CITY OF REDONDO BEACH

PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES DIVISION
REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM
PROSPECT AVE. BETWEEN ANITA ST. AND PALOS VERDES BLVD.
PROJECT NO. 41490

SHEET INDEX

BENCHMARK

LOS ANGELES COUNTY PUBLIC WORKS BENCHMARK

DESIGNATION: QY 10954
YEAR: 2013
DATUM: NAVD88
ELEV: 96.815'

DESCRIPTION: DPW BM TAG IN N CB 10FT WEST OF BCR AT NW COR TORRANCE BL AND GUADALUPE AVE.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS PROJECT IS THE CALIFORNIA COORDINATES SYSTEM NAD83, ZONE 5 (2017.50EPOCH) AND ESTABLISHED LOCALLY BY FIELD-OBSERVED TIES RELATIVE TO CALIFORNIA SPATIAL REFERENCE NETWORK STATIONS "LBC1" AND "TORP", IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE, SECTIONS 8801-8819 AND WITH A BEARING OF NORTH 78°08'56" EAST. ALL LINEAR MEASUREMENTS ARE IN US SURVEY FEET. TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES AT STATION "A" WITH COMBINED SCALE FACTOR OF 1.00004224.

STATION	NORTHING	EASTING	ELEVATION
LBC1	1761296.38'	6520006.24'	47.52'
TORP	1748960.84'	6461221.83'	103.06'
"A"	1773206.83'	6448514.67'	90.61'
"B"	1757389.79'	6448317.69'	93.01'

UTILITY CONTACT LIST

COMPANY	CONTACT	PHONE NUMBER
AMERICAN DARK FIBER	JOSEPH GONZALEZ	(951)858-0154
CALIFORNIA WATER SERVICE	CARDINAL FERNANDEEZEES	(310)420-8217
CHEVRON PIPELINE COMPANY	ALLEN JUST	(714)508-2677
COUNTY SANITATION DISTRICT - COMPTON	ENGINEERING COUNTER	(310)638-1161
CROWN CASTLE	FIBER DIG ALERT	(800)654-3110
FRONTIER	DONALD CRITCHFIELD	(310)264-5100
LA COUNTY PUBLIC WORKS - FLOOD MAINTENANCE	ADAM LEE	(626)458-6185
LA DEPARTMENT OF WATER AND POWER	ENGINEERING COUNTER	(213)367-6428
MARATHON PIPELINE	PATRICK KELLEY	(562)208-0511
MCI BUSINESS (VERIZON)	VERIZON INVESTIGATIONS	(800)289-327
SOCAL GAS	ENGINEERING COUNTER	(310)687-2011
SOUTHERN CALIFORNIA EDISON	GILBERT ACEVEZ	(909)548-7249
SPECTRUM	NATASCHA FUCSIK	(310)216-3545
WEST BASIN MUNICIPAL WATER DISTRICT	FRANK FUCHS	(310)660-6255
ZAYO FNA ABOVENET	GEORGE HUSS	(213)283-3601

DIGALERT

DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG

TOLL FREE 1-800-227-2600

Underground Service Alert of Southern California

PROJECT VICINITY MAP
NTS

ABBREVIATIONS

BFP	BACKFLOW PREVENTER
BC	BEGIN CURVE
BCR	BEGIN CURB RETURN
BEG	BEGIN
C OR C/L	CENTER LINE
C&G	CURB AND GUTTER
CMH	COMMUNICATIONS MAN HOLE
COM	COMMUNICATIONS
CPB	COMMUNICATIONS PULLBOX
DW	DOMESTIC WATER
DWY	DRIVEWAY
E/ELEC	ELECTRICAL
EB	ELECTRICAL BOX
EC	END CURVE
ECB	ELECTRICAL CONTROL BOX
ECR	END CURB RETURN
EVT	ELECTRICAL VAULT
EX	EXISTING
FS	FINISH SURFACE
FH	FIRE HYDRANT
FL	FLOW LINE
G	GAS LINE
GV	GAS VALVE
GW	GUY WIRE/GUIDE WIRE
JP	JOINT POLE
LT	LEFT
MH	MANHOLE
OH	OVERHEAD
PP	POWER POLE
PB	PULL BOX
PVMT	PAVEMENT
RT	RIGHT
R/W	RIGHT-OF-WAY
RW	RECLAIMED WATER
SHT	SHEET
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
SW	SIDEWALK
SCE	SOUTHERN CALIFORNIA EDISON
SD	STORM DRAIN
SDDI	STORM DRAIN DRAINAGE INLET
SDMH	STORM DRAIN MANHOLE
SD VLT	STORM DRAIN VAULT
STD	STANDARD
SSMH	SANITARY SEWER MANHOLE
T	TELEPHONE
TC	TOP OF CURB
TMH	TELEPHONE MANHOLE
TS	TRAFFIC SIGNAL
UG	UNDERGROUND
WM	WATER METER
WMH	WATER MANHOLE
WV	WATER VALVE
W VLT	WATER VAULT

SYMBOLS LEGEND

- CENTERLINE
- RIGHT OF WAY LINE
- EX WATER VALVE
- EX GAS VALVE
- EX FIRE HYDRANT
- EX MANHOLE
- EX SANITARY SEWER MANHOLE
- EX STORM DRAIN MANHOLE
- EX COMMUMNICATIONS MANHOLE
- EX ELECTRICAL EMANHOLE
- EX TELECOMMUNICATIONS MANHOLE
- EX SIGN
- EX PULL BOX
- EX JUNCTION POLE
- EX STREET LIGHT

N

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER — SHEILA AMPARO — 78003 Exp 9-30-27 CIVIL — STATE OF CALIFORNIA

PLANS PREPARED BY:

DESIGNED BY:	MB	DATE: 02/06/26
DRAWN BY:	JC	DATE: 02/06/26
CHECKED BY:	SA	DATE: 02/06/26

CIVIL ENGINEER: SHEILA AMPARO LICENSE NO. 78003

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

TITLE SHEET

DRAWN	JC	CHECKED	MB/SA
SCALE	AS NOTED	APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER
DATE		PROJECT NO.	41490
SHEET NO.	01 OF 58 SHEETS	DRAWING NO.	T-01

DRAWING: \\bf-nb\vol4\2024\41992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-01-nb-ti.dwg PLOTTED: 2/6/2026 3:30 PM BY: Jacob

GENERAL NOTES

1. GENERAL NOTES APPLY TO ALL PLANS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SUBSTRUCTURES, WHETHER SHOWN OR NOT. VERIFICATION BY POTHOLING AND/OR METAL DETECTORS FOR UTILITY LINES AND UTILITY COVERS IS REQUIRED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES ENCOUNTERED DURING THIS PROJECT, AND SHALL NOTIFY THE CITY ENGINEER IMMEDIATELY OF ANY UNDOCUMENTED SUBSTRUCTURES. ANY DAMAGES TO UTILITIES AS A RESULT OF CONTRACTOR'S ACTION SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE TO THE SATISFACTION OF THE AGENCY HAVING JURISDICTION.
4. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED TEMPORARY AND PERMANENT PERMITS, INCLUDING LICENSES, CERTIFICATES, INSPECTIONS, TESTS, AND SERVICE. COPIES OF APPLICABLE PERMITS AND AN APPROVED SET OF PLANS SHALL BE AT THE JOB SITE AT ALL TIMES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CONSTRUCTION WITH ALL UTILITIES.
6. CONTRACTOR SHALL FURNISH AND INSTALL ALL SIGNS, LIGHTS, BARRICADES, FLASHING ARROW BOARDS, AND ANY OTHER TRAFFIC CONTROL WARNING DEVICES IN GOOD WORKING CONDITIONS, INCLUDING FLAGMEN, AS MAY BE REQUIRED BY THE CITY ENGINEER. ALL ITEMS MENTIONED SHALL CONFORM TO THE REQUIREMENTS SPECIFIED IN THE LATEST EDITION OF THE WORK AREA TRAFFIC CONTROL HANDBOOK MUTCD MANUAL. FAILURE TO DO SO WILL BE CITED UNDER THE APPLICABLE SECTION OF THE C.V.C AND CORRECTIVE COST TO THE CITY WILL BE CHARGED TO THE CONTRACTOR. 'NO PARKING' SIGNS (11" X 17") CONTAINING CONSTRUCTION TIMES, CONSTRUCTION DATES. AND A REFERENCE TO CVC22651(, MUST BE POSTED 72 HOURS PRIOR TO CONSTRUCTION. DOOR HANGERS WITH CONSTRUCTION INFORMATION MUST BE DISTRIBUTED TO AFFECTED BUSINESSES 72 HOURS PRIOR TO CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR ALL SURVEY WORK NECESSARY FOR CONSTRUCTION.
8. ALL WORK SHALL CONFORM TO THE LATEST EDITION AND SUPPLEMENTS OF THE STANDARD SPECIFICATIONS AND PLANS FOR PUBLIC WORKS CONSTRUCTION.
9. THE WORK AREA SHALL BE CLEANED DAILY AND KEPT CLEAN OF ALL DUST, DIRT, AND DEBRIS.
10. CONSTRUCTION WILL NEED TO BE COORDINATED WITH THE TRASH AND STREET SWEEPING SERVICES, WHICH ARE SCHEDULED ONCE A WEEK. CANCELLATION OF TRASH OR STREET SWEEPING SERVICES FOR ANY WEEK WILL NOT BE PERMITTED.
11. CONTRACTOR SHALL HAND DELIVER 'NOTICE TO TENANTS' TO ALL AFFECTED BUSINESSES AT LEAST THREE DAYS PRIOR TO THE START OF CONSTRUCTION. BUSINESSES SHALL ALSO BE INFORMED VA NOTICES OF ANY SIGNIFICANT CHANGES TO THE PROJECT SCOPE OR SCHEDULE. ALL NOTICES MUST BE APPROVED BY THE CITY ENGINEER.COST FOR NOTIFICATION SHALL BE INCLUDED IN THE BID PRICE FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL.
12. THE CITY ENGINEER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO REMOVAL OF EXISTING TRAFFIC STRIPES, PAVEMENT LEGENDS, OR SIGNS.
13. CONTRACTOR SHALL SUBMIT COPIES OF ASPHALT WASTE DISPOSAL TICKETS FROM THE RECYCLING SOURCE TO THE CITY ENGINEER AND/OR THEIR REPRESENTATIVE.
14. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL DIMENSIONS, EXISTING AND FINISH SURFACE ELEVATIONS, CONDITIONS, ETC. AT THE JOB SITE BEFORE SUBMITTING A BID OR COMMENCING WORK. THE CONTRACTOR SHALL IMMEDIATELY REPORT ANY DISCREPANCIES OR ERRORS IN THE PLANS TO THE CITY ENGINEER.
15. NO CHANGES IN THE PLANS SHALL BE MADE OR EXTRA WORK PERFORMED WITHOUT WRITTEN APPROVAL OF THE CITY ENGINEER'S REPRESENTATIVE.
16. CONTRACTOR SHALL RESET ALL CENTERLINE TIE/MONUMENTS AND PRESENT THE CITY WITH A CENTERLINE DOCUMENT STAMP APPROVED BY A LICENSED ENGINEER/SURVEYOR.
17. CONTRACTOR SHALL ADJUST ALL MANHOLES, VALVE BOXES, ETC. TO FINISHED GRADE AT THE CONTRACTOR'S EXPENSE.
18. CONTRACTOR TO KEEP AT LEAST HALF OF THE ROADWAY WIDTH OPEN IN EACH DIRECTION AT ALL TIMES

ENGINEERING SERVICES DIVISION NOTES

A. MYLAR COPY OF THE RECORDED TRACT MAP/PARCEL MAP SHALL BE SUBMITTED TO THE CITY ENGINEER, PRIOR TO REQUESTING FINAL BUILDING INSPECTION.

B. RECORDED COPY OF THE REQUIRED COVENANT/EASEMENT/DEED/DEED RESTRICTION SHALL BE SUBMITTED TO THE CITY ENGINEER, PRIOR TO REQUESTING FINAL BUILDING INSPECTION.

C. ALL EASEMENTS, OIL WELLS, SUBSTRUCTURES, SUPERSTRUCTURES, LANDSCAPE, HARDSCAPE, UTILITY POLES, UTILITY BOXES, UTILITY VENTS, UTILITY VAULTS, UTILITY CABINETS, UTILITY OVERHEAD LINES AND WATER HYDRANTS ARE SHOWN ON THIS SITE PLAN.

D. CONTRACTOR, AT ITS SOLE COST, SHALL ENSURE THAT PERMITTED WORK WILL NOT CREATE POTENTIAL FLOODING OF NEIGHBORING IMPROVEMENTS, NOR WILL IT ALTER THE EXISTING COURSE OF WATER FLOW.

E. CONTRACTOR SHALL NOTIFY CITY ENGINEERING SERVICES DIVISION 48 HOURS PRIOR TO COMMENCING ANY WORK IN PUBLIC RIGHT OF WAY.

F. WORK IN PUBLIC RIGHT OF WAY, SHALL COMPLY WITH THE LATEST EDITION OF APWA STANDARD PLANS AND SPECIFICATIONS, AND SHALL BE EXECUTED TO THE SATISFACTION OF CITY ENGINEER AND/OR HIS REPRESENTATIVE.

G. WORK IN PUBLIC RIGHT OF WAY SHALL BE PERFORMED BY LICENSED CONTRACTORS. CONTRACTORS AND SUBCONTRACTORS SHALL POSSESS VALID REDONDO BEACH BUSINESS LICENSES.

H. CONTRACTOR SHALL MAINTAIN CONSTRUCTION PERMITS AND AN APPROVED SET OF PLANS ON SITE AT ALL TIME. CONTRACTOR SHALL SURRENDER ALL REQUIRED CONSTRUCTION DOCUMENTS TO THE CITY ENGINEER AND/OR HIS REPRESENTATIVE UPON DEMAND.

