

CITY OF RANCHO PALOS VERDES

PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT



LOCATION MAP
NO SCALE

SHEET INDEX

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UTILITY COMPANY CONTACT INFORMATION

UTILITY COMPANY	PHONE
CITY OF RANCHO PALOS VERDES	(310) 544-5252
SOUTHERN CALIFORNIA EDISON COMPANY	(310) 783-1156
SOUTHERN CALIFORNIA GAS COMPANY	(310) 687-2020
VERIZON	(310) 793-4159
CALIFORNIA WATER SERVICE COMPANY	(310) 541-2438
COX COMMUNICATIONS	(310) 551-5020 X30
COUNTY OF LA, DEPT. OF PUBLIC WORKS (STORM DRAIN)	(626) 458-3109
COUNTY OF LA, DEPT. OF PUBLIC WORKS (SEWER)	(626) 458-4357
SANITATION DISTRICT OF LOS ANGELES COUNTY	(562) 699-7411 X1205
USA	(800) 227-2600

NOTICE TO CONTRACTOR

NOTICE: ACTUAL EXISTING SITE CONDITIONS MAY DIFFER FROM THOSE SHOWN AS THE CONSTRUCTION WILL BE IN AN ACTIVE LANDSLIDE AREA. THE CONTRACTOR SHALL VERIFY SITE CONDITIONS PRIOR TO BIDDING. LOCATION OF EXISTING AND ABANDONED UTILITIES IS UNKNOWN OR FROM RECORD DATA ONLY. THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION LOCATIONS OF ALL UTILITIES PRIOR TO BIDDING AND CONSTRUCTION. CONTRACTOR SHALL MAINTAIN AS-BUILT RECORDS OF EXISTING UTILITIES AND INFORM THE ENGINEER IN CASE OF DISCREPANCIES.

THE CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED USE OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

THE CONTRACTOR SHALL VERIFY THE PRESENCE, LOCATION, AND MATERIAL OF ALL AFFECTED OR CONFLICTING UTILITIES AS NECESSARY FOR CONSTRUCTION. UTILITY VERIFICATION AND NOTIFICATION SHALL BE MADE IN A TIMELY MANNER SO AS TO ALLOW FOR ALTERNATIVE PLANNING WITHOUT AFFECTING THE CONSTRUCTION SCHEDULE MATERIALLY.

UNDERGROUND SERVICE ALERT (USA)

IT'S THE LAW!
DIG A LERT



CALL AT LEAST
TWO WORKING DAYS
BEFORE YOU DIG

Know what's below.
Call before you dig.

THIS IS A FEDERALLY FUNDED PROJECT THROUGH THE
LOS ANGELES COUNTY METRO TRANSPORTATION AUTHORITY
PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT, NO. CML-5413(012)



GENERAL NOTES (STREET IMPROVEMENT)

1. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK), THE CITY OF RANCHO PALOS VERDES STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION, THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS & SPECIFICATIONS, & PROJECT SPECIAL PROVISIONS, EACH OF THE MOST RECENT DATE.
2. THE CONTRACTOR SHALL NOTIFY THE CITY OF RANCHO PALOS VERDES AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO STARTING CONSTRUCTION, AT (310) 544-5252.
3. ALL UNDERGROUND FACILITIES SHALL BE INSTALLED PRIOR TO SURFACING OF STREETS. THE INSTALLATION OF ALL UNDERGROUND FACILITIES CROSSING EXISTING ARTERIAL HIGHWAYS REQUIRES BORING OR JACKING, UNLESS OTHERWISE APPROVED BY THE CITY OF RANCHO PALOS VERDES.
4. TRAFFIC CONTROL AND SAFETY DEVICES SHALL BE INSTALLED PER THE LATEST EDITION OF THE CALIFORNIA MUTCD, AND TO THE SATISFACTION OF THE CITY OF RANCHO PALOS VERDES.
5. EXISTING PAVEMENT DISTURBED BY THE CONSTRUCTION OF UNDERGROUND INSTALLATIONS SHALL BE REPLACED IN KIND & RESTRIPIED. A PERMIT ISSUED BY THE CITY OF RANCHO PALOS VERDES IS REQUIRED.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR AND COORDINATE THE RELOCATION OF ANY EXISTING UTILITIES DEEMED NECESSARY BY THE PROPOSED IMPROVEMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EXISTING UTILITIES. ANY DAMAGE TO SUCH FACILITIES CAUSED BY HIS WORK SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
8. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN, DUST FREE AND SANITARY CONDITION TO THE SATISFACTION OF THE CITY'S INSPECTOR. THE ADJACENT STREETS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCES BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY HIS CONSTRUCTION. STOCKPILING OF MATERIALS WITHIN THE PUBLIC RIGHT-OF-WAY IS NOT ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY INSPECTOR.
9. ALL CONCRETE WORK SHOWN ON PLANS SHALL BE 6 SACK TYPE "Y" CEMENT, UNLESS DEEMED UNNECESSARY BY SULPHATE CONTENT TEST AS APPROVED BY THE CITY OF RANCHO PALOS VERDES.
10. CONTRACTOR SHALL OBTAIN ALL REQUIRED O.S.H.A. PERMITS PRIOR TO CONSTRUCTION OF UNDERGROUND FACILITIES.
11. WHEELCHAIR RAMPS, DRIVEWAY APRONS, CURBS, OR GUTTERS DISTURBED BY CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. A PERMIT ISSUED BY THE CITY OF RANCHO PALOS VERDES IS REQUIRED.
12. ALL SAWCUTS SHALL BE DONE BY THE WET-CUT METHOD, UNLESS OTHERWISE APPROVED BY THE ENGINEER, AND ALL SLURRY SHALL BE VACUUM REMOVED.
13. NEW CONCRETE SHALL MATCH EXISTING CONCRETE IN COLOR, FINISH, AND TEXTURE, TO THE APPROVAL OF THE ENGINEER.
14. CONSTRUCTION SHALL BE ADJUSTED AS NECESSARY TO MATCH EXISTING CONDITIONS, USES, AND PROVIDE POSITIVE SURFACE DRAINAGE. EXACT LIMITS AND CONFIGURATION OF WORK TO BE ADJUSTED AS DIRECTED BY THE ENGINEER IN THE FIELD.
15. TOPOGRAPHIC INFORMATION SHOWN HEREIN HAS BEEN PROVIDED BY THE KDM MERIDIAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CORRECTNESS OF TOPOGRAPHIC INFORMATION FOR HIS OWN PURPOSES.
16. THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION MARKINGS FROM THE PROJECT, INCLUDING THOSE PLACED FOR UTILITY LOCATING AND CONSTRUCTION SURVEYING.
17. ALL PORTLAND CEMENT CONCRETE SHALL REACH A COMPRESSIVE STRENGTH OF 2500 PSI WITHIN 3 DAYS OF PLACEMENT.
18. WORK AREA IS WITHIN AN ACTIVE LANDSLIDE AREA. CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS DURING CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL ELEVATIONS AND MAKE ANY ADJUSTMENTS AS NECESSARY TO THE SATISFACTION OF THE CITY ENGINEER.

DATUM STATEMENT

TOPOGRAPHIC SURVEY IS BASED ON SURVEY COMPLETED BY KDM MERIDIAN, INC, PROJECT NO. 16-KOA-01 ON 2/29/16.

HORIZONTAL DATUM AND BASIS OF BEARINGS

THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 5, (NSRS2007 2009.00 EPOCH) IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819; SAID COORDINATES AND BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWING CALIFORNIA SPATIAL REFERENCE NETWORK, OR EQUIVALENT STATIONS:

REFERENCED (CSRC) STATIONS CONNECTED

STATION	LATITUDE	LONGITUDE	NORTHING (US FT)	EASTING (US FT)	SLAT (US FT)	SLONG (US FT)
PVE3	33°44'35.854978"	-118°24'15.271067"	1729207.243	6438765.014	0.0031	0.0030
PVRS	33°46'25.893361"	-118°19'14.069305"	1740239.438	6464237.712	0.0032	0.0039
VTS	33°42'45.491048"	-118°17'37.714280"	1717933.825	6472307.055	0.0023	0.0034

MAPPING ANGLE AND GRID FACTOR

STATION	NORTHING (US FT)	EASTING (US FT)	MAPPING ANGLE	COMBINATION FACTOR	ELEVATION (US FT)	HEIGHT (US FT)
104	1726285.430	6453710.788	-001°12'09"	1.00007251	230.68	112.30

NOTES: ALL COORDINATES AND DISTANCES SHOWN, UNLESS OTHERWISE NOTED, ARE IN TERMS OF THE U.S. SURVEY FOOT (US FT). AS USED IN THE TABLES ABOVE, ELEVATION REFERS TO THE CALIFORNIA ORTHOMETRIC HEIGHT (COH88) OR EQUIVALENT OF THE POINT WHERE THE MAPPING ANGLE AND COMBINATION FACTOR WERE CALCULATED IN TERMS OF THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND HEIGHT REFERS TO THE VERTICAL VALUE OF THE CALIFORNIA GEODETIC COORDINATE OR EQUIVALENT ELLIPOID HEIGHT USED TO CALCULATE THE COMBINATION FACTOR. DISTANCES SHOWN HEREON OR INVERSED FROM COORDINATES SHOWN HEREON ARE IN REFERENCE TO CCS83, TO APPROXIMATE LOCAL GROUND DISTANCES DIVIDE BY THE COMBINATION FACTOR PROVIDED HEREON.

VERTICAL DATUM AND BENCHMARK

VERTICAL DATUM: LOS ANGELES COUNTY - NAVD88 (2005 ADJUSTMENT)
BENCH MARK: Y 12154
ELEVATION: 232.770

DESCRIPTION: LEAD & DPW TAG IN NORTH CURB 1 FOOT WESTERLY OF THE ECR AT THE NORTHWEST CORNER OF PALOS VERDES DRIVE SOUTH (SERVICE ROAD) & SCHOONER DRIVE

BEST MANAGEMENT PRACTICES

- WM-1 MATERIAL DELIVERY AND STORAGE
PROVIDE A MATERIAL STORAGE AREA WITH SECONDARY CONTAINMENT AND/OR WEATHER PROTECTION. NOTE THE MAINTENANCE PRACTICES AND SCHEDULE PROPOSED FOR THIS AREA.
- WM-2 MATERIAL USE
HAZARDOUS MATERIALS, FERTILIZERS, PESTICIDES, PLASTERS, SOLVENTS, PAINTS, AND OTHER COMPOUNDS MUST BE PROPERLY HANDLED IN ORDER TO REDUCE THE RISK OF POLLUTION OR CONTAMINATION. TRAINING AND INFORMATION ON PROCEDURES FOR THE PROPER USE OF ALL MATERIALS MUST BE AVAILABLE TO THE EMPLOYEES THAT APPLY SUCH MATERIALS.
- WM-3 STOCKPILE MANAGEMENT
ENSURE THAT ALL STOCKPILES ARE PROPERLY COVERED AND CONTAINED, SO THAT NO RUN-OFF MAY OCCUR.
- WM-4 SPILL PREVENTION AND CONTROL
IDENTIFY SPILL PREVENTION AND CONTROL MEASURES THAT WILL BE TAKEN FOR ALL PROPOSED MATERIALS. IDENTIFY THE METHODS, BY WHICH ACCIDENTAL SPILLS WILL BE CLEANED AND PROPERLY DISPOSED OF.
- WM-5 SOLID WASTE MANAGEMENT
PROVIDE DESIGNATED WASTE COLLECTION AREAS AND CONTAINERS. ARRANGE FOR REGULAR DISPOSAL. PROVIDE COVERED STORAGE WITH SECONDARY CONTAINMENT. CONTAINERS ARE REQUIRED TO PROTECT WASTE FROM RAIN TO POLLUTION AND PREVENT WIND DISPERSAL.
- WM-6 HAZARDOUS WASTE MANAGEMENT
HAZARDOUS MATERIALS MUST BE DISPOSED OF IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS. IDENTIFY THE PROPOSED METHODS OF DISPOSAL AND ANY SPECIAL HANDLING CONTRACTS THAT MAY BE APPLICABLE.
- WM-7 CONTAMINATED SOIL MANAGEMENT
PREVENT OR REDUCE THE DISCHARGE OF POLLUTANTS TO STORMWATER FROM CONTAMINATED SOIL AND HIGHLY ACIDIC OR ALKALINE SOILS BY CONDUCTING PRECONSTRUCTION SURVEYS, INSPECTING EXCAVATIONS REGULARLY, AND REMEDIATING CONTAMINATED SOIL PROMPTLY.
- WM-8 CONCRETE WASTE MANAGEMENT
STORE DRY AND WET MATERIALS UNDER COVER. AVOID ON-SITE WASHOUT EXCEPT IN DESIGNATED AREAS AWAY FROM DRAINS, DITCHES, STREETS, AND STREAMS. CONCRETE WASTE DEPOSITED ON SITE SHALL SET-UP, BE BROKEN APART, AND DISPOSED OF PROPERLY. CONTAINMENT AND PROPER DISPOSAL IS REQUIRED FOR ALL CONCRETE WASTE.
- WM-9 SANITARY/SEPTIC WASTE MANAGEMENT
UNTREATED RAW WASTEWATER IS NOT TO BE DISCHARGED OR BURIED. SANITARY SEWER FACILITIES ON SITE ARE REQUIRED TO BE IN COMPLIANCE WITH LOCAL HEALTH AGENCY REQUIREMENTS. SANITARY OR SEPTIC WASTES MUST BE TREATED OR DISPOSED OF IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.
- WM-10 LIQUID WASTE MANAGEMENT
LIQUID WASTE IS NOT TO BE DISCHARGED OR BURIED. LIQUID WASTE DISPOSAL ON SITE IS REQUIRED TO BE IN COMPLIANCE WITH LOCAL HEALTH AGENCY REQUIREMENTS.
- TC-1 STABILIZED CONSTRUCTION ENTRANCE/EXIT
A STABILIZED ENTRANCE/EXIT IS REQUIRED FOR ALL CONSTRUCTION SITES TO ENSURE THAT DIRT AND DEBRIS ARE NOT TRACKED ONTO THE ROAD OR ADJACENT PROPERTY. MAINTENANCE OF SUCH A SYSTEM IS REQUIRED FOR THE DURATION OF THE PROJECT. SUCH STABILIZATION MAY BE OF ROCK OR PAVED.
- SE-6 GRAVEL BAG
ERODED SEDIMENTS MUST BE RETAINED ON THE SITE AND NOT PERMITTED TO ENTER THE DRAINAGE SYSTEM. MAY BE WAIVED AT THE SOLE DISCRETION OF THE CITY INSPECTOR IF OTHER EROSION CONTROL BMPs ARE DEEMED SUFFICIENT.
- SE-7 STREET SWEEP
TO ENTER THE DRAINAGE SYSTEM. MAY BE WAIVED AT THE SOLE DISCRETION OF THE CITY INSPECTOR IF OTHER EROSION CONTROL BMPs ARE DEEMED SUFFICIENT.
- SE-10 SD INLET PROT.
DISCRETION OF THE CITY INSPECTOR IF OTHER EROSION CONTROL BMPs ARE DEEMED SUFFICIENT.
- WE-1 WIND EROSION CONTROL
WATER AREAS WHERE WIND CONDITIONS ARE CAUSING MIGRATION OF VISIBLE DUST MORE THAN 100' FROM THE ACTIVE SOURCE.
- NS-1 WATER CONSERVATION PRACTICES
INSPECT SITE DURING PROJECT EXECUTION FOR EVIDENCE OF ILLICIT DISCHARGES OR ILLEGAL DUMPING. REMOVE, DISPOSE AND REPLACE DAMAGED, DETERIORATED OR OTHERWISE UNSUITABLE BMPs.
- NS-2 DEWATERING OPERATIONS
INSPECT SITE DURING PROJECT TO REMOVE NON-STORM WATER AND ACCUMULATED PRECIPITATION.
- NS-3 PAVING AND GRINDING OPERATIONS
INSPECT AND MAINTAIN MACHINERY REGULARLY TO MINIMIZE LEAKS AND Drips. BI-WEEKLY, ENSURE THAT EMPLOYEES AND SUBCONTRACTORS ARE IMPLEMENTING APPROPRIATE MEASURES DURING PAVING OPERATIONS. COVER STORM DRAIN INLETS WITH A SOLID COVER, NOT FILTER FABRIC, EXCEPT DURING RAIN.
- NS-6 ILLICIT CONNECTION/ILLEGAL DISCHARGE REPORTING
NOTIFY THE RESIDENT ENGINEER OF ANY ILLICIT DISCHARGES OR ILLEGAL DUMPING INCIDENTS AT THE TIME OF DISCOVERY. MAKE SURE ALL REPORTS AND DOCUMENTS ARE FILLED OUT.
- NS-7 POTABLE WATER/IRRIGATION
DISCHARGE OF POTENTIAL POLLUTANTS WILL BE INSPECTED WEEKLY.
- NS-8 VEHICLE AND EQUIPMENT CLEANING
VEHICLE AND EQUIPMENT CLEANING SHALL NOT BE ALLOWED ON OR NEAR THE PROJECT SITE.
- NS-9 VEHICLE AND EQUIPMENT FUELING
INSPECT VEHICLE AND EQUIPMENT FUELING PRACTICES DAILY, AND ASSURE THAT NO POLLUTANTS ARE RUNNING OFF THE DESIGNATED CLEAN OFF AREA. THE CLEAN OFF AREA, SHOULD BE SECURE AND SAFE FROM RUN OFF ONTO THE SITE. NOTIFY THE R.E. IF INCIDENTS OF RUNOFF OCCUR.
- NS-10 VEHICLE AND EQUIPMENT MAINTENANCE
INSPECT VEHICLE AND EQUIPMENT MAINTENANCE PRACTICES DAILY, AND ASSURE THAT NO POLLUTANTS ARE RUNNING OFF THE DESIGNATED CLEAN OFF AREA. THE CLEAN OFF AREA, SHOULD BE SECURE AND SAFE FROM RUN OFF ONTO THE SITE. NOTIFY THE R.E. IF INCIDENTS OF RUNOFF OCCUR.
- NS-12 CONCRETE CURING
ENSURE THAT EMPLOYEES AND SUB CONTRACTORS IMPLEMENT APPROPRIATE MEASURES FOR STORAGE AND HANDLING OF CURING COMPOUNDS. INSPECT CURE CONTAINERS AND SPRAY EQUIPMENT FOR LEAKS AND SPILLS DAILY AT THE BEGINNING AND END OF SHIFT WHEN THIS OPERATION IS TO BE USED.
- NS-13 CONCRETE FINISHING
INSPECT ANY DIVERSION DEVICES FOR DEBRIS, REMOVE DEBRIS AS NECESSARY.

CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS DATE

APPROVED BY PRINCIPAL ENGINEER, P.E. DATE

REVISIONS	DESIGNED GC	DRAWN GC	CHECKED CS	APPROVED	DATE 9/15/17	PLANS PREPARED BY: KOA CORPORATION PLANNING & ENGINEERING 1100 Corporate Center Drive, Suite 201 Monterey Park, California 91754-7632 Tel: (323) 260-4703 Fax: (323) 260-4705	CITY OF RANCHO PALOS VERDES	PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT TITLE SHEET	SHEET 1 OF 16	PROJECT NO. LAF1506
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PALOS

VERDES

SCHOONER DR

This technical diagram illustrates the cross-section of a curb and gutter system for a street improvement. The diagram shows a cross-section of the curb, gutter, and underlying subgrade and subbase layers. Key components labeled include:

- FLAGSTONE PAVERS
- $\frac{1}{2}$ " MORTAR JOINTS (FLUSH)
- PAVERS FLUSH W/ TOP OF CURB
- MEDIAN CURB, SEE STREET IMPROVEMENT PLANS
- 3.5" MORTAR SUB BASE
- 3" CMB @ 90% COMPACTION
- 90% COMPACTED FILL UNDER CMB

NOTES:

1. CLEAN STONE SURFACE OF EXCESS MORTAR.
2. FLAGSTONE PAVER SHALL BE "LOMPOC STONE" FROM BOURGET FLAGSTONE COMPANY, SANTA MONICA, OR CITY APPROVED EQUAL. SUBMIT SAMPLE FOR APPROVAL.

FLAGSTONE PAVER DETAIL
NO SCALE

SHEET 3 / 11 —

SHEET 4

The diagram illustrates a sawcut installation with the following dimensions and features:

- Total width: 19' (labeled twice at the top).
- Left vertical wall: Labeled "SAWCUT" vertically.
- Left gap: 1' (labeled above the gap).
- Left sawcut: A vertical line with a circular callout labeled "2" at the bottom.
- Left support: A rectangular base with a circular callout labeled "1" at the bottom.
- Center gap: 3' (labeled above the gap).
- Center sawcut: A vertical line with a circular callout labeled "3" at the bottom.
- Center support: A rectangular base with a circular callout labeled "1" at the bottom.
- Right gap: 3' (labeled above the gap).
- Right sawcut: A vertical line with a circular callout labeled "2" at the bottom.
- Right support: A rectangular base with a circular callout labeled "1" at the bottom.
- Right vertical wall: Labeled "SAWCUT" vertically.
- Right gap: 1' (labeled above the gap).
- Top center: A horizontal line labeled "VAR.(4.5'-14.5')".
- Callouts 3, 6, and 7: Three circular callouts pointing to the center gap area, labeled "3", "6", and "7" respectively.

TYPICAL SECTION

CONSTRUCTION NOTES

- ① REMOVAL LIMIT. SAWCUT CONCRETE, ASPHALT, AND OTHER HARDSCAPE SURFACES AND REMOVE TO THE LIMITS SHOWN ON THIS PLAN. ALL REMOVALS SHALL BE DISPOSED OF BY THE CONTRACTOR.
- ② CONSTRUCT 6" AC PAVEMENT (TYPE C2 PG 64-10) OVER 10" CMB.
- ③ CONSTRUCT 8" PCC CURB (TYPE A1-8) PER APWA STD. PLAN 120-2 OVER 6" CMB.
- ④ RELOCATE IRRIGATION CONTROL VALVES/BOXES, IRRIGATION LINES, Emitter ACCESS SLEEVES, AND IRRIGATION DRIP LINES TO NEW MEDIAN AS DIRECTED BY CITY ENGINEER.
- ⑤ RELOCATE WATER METER TO NEW MEDIAN AS DIRECTED BY CITY ENGINEER.
- ⑥ CONTRACTOR SHALL RESTORE LANDSCAPING TO THE SATISFACTION OF THE CITY ENGINEER.
- ⑦ CONTRACTOR SHALL INSTALL NEW BARK MULCH AT EXISTING LOCATIONS TO THE SATISFACTION OF THE CITY ENGINEER.
- ⑧ PROTECT IN PLACE.
- ⑨ CONSTRUCT L.I.D. BIOFILTRATION PLANTER PER DETAILS ON SHEET 10.
- ⑩ CONSTRUCT STONE PAVERS IN MEDIAN NOSE PER PLAN AND DETAIL ON SHEET 2. STONE SHALL BE "LOMPOC STONE" FROM BOURGET FLAGSTONE COMPANY, SANTA MONICA, OR CITY APPROVED EQUAL, AND SHALL MATCH EXISTING STONE APPEARANCE.

SHEET INDEX MAP
NO SCALE

The site plan illustrates the layout of streets and property boundaries for the Portuguese Bend Beach Club. Key features include:

- Streets:** PALOS, VERDES, ADMIRABLE, EXULTANT, STALWART, DAUNTESS, SCHOONER, YACHT HARBOR DR, CONQUEROR DR, PIRATE DR, VIGILANCE DR, PHANTOM DR, SEA RAVEN DR, HEROIC DR, GULF CREST DR, PALO VISTA DR, and SOUTH.
- Properties:** The club's property is outlined in black and labeled "PORTUGUESE BEND BEACH CLUB".
- Project Location:** A large grey T-shaped arrow points from the bottom left towards the club's property, indicating the "PROJECT LOCATION".

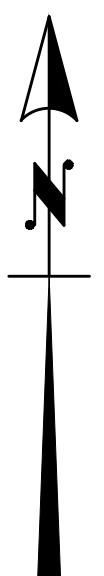
LOCATION MAP
NO SCALE

SOUTH

CONQUEROR

DR

FORRESTAL DR



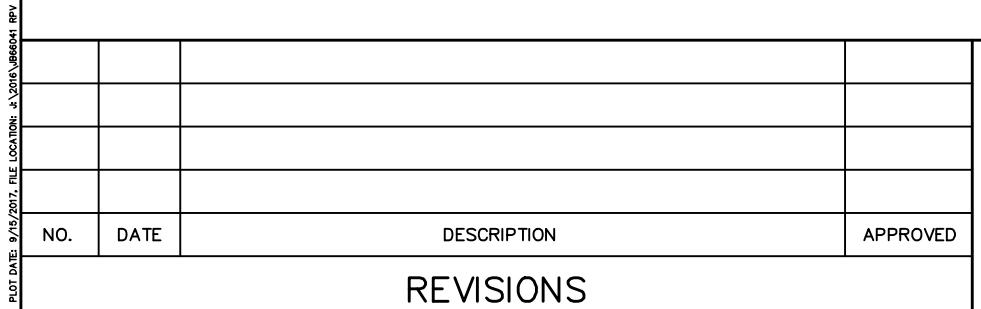
CITY OF RANCHO PALOS VERDES

PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT SHEET INDEX MAP, TYPICAL SECTION & DETAILS

SHEET 2 OF 16

PROJECT NO. LAF1506

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED



DESIGNED	<u> </u>
DRAWN	<u> </u>
CHECKED	<u> </u>
DATE	<u>9/1</u>

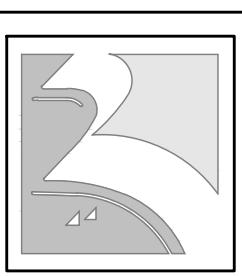
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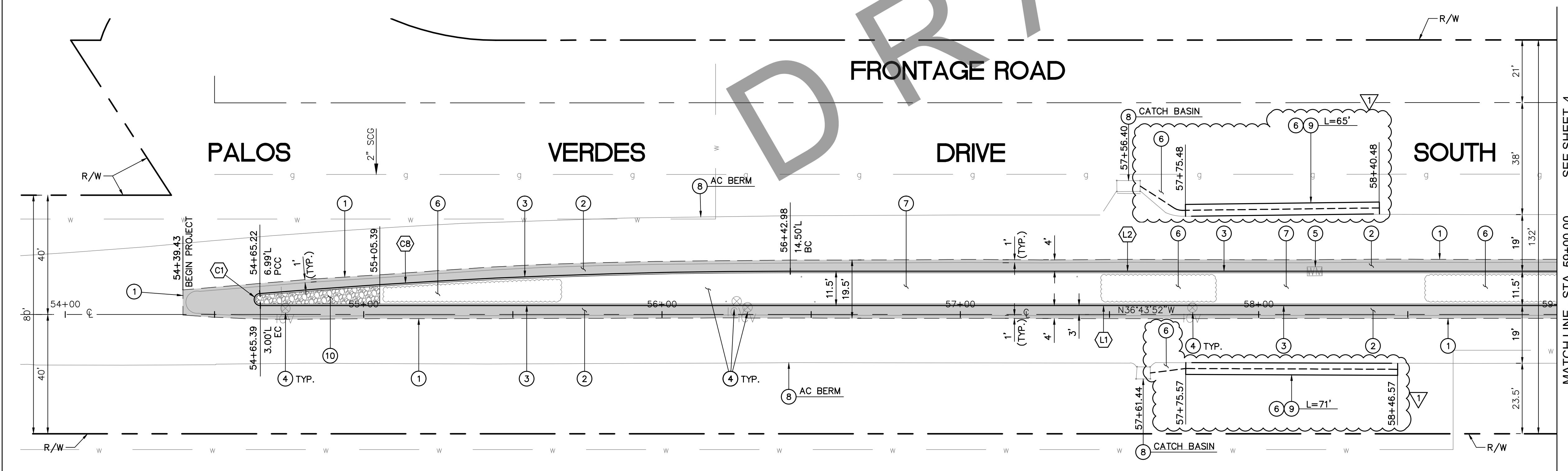
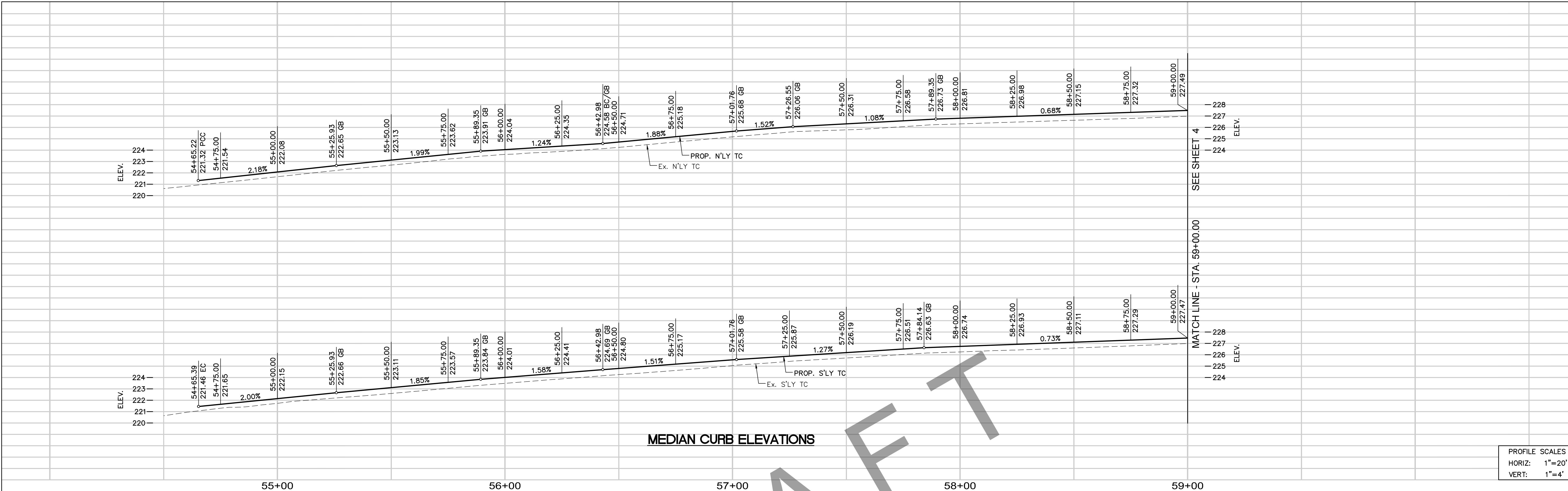
KOA CORPORATION

