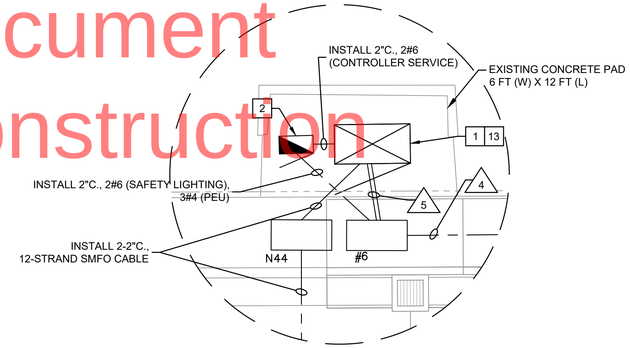
- TYPE A DETECTOR LOOP
- VIDEO DETECTION ZONE
- NEW CCTV CAMERA
- NEW VIDEO DETECTION CAMERA
- TT MAST ARM MOUNTED SIGN
- NEW SIGNAL POLE
- STREET LIGHT
- (#) POLE DESIGNATION
- (#) CONDUIT RUN DESIGNATION
- PEDESTRIAN PUSH BUTTON POST
- PEDESTRIAN SIGNAL INDICATION
- METERED TRAFFIC SIGNAL SERVICE PEDESTAL
- TRAFFIC SIGNAL CONTROLLER
- NEW VEHICLE SIGNAL HEAD
- NEW GPS EMERGENCY VEHICLE PREEMPTION

PROPOSED PHASE DIAGRAM

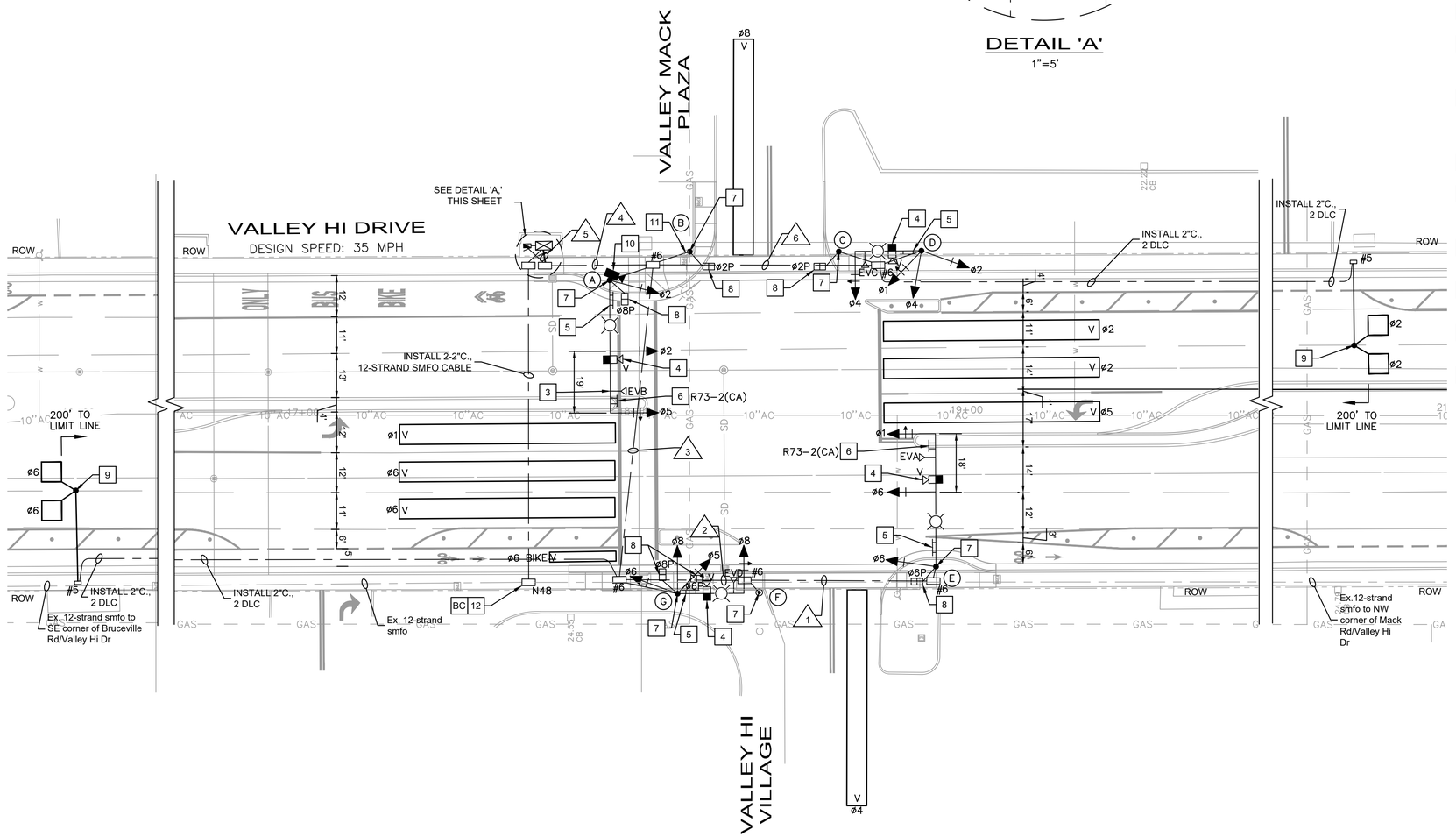
ø1	ø2 PED	ø3 NOT USED	ø4 PED
ø5	ø6 PED	ø7 NOT USED	ø8 PED