I. PRIOR TO ISSUANCE OF THE BUILDING/ENGINEERING PERMIT, CONTRACTOR MUST PROVIDE PROOF OF INSURANCE. CONTRACTOR SHALL MAINTAIN ON CITY FILES APPROVED ONE MILLION DOLLAR GENERAL LIABILITY NAMING THE CITY ADDITIONAL INSURED, WITH 30-DAY CANCELLATION NOTICE. THE INSURANCE POLICY SHALL STATE "THE CITY OF REDONDO BEACH, ITS OFFICERS, ELECTED OFFICIALS, ATTORNEYS, EMPLOYEES, MEMBERS OF BOARDS AND COMMISSIONS, AGENTS AND VOLUNTEERS ARE HEREBY NAMED ADDITIONAL INSURED." THE CERTIFICATE OF INSURANCE MUST STATE THAT THE INSURANCE IS "PRIMARY" AND NOT EXCESS. THE CANCELLATION CLAUSE SHALL STATE "SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT.

ENGINEERING SERVICES DIVISION NOTES CONT.

J. CONTRACTOR SHALL REPLACE AT ITS SOLE COST, DAMAGED SIDEWALK, DRIVEWAYS, CURB, GUTTER AND PAVEMENT TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE.

K. CONSTRUCT NEW RESIDENTIAL CONCRETE DRIVEWAY TYPE __ WHERE NOTED ON SITE PLAN. NEW CONCRETE SHALL BE CLASS 520-C-2500.

L. CONSTRUCT NEW COMMERCIAL CONCRETE DRIVEWAY TYPE __ WHERE NOTED ON SITE PLAN. NEW CONCRETE SHALL BE CLASS 520-C-2500.

M. CONSTRUCT NEW CONCRETE SIDEWALK WHERE NOTED ON SITE PLAN. NEW SIDEWALK SHALL MATCH EXISTING. NEW CONCRETE SHALL BE CLASS 520-C-2500.

N. CONSTRUCT NEW CONCRETE CURB AND GUTTER WHERE NOTED ON SITE PLAN. NEW CURB SHALL HAVE FACE HEIGHT OF 6 INCHES OR MATCH EXISTING. NEW GUTTER SHALL BE 12 INCHES WIDE OR MATCH EXISTING. NEW CONCRETE SHALL BE CLASS 520-C-2500.

O. CONSTRUCT NEW FULL-DEPTH ASPHALT CONCRETE PAVEMENT WHERE NOTED ON SITE PLAN. NEW ASPHALTIC CONCRETE SHALL BE CLASS D1-PG-64-10.

P. CONSTRUCT NEW CONCRETE CURB RAMP WITH ADJACENT 3-FOOT MINIMUM ASPHALTIC CONCRETE PAVEMENT, WHERE NOTED ON SITE PLAN. NEW CONCRETE SHALL BE CLASS 520-C-2500. NEW ASPHALTIC CONCRETE SHALL BE CLASS D1-PG-64-10.

Q. NEW SEWER LATERAL SHALL BE CONNECTED TO MAIN SEWER LINE WITHIN PROPERTY FRONTAGE. SEWER LATERAL SHALL BE PERPENDICULAR TO MAIN SEWER LINE. MINIMUM SEWER LATERAL DIAMETER SHALL BE 4-INCH. NO CONNECTION TO EXISTING SEWER IS ALLOWED UNLESS THE EXISTING SEWER MEETS THE CURRENT CODE REQUIREMENTS AND THE APPROVAL OF THE BUILDING DIVISION. QUALITY/QUANTITY OF SEWAGE CONSTITUENTS SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE WASTEWATER ORDINANCE OF THE SANITATION DISTRICTS OF LOS ANGELES COUNTY. PROVIDE 6-INCH CLEAN-OUT IMMEDIATELY BEHIND SIDEWALK. ENCASE CLEAN-OUT IN CONCRETE BOX MARKED "S" OR "SEWER". DESIGN SHALL BE PERFORMED BY A REGISTERED CIVIL ENGINEER.

R. NEW PUBLIC OR QUASI-PUBLIC UTILITY FACILITIES SHALL BE LOCATED IN PUBLIC PARKWAY (THE LANDSCAPED AREAS WITHIN THE CITY RIGHT OF WAY), OUTSIDE OF CURB RAMPS, DRIVEWAYS AND SIDEWALK, UNLESS OTHERWISE NOTED ON SITE PLAN.

S. TRAFFIC DELINEATION SHALL BE EXECUTED IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA-MUTCD) AND TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE.

T. COMMERCIAL VEHICLES TRANSPORTING SOIL, EQUIPMENT OR CONSTRUCTION MATERIALS, AND HAVING UNLADEN WEIGHT AS DEFINED IN SECTION 660 OF CVC OF 6,000 POUNDS OR MORE OR HAVING MANUFACTURER'S GROSS WEIGHT RATING AS DEFINED IN SECTION 390 OF CVC OF 10,000 POUNDS OR MORE SHALL USE DESIGNATED TRUCK ROUTE TO COMMUTE TO PROJECT SITE. ANY COMMERCIAL VEHICLE HAVING A FULLY LADEN WEIGHT OF 20,000 POUNDS OR MORE SHALL NOT USE CONDITIONAL TRUCK ROUTE.

U. PUBLIC WORKS INSPECTOR SHALL INSPECT ALL STREET IMPROVEMENTS; ALL SEWER SYSTEMS INCLUDING ALL PIPING, TRENCHING, BACKFILLING AND SEWER EJECTOR; ALL STORM DRAIN SYSTEMS INCLUDING ALL PIPING, TRENCHING, BACKFILLING, CATCH BASINS, SUMP PUMPS AND OIL/WATER SEPARATOR. FIRST INSPECTION SHALL TAKE PLACE AFTER FORMS ARE IN PLACE FOR SIDEWALKS, DRIVEWAYS, ETC. OR AT THE TIME OF CONSTRUCTING THE SEWER LINE SADDLE. SECOND INSPECTION SHALL TAKE PLACE WHILE SIDEWALKS, DRIVEWAYS, ETC., ARE BEING POURED AND FINISHED OR AT THE TIME OF BACKFILLING. BACKFILLING, COMPACTION AND TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH CITY STANDARDS AND TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE. FINAL INSPECTION WILL BE MADE PRIOR TO CITY BUILDING DIVISION FINAL INSPECTION. AT THAT TIME, IF ALL WORK PERTAINING TO PUBLIC RIGHT OF WAY IS IN GOOD ORDER, THE PERMIT DEPOSITS WILL BE RELEASED, LESS ANY AND ALL CHARGES.

V. CONTRACTOR SHALL ARRANGE FOR PUBLIC WORKS INSPECTION 24 HOURS IN ADVANCE. CONTRACTOR SHALL CONTACT THE ENGINEERING SERVICES DIVISION AT (310) 937-6653 BEFORE 3:00 P.M. FOR ALL INSPECTION REQUESTS. CALLS RECEIVED AFTER 3:00 P.M. SHALL NOT BE SCHEDULED FOR NEXT BUSINESS DAY INSPECTION.

W. CONTRACTOR SHALL SUBMIT COMPACTION REPORTS AND CONCRETE/ASPHALT CLASS CERTIFICATES TO THE ENGINEERING SERVICES DIVISION PRIOR TO REQUESTING FINAL INSPECTION.

X. DUST CONTROL SHALL BE ENFORCED TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE THROUGHOUT CONSTRUCTION.

Y. NOISE CONTROL SHALL BE ENFORCED TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE THROUGHOUT CONSTRUCTION. ACTUAL CONSTRUCTION ACTIVITIES IN PUBLIC RIGHT OF WAY MAY OCCUR FROM 7:00 A.M. TO 6:00 P.M., MONDAY THROUGH FRIDAY. NO WORK IN PUBLIC RIGHT OF WAY SHALL OCCUR ON SATURDAYS WITHOUT PRIOR AUTHORIZATION FROM THE CITY ENGINEER AND/OR HIS REPRESENTATIVE. AUTHORIZED WORK ON SATURDAYS SHALL OCCUR FROM 9:00 A.M. TO 5:00 P.M. NO WORK IN PUBLIC RIGHT OF WAY SHALL OCCUR ON SUNDAYS OR NATIONAL HOLIDAYS.

Z. PUBLIC RIGHT OF WAY SHALL BE KEPT CLEAR AND CLEAN TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE THROUGHOUT CONSTRUCTION. NO STORAGE OF DEBRIS, MATERIALS OR EQUIPMENT SHALL BE ALLOWED ON PUBLIC RIGHT OF WAY WITHOUT PRIOR WRITTEN CONSENT FROM THE CITY ENGINEER AND/OR HIS REPRESENTATIVE. SUCH CONSENT SHALL BE RENEWED DAILY. IF CITY CREWS ARE CALLED UPON TO PERFORM WORK OF CONTRACTOR, REGARDING CITY RIGHT OF WAY, CONTRACTOR SHALL BE CHARGED FOR ALL EXPENSES INCURRED BY CITY CREWS.

AA. CONTRACTOR SHALL LOCATE AND PROTECT IN PLACE EXISTING UTILITIES AT ITS SOLE COST. CONTRACTOR SHALL REPAIR, AT ITS COST AND TO THE SATISFACTION OF THE CITY ENGINEER, HIS REPRESENTATIVE AND/OR TO THE UTILITY COMPANIES, ANY DAMAGE INFLICTED BY CONTRACTOR ON EXISTING UTILITIES.

BB. CONTRACTOR SHALL LOCATE AND PROTECT IN PLACE EXISTING SURVEY POINTS AT ITS SOLE COST. CONTRACTOR SHALL RE-ESTABLISH DAMAGED SURVEY POINTS, AT ITS SOLE COST, AND TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE.

CC. CONTRACTOR SHALL REPLACE AT ITS SOLE COST, REMOVED/DAMAGED TREES/LANDSCAPING WITHIN PUBLIC RIGHT OF WAY, TO THE SATISFACTION OF THE CITY ENGINEER AND/OR HIS REPRESENTATIVE.

SIGNING AND STRIPING NOTES

1. GENERAL SIGNING AND STRIPING NOTES APPLY TO ALL PLAN SHEETS.
2. SIGNS, STRIPING, PAVEMENT MARKINGS, AND PAVEMENT MARKERS SHALL BE INSTALLED PER THE 2026 EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND 2025 EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
3. ALL CONFLICTING STRIPING AND PAVEMENT MARKINGS SHALL BE COMPLETELY REMOVED BY SANDBLASTING PRIOR TO INSTALLATION OF NEW STRIPING AND MARKINGS.
4. SIGN SHEETING SHALL BE 3M DG3 OR CITY-APPROVED EQUIVALENT.
5. STRIPING AND PAVEMENT MARKINGS SHALL BE ALKYD THERMOPLASTIC WITH GLASS BEADS. MATERIAL SHALL CONFORM TO SPECIFICATION 8010-004 (TYPE II) FOR GLASS BEADS. APPLICATION SHALL CONFORM TO CALTRANS STANDARD SPECIFICATION SECTION 84-2. CONTRACTOR SHALL VERIFY LATEST MATERIALS SPECIFICATIONS AND SHALL NOTIFY CITY ENGINEER AND/OR THEIR REPRESENTATIVE OF ANY CHANGE PRIOR TO INSTALLATION.
6. LIMIT LINES SHALL BE INSTALLED 4' EDGE-TO-EDGE IN ADVANCE OF THE CROSSWALK AT A 90 DEGREE ANGLE TO THE CENTERLINE OR LANE LINE. WHEN THE CROSSWALK IS INSTALLED AT AN ANGLE, THE 4' BUFFER SHALL BE MEASURED FROM THE EDGE OF CROSSWALK TO THE LIMIT LINE AT THE CENTER OF THE LANE. LANE AND CHANNELIZING LINES SHALL TERMINATE AT LIMIT LINE.
7. CROSSWALKS SHALL BE 2' CONTINENTAL STRIPES WITH 3' GAPS. INSTALLATION SHALL BEGIN WITH THE FIRST STRIPE CENTERED ON THE CENTERLINE; ADDITIONAL STRIPES SHALL BE INSTALLED AT A SPACING OF 5' CENTER-ON-CENTER. STRIPES SHALL NOT BE INSTALLED CLOSER THAN 1' FROM PAVEMENT EDGE. ANY INSTALLATION QUESTIONS SHALL BE DISCUSSED WITH THE CITY ENGINEER AND/OR THEIR REPRESENTATIVE PRIOR TO INSTALLATION.
8. ALL LANE STRIPING AT INTERSECTION APPROACHES WITHOUT CROSSWALKS SHALL END 10 FEET FROM THE EXTENSION OF THE INTERSECTING CURB LINE.
9. ALL LANE LINES AT INTERSECTION APPROACHES AND DEPARTURES SHALL BEGIN AND END WITH 50 FEET OF 6" SOLID LINE UNLESS OTHERWISE SHOWN.
10. ALL CENTERLINE STRIPING AT INTERSECTION APPROACHES SHALL BE DOUBLE YELLOW FOR A DISTANCE OF 50 FEET UNLESS OTHERWISE SHOWN.
11. LANE WIDTHS SHALL BE MEASURED BETWEEN THE CENTER LINES OF EACH ADJACENT SINGLE OR DOUBLE STRIPE(S) OR TOP OF CURBS AS APPROPRIATE. ACTUAL LANE WIDTHS MAY VARY FROM THOSE SHOWN ON PLAN(S) DUE TO TOPOGRAPHY AND STREET CURVATURE. ANY CHANGES TO STRIPED LANE WIDTHS FOR THOSE SHOWN ON PLAN(S) REQUIRE APPROVAL BY THE CITY ENGINEER AND/OR THEIR REPRESENTATIVE PRIOR TO CAT-TRACKING.
12. ALL STRIPING SHALL BE CAT-TRACKED AND APPROVED BY THE CITY ENGINEER AND/OR THEIR REPRESENTATIVE PRIOR TO FINAL INSTALLATION. A MINIMUM OF THREE DAYS NOTICE MUST BE PROVIDED TO THE CITY ENGINEER AND/OR THEIR REPRESENTATIVE, (310) 318-0661, FOR APPROVAL OF CAT-TRACKING AND/OR STRIPING.
13. ALL TWO-WAY, BLUE RETROREFLECTIVE PAVEMENT MARKERS, TYPE D, FOR FIRE HYDRANT LOCATIONS ARE TO BE RESTORED. NUMBER OF MARKERS TO BE VERIFIED BY CONTRACTOR.
14. ALL COSTS TO RESTORE STRIPING, PAVEMENT MARKINGS, AND PAVEMENT MARKERS TO MATCH THE EXISTING CONDITION PER THE PRECEDING NOTES SHALL BE INCLUDED IN THE BID PRICE.
15. TELESPAR, ROUND, AND WOOD POSTS IN SIDEWALK TO BE REMOVED SHALL BE REMOVED COMPLETELY AND THE HOLE BACKFILLED, PACKED, AND FINISHED WITH NON-SHRINK GROUT. U-POSTS IN SIDEWALK TO BE REMOVED MAY BE CUT OFF FLUSH TO SIDEWALK. POSTS IN DIRT TO BE REMOVED SHALL BE REMOVED COMPLETELY AND THE HOLE BACKFILLED, COMPACTED, AND MADE FLUSH WITH SURROUNDING SURFACE AREA.
16. ALL NEW SIGNS SHALL HAVE PERMANENTLY AFFIXED ON THE BACK OF THE SIGN THE MONTH AND YEAR OF INSTALLATION.
17. ALL REMOVED SIGNS SHALL BE RETURNED TO THE CITY.
18. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES TO DRILLING HOLES OR PREPARING SIGN FOUNDATIONS.