PLANNING & ENGINEERING



CITY OF RANCHO PALOS VERDES





CONSTRUCTION NOTES

- REMOVAL LIMIT, SAWCUT CONCRETE, ASPHALT, AND OTHER HARDCAPE SURFACES AND REMOVE TO THE LIMITS SHOWN ON THIS PLAN. ALL REMOVALS SHALL BE DISPOSED OF BY THE CONTRACTOR. REMOVE AND TRIM LANDSCAPING AS NEEDED.
- CONSTRUCT 6" AC PAVEMENT (TYPE C2 PG 64-10) OVER 10" CMB.
- CONSTRUCT 8" PCC CURB (TYPE A1-8) PER SPPWC STD. PLAN 120-2, OVER 6" CMB.
- RELOCATE IRRIGATION CONTROL VALVES/BOXES, IRRIGATION LINES, Emitter ACCESS SLEEVES, AND IRRIGATION DRIP LINES TO WITHIN MODIFIED MEDIAN AS DIRECTED BY CITY ENGINEER.
- RELOCATE WATER METER TO WITHIN MODIFIED MEDIAN AS DIRECTED BY CITY ENGINEER.
- CONTRACTOR SHALL RESTORE LANDSCAPING TO THE SATISFACTION OF THE CITY ENGINEER.
- CONTRACTOR SHALL INSTALL NEW BARK MULCH AT EXISTING LOCATIONS TO THE SATISFACTION OF THE CITY ENGINEER.
- PROTECT IN PLACE.
- CONSTRUCT L.I.D. BIOFILTRATION PLANTER PER DETAILS ON SHEET 10.
- CONSTRUCT STONE PAVERS IN MEDIAN NOSE PER PLAN AND DETAIL ON SHEET 2. STONE SHALL BE "LOMPOC STONE" FROM BOURGET FLAGSTONE COMPANY, SANTA MONICA, OR CITY APPROVED EQUAL, AND SHALL MATCH EXISTING STONE APPEARANCE.
- INSTALL 3" PVC PIPE (SCH 80) FOR FUTURE IRRIGATION SYSTEM.
- ADD ALTERNATE #1.

LINE TABLE		CURVE TABLE		
LINE #	LENGTH	DIRECTION	RADIUS	DELTA
L1	687.80	S36°4'51.52"E	2.00	47.36
L2	510.21	S36°4'51.52"E	2108.36	89.04
C8	177.97	4°50'11.38"		

CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS DATE

APPROVED BY PRINCIPAL ENGINEER, P.E. DATE

NOTICE: ALL UTILITIES ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL CONTACT DIGALERT AT 8-1-1 TO MARK UTILITIES. CONTRACTOR SHALL VERIFY AND MAINTAIN CLEARANCE FOR UTILITIES.

DESIGNED GC
DRAWN GC
CHECKED CS
APPROVED
NO. DATE
DESCRIPTION
APPROVED
REVISIONS

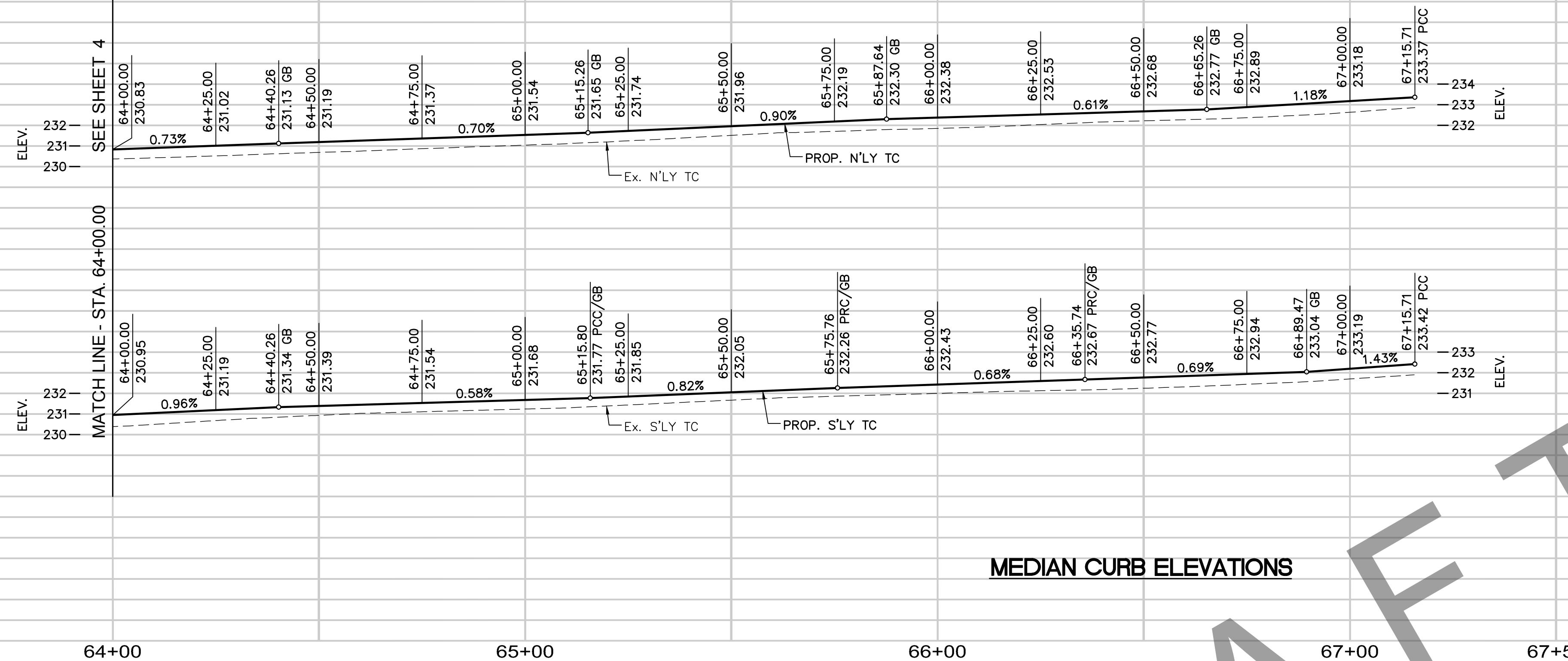
PLANS PREPARED BY:
KOA CORPORATION
PLANNING & ENGINEERING
1100 Corporate Center Drive, Suite 201
Monterey Park, California 91754-7632
Tel: (323) 260-4703 Fax: (323) 260-4705
REGISTERED PROFESSIONAL CIVIL ENGINEER
No. C79006
STATE OF CALIFORNIA
CIVIL

CITY OF RANCHO PALOS VERDES

PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
CIVIL IMPROVEMENT PLAN
STA 54+00 TO STA 59+00

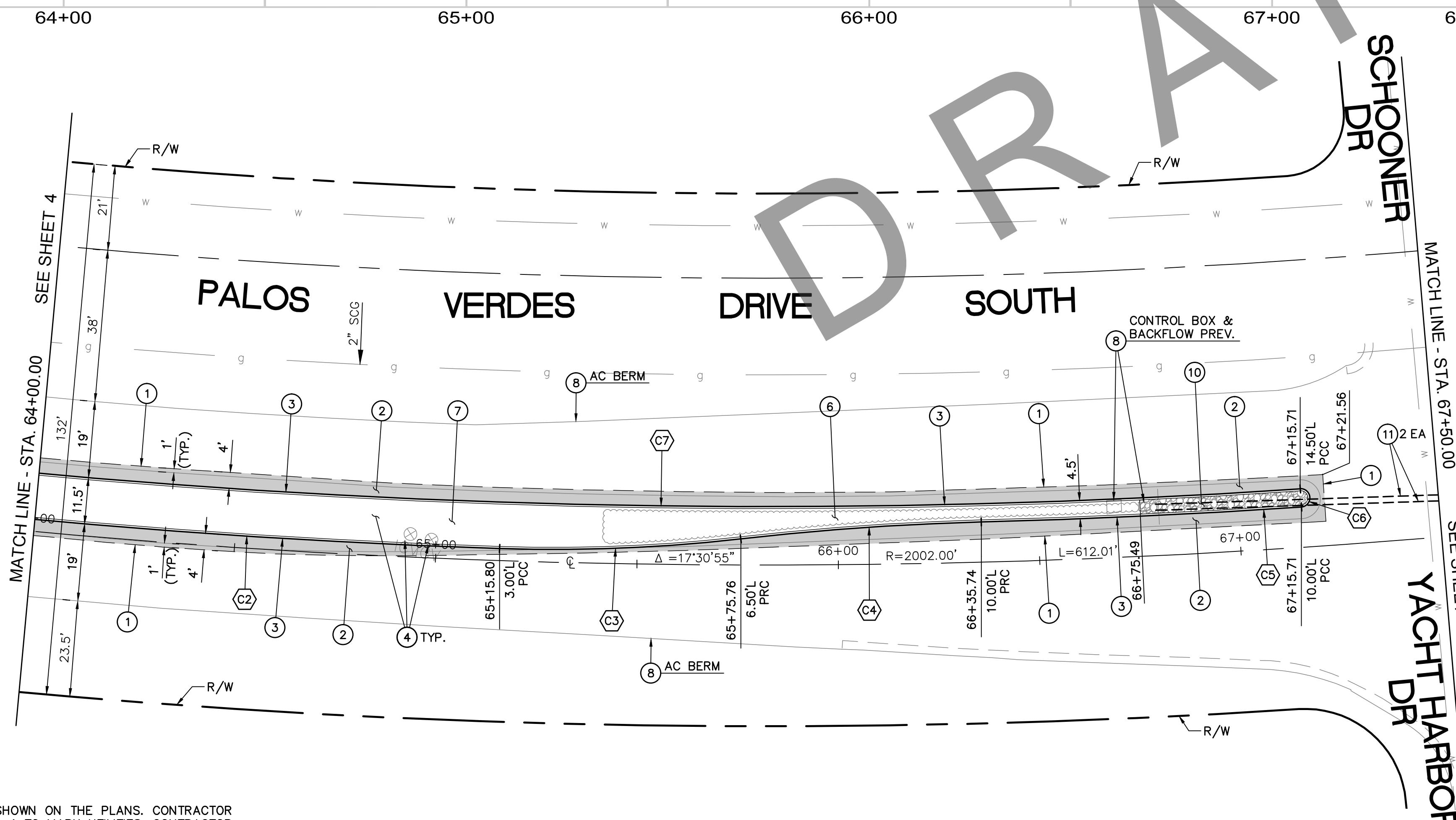
SHEET 3 OF 16

PROJECT NO. LAF1506



PROFILE SCALES
HORIZ: 1"=20'
VERT: 1"=4'

MEDIAN CURB ELEVATIONS



CONSTRUCTION NOTES

- ① REMOVAL LIMIT. SAWCUT CONCRETE, ASPHALT, AND OTHER HARDCAPE SURFACES AND REMOVE TO THE LIMITS SHOWN ON THIS PLAN. ALL REMOVALS SHALL BE DISPOSED OF BY THE CONTRACTOR. REMOVE AND TRIM LANDSCAPING AS NEEDED.
- ② CONSTRUCT 6" AC PAVEMENT (TYPE C PG 64-10) OVER 10" CMB.
- ③ CONSTRUCT 8" PCC CURB (TYPE A1-8) PER SPPWC STD. PLAN 120-2, OVER 6" CMB.
- ④ RELOCATE IRRIGATION CONTROL VALVES/BOXES, IRRIGATION LINES, EMMITTER ACCESS SLEEVES, AND IRRIGATION DRIP LINES TO WITHIN MODIFIED MEDIAN AS DIRECTED BY CITY ENGINEER.
- ⑤ RELOCATE WATER METER TO WITHIN MODIFIED MEDIAN AS DIRECTED BY CITY ENGINEER.
- ⑥ CONTRACTOR SHALL RESTORE LANDSCAPING TO THE SATISFACTION OF THE CITY ENGINEER.
- ⑦ CONTRACTOR SHALL INSTALL NEW BARK MULCH AT EXISTING LOCATIONS TO THE SATISFACTION OF THE CITY ENGINEER.
- ⑧ PROTECT IN PLACE.
- ⑨ CONSTRUCT L.I.D. BIOFILTRATION PLANTER PER DETAILS ON SHEET 10.
- ⑩ CONSTRUCT STONE PAVERS IN MEDIAN NOSE PER PLAN AND DETAIL ON SHEET 2. STONE SHALL BE "LOMPOC STONE" FROM BOURGET FLAGSTONE COMPANY, SANTA MONICA, OR CITY APPROVED EQUAL, AND SHALL MATCH EXISTING STONE APPEARANCE.
- ⑪ INSTALL 3" PVC PIPE (SCH 80) FOR FUTURE IRRIGATION SYSTEM.
- ⑫ ADD ALTERNATE #1.

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C2	362.07	1999.00	10°22'39.68"	181.53
C3	59.97	408.08	8°25'11.26"	30.04
C4	59.86	688.32	4°58'56.59"	29.95
C5	79.56	1992.00	2°17'18.24"	39.79
C6	7.07	2.25	180'00"0.00"	-
C7	558.44	1987.50	16°05'55.28"	281.07

CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS DATE

APPROVED BY PRINCIPAL ENGINEER, P.E. DATE

NOTICE: ALL UTILITIES ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL CONTACT DIGALERT AT 8-1-1 TO MARK UTILITIES. CONTRACTOR SHALL VERIFY AND MAINTAIN CLEARANCE FOR UTILITIES.