EVP ASSIGNMENTS

EVA = ø6 + ø1
EVB = ø5 + ø2
EVC = ø4
EVD = ø8



DETAIL 'A'
1"=5'



CONSTRUCTION NOTES

1. FURNISH AND INSTALL TS2 TYPE R CABINET WITH TS2 CONTROLLER ASSEMBLY WITH THE LATEST VERSION OF THE D4 SOFTWARE. CABINET SHALL BE TESTED AND DELIVERED FULLY OPERATIONAL IN ACCORDANCE WITH THE LATEST CITY STANDARD SPECIFICATIONS. ALL AUXILARY EQUIPMENT SHALL MEET THE CITY'S PRE QUALIFIED PRODUCTS LIST UNLESS A NEWER MODEL IS NOTED. ALL SIGNAL MATERIALS SHALL MEET THE LATEST SPECIFICATIONS AND ADDENDUMS AT EQUIPMENT SUBMITTAL.
2. FURNISH AND INSTALL METERED TRAFFIC SIGNAL SERVICE PEDESTAL PER CITY OF SACRAMENTO STANDARD DRAWING ON SHEET E-7. INSTALL ON NEW FOUNDATION. CONTRACTOR TO COORDINATE POWER INSTALLATION WITH SMUD AND MEET SMUD REQUIREMENTS.
3. FURNISH AND INSTALL OPTICOM 3100 GPS RADIO UNIT PER CITY OF SACRAMENTO STANDARD DRAWING E-240.
4. FURNISH AND INSTALL ECONOLITE VISION VEHICLE DETECTION VIDEO CAMERA ON TRAFFIC SIGNAL MAST ARM. INSTALL ASSOCIATED COMMUNICATIONS AND POWER CABLES.
5. FURNISH AND INSTALL RETROFLECTIVE STREET NAME SIGN PER CITY OF SACRAMENTO STANDARD DRAWING T-301.
6. FURNISH AND INSTALL SIGN ON MAST ARM PER 2022 CALTRANS STANDARD PLAN ES-7N, DETAIL "U".
7. FURNISH AND INSTALL POLARA 2-WIRE AUDIBLE ADA TYPE PEDETRIAN PUSH BUTTON(S) WITH R10-3e(CA) SIGN(S) AND DETECTABLE AUDIO AND VIBRO TACTILE BUTTON. SIGNAGE SHALL BE OPTION K FOR POLARA PRODUCT.
8. FURNISH AND INSTALL PEDESTRIAN SIGNAL HEAD WITH LED COUNTDOWN PEDESTRIAN SIGNAL FACE MODULE PER 2022 CALTRANS STANDARD PLAN ES-4B. ALL PEDESTRIAN HEADS SHALL BE INTERNATIONAL SYMBOLS WITH COUNTDOWN MODULES.
9. FURNISH AND INSTALL TYPE "B" DETECTOR HAND HOLE PER CITY OF SACRAMENTO STANDARD DRAWING E-180.
10. FURNISH AND INSTALL AXIS P3735-PLE PTZ CCTV CAMERA. CCTV CAMERA TO BE PLACED ON POLE MOUNT HIGH (OPTION B) PER CITY OF SACRAMENTO STANDARD DRAWING E-230. INSTALL ASSOCIATED COMMUNICATIONS AND POWER CABLES.
11. REMOVE EXISTING CITY OF SACRAMENTO STREET LIGHT. ABANDON FOUNDATION.CONTRACTOR TO COORDINATE WITH THE CITY ON STREET LIGHT REMOVAL.
12. FURNISH AND INSTALL FIBER OPTIC SPLICE CLOSURE IN SPLICE VAULT. SPLICE NEW 12-STRAND BRANCH CABLE TO EXISTING 96-STRAND TRUNK CABLE.
13. FURNISH AND INSTALL FIBER OPTIC TERMINATION PANEL IN TRAFFIC SIGNAL CONTROLLER CABINET. TERMINATE NEW 12-STRAND BRANCH CABLE.