ELECTRICAL NOTES

1. TRAFFIC SIGNAL, LIGHTING, AND ELECTRICAL SYSTEMS SHALL CONFORM TO THE 2025 EDITION OF THE PROVISIONS OF THE STANDARD SPECIFICATIONS AND STANDARD PLANS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, 2018 STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2026 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE SPECIAL CONDITIONS, AND ALL REVISIONS AND DOCUMENTS REFERENCED THEREBY.
2. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED BY THE CONTRACTOR.
3. ALL WIRING SHALL BE MARKED (TAGGED_ WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION.
4. ALL SIGNAL EQUIPMENT SHALL BE WIRED IN ACCORDANCE WITH THE SIGNAL PHASE DIAGRAM.
5. RELOCATION OF WIRELESS RADIO EQUIPMENT AND ANTENNA SHALL BE DONE BY THE AGENCY, CONTRACTOR SHALL CONTACT THE SIGNAL SHOP SUPERVISOR MR. JEFF MAGALLANES AT (626)458-1704 TEN (10) WORKING DAYS IN ADVANCE FOR COORDINATION.
6. ALL NEW PULL BOXES SHALL BE NO. 6, UNLESS OTHERWISE NOTED.
7. ALL NEW UNDERGROUND CONDUIT SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
8. THREE-CONDUCTOR CABLE (3CSC) AND TWELVE-CONDUCTOR CABLE (12 CSC) SHALL BE INSTALLED IN LIEU OF INDIVIDUAL CONDUCTORS. NO OTHER TRAFFIC SIGNAL (TS) MULTI-CONDUCTOR CABLE WILL BE ACCEPTED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
9. IF ABANDONING EXISTING CONDUIT, REMOVE EXISTING CONDUCTORS.
10. NEW VEHICLE HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE) VEHICLE HEADS PER LOST ANGELES COUNTY DPW SPECIFICATIONS. (SEE SPECIAL PROVISIONS).
11. NEW PEDESTRIAN HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE) COUNTDOWN PEDESTRIAN HEADS. (SEE SPECIAL PROVISIONS).
12. ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPLIANT.
13. POLE LOCATIONS SHOWN HEREON ARE APPROXIMATE. PRECISE LOCATIONS SHALL BE ESTABLISHED IN THE FIELD AND VERIFIED BY THE PROJECT ENGINEER.
14. ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED NO FURTHER THAN 5 FEET FROM THE BACK OF CROSSWALK OR LIMIT LINE UNLESS OTHERWISE NOTED.
15. "INSTALL", AS USED IN CONSTRUCTION NOTES, SHALL MEAN "FURNISH AND INSTALL".

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

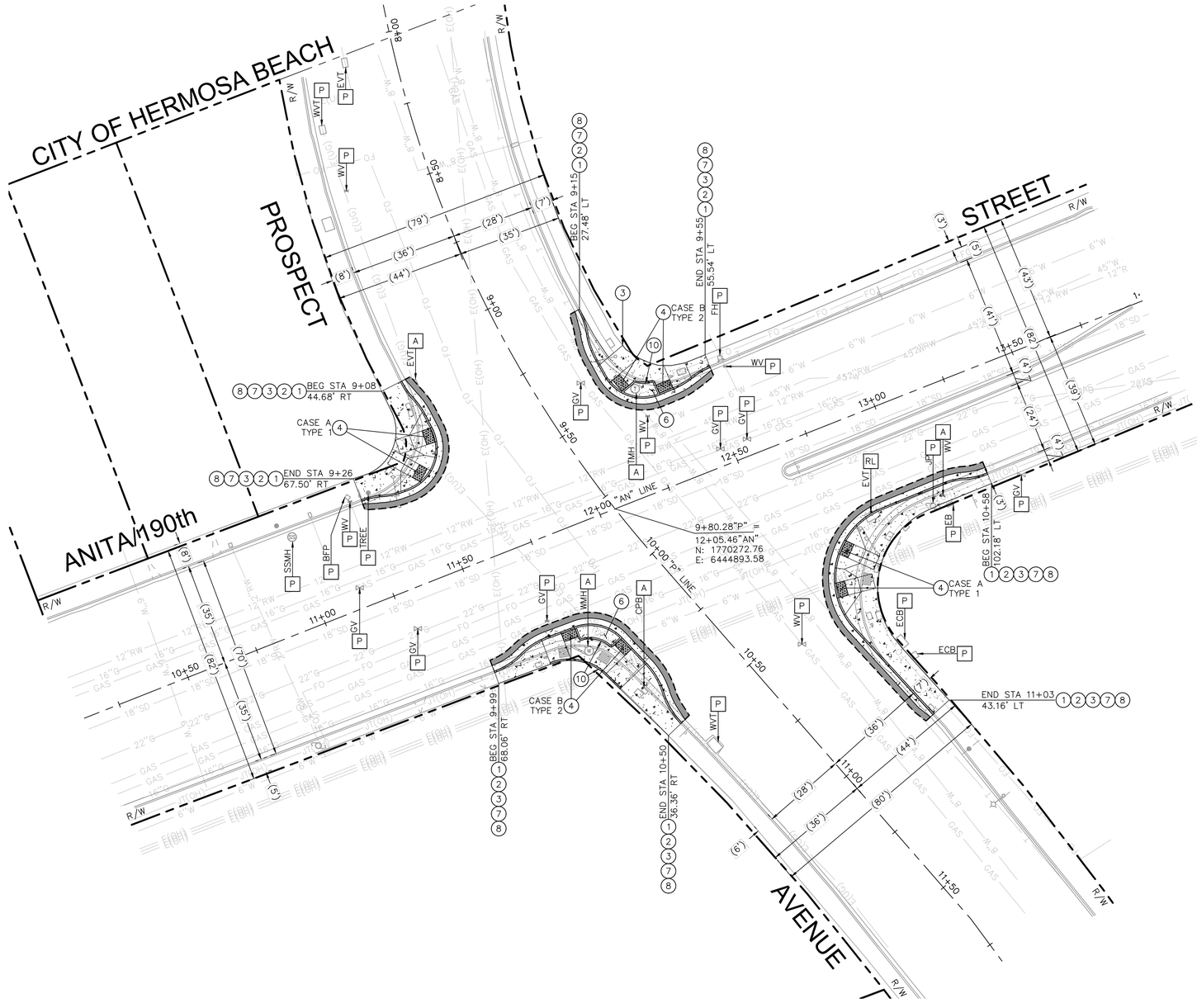
GENERAL NOTES

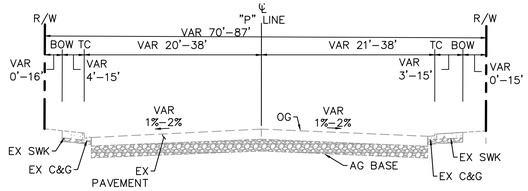
DRAWN	CHECKED	SCALE
JC	MB/SA	AS NOTED

APPROVED BY: ANDREW S. WINJE, P.E. CITY ENGINEER — DATE:

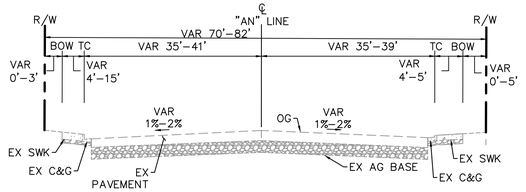
PROJECT NO.	SHEET NO.	DRAWING NO.
41490	02 OF 58 SHEETS	GN-01

DRAWING: \\Dot-nb-vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-01-nb-gn.dwg PLOTTED: 2/6/2026 3:11 PM BY: Jacob

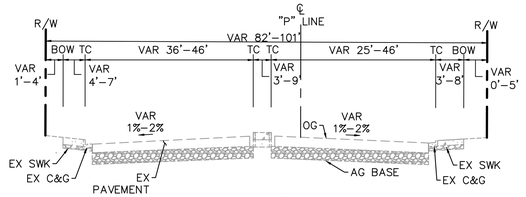




PROSPECT AVENUE
NTS



ANITA/190th STREET
NTS



ANITA/190th STREET
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- P PROTECT IN PLACE (ITEM)
- A ADJUST TO GRADE (ITEM)
- R REMOVE (ITEM)
- RL RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD–01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111–5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110–2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2–6, PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD–01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122–2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1–6 PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD–01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

scale 20 0 20 40 feet
1" = 20'

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T EX TELECOMMUNICATIONS
- (XX)"W EX DOMESTIC WATER
- FO EX FIBER OPTIC
- (XX)"SS EX SANITARY SEWER
- COM(UG) EX UNDERGROUND COMMUNICATION
- OH EX OVERHEAD COMMUNICATION
- E(OH) EX OVERHEAD ELECTRIC
- E(UG) EX UNDERGROUND ELECTRIC
- (XX)"GAS EX GAS
- O EX OIL

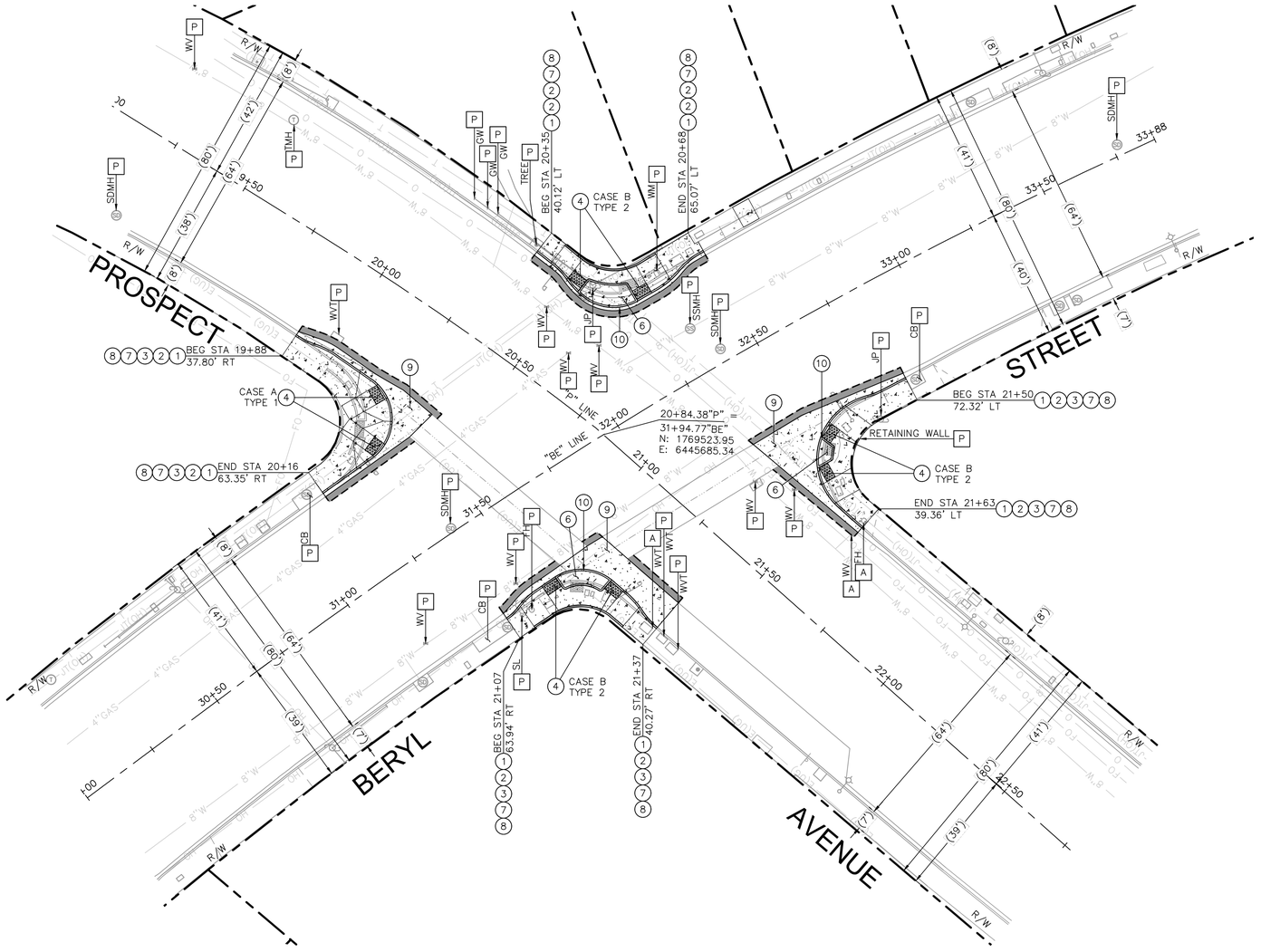
REVISIONS	
DATE	DESCRIPTION

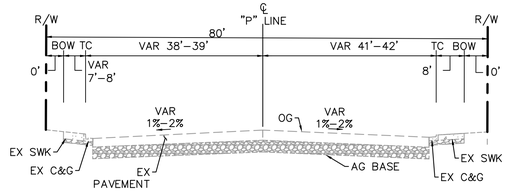
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVENUE & ANITA/190TH STREET