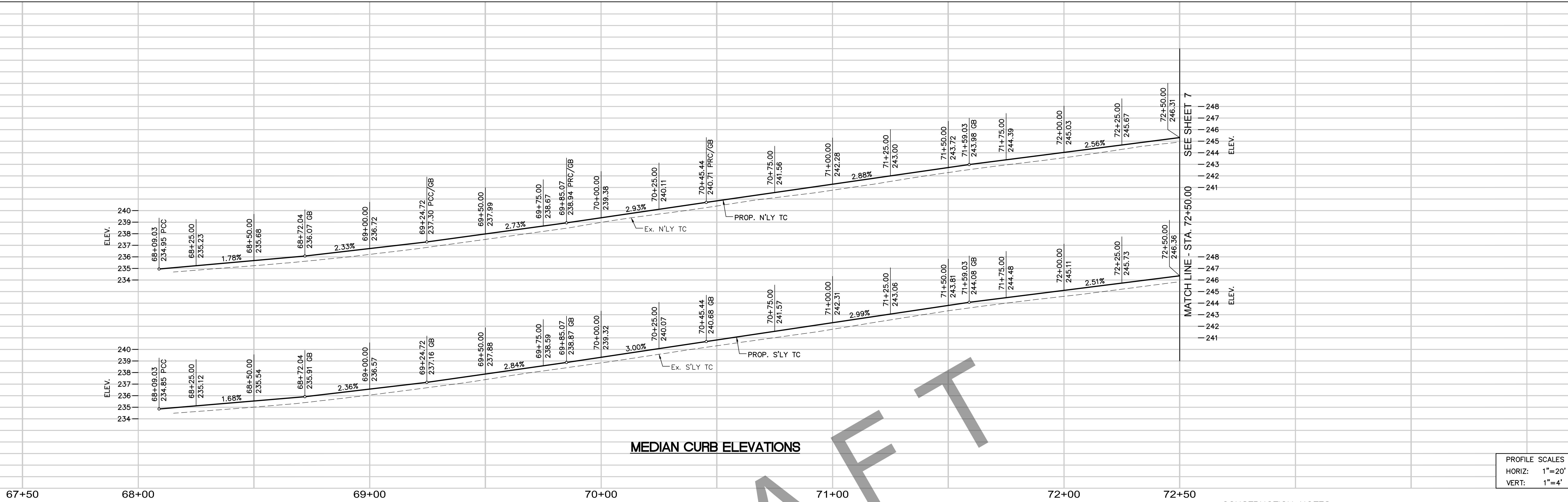
REVISIONS	NO.	DATE	DESCRIPTION	APPROVED



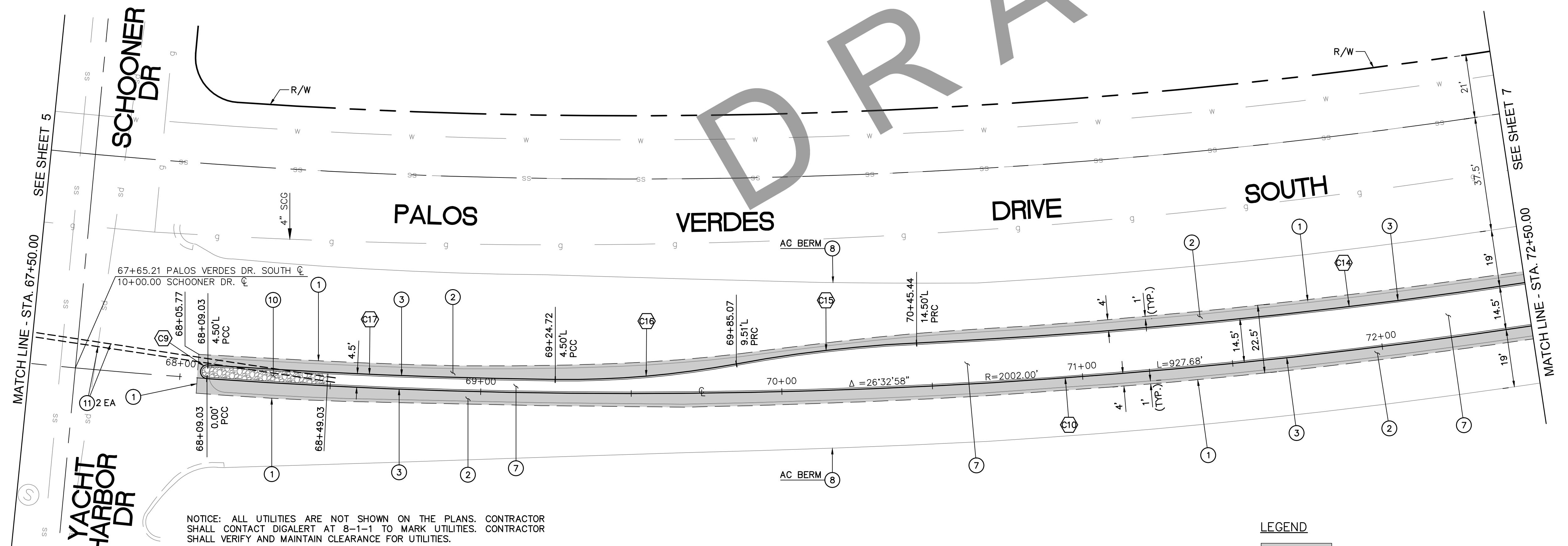
CITY OF RANCHO PALOS VERDES

PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
CIVIL IMPROVEMENT PLAN
STA 64+00 TO STA 67+50

SHEET 5 OF 16
PROJECT NO. LAF1506



PROFILE SCALES
HORIZ: 1"=20'
VERT: 1"=4'



CONSTRUCTION NOTES

- REMOVAL LIMIT, SAWCUT CONCRETE, ASPHALT, AND OTHER HARSCAPE SURFACES AND REMOVE TO THE LIMITS SHOWN ON THIS PLAN. ALL REMOVALS SHALL BE DISPOSED OF BY THE CONTRACTOR. REMOVE AND TRIM LANDSCAPING AS NEEDED.
- CONSTRUCT 6" AC PAVEMENT (TYPE C2 PG 64-10) OVER 10" CMB.
- CONSTRUCT 8" PCC CURB (TYPE A1-8) PER SPPWC STD. PLAN 120-2, OVER 6" CMB.
- RELOCATE IRRIGATION CONTROL VALVES/BOXES, IRRIGATION LINES, Emitter ACCESS SLEEVES, AND IRRIGATION DRIP LINES TO WITHIN MODIFIED MEDIAN AS DIRECTED BY CITY ENGINEER.
- RELOCATE WATER METER TO WITHIN MODIFIED MEDIAN AS DIRECTED BY CITY ENGINEER.
- CONTRACTOR SHALL RESTORE LANDSCAPING TO THE SATISFACTION OF THE CITY ENGINEER.
- CONTRACTOR SHALL INSTALL NEW BARK MULCH AT EXISTING LOCATIONS TO THE SATISFACTION OF THE CITY ENGINEER.
- PROTECT IN PLACE.
- CONSTRUCT L.I.D. BIOFILTRATION PLANTER PER DETAILS ON SHEET 10.
- CONSTRUCT STONE PAVERS IN MEDIAN NOSE PER PLAN AND DETAIL ON SHEET 2. STONE SHALL BE "LOMPOC STONE" FROM BOURGET FLAGSTONE COMPANY, SANTA MONICA, OR CITY APPROVED EQUAL, AND SHALL MATCH EXISTING STONE APPEARANCE.
- INSTALL 3" PVC PIPE (SCH 80) FOR FUTURE IRRIGATION SYSTEM.
- ADD ALTERNATE #1.

CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C9	7.07	2.25	180°0'0"0"	-
C10	883.86	2002.00	251°7'43.10"	449.25
C14	642.75	1987.50	183°31'45.19"	324.21
C15	60.62	443.88	74°46'42.67"	30.18
C16	60.44	307.83	111°5'01.00"	30.32
C17	115.43	1997.50	31°18'39.83"	57.73

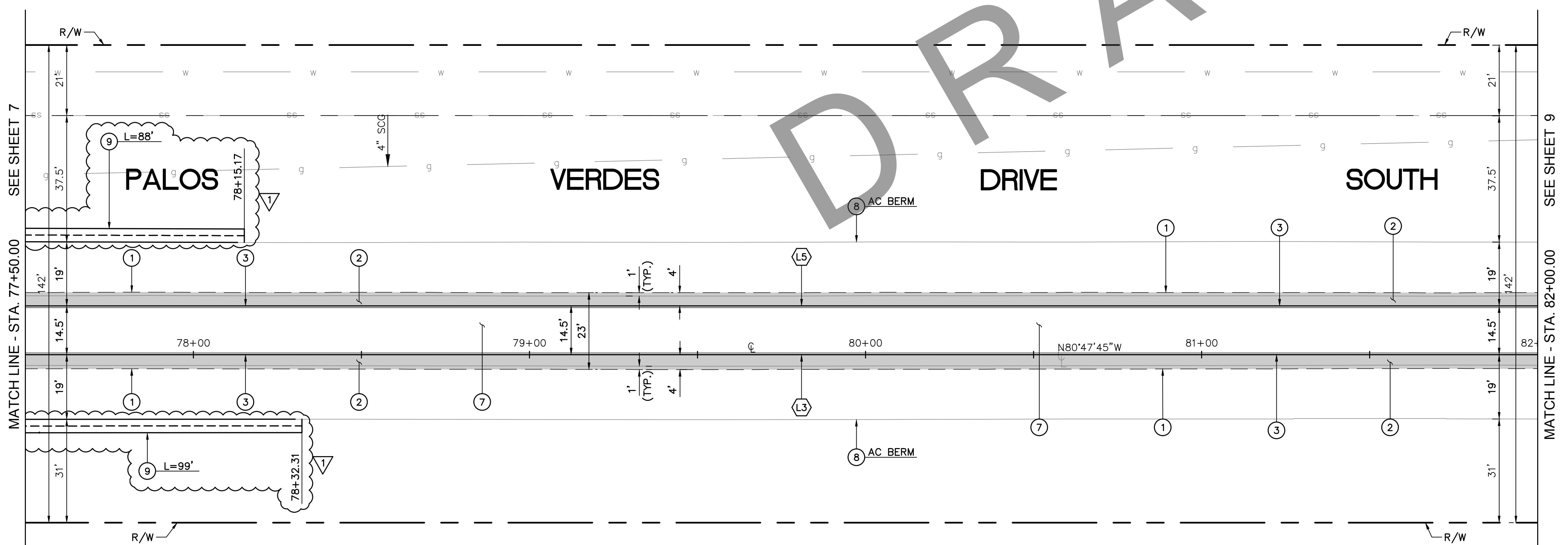
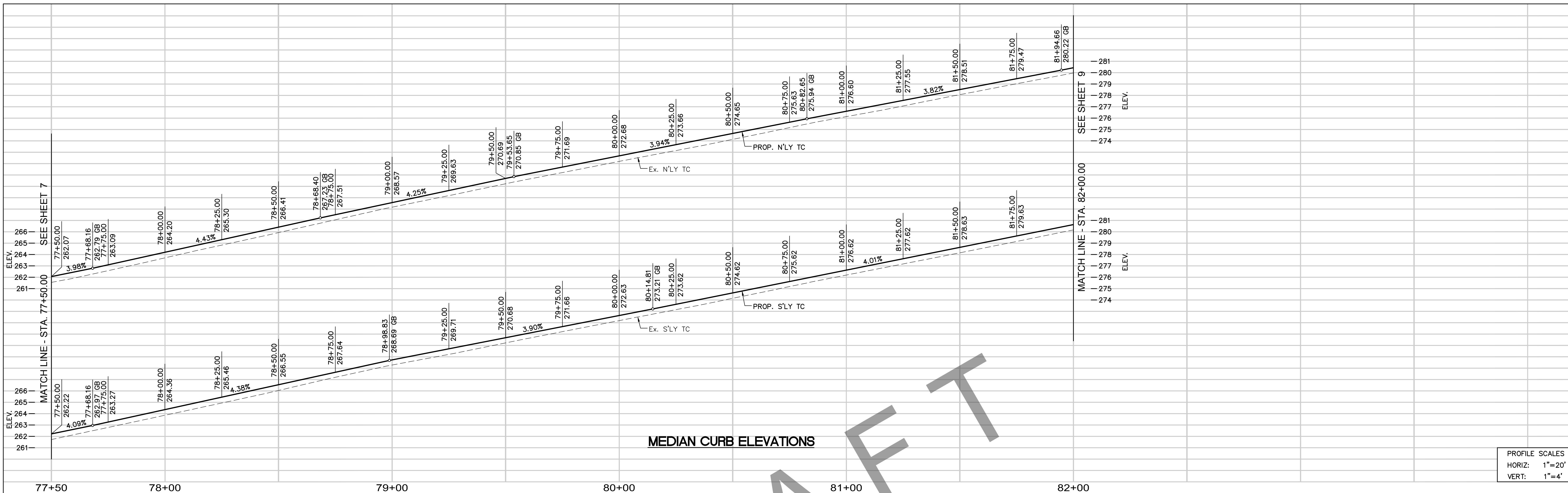
CITY OF RANCHO PALOS VERDES
 DIRECTOR OF PUBLIC WORKS
 APPROVED BY PRINCIPAL ENGINEER, P.E.

GRAPHIC SCALE
 1"=20'
 20' 10' 0 10' 20'

SHEET 6 OF 16
 PROJECT NO. LAF1506

REVISIONS	DESCRIPTION	APPROVED

DESIGNED	GC
DRAWN	GC
CHECKED	CS
DATE	9/15/17



PROFILE SCALES
HORIZ: 1"=20'
VERT: 1"=4'

LINE TABLE		
LINE #	LENGTH	DIRECTION
L3	508.27	N80°47'44.74"W
L5	775.51	N80°47'44.74"W

CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS DATE

APPROVED BY PRINCIPAL ENGINEER, P.E. DATE

NOTICE: ALL UTILITIES ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL CONTACT DIGAELERT AT 8-1-1 TO MARK UTILITIES. CONTRACTOR SHALL VERIFY AND MAINTAIN CLEARANCE FOR UTILITIES.