BC INSTALL PULL BOX INTO EXISTING CONDUIT.

GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

PLOT STAMP:

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REVISIONS NO.	DESCRIPTION	DATE	BY

BENCH MARK ELEV. –
DESCRIPTION
– –

FIELD BOOK -
SCALE
HORIZ. ____
VERT. ____

CITY OF SACRAMENTO
DEPARTMENT OF PUBLIC WORKS

DRAWN BY: ____ DESIGN BY: ____ CHECKED BY: ____
DATE ____ R.C.E. ____ DATE ____ R.C.E. ____ DATE ____

65% NOT FOR CONSTRUCTION

Kimley»Horn
KIMLEY-HORN AND ASSOCIATES, Inc.
555 CAPITOL MALL, SUITE 300
SACRAMENTO, CA 95814

IMPROVEMENT PLANS FOR
LA MANCHA WAY / VALLEY HI DRIVE TRAFFIC SIGNAL DESIGN

PN: 097186046

DWG. NO.

SHEET 1 OF 2

POLE AND EQUIPMENT SCHEDULE*

LOCATION	STANDARD			LED LUMINAIRE WATT	VEHICLE SIGNALS		PEDESTRIAN SIGNALS		ACCESSIBLE PEDESTRIAN SIGNAL			IISNS	SPECIAL REQUIREMENTS
	TYPE	SIGNAL MAST ARM	LUMINAIRE MAST ARM		PHASE	MOUNTING	PHASE	MOUNTING	PHASE	ARROW	QUADRANT		
Ⓐ	26-4-100	40'	12'	71W	ø2 ø5 ø2	MAS MAT SV-1-T	ø8	SP-1-T	ø8	←	N	Valley Hi Village Valley Mack Plaza	
Ⓑ	1-B(10')	–	–	–	–	–	ø2	TP-1-T	ø2	→	E	–	
Ⓒ	1-B(10')	–	–	–	–	–	ø2	TP-1-T	ø2	←	E	–	
Ⓓ	17-3-100	20'	12'	71W	ø4 ø1 ø2 ø4	MAT SV-3-T	–	–	–	–	–	Valley Hi Dr	
Ⓔ	26-4-100	40'	12'	71W	ø1 ø6 ø6	MAT MAS SV-1-T	ø6	SP-1-T	ø6	←	E	Valley Hi Village Valley Mack Plaza	
Ⓕ	PPB POST(5'-7")	–	–	–	–	–	–	–	ø6	←	W	–	
Ⓖ	17-3-100	20'	12'	71W	ø8 ø5 ø6 ø8	MAT SV-3-T	ø6 ø8	SP-2-T	ø8	←	S	Valley Hi Dr	

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

ALL POLE AND SIGNAL EQUIPMENT IS NEW.

ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE.

CONTRACTOR TO PROVIDE ALL MATERIALS SHOWN IN THE POLE AND EQUIPMENT SCHEDULE.

ALL SIGNAL DISPLAYS SHALL GET YELLOW REFLECTIVE BORDERS.

CONDUIT AND CONDUCTOR SCHEDULE

CONDUCTOR DESIGNATION	No. OF CONDUCTORS/RUN No. 1	2	3	4	5	6	7
NO. 14 CONDUCTORS,							
ø1							
ø2							
ø4							
ø6							
ø2P							
ø3P							
ø4P							
ø2 2-WIRE APS SYSTEM							
ø3 2-WIRE APS SYSTEM							
ø4 2							
PPB							
PEU							
SPARES							
TOTAL (NO. 14)							
NO. 10 CONDUCTORS, SIGNAL NEUTRAL							
NO. 6 CONDUCTORS, (GROUND)							
LIGHTING (120V)							
TOTAL (NO. 6)							
VIDEO DETECTION							
CCTV CAT6							
CCTV POWER							
DETECTION LOOP CABLES (DLCs)							
ø2							
ø4							
ø6							
TOTAL DLCs							
GPS EVP CABLE							
CONDUIT SIZE (IN.)							
CONDUIT PERCENT FILL (%)							

TO BE COMPLETED NEXT SUBMITTAL

ALL CONDUCTORS, CABLES, AND CONDUIT ARE NEW.

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