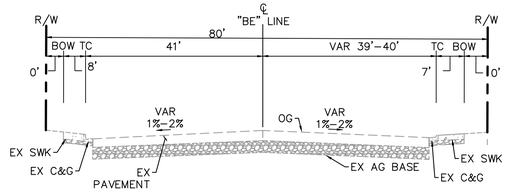
DRAWN JC	CHECKED MB	SCALE 1" = 20'	
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 03 OF 58 SHEETS	DRAWING NO. SI-01	

DRAWING: \\bkf-nb\vol1\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-02-rb-si-pros-01.dwg PLOTTED: 2/6/2026 3:12 PM BY:





PROSPECT AVENUE
NTS



BERYL STREET
NTS

CONSTRUCTION NOTES

- (P) PROTECT IN PLACE (ITEM)
- (A) ADJUST TO GRADE (ITEM)
- (R) REMOVE (ITEM)
- (RL) RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD–01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111–5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110–2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2–6, PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD–01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122–2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1–6 PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD–01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T — EX TELECOMMUNICATIONS
- (XX)"W — EX DOMESTIC WATER
- FO — EX FIBER OPTIC
- (XX)"SS — EX SANITARY SEWER
- COM(UG) — EX UNDERGROUND COMMUNICATION
- OH — EX OVERHEAD COMMUNICATION
- E(OH) — EX OVERHEAD ELECTRIC
- E(UG) — EX UNDERGROUND ELECTRIC
- (XX)"GAS — EX GAS
- O — EX OIL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

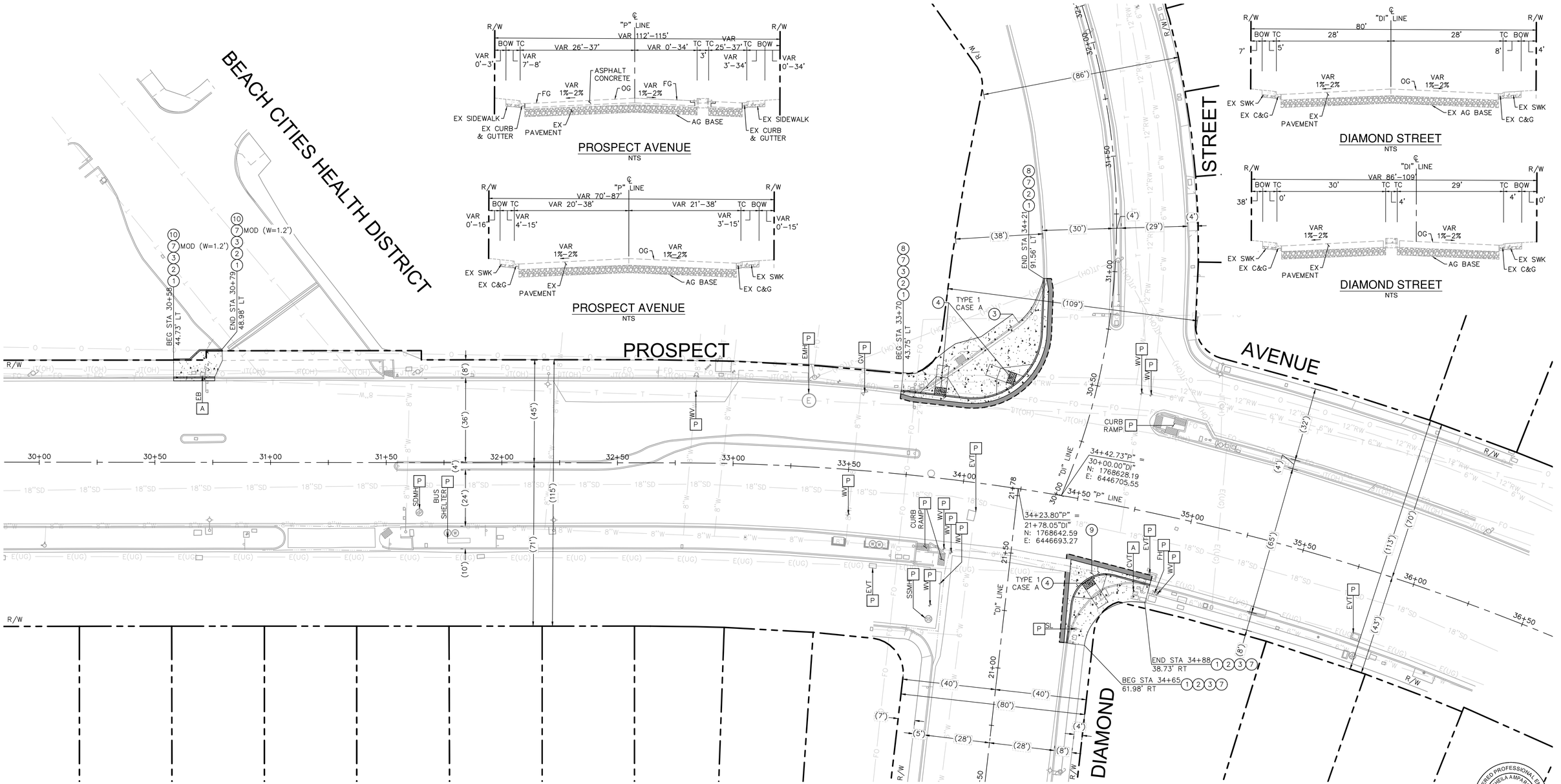
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

STREET IMPROVEMENT
PROSPECT AVENUE & BERYL STREET

DRAWN JC	CHECKED MB	SCALE	1" = 20'
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 04 OF 58 SHEETS	DRAWING NO.	SI-02

DRAWING: \\bkf-nv\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-02-rb-si-pros-01.dwg PLOTTED: 2/6/2026 3:13 PM BY:



60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- P PROTECT IN PLACE (ITEM)
- A ADJUST TO GRADE (ITEM)
- R REMOVE (ITEM)
- RL RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD-01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111-5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110-2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2-6, PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD-01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122-2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1-6 PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD-01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T EX TELECOMMUNICATIONS
- (XX)"W EX DOMESTIC WATER
- FO EX FIBER OPTIC
- (XX)"SS EX SANITARY SEWER
- COM(UG) EX UNDERGROUND COMMUNICATION
- OH EX OVERHEAD COMMUNICATION
- E(OH) EX OVERHEAD ELECTRIC
- E(UG) EX UNDERGROUND ELECTRIC
- (XX)"GAS EX GAS
- O EX OIL

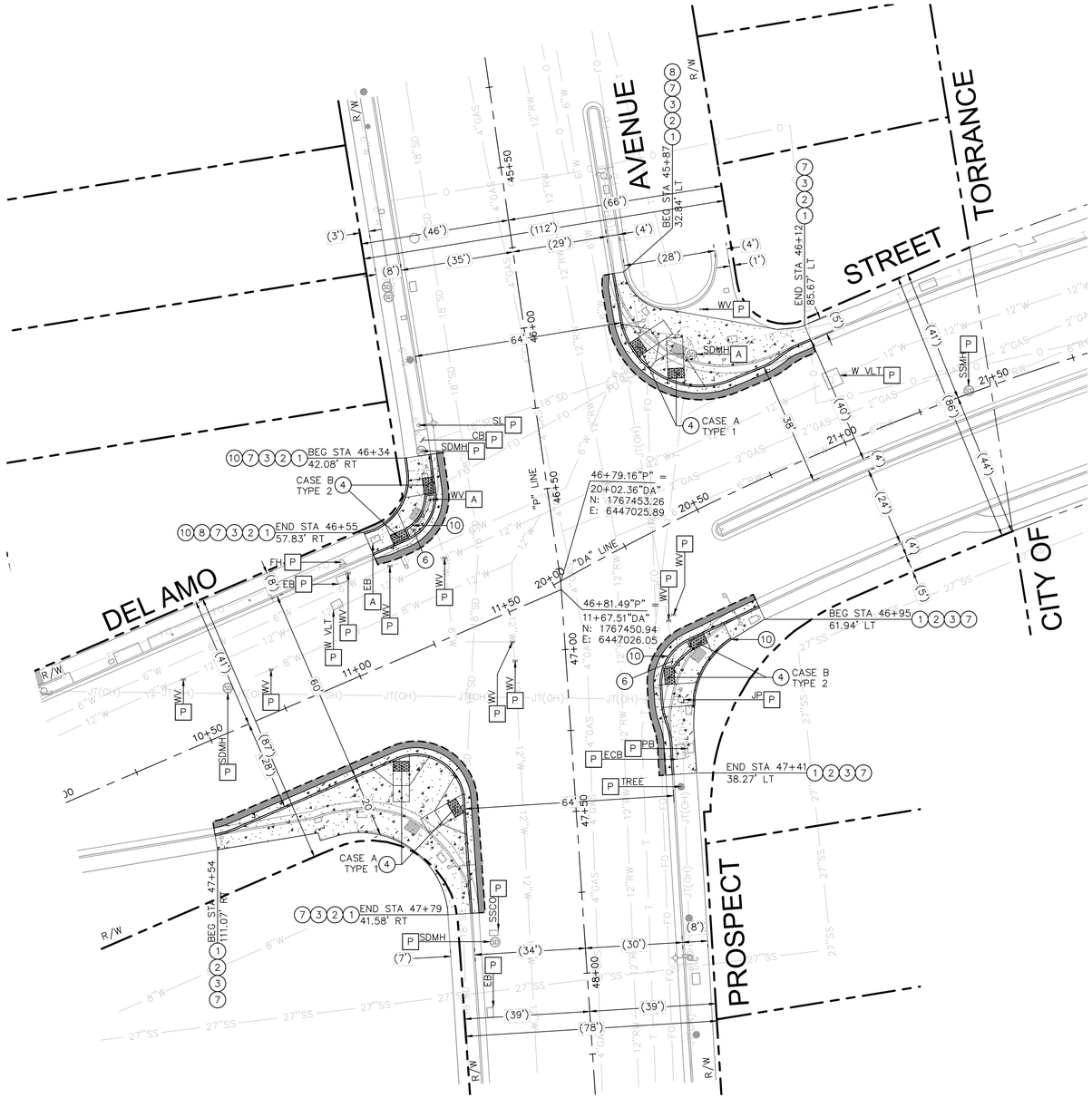
REVISIONS	
DATE	DESCRIPTION

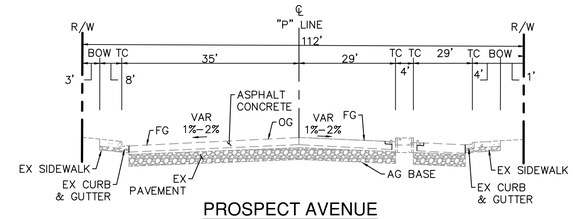
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVE & DIAMOND ST-BEACH CITIES

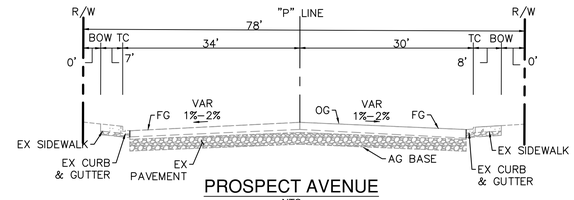
DRAWN JC	CHECKED MB	SCALE 1" = 20'	
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 05 OF 58 SHEETS	DRAWING NO. SI-03	

DRAWING: \\bkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-02-rb-si-pros-01.dwg PLOTTED: 2/6/2026 3:14 PM BY:

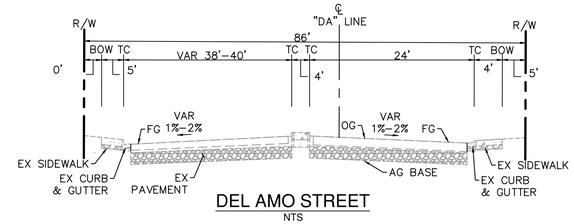




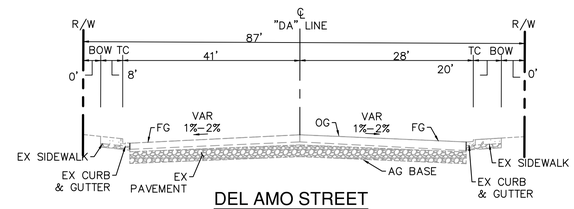
PROSPECT AVENUE
NTS



PROSPECT AVENUE
NTS



DEL AMO STREET
NTS



DEL AMO STREET
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- P PROTECT IN PLACE (ITEM)
- A ADJUST TO GRADE (ITEM)
- R REMOVE (ITEM)
- RL RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD–01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111–5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110–2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2–6, PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD–01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122–2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1–6 PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD–01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T EX TELECOMMUNICATIONS
- (XX)"W EX DOMESTIC WATER
- FO EX FIBER OPTIC
- (XX)"SS EX SANITARY SEWER
- COM(UG) EX UNDERGROUND COMMUNICATION
- OH EX OVERHEAD COMMUNICATION
- E(OH) EX OVERHEAD ELECTRIC
- E(UG) EX UNDERGROUND ELECTRIC
- (XX)"GAS EX GAS
- O EX OIL