REVISIONS	DESCRIPTION	APPROVED



CITY OF RANCHO PALOS VERDES

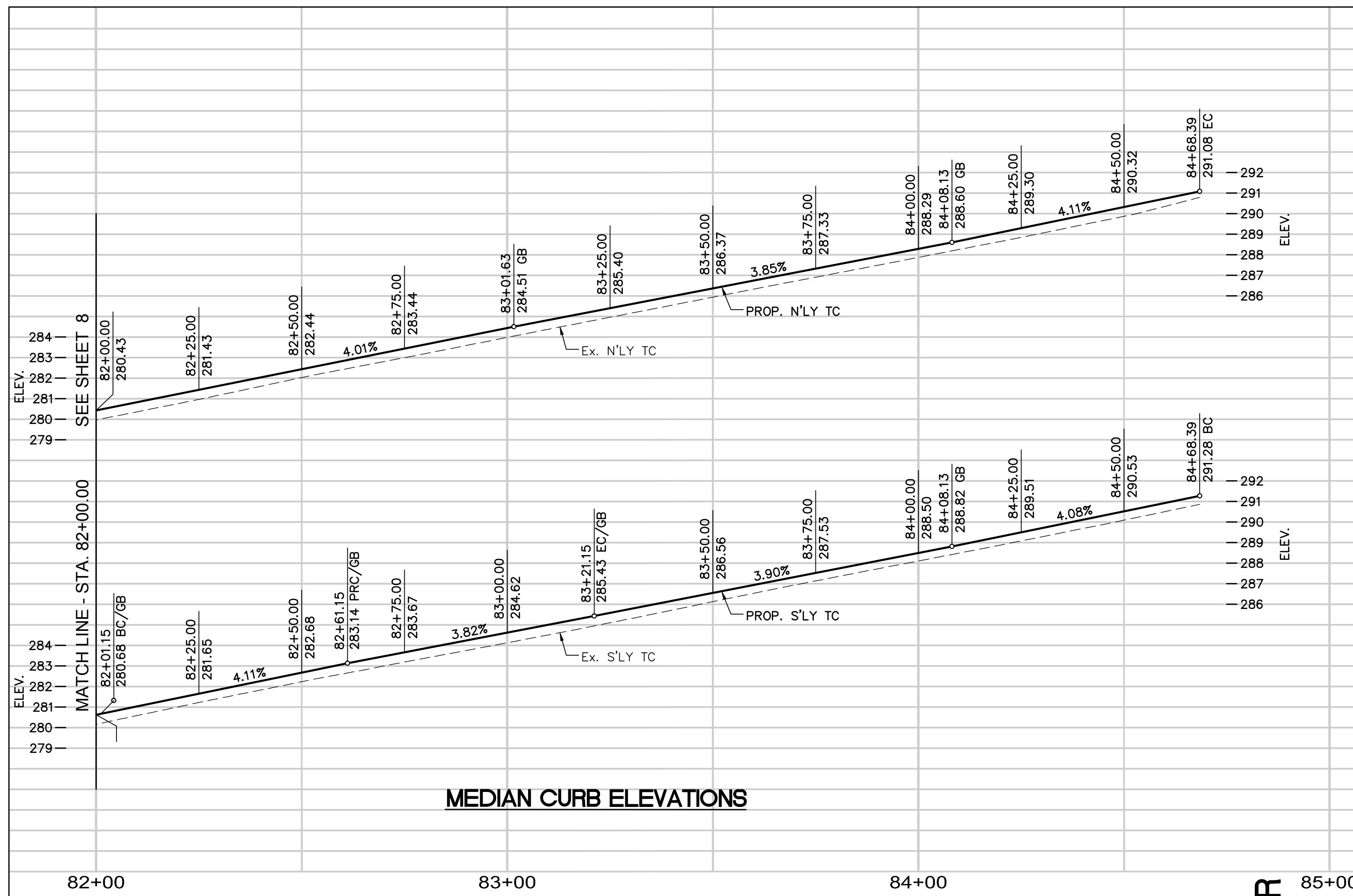
PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
CIVIL IMPROVEMENT PLAN
STA 77+50 TO STA 82+00

SHEET 8 OF 16

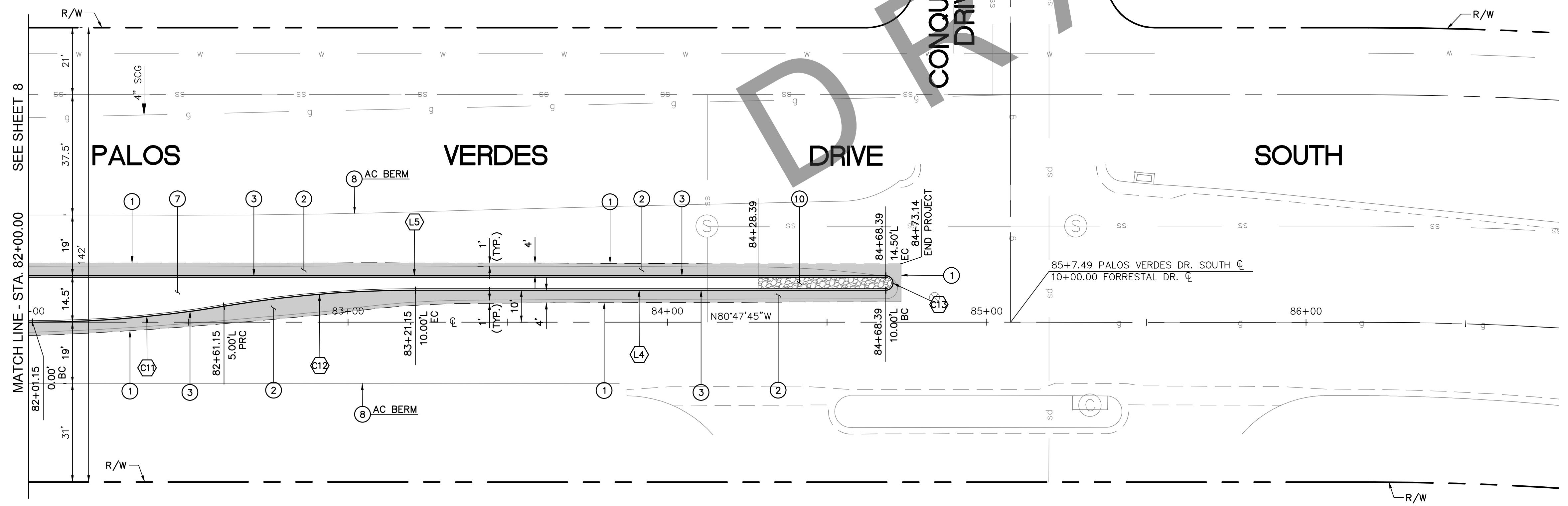
PROJECT NO. LAF1506

20'
10' 0' 10' 20'
1"=20'
GRAPHIC SCALE

LEGEND
ASPHALT CONCRETE PAVEMENT



PROFILE SCALES
HORIZ: 1"=20'
VERT: 1"=4'



CONSTRUCTION NOTES

- ① REMOVAL LIMIT. SAWCUT CONCRETE, ASPHALT, AND OTHER HARDSCAPE SURFACES AND REMOVE TO THE LIMITS SHOWN ON THIS PLAN. ALL REMOVALS SHALL BE DISPOSED OF BY THE CONTRACTOR. REMOVE AND TRIM LANDSCAPING AS NEEDED.
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- ⑧ PROTECT IN PLACE.
- ⑨ CONSTRUCT L.I.D. BIOFILTRATION PLANTER PER DETAILS ON SHEET 10.
- ⑩ CONSTRUCT STONE PAVERS IN MEDIAN NOSE PER PLAN AND DETAIL ON SHEET 2. STONE SHALL BE "LOMPOC STONE" FROM BOURGET FLAGSTONE COMPANY, SANTA MONICA, OR CITY APPROVED EQUAL, AND SHALL MATCH EXISTING STONE APPEARANCE.

LINE TABLE		
#	LENGTH	DIRECTION
	147.25	N80°47'44.74"W
	775.51	N80°47'44.74"W

CURVE TABLE				
VE #	LENGTH	RADIUS	DELTA	TANGENT
11	60.28	362.50	9°31'38.22"	30.21
12	60.28	362.50	9°31'37.58"	30.21
13	7.07	2.25	180°00'00.00"	—

CITY OF RANCHO PALOS VERDES

RECTOR OF PUBLIC WORKS DATE

APPROVED BY PRINCIPAL ENGINEER, P.E. DATE

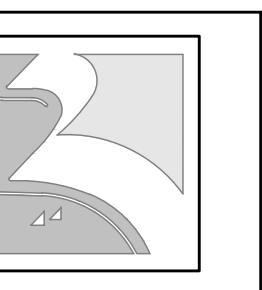
NOTICE: ALL UTILITIES ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL CONTACT DIGALERT AT 8-1-1 TO MARK UTILITIES. CONTRACTOR SHALL VERIFY AND MAINTAIN CLEARANCE FOR UTILITIES.

				DESIGNED	
				DRAWN	
				CHECKED	
NO.	DATE	DESCRIPTION	APPROVED	DATE	9/
REVISIONS					

<u>GC</u>	PLANS PREPARED BY:
<u>GC</u>	 KOA CORPORATION PLANNING & ENGINEERING
<u>CS</u>	1100 Corporate Center Drive, Suite 201 Monterey Park, California 91754-7632 Tel: (323) 260-4703 Fax: (323) 260-4705
<u>/15/17</u>	

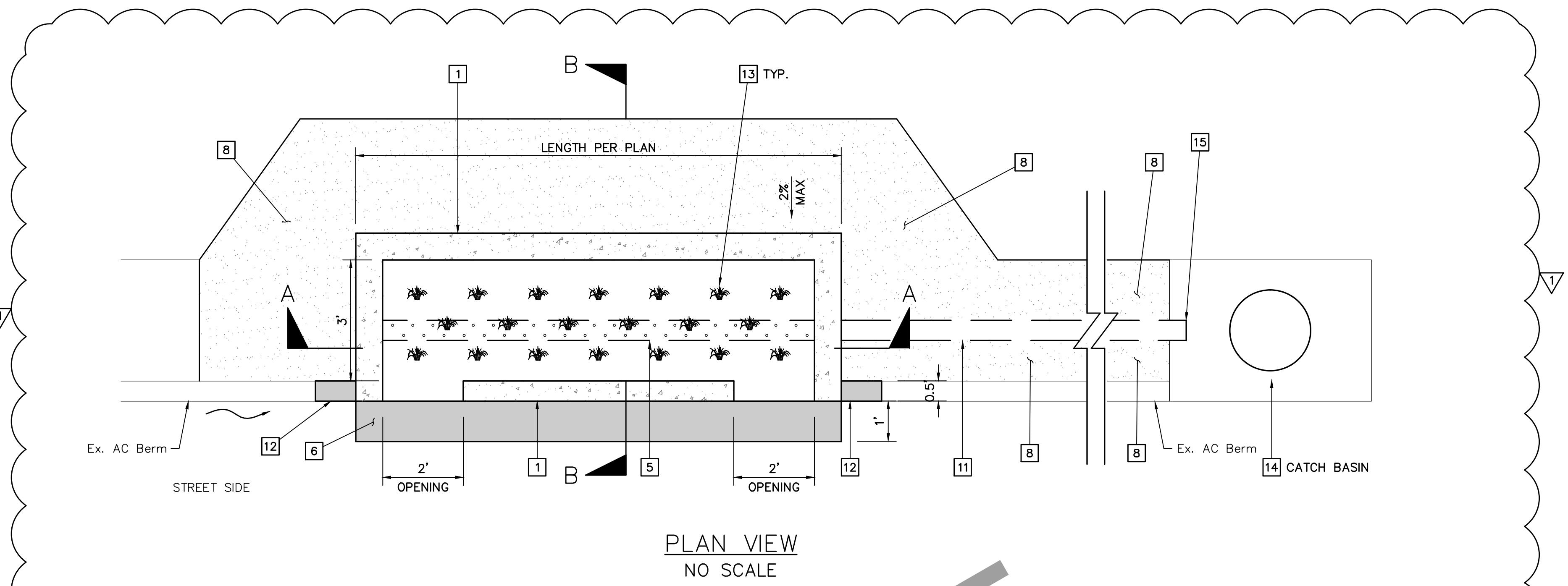


CITY OF RANCHO PALOS VERDES

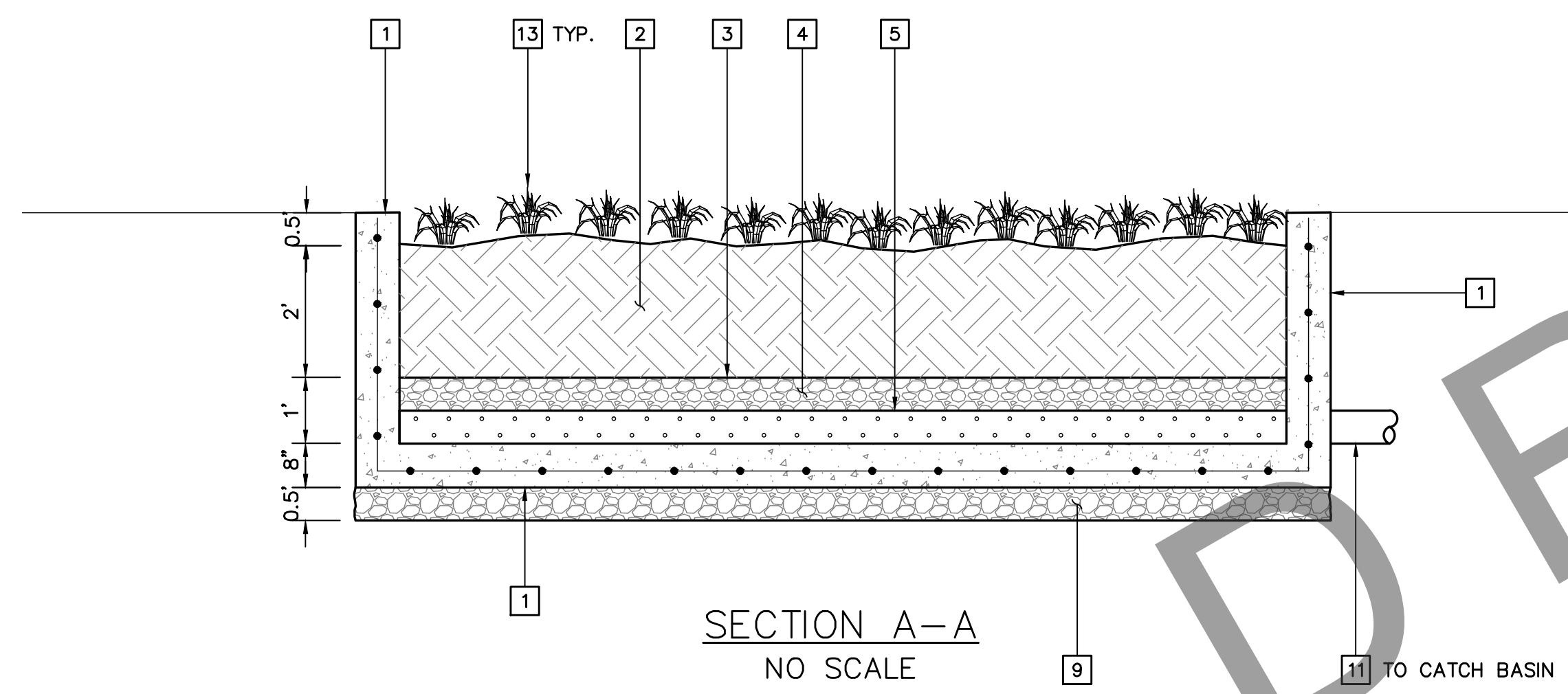


PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
CIVIL IMPROVEMENT PLAN
STA 82+00 TO 85+00

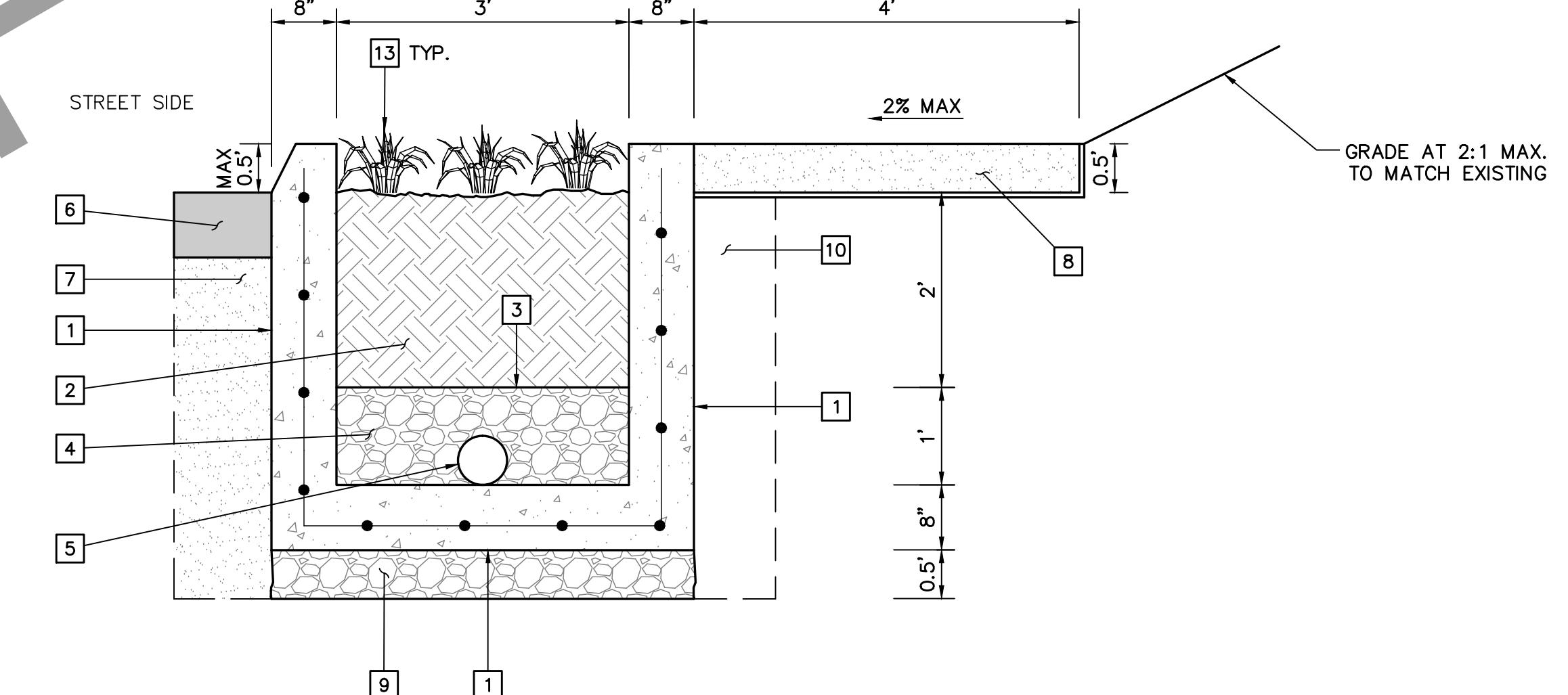
SHEET 9 OF 16
PROJECT NO. LAF1506



PLAN VIEW
NO SCALE



SECTION A-A
NO SCALE



SECTION B-B
NO SCALE

CONSTRUCTION NOTES (THIS SHEET ONLY)

- 1 CONSTRUCT INFILTRATION STRUCTURE PER DETAILS HEREON. 8" WIDE 3,000 PSI CONCRETE WITH #3 BAR @ 12" O.C. EACH WAY. PROVIDE OPENINGS AS SHOWN. INTEGRAL CURB TO MATCH APWA STD PLAN 120-2, A1-6 PROFILE.
- 2 INSTALL PLANTING MEDIA (SEE LACDPW SPEC).
- 3 INSTALL NONWOVEN PERMEABLE GEOTEXTILE FABRIC (90 N).
- 4 INSTALL 12" LAYER OF 3/8" PEA GRAVEL.
- 5 INSTALL 6" SCH 40 PVC PERFORATED PIPE WITH NONWOVEN PERMEABLE GEOTEXTILE FABRIC (90 N) WRAP.
- 6 CONSTRUCT 12" WIDE AC SLOT PATCH, 9" THICK MIN.
- 7 INSTALL 1.5 SACK SAND-CEMENT SLURRY BACKFILL. OPTIONAL: NEAT POUR AGAINST CLEAN EXCAVATED SOIL.
- 8 RESTORE COASTAL TRAIL IN KIND. PROVIDE 4' MIN. ADA COMPLIANT TRAIL.
- 9 CONSTRUCT CMB AT 90% RELATIVE COMPACTION
- 10 INSTALL NATIVE BACKFILL AT 90% RELATIVE COMPACTION. OPTIONAL: NEAT POUR AGAINST CLEAN EXCAVATED SOIL.
- 11 INSTALL SCH 40 PVC PIPE AND CONNECT TO EXISTING CATCH BASIN. ELEVATION AND PIPE DEPTH SHALL BE APPROVED BY THE CITY ENGINEER. SLOPE TO DRAIN.
- 12 AC CURB TRANSITION, TYP.
- 13 CONTRACTOR SHALL PLANT "DUNE BUCKWHEAT" @ 9" O.C. AND INSTALL 2" BARK MULCH TO THE SATISFACTION OF THE CITY ENGINEER.
- 14 PROTECT IN PLACE.
- 15 CORE EXISTING CATCH BASIN AND GROUT PIPE IN PLACE.
- 1 ADD ALTERNATE #1.

CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS

DATE

APPROVED BY PRINCIPAL ENGINEER, P.E.

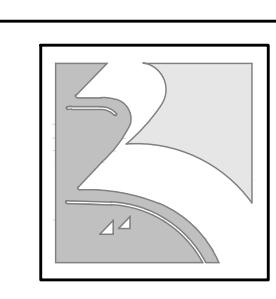
DATE

NO.	DATE	DESCRIPTION	APPROVED

DESIGNED	GC
DRAWN	GC
CHECKED	CS



CITY OF RANCHO PALOS VERDES

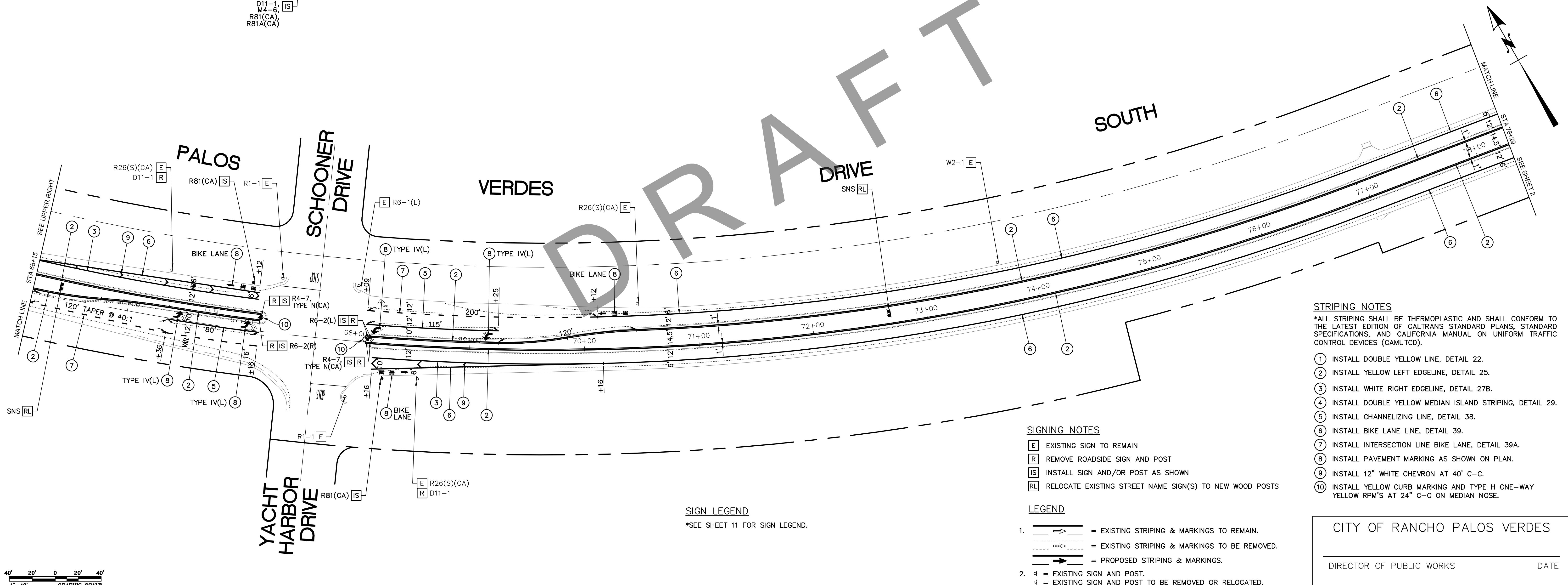
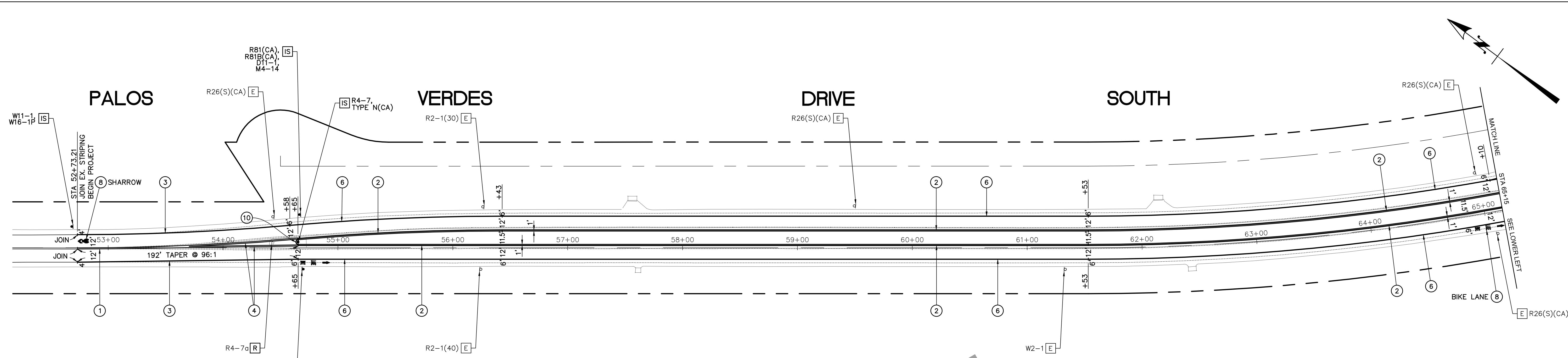


PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT

LOW IMPACT DEVELOPMENT DETAILS

SHEET 10 OF 16

PROJECT NO. LAF1506

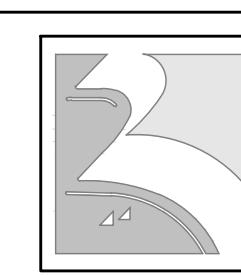


NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED	GC
DRAWN	GC
CHECKED	CS
DATE	9/15/17



CITY OF RANCHO PALOS VERDES



PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
 SIGNING AND STRIPING PLAN
 STA 52+73 TO STA 78+29

SHEET 11 OF 16
 PROJECT NO. LAF1506

STRIPING NOTES

*ALL STRIPING SHALL BE THERMOPLASTIC AND SHALL CONFORM TO THE LATEST EDITION OF CALTRANS STANDARD PLANS, STANDARD SPECIFICATIONS, AND CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CAMUTCD).

1. INSTALL DOUBLE YELLOW LINE, DETAIL 22.
2. INSTALL YELLOW LEFT EDGELINE, DETAIL 25.
3. INSTALL WHITE RIGHT EDGELINE, DETAIL 27B.
4. INSTALL DOUBLE YELLOW MEDIAN ISLAND STRIPING, DETAIL 29.
5. INSTALL CHANNELIZING LINE, DETAIL 38.
6. INSTALL BIKE LANE LINE, DETAIL 39.
7. INSTALL INTERSECTION LINE BIKE LANE, DETAIL 39A.
8. INSTALL PAVEMENT MARKING AS SHOWN ON PLAN.
9. INSTALL 12" WHITE CHEVRON AT 40' C-C.
10. INSTALL YELLOW CURB MARKING AND TYPE H ONE-WAY YELLOW RPM'S AT 24" C-C ON MEDIAN NOSE.

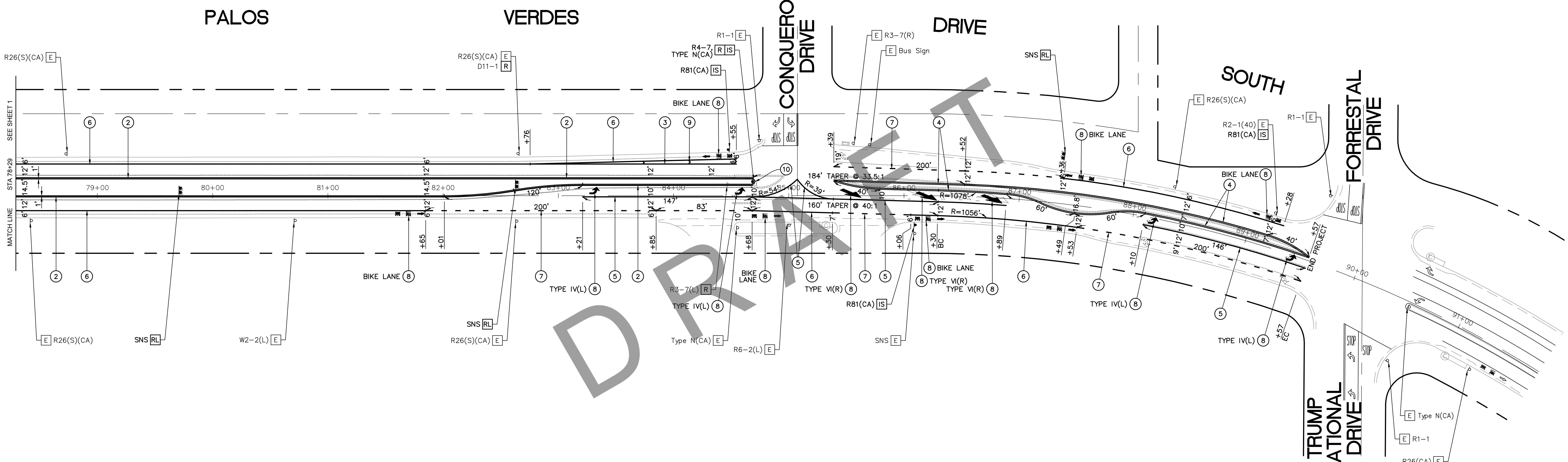
SIGNING NOTES

E EXISTING SIGN TO REMAIN
R REMOVE ROADSIDE SIGN AND POST
IS INSTALL SIGN AND/OR POST AS SHOWN
RL RELOCATE EXISTING STREET NAME SIGN(S) TO NEW WOOD POSTS

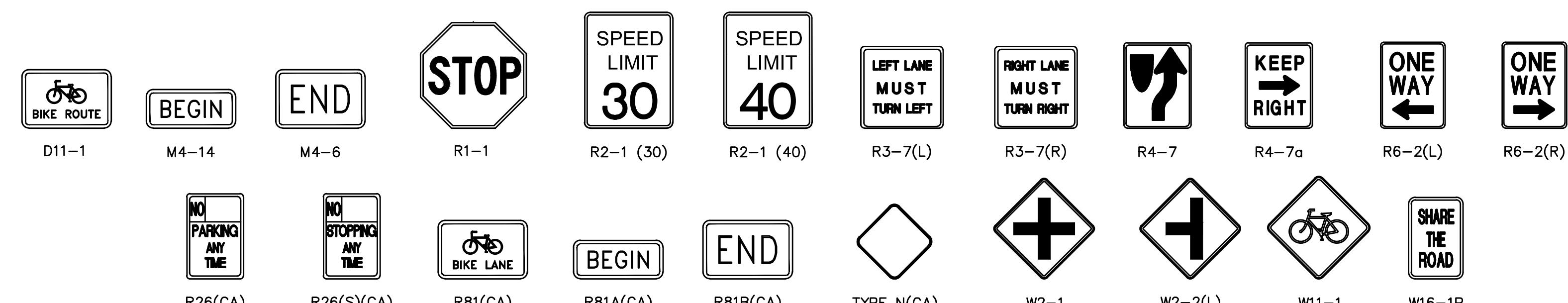
LEGEND

1. = EXISTING STRIPING & MARKINGS TO REMAIN.
 = EXISTING STRIPING & MARKINGS TO BE REMOVED.
 = PROPOSED STRIPING & MARKINGS.