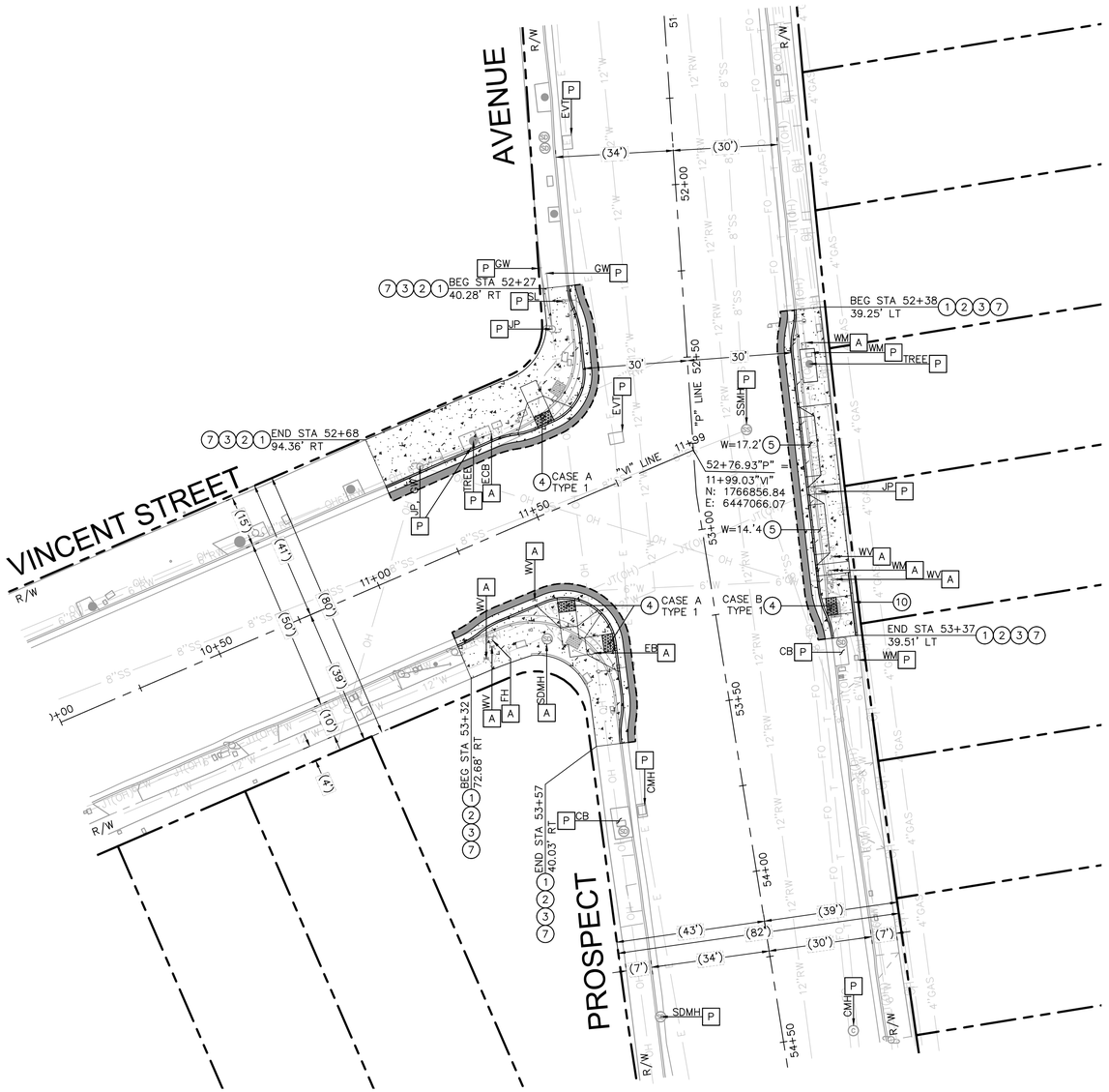
REVISIONS	
DATE	DESCRIPTION

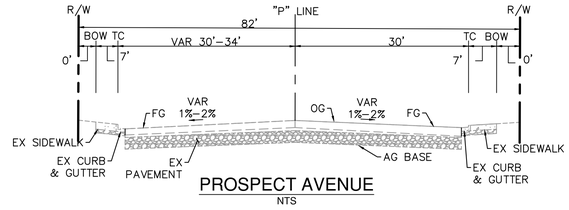
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

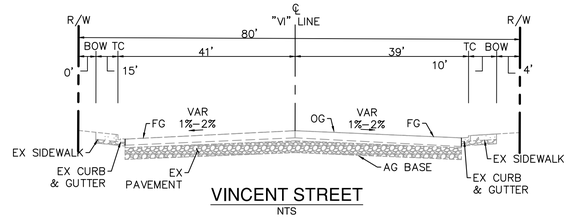
REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVENUE & DEL AMO STREET

DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO.	41490	SHEET NO.	06 OF 58 SHEETS	DRAWING NO.	SI-04

DRAWING: \\bf-nt\vol4\2024\41992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-02-rb-si-pros-01.dwg PLOTTED: 2/6/2026 3:35 PM BY:







60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- [P] PROTECT IN PLACE (ITEM)
- [A] ADJUST TO GRADE (ITEM)
- [R] REMOVE (ITEM)
- [RL] RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD–01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111–5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110–2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2–6, PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD–01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122–2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1–6 PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD–01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T — EX TELECOMMUNICATIONS
- W — EX DOMESTIC WATER
- FO — EX FIBER OPTIC
- SS — EX SANITARY SEWER
- COM(UG) — EX UNDERGROUND COMMUNICATION
- OH — EX OVERHEAD COMMUNICATION
- E(OH) — EX OVERHEAD ELECTRIC
- E(UG) — EX UNDERGROUND ELECTRIC
- GAS — EX GAS
- O — EX OIL

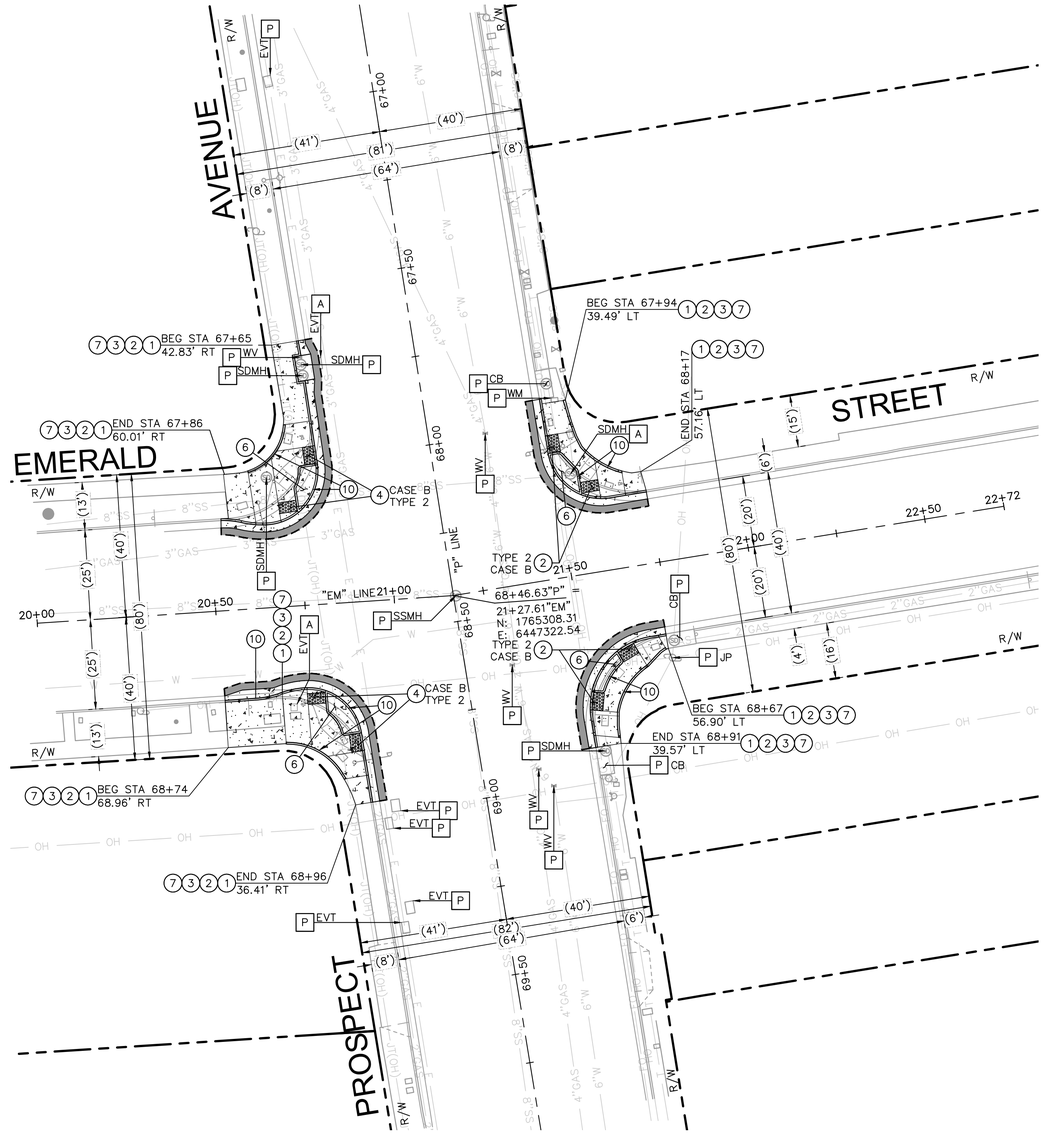
REVISIONS	
DATE	DESCRIPTION

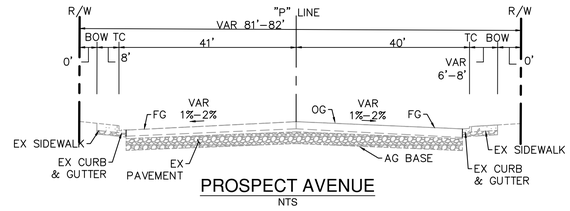
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVENUE & VINCENT STREET

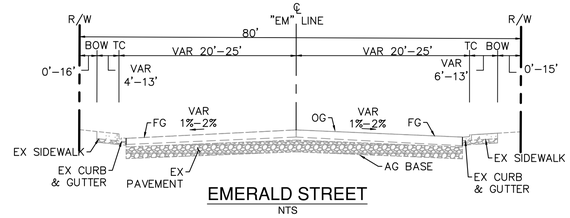
DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO. 41490		SHEET NO. 07 OF 58 SHEETS		DRAWING NO. SI-05	

DRAWN: \\dot-no\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-06-rb-si-pros-02.dwg PLOTTED: 2/6/2026 3:15 PM BY:





PROSPECT AVENUE
NTS



EMERALD STREET
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- [P] PROTECT IN PLACE (ITEM)
- [A] ADJUST TO GRADE (ITEM)
- [R] REMOVE (ITEM)
- [RL] RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD-01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111-5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110-2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2-6, PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD-01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122-2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1-6 PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD-01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T — EX TELECOMMUNICATIONS
- W — EX DOMESTIC WATER
- FO — EX FIBER OPTIC
- SS — EX SANITARY SEWER
- COM(UG) — EX UNDERGROUND COMMUNICATION
- OH — EX OVERHEAD COMMUNICATION
- E(OH) — EX OVERHEAD ELECTRIC
- E(UG) — EX UNDERGROUND ELECTRIC
- GAS — EX GAS
- O — EX OIL

REVISIONS	
DATE	DESCRIPTION

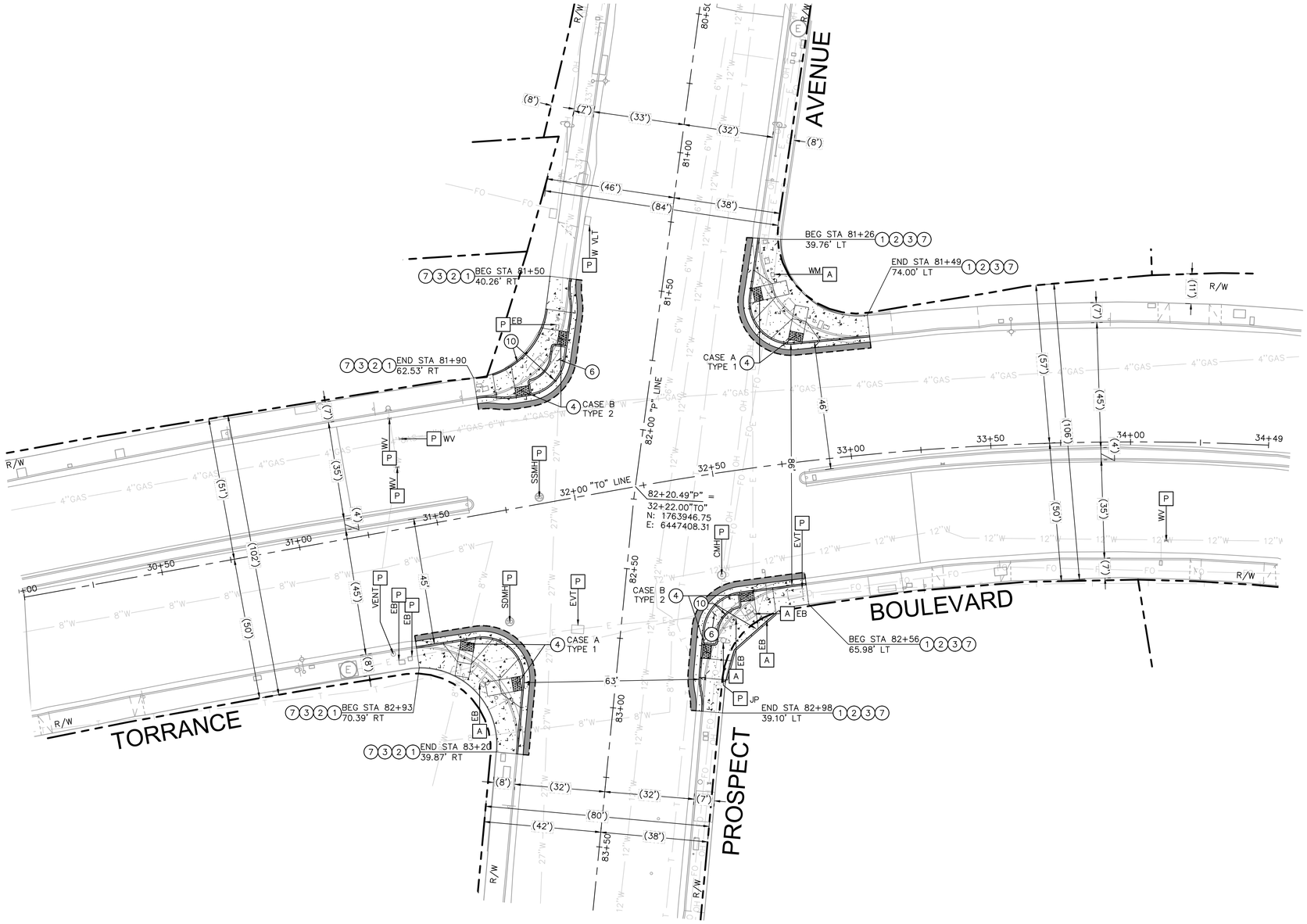
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

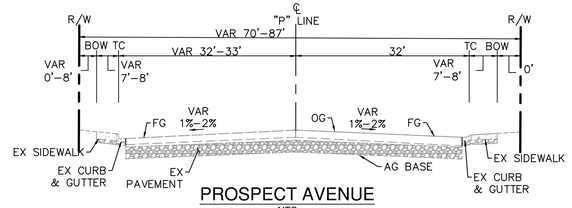
REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

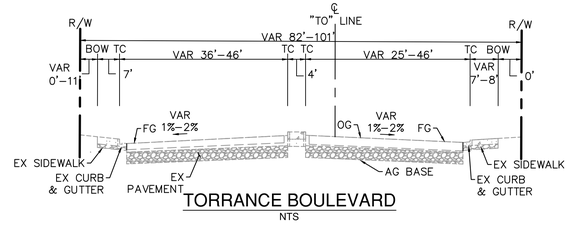
STREET IMPROVEMENT
PROSPECT AVENUE & EMERALD STREET

DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO.	41490	SHEET NO.	08 OF 58 SHEETS	DRAWING NO.	SI-06

DRAWING: \\bkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-06-rb-si-pros-02.dwg PLOTTED: 2/6/2026 3:15 PM BY:







CONSTRUCTION NOTES

- P PROTECT IN PLACE (ITEM)
- A ADJUST TO GRADE (ITEM)
- R REMOVE (ITEM)
- RL RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD–01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111–5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110–2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2–6, PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD–01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122–2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1–6 PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD–01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40 scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T EX TELECOMMUNICATIONS
- W EX DOMESTIC WATER
- FO EX FIBER OPTIC
- SS EX SANITARY SEWER
- COM(UG) EX UNDERGROUND COMMUNICATION
- OH EX OVERHEAD COMMUNICATION
- E(OH) EX OVERHEAD ELECTRIC
- E(UG) EX UNDERGROUND ELECTRIC
- GAS EX GAS
- O EX OIL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER SHEILA AMPARO 78003 Exp 9-30-27 CIVIL STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

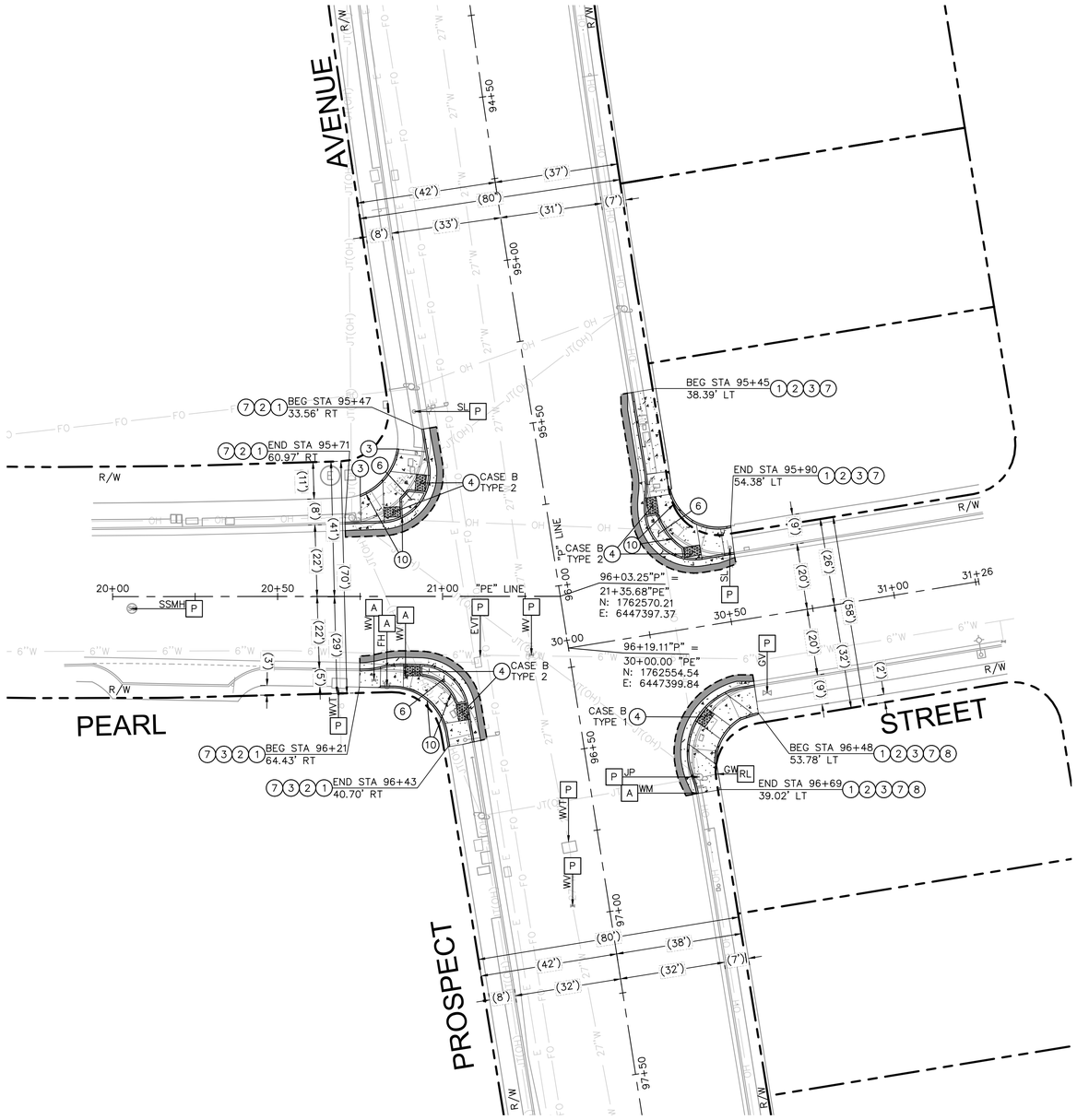
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

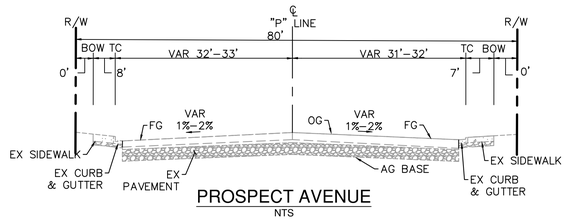
REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

STREET IMPROVEMENT
PROSPECT AVENUE & TORRANCE BOULEVARD

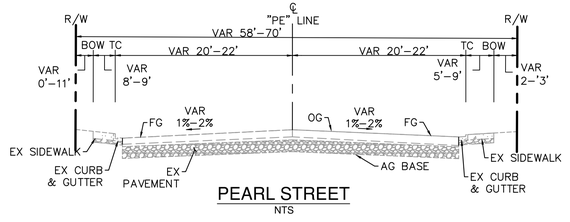
DRAWN	JC/MO	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO. 41490		SHEET NO. 09 OF 58 SHEETS		DRAWING NO. SI-07	

DRAWING: \\bkt-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-06-ns-si-pros-02.dwg PLOTTED: 2/6/2026 3:15 PM BY:





PROSPECT AVENUE
NTS



PEARL STREET
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- P PROTECT IN PLACE (ITEM)
- A ADJUST TO GRADE (ITEM)
- R REMOVE (ITEM)
- RL RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD–01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111–5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110–2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2–6, PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD–01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122–2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1–6 PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD–01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T EX TELECOMMUNICATIONS
- W EX DOMESTIC WATER
- FO EX FIBER OPTIC
- SS EX SANITARY SEWER
- COM(UG) EX UNDERGROUND COMMUNICATION
- OH EX OVERHEAD COMMUNICATION
- E(OH) EX OVERHEAD ELECTRIC
- E(UG) EX UNDERGROUND ELECTRIC
- GAS EX GAS
- O EX OIL

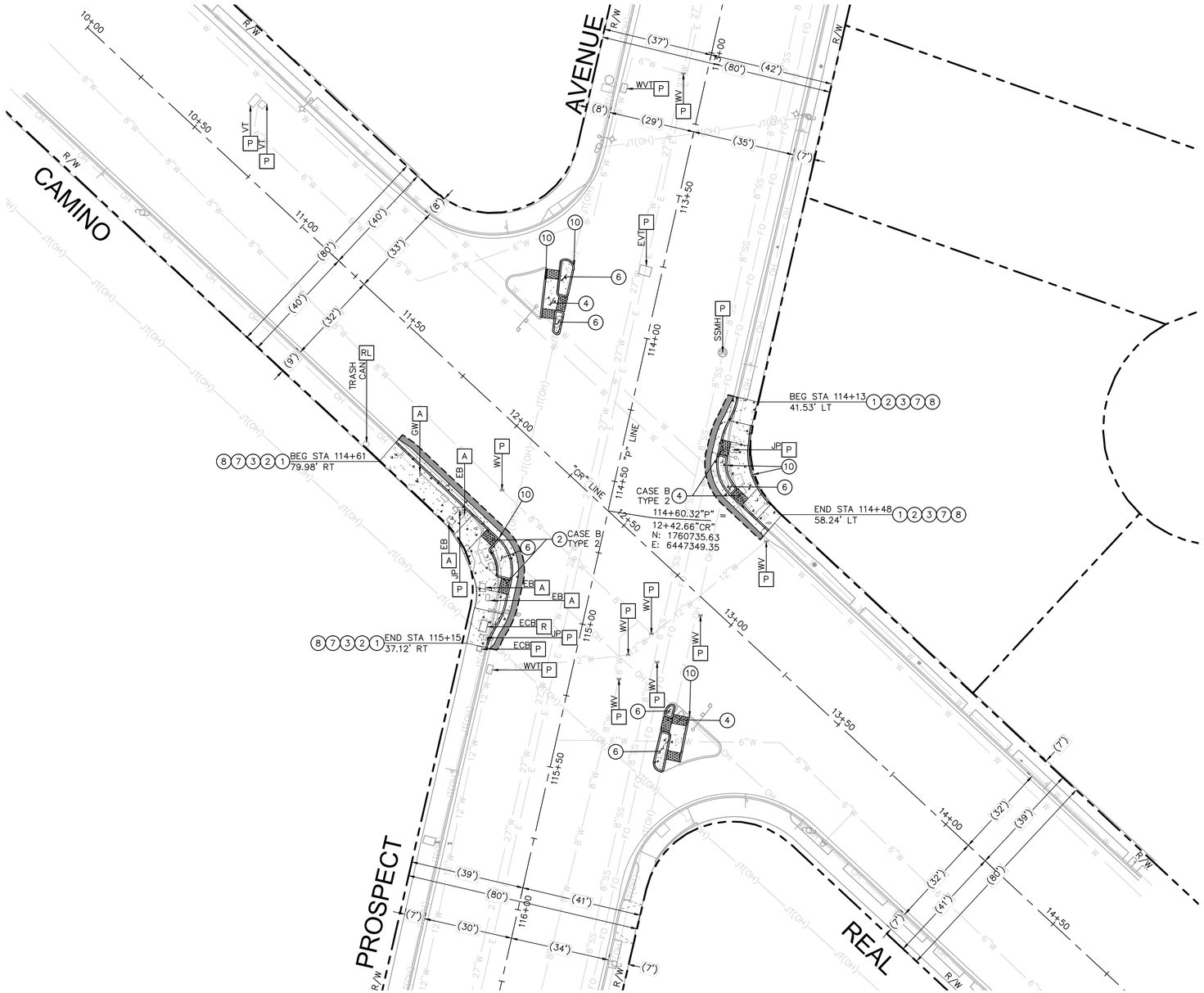
REVISIONS	
DATE	DESCRIPTION

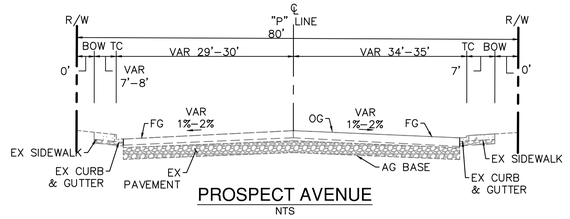
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVENUE & PEARL STREET

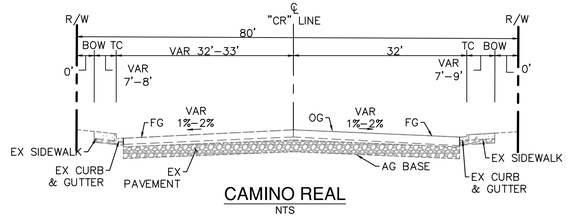
DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO. 41490		SHEET NO. 10 OF 58 SHEETS		DRAWING NO. SI-08	

DRAWING: \\atl-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-06-rb-si-pros-02.dwg PLOTTED: 2/6/2026 3:15 PM BY:





PROSPECT AVENUE
NTS



CAMINO REAL
NTS

60% SUBMITTAL (02/06/2025)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- P PROTECT IN PLACE (ITEM)
- A ADJUST TO GRADE (ITEM)
- R REMOVE (ITEM)
- RL RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD-01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111-5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110-2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2-6, PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD-01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122-2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1-6 PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD-01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T EX TELECOMMUNICATIONS
- W EX DOMESTIC WATER
- FO EX FIBER OPTIC
- SS EX SANITARY SEWER
- COM(UG) EX UNDERGROUND COMMUNICATION
- OH EX OVERHEAD COMMUNICATION
- E(OH) EX OVERHEAD ELECTRIC
- E(UG) EX UNDERGROUND ELECTRIC
- GAS EX GAS
- O EX OIL