2. = EXISTING SIGN AND POST.
 = EXISTING SIGN AND POST TO BE REMOVED OR RELOCATED.
 = PROPOSED SIGN AND POST.



SIGN LEGEND



CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS

DATE

APPROVED BY PRINCIPAL ENGINEER, P.E.

DATE

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED	GC
DRAWN	GC
CHECKED	CS
DATE	9/15/17



CITY OF RANCHO PALOS VERDES

PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
 SIGNING AND STRIPING PLAN
 STA 78+29 TO STA 91+00

SHEET 12 OF 16

PROJECT NO. LAF1506

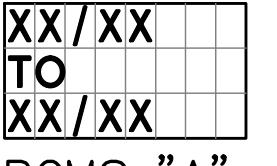
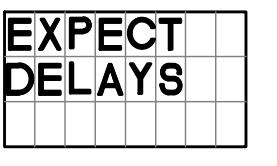
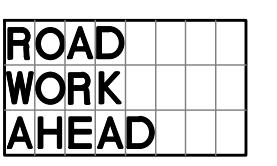
GENERAL NOTES:

- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING WORK TO INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES AS SHOWN HEREIN, AS WELL AS ANY SUCH ADDITIONAL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED TO ENSURE THE SAFE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH OR AROUND THE CLOSURE AREA AND PROVIDE THE MAXIMUM PROTECTION AND SAFETY TO WORKERS.
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN THEIR PROPER POSITION AT ALL TIMES AND SHALL BE REPAIRED, REPLACED, OR CLEANED AS NECESSARY TO PRESERVE THEIR APPEARANCE AND CONTINUITY.
- ANY REVISIONS TO THE DRAWINGS SHALL BE APPROVED IN WRITING BY THE CITY OF RANCHO PALOS VERDES PUBLIC WORKS DEPARTMENT DIRECTOR, OR HIS AUTHORIZED REPRESENTATIVE.
- THE CITY OF RANCHO PALOS VERDES PUBLIC WORKS DEPARTMENT RESERVES THE RIGHT TO OBSERVE THE TRAFFIC CONTROL OPERATIONS AND TO MAKE ANY NECESSARY CHANGES. ANY DIRECTED CHANGES SHALL SUPERSEDE THESE PLANS AND SHALL BE IMPLEMENTED AT THE SOLE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE TEMPORARY DELINEATION, SIGNAGE, AND OTHER DEVICES WHEN NO LONGER REQUIRED, AND SHALL RESTORE AREAS TO ORIGINAL CONDITIONS.
- THE CONTRACTOR SHALL COVER EXISTING SIGNS WHERE THEY CONFLICT WITH CONSTRUCTION DETOURS AND SIGNING.
- WORKING HOURS SHALL BE FROM 9AM TO 3PM, MONDAY THROUGH FRIDAY. WORK IS NOT PERMITTED ON WEEKENDS OR CITY HOLIDAYS.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF RANCHO PALOS VERDES PUBLIC WORKS DEPARTMENT 48 HOURS IN ADVANCE OF BEGINNING WORK AT 310-544-5252.
- IMPLEMENTATION OF TRAFFIC CONTROL SHALL BE PERFORMED BY A PROFESSIONAL TEMPORARY TRAFFIC CONTROL COMPANY AND FLAGGER CONTROL SHALL BE CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

23. METROPOLITAN TRANSPORTATION AUTHORITY (MTA) AND PALOS VERDES PENINSULA TRANSIT AUTHORITY (PVTA) BUS STOPS IMPACTED. CONTRACTOR SHALL NOTIFY MTA AT (213) 922-4632 AND PVTA AT (310) 544-7108 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AND MUST BE ACKNOWLEDGED BY MTA AND PVTA DISPATCH.

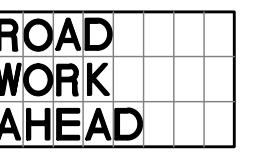
24. CONTRACTOR SHALL TRIM STREET TREES TO MAINTAIN A MINIMUM OF 15' VERTICAL CLEARANCE PRIOR TO THIS PHASE OF WORK. CONTRACTOR SHALL NOTIFY CITY IN ADVANCE IF SUCH TRIMMING IS NECESSARY.

25. WHEN WORK REQUIRES THE USE OF STEEL PLATES, THEY SHALL BE OF THE NON-SKID TYPE, RECESSED TO BE FLUSH WITH THE PAVEMENT SURFACE, PINNED TO BE SECURED IN PLACE, AND INSTALLED IN ACCORDANCE WITH CALTRANS STANDARDS. ADVANCE WARNING SIGNS SHALL ALSO BE IMPLEMENTED FOR THE ENTIRE DURATION OF TIME THE STEEL PLATES ARE IN PLACE.



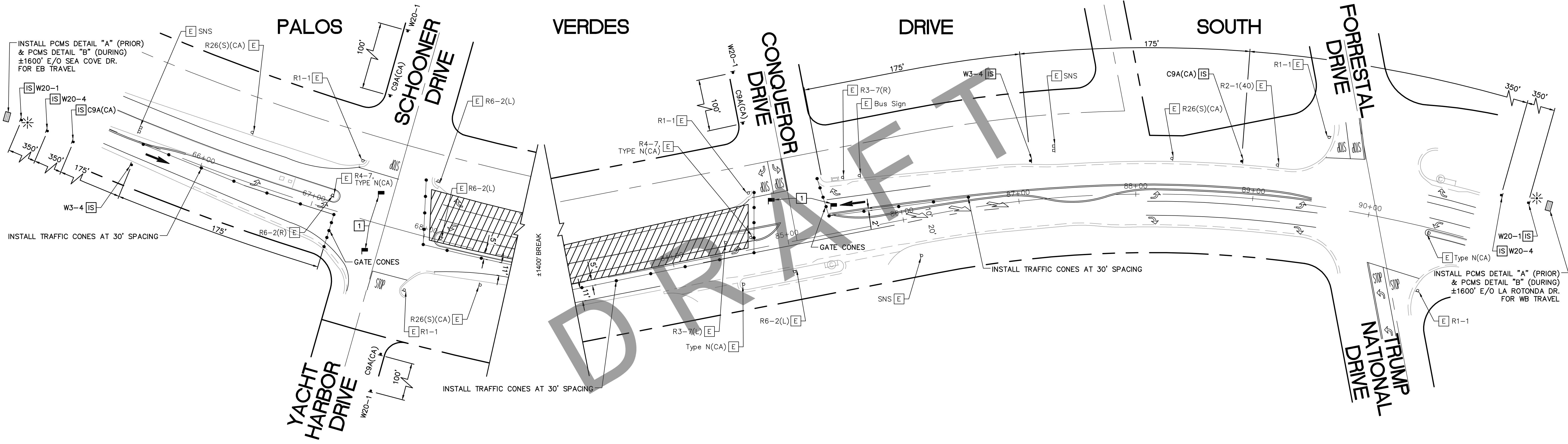
PCMS "A"

TO BE IN OPERATION
THREE WEEKS PRIOR
TO CONSTRUCTION



PCMS "B"

TO BE IN OPERATION
DURING CONSTRUCTION



NOTES:

1 A FLAGGER SHALL BE AVAILABLE AT THE LOCATIONS SHOWN TO ASSIST MOTORISTS THRU WORK ZONE. IF FLAGGERS ARE UNABLE TO SEE EACH OTHER, THEY MUST HAVE A HAND HELD COMMUNICATION DEVICE (E.G. WALKIE TALKIE) WITH THEM AT ALL TIMES.

40' 20' 0 20' 40'
1'=40'

GRAPHIC SCALE

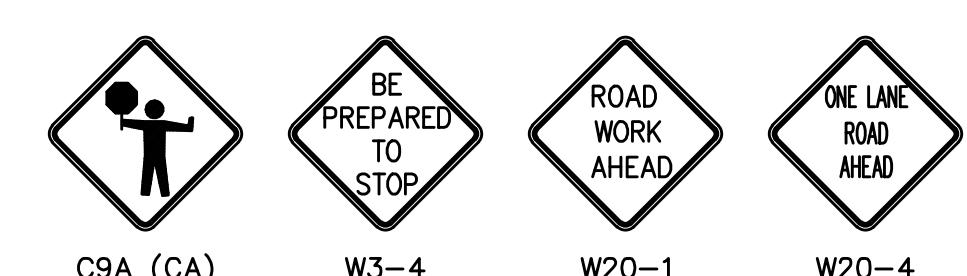
LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- DIRECTION OF TRAVEL
- PORTABLE FLASHING BEACON
- FLAGGER
- PORTABLE CHANGEMABLE MESSAGE SIGN

SIGNING NOTES

- E EXISTING SIGN TO REMAIN
- C COVER ROADSIDE SIGN AND POST
- IS INSTALL TEMPORARY SIGN AND/OR POST AS SHOWN

SIGN LEGEND



CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS

DATE

APPROVED BY PRINCIPAL ENGINEER, P.E.

DATE

NO.	DATE	DESCRIPTION	APPROVED

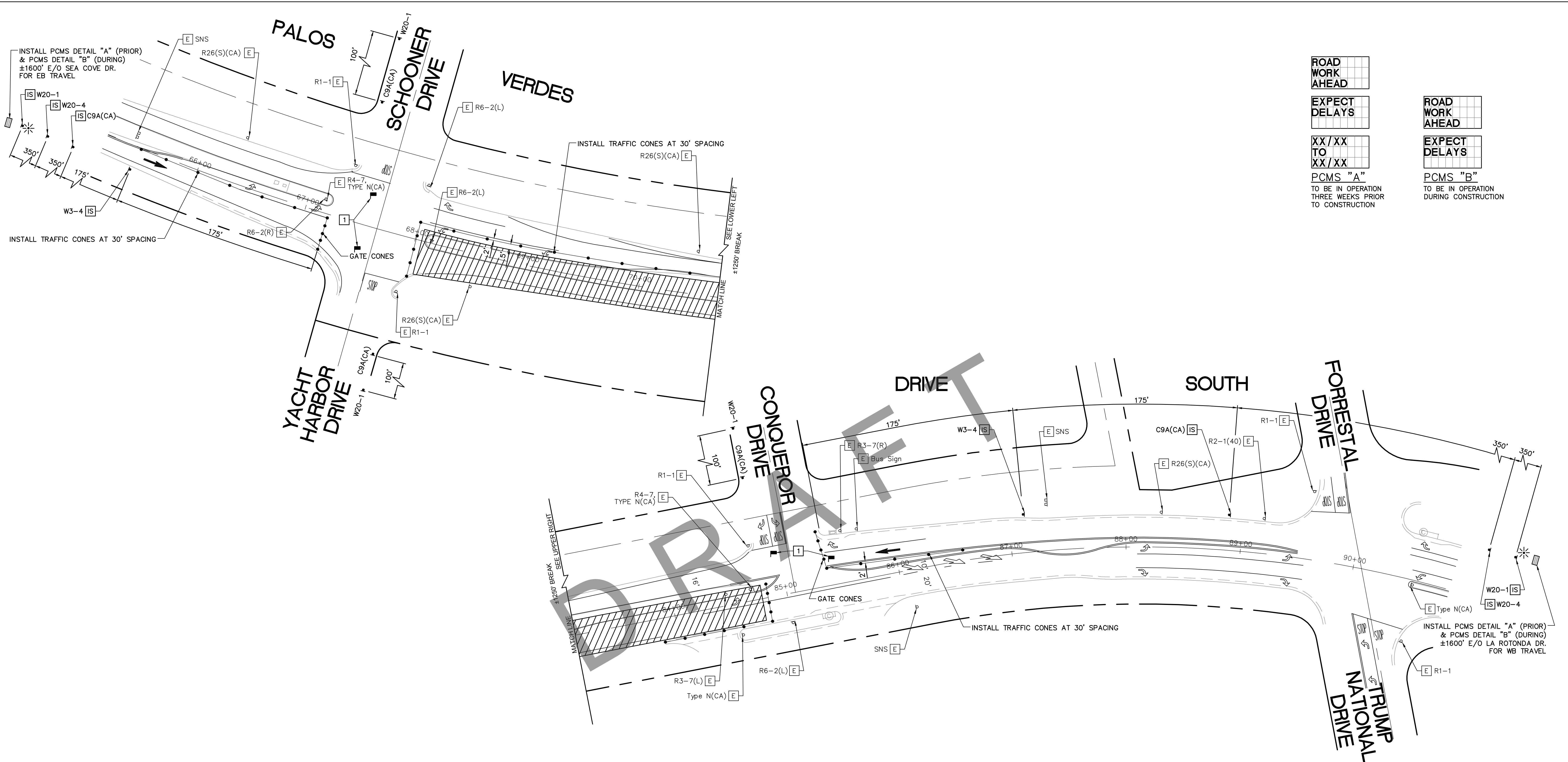
DESIGNED	JB
DRAWN	JB
CHECKED	CS
DATE	5/20/16

PLANS PREPARED BY:		
KOA CORPORATION PLANNING & ENGINEERING 1100 Corporate Center Drive, Suite 201 Monterey Park, California 91754-7632 Tel: (323) 260-4703 Fax: (323) 260-4705		

REVISIONS	CITY OF RANCHO PALOS VERDES	

PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
WORKSITE TRAFFIC CONTROL PLAN
STA 67+50 TO STA 90+00 (STAGE 1)

SHEET 13 OF 16
PROJECT NO. LAF1506



NOTES:

1 A FLAGGER SHALL BE AVAILABLE AT THE LOCATIONS SHOWN TO ASSIST MOTORISTS THRU WORK ZONE. IF FLAGGERS ARE UNABLE TO SEE EACH OTHER, THEY MUST HAVE A HAND HELD COMMUNICATION DEVICE (E.G. WALKIE TALKIE) WITH THEM AT ALL TIMES.