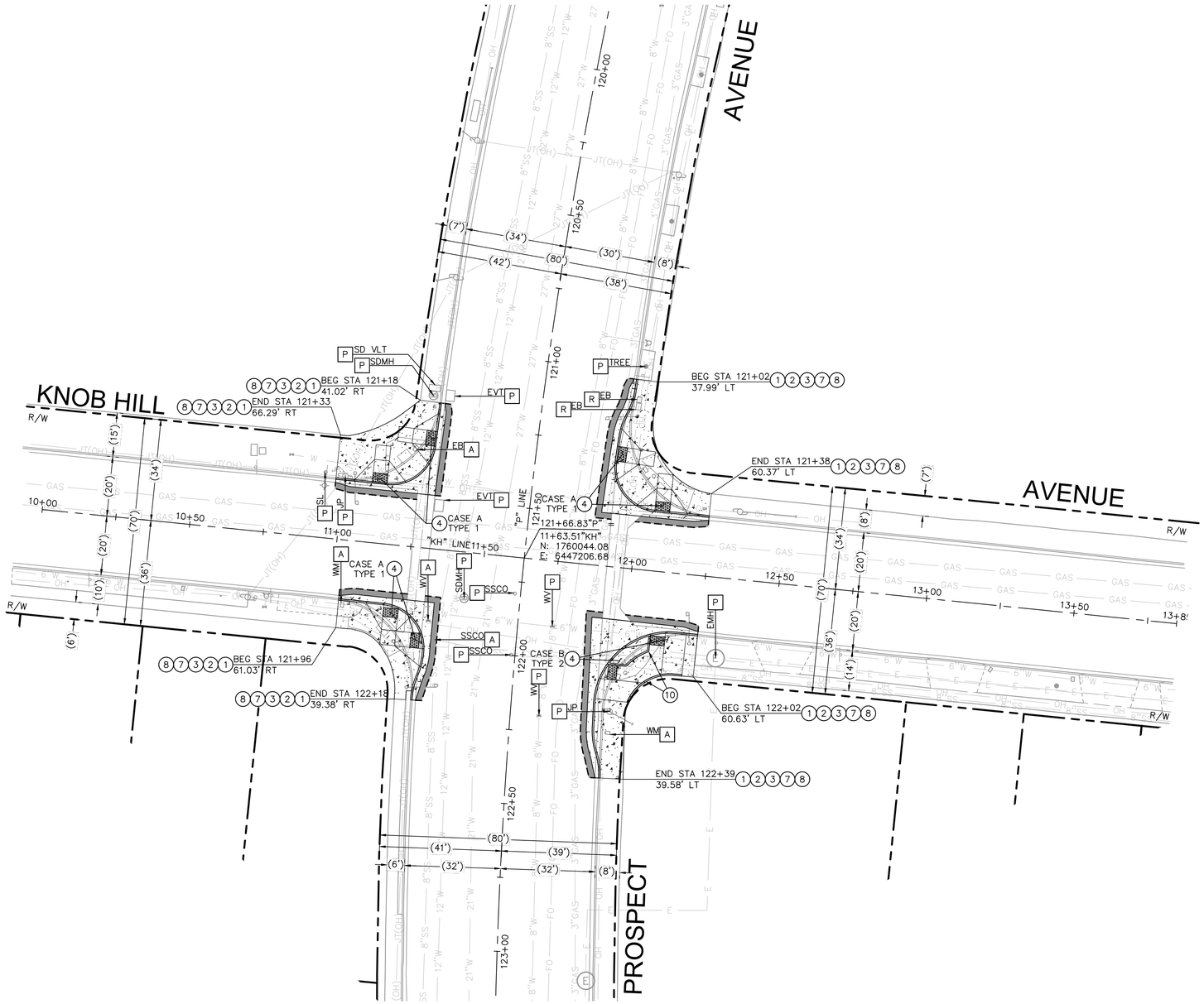
REVISIONS	
DATE	DESCRIPTION

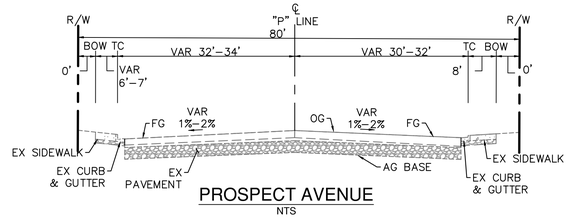
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVENUE & CAMINO REAL

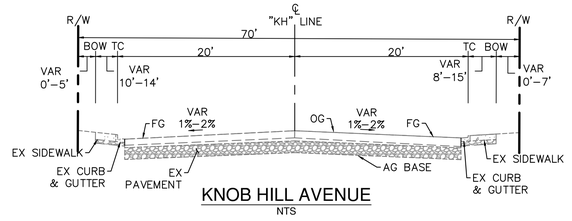
DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO. 41490		SHEET NO. 11 OF 58 SHEETS		DRAWING NO. SI-09	

DRAWING: \\atf-no\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-10-rb-si-pros-03.dwg PLOTTED: 2/6/2026 3:17 PM BY:





PROSPECT AVENUE
NTS



KNOB HILL AVENUE
NTS

CONSTRUCTION NOTES

- [P] PROTECT IN PLACE (ITEM)
- [A] ADJUST TO GRADE (ITEM)
- [R] REMOVE (ITEM)
- [RL] RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD–01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111–5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110–2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113–2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2–6, PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD–01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122–2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1–6 PER SPPWC STD PLAN 120–3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD–01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T — EX TELECOMMUNICATIONS
- W — EX DOMESTIC WATER
- FO — EX FIBER OPTIC
- SS — EX SANITARY SEWER
- COM(UG) — EX UNDERGROUND COMMUNICATION
- OH — EX OVERHEAD COMMUNICATION
- E(OH) — EX OVERHEAD ELECTRIC
- E(UG) — EX UNDERGROUND ELECTRIC
- GAS — EX GAS
- O — EX OIL

60% SUBMITTAL (02/06/2025)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

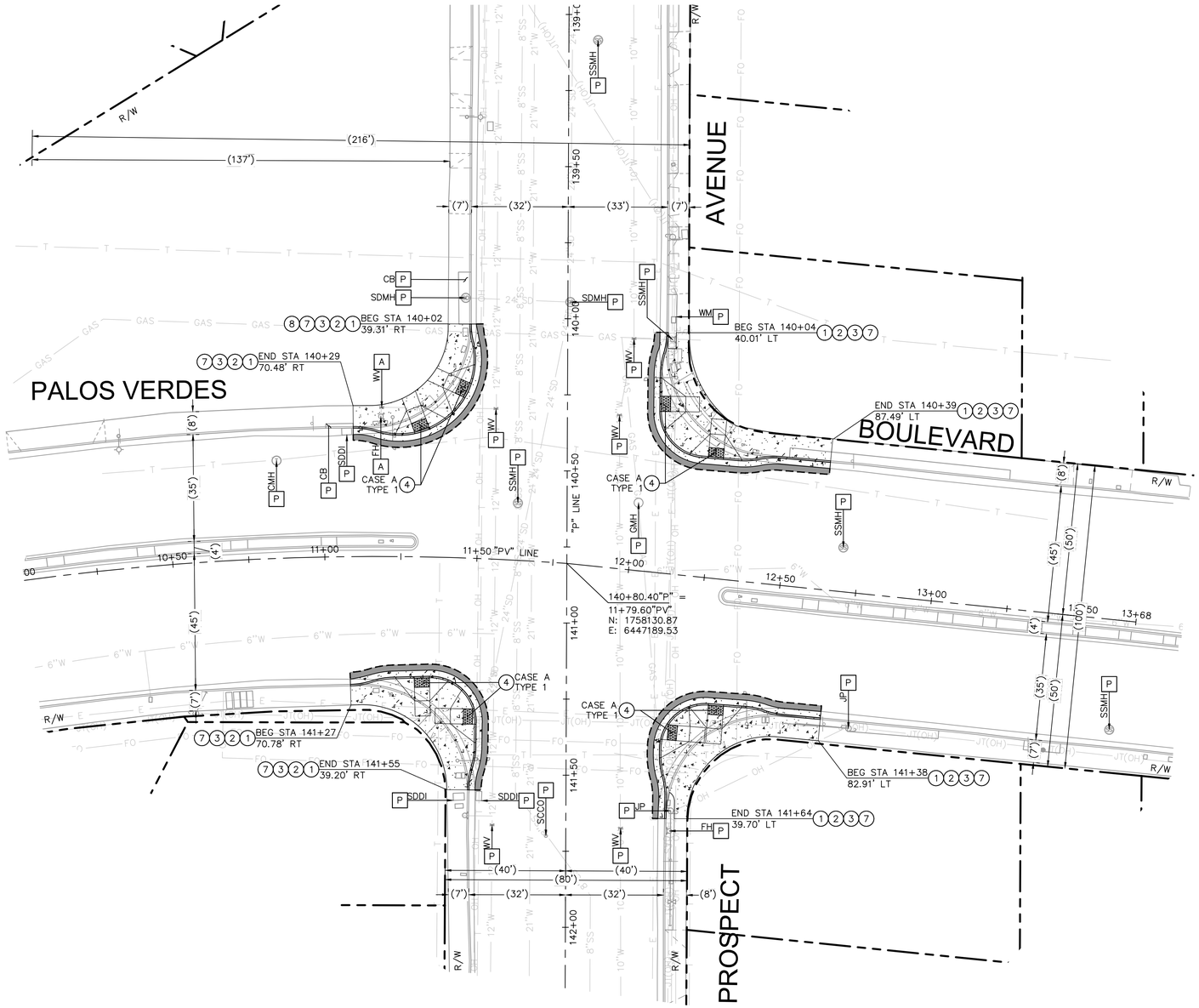
REVISIONS	
DATE	DESCRIPTION

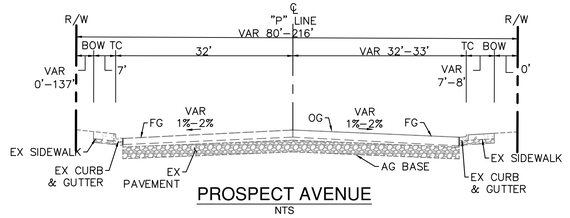
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVENUE & KNOB HILL AVENUE

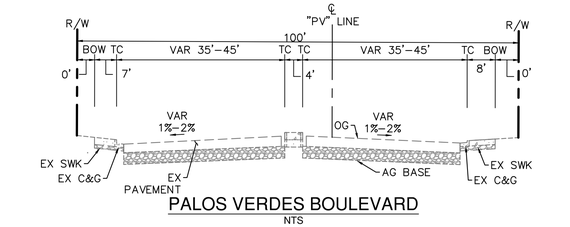
DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO. 41490		SHEET NO. 12 OF 58 SHEETS		DRAWING NO. SI-10	

DRAWING: \\atf-no\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-10-rb-si-pros-03.dwg PLOTTED: 2/6/2025 3:17 PM BY:





PROSPECT AVENUE
NTS



PALOS VERDES BOULEVARD
NTS

60% SUBMITTAL (02/06/2025)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

- P PROTECT IN PLACE (ITEM)
- A ADJUST TO GRADE (ITEM)
- R REMOVE (ITEM)
- RL RELOCATE (ITEM)
- (1) SAWCUT AND REMOVE INTERFERING PORTIONS OF EX PCC CURB & GUTTER, SIDEWALK, CURB RAMP AND / OR LOCAL DEPRESSION, UNLESS OTHERWISE NOTED, AS REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.
- (2) SAWCUT & REMOVE AND CONSTRUCT 24" WIDE FULL DEPTH AC SLOT PAVEMENT PER DETAIL A ON SHEET CD-01.
- (3) CONSTRUCT 4" PCC SIDEWALK PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (4) CONSTRUCT PCC CURB RAMP PER SPPWC STANDARD PLAN 111-5 (TYPE AND CASE PER PLAN) WITH 36"x60" DETECTABLE WARNING SURFACE.
- (5) CONSTRUCT DRIVEWAY APPROACH (TYPE B) PER SPPWC STANDARD 110-2. WIDTH PER PLAN.
- (6) CONSTRUCT 4" PCC SURFACE PER SPPWC STD PLAN 113-2 OVER 4" CRUSHED AGGREGATE BASE.
- (7) CONSTRUCT PCC CURB AND GUTTER (6" CF), TYPE A2-6, PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE. W=24".
- (8) CONSTRUCT PCC GUTTER TRANSITION PER DETAIL B ON SHEET CD-01
- (9) CONSTRUCT CROSS GUTTER PER SPPWC STD 122-2.
- (10) CONSTRUCT PCC PEDESTRIAN CURB (6" CF), TYPE A1-6 PER SPPWC STD PLAN 120-3 OVER 6" CRUSHED AGGREGATE BASE.

LEGEND

- DETECTABLE WARNING SURFACE
- FULL DEPTH AC, SEE DETAIL A ON SHEET CD-01
- PCC IMPROVEMENTS

STREET IMPROVEMENT GENERAL NOTES:

1. GENERAL STREET IMPROVEMENT NOTES APPLY TO ALL PLAN SHEETS.
2. SEE SS SHEETS FOR SIGNING AND STRIPING DETAILS.
3. SEE E SHEETS FOR TRAFFIC SIGNAL RELOCATIONS, ADJUSTMENT, AND PROTECTION DETAILS.
4. SEE CD SHEETS FOR CONSTRUCTION DETAILS.

N

20 0 20 40
scale 1" = 20' feet

LEGEND

- SAWCUT LINE
- EX R/W LINE
- CENTERLINE
- T EX TELECOMMUNICATIONS
- W EX DOMESTIC WATER
- FO EX FIBER OPTIC
- SS EX SANITARY SEWER
- COM(UG) EX UNDERGROUND COMMUNICATION
- OH EX OVERHEAD COMMUNICATION
- E(OH) EX OVERHEAD ELECTRIC
- E(UG) EX UNDERGROUND ELECTRIC
- GAS EX GAS
- O EX OIL

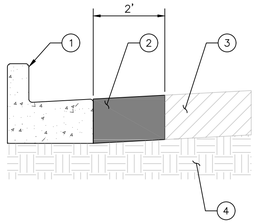
REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
STREET IMPROVEMENT
PROSPECT AVENUE & PALOS VERDES BOULEVARD

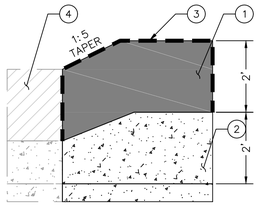
DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO. 41490		SHEET NO. 13 OF 58 SHEETS		DRAWING NO. SI-11	

DRAWING: \\pw-rb\work\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-10-si-pros-03.dwg PLOTTED: 2/6/2026 3:17 PM BY:



1. SAWCUT, REMOVE & CONSTRUCT CURB & GUTTER/DRIVEWAY PER PLAN
2. SAWCUT, REMOVE & REPLACE 6" FULL DEPTH AC SLOT PAVEMENT. CONSTRUCT 2" SURFACE COURSE (ARHM)
3. EXISTING AC PAVEMENT
4. COMPACT SUBGRADE TO 95% RELATIVE COMPACTION

A A.C. SLOT PAVING DETAIL
SCALE: N.T.S.



1. 2' AC SLOT PER DETAIL A ON SHEET CD-01
2. CONSTRUCT 6" PCC CURB AND GUTTER TYPE A2-6 PER SPPWC STD PLAN 120-3. W=24"
3. SAWCUT LINE
4. EXISTING AC PAVEMENT
5. COMPACT SUBGRADE TO 95% RELATIVE COMPACTION

B PCC GUTTER TRANSITION
SCALE: N.T.S.

LEGEND:

- PROPOSED PCC
- EXISTING PCC
- PROPOSED AC PAVEMENT
- EXISTING AC PAVEMENT
- EXISTING AGGREGATE BASE
- EXISTING SUBGRADE
- SAWCUT LINE

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

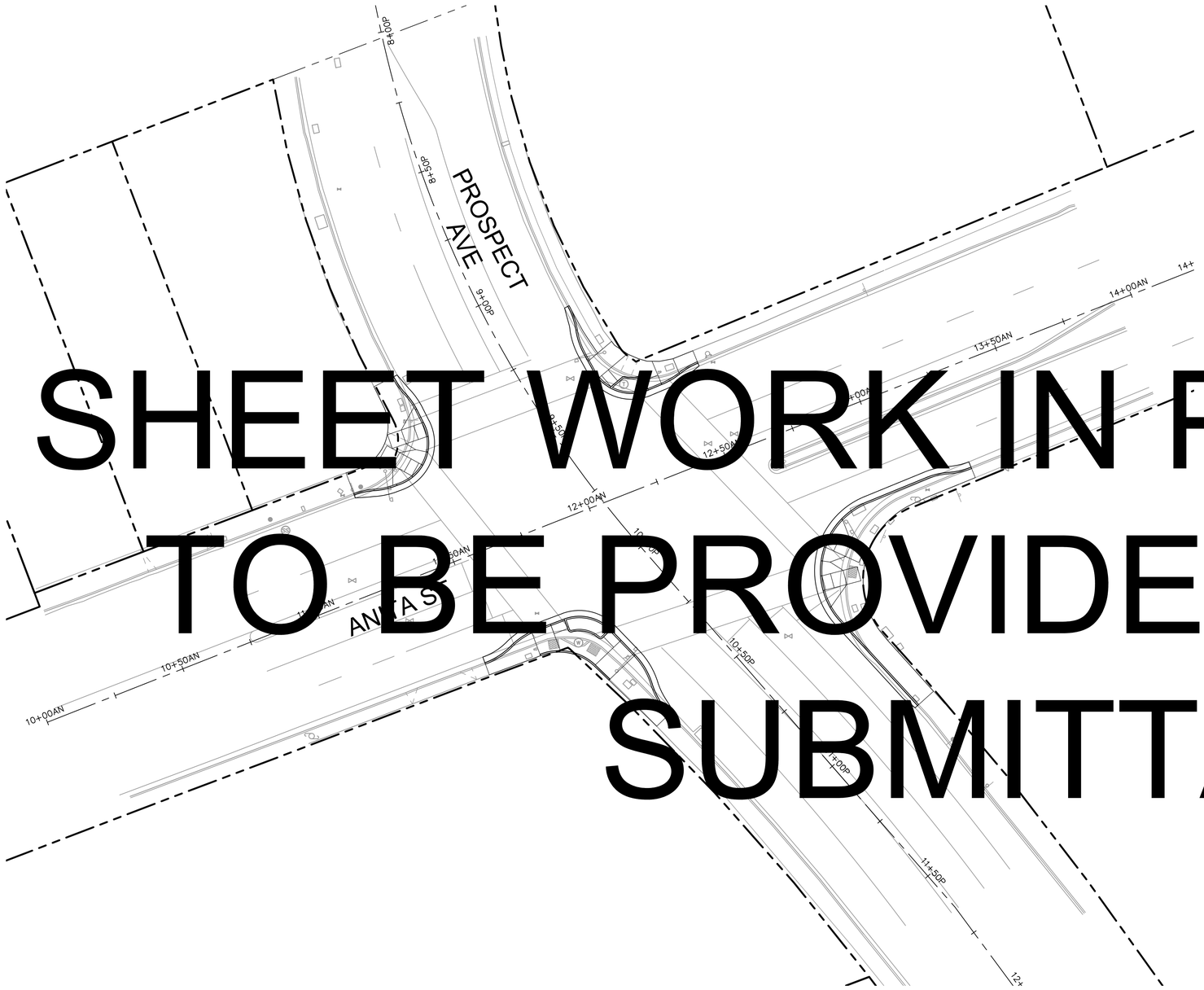
CONSTRUCTION DETAILS

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY _____ DATE _____
ANDREW S. WINJE, P.E. CITY ENGINEER

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	14 OF 58 SHEETS	CD-01

DRAWING: \\bkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-14-rb-cd-01-pros.dwg PLOTTED: 2/6/2026 3:27 PM



SHEET WORK IN PROGRESS TO BE PROVIDED AT 90% SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

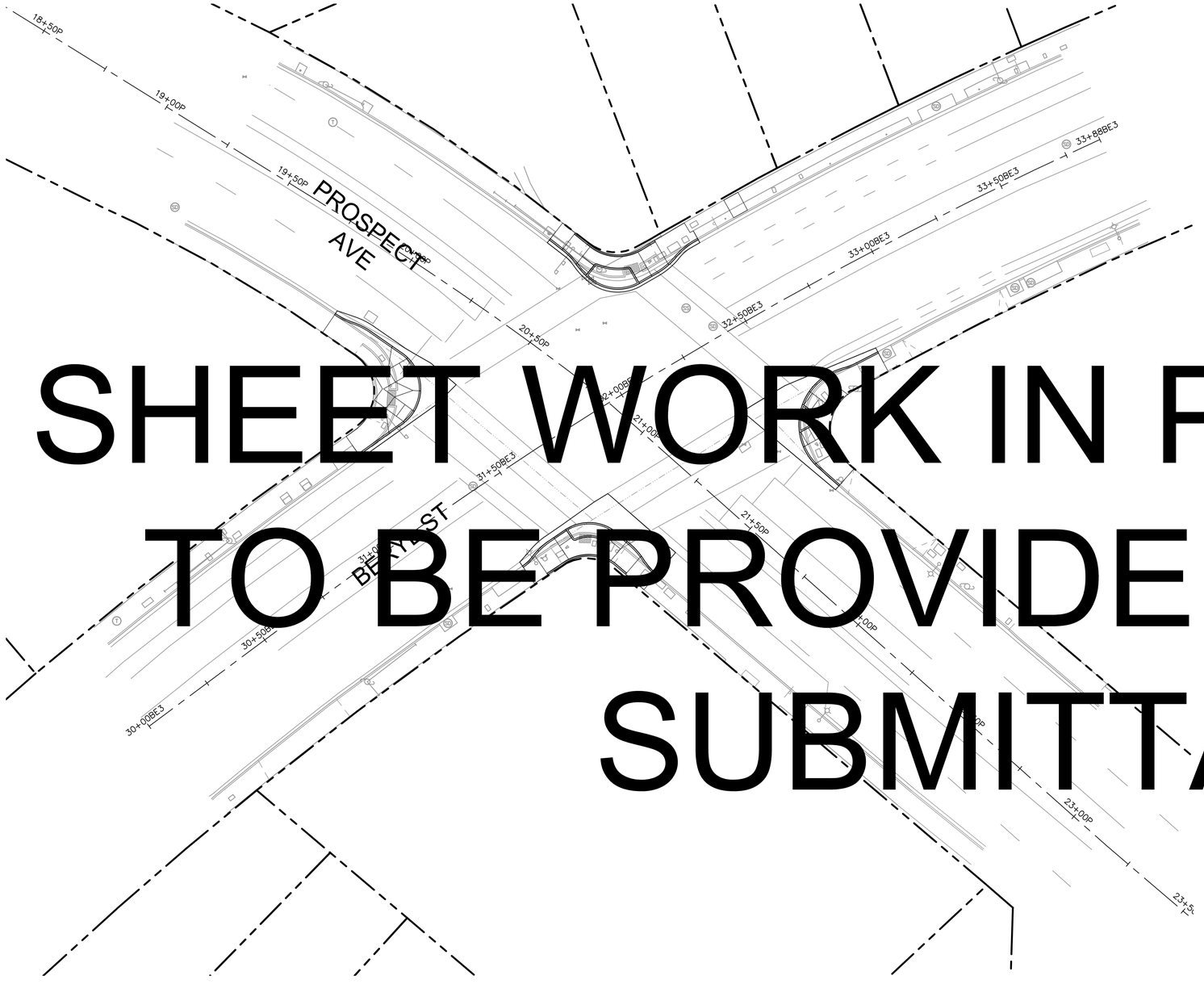
CONSTRUCTION DETAILS
PROSPECT AVENUE & ANITA/190TH STREET

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	15 OF 58 SHEETS	CD-02

DRAWING: \\atl-nb\vol4\202X\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-14-rb-cd-01-pros.dwg PLOTTED: 2/6/2026 3:27 PM



SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

CONSTRUCTION DETAILS
PROSPECT AVENUE & BERYL STREET

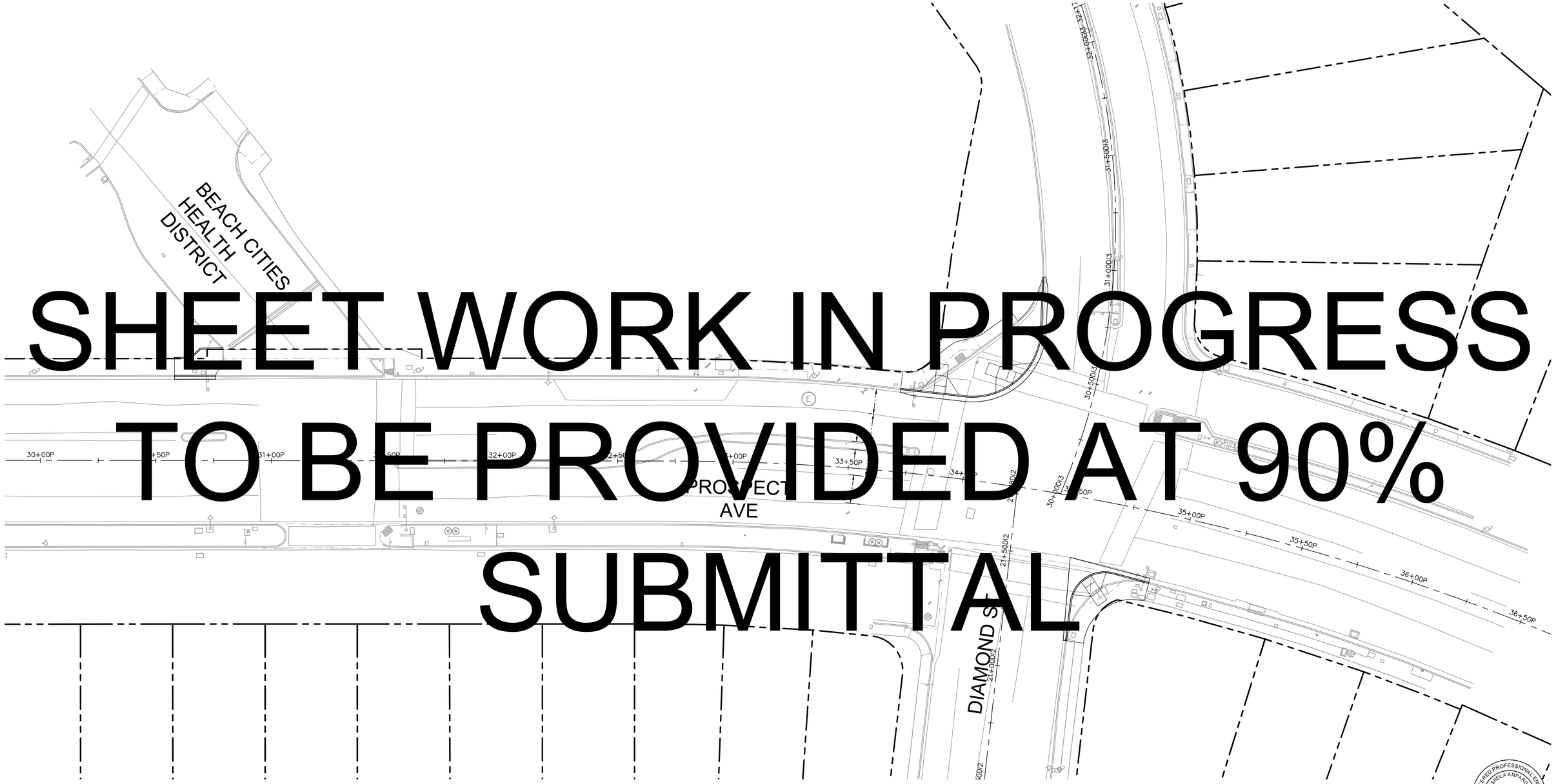
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	16 OF 58 SHEETS	CD-03

DRAWING: J:\pkf-rb\work\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-14-rb-cd-01-pros.dwg PLOTTED: 2/6/2026 3:27 PM



SHEET WORK IN PROGRESS

TO BE PROVIDED AT 90%

SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
CONSTRUCTION DETAILS
PROSPECT AVE & DIAMOND ST-BEACH CITIES