40' 20' 0 20' 40'
1' = 40' GRAPHIC SCALE

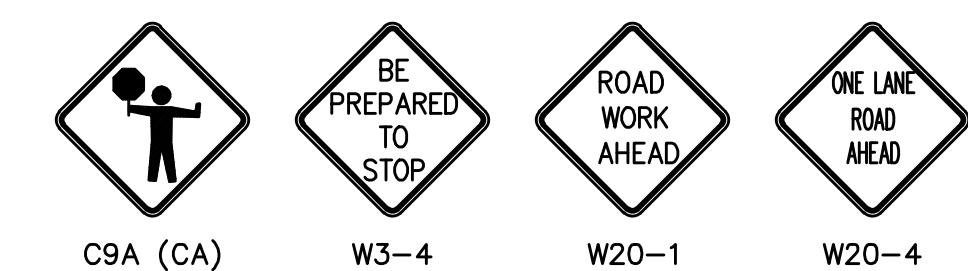
LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- DIRECTION OF TRAVEL
- PORTABLE FLASHING BEACON
- FLAGGER
- PORTABLE CHANGEMABLE MESSAGE SIGN

SIGNING NOTES

- E EXISTING SIGN TO REMAIN
- C COVER ROADSIDE SIGN AND POST
- IS INSTALL TEMPORARY SIGN AND/OR POST AS SHOWN

SIGN LEGEND



CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS

DATE

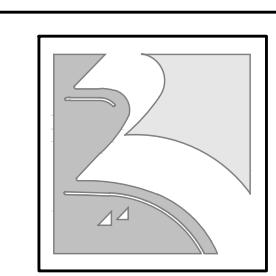
APPROVED BY PRINCIPAL ENGINEER, P.E.

DATE

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED	JB
DRAWN	JB
CHECKED	CS
DATE	5/20/16

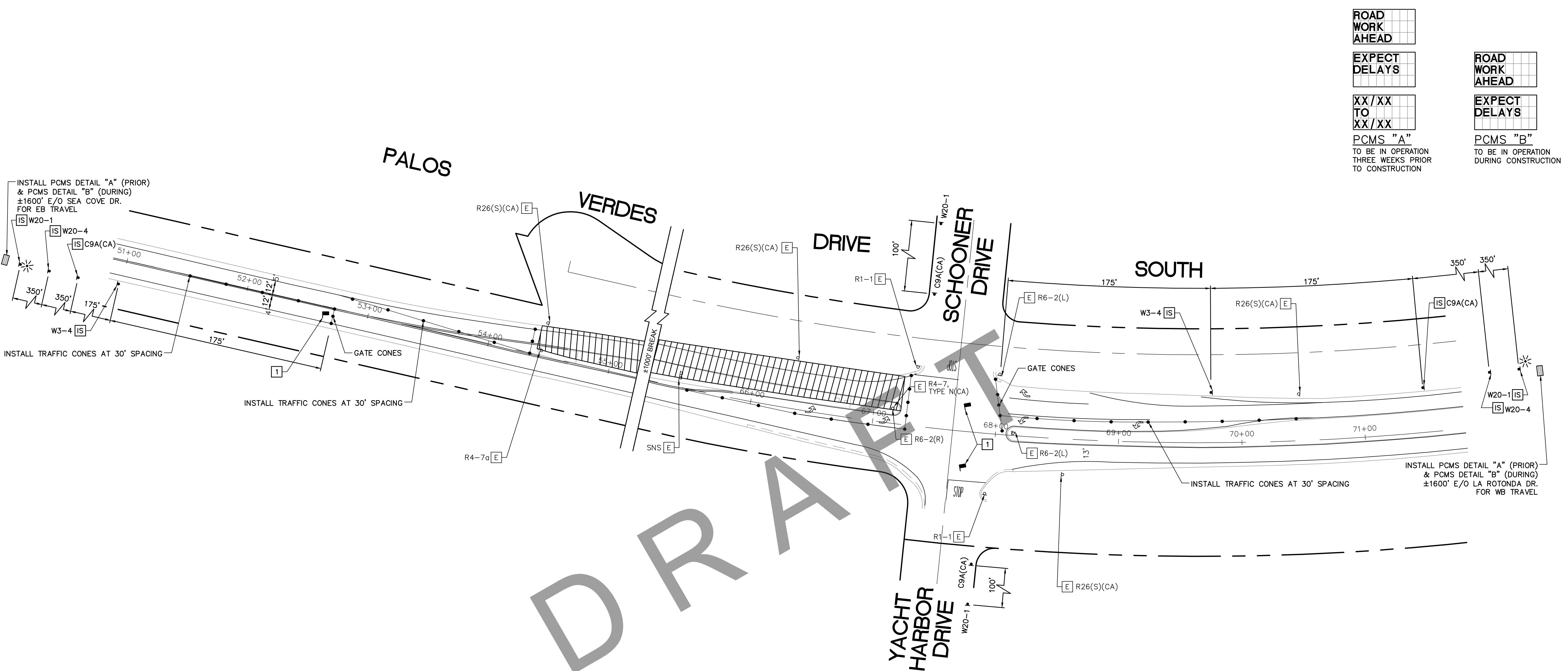
PLANS PREPARED BY:
KOA CORPORATION PLANNING & ENGINEERING 1100 Corporate Center Drive, Suite 201 Monterey Park, California 91754-7632 Tel: (323) 260-4703 Fax (323) 260-4705

CITY OF RANCHO PALOS VERDES


PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
WORKSITE TRAFFIC CONTROL PLAN
STA 67+50 TO STA 90+00 (STAGE 2)

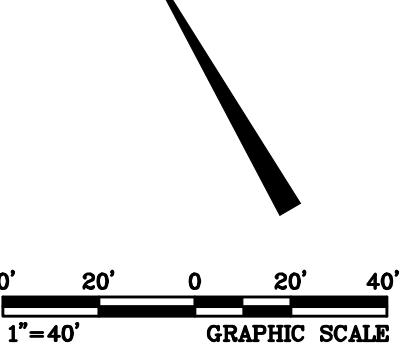
SHEET 14 OF 16

PROJECT NO. LAF1506



NOTES:

1 A FLAGGER SHALL BE AVAILABLE AT THE LOCATIONS SHOWN TO ASSIST MOTORISTS THRU WORK ZONE. IF FLAGGERS ARE UNABLE TO SEE EACH OTHER, THEY MUST HAVE A HAND HELD COMMUNICATION DEVICE (E.G. WALKIE TALKIE) WITH THEM AT ALL TIMES.



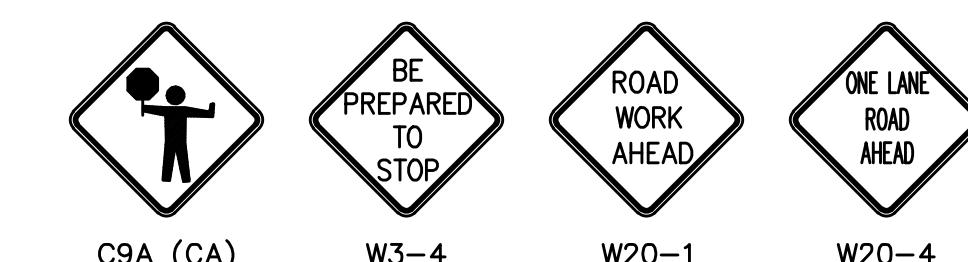
LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- DIRECTION OF TRAVEL
- PORTABLE FLASHING BEACON
- FLAGGER
- PORTABLE CHANGING MESSAGE SIGN

SIGNING NOTES

- [E] EXISTING SIGN TO REMAIN
- [C] COVER ROADSIDE SIGN AND POST
- [IS] INSTALL TEMPORARY SIGN AND/OR POST AS SHOWN

SIGN LEGEND



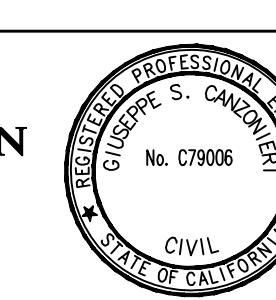
CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS DATE

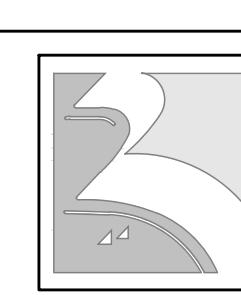
APPROVED BY PRINCIPAL ENGINEER, P.E. DATE

DESIGNED	JB
DRAWN	JB
CHECKED	CS
APPROVED	
NO. DATE	DESCRIPTION
	REVISIONS
DATE	5/20/16

PLANS PREPARED BY:
KOA CORPORATION
 PLANNING & ENGINEERING
 1100 Corporate Center Drive, Suite 201
 Monterey Park, California 91754-7632
 Tel: (323) 260-4703 Fax (323) 260-4705



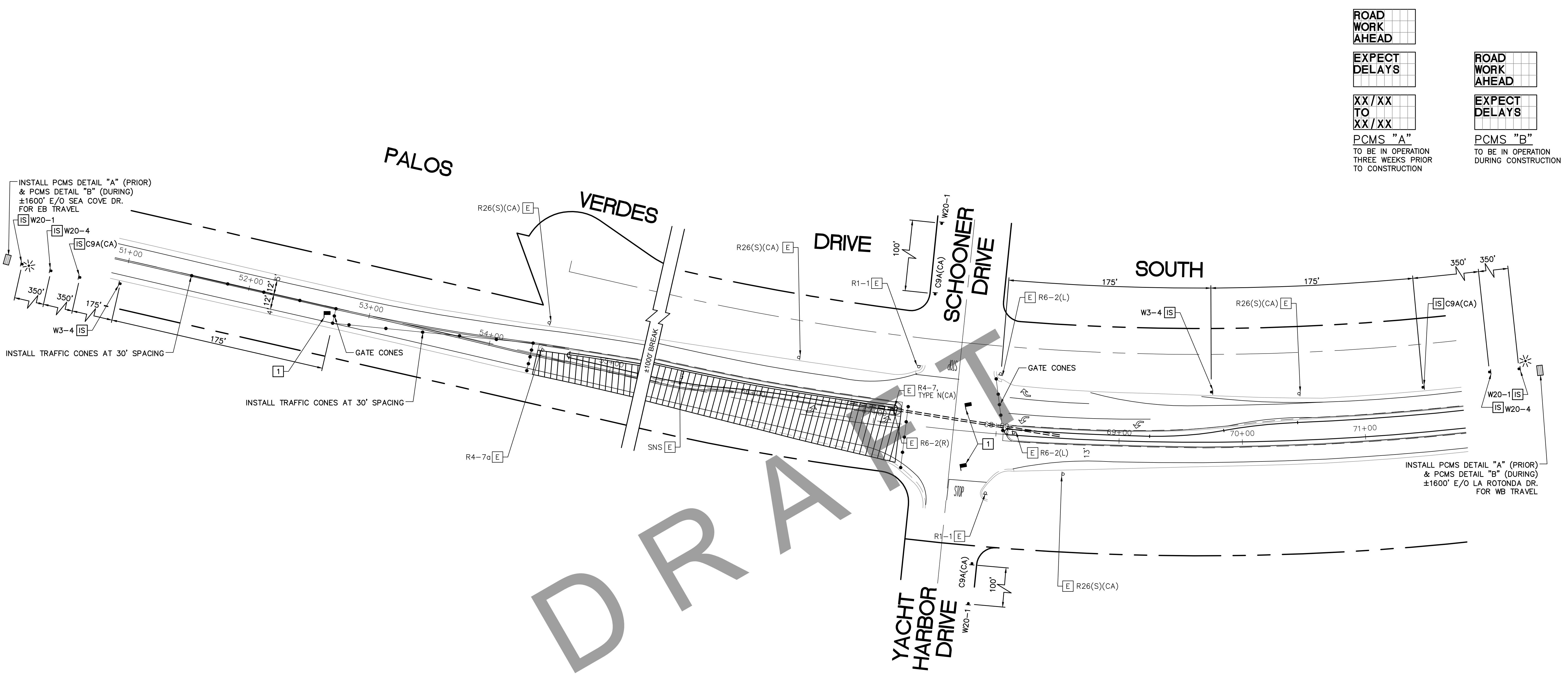
CITY OF RANCHO PALOS VERDES



PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
 WORKSITE TRAFFIC CONTROL PLAN
 STA 53+00 TO STA 67+00 (STAGE 3)

SHEET 15 OF 16

PROJECT NO. LAF1506



NOTES:

1 A FLAGGER SHALL BE AVAILABLE AT THE LOCATIONS SHOWN TO ASSIST MOTORISTS THRU WORK ZONE. IF FLAGGERS ARE UNABLE TO SEE EACH OTHER, THEY MUST HAVE A HAND HELD COMMUNICATION DEVICE (E.G. WALKIE TALKIE) WITH THEM AT ALL TIMES.

40' 20' 0 20' 40'
1'=40' GRAPHIC SCALE

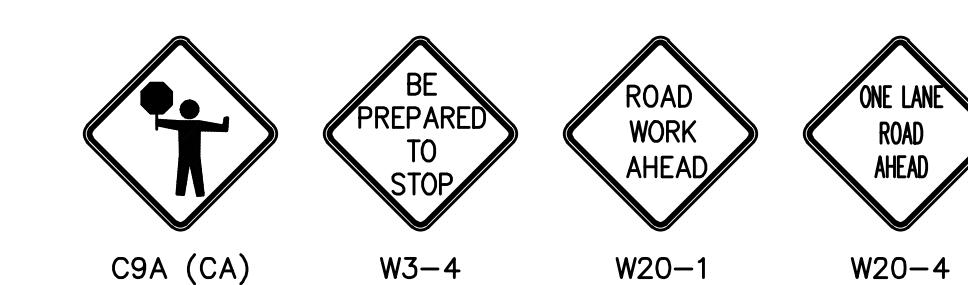
LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- DIRECTION OF TRAVEL
- PORTABLE FLASHING BEACON
- FLAGGER
- PORTABLE CHANGING MESSAGE SIGN

SIGNING NOTES

- E EXISTING SIGN TO REMAIN
- C COVER ROADSIDE SIGN AND POST
- IS INSTALL TEMPORARY SIGN AND/OR POST AS SHOWN

SIGN LEGEND



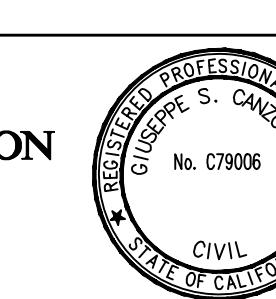
CITY OF RANCHO PALOS VERDES

DIRECTOR OF PUBLIC WORKS DATE

APPROVED BY PRINCIPAL ENGINEER, P.E. DATE

DESIGNED	JB
DRAWN	JB
CHECKED	CS
APPROVED	
NO. DATE	DESCRIPTION
	REVISIONS
	5/20/16

PLANS PREPARED BY:	
KOA CORPORATION	PLANNING & ENGINEERING 1100 Corporate Center Drive, Suite 201 Monterey Park, California 91754-7632 Tel: (323) 260-4703 Fax (323) 260-4705



CITY OF RANCHO PALOS VERDES

PALOS VERDES DRIVE SOUTH COMPATIBLE BIKE LANES SAFETY PROJECT
WORKSITE TRAFFIC CONTROL PLAN
STA 53+00 TO STA 67+00 (STAGE 4)

SHEET 16 OF 16

PROJECT NO. LAF1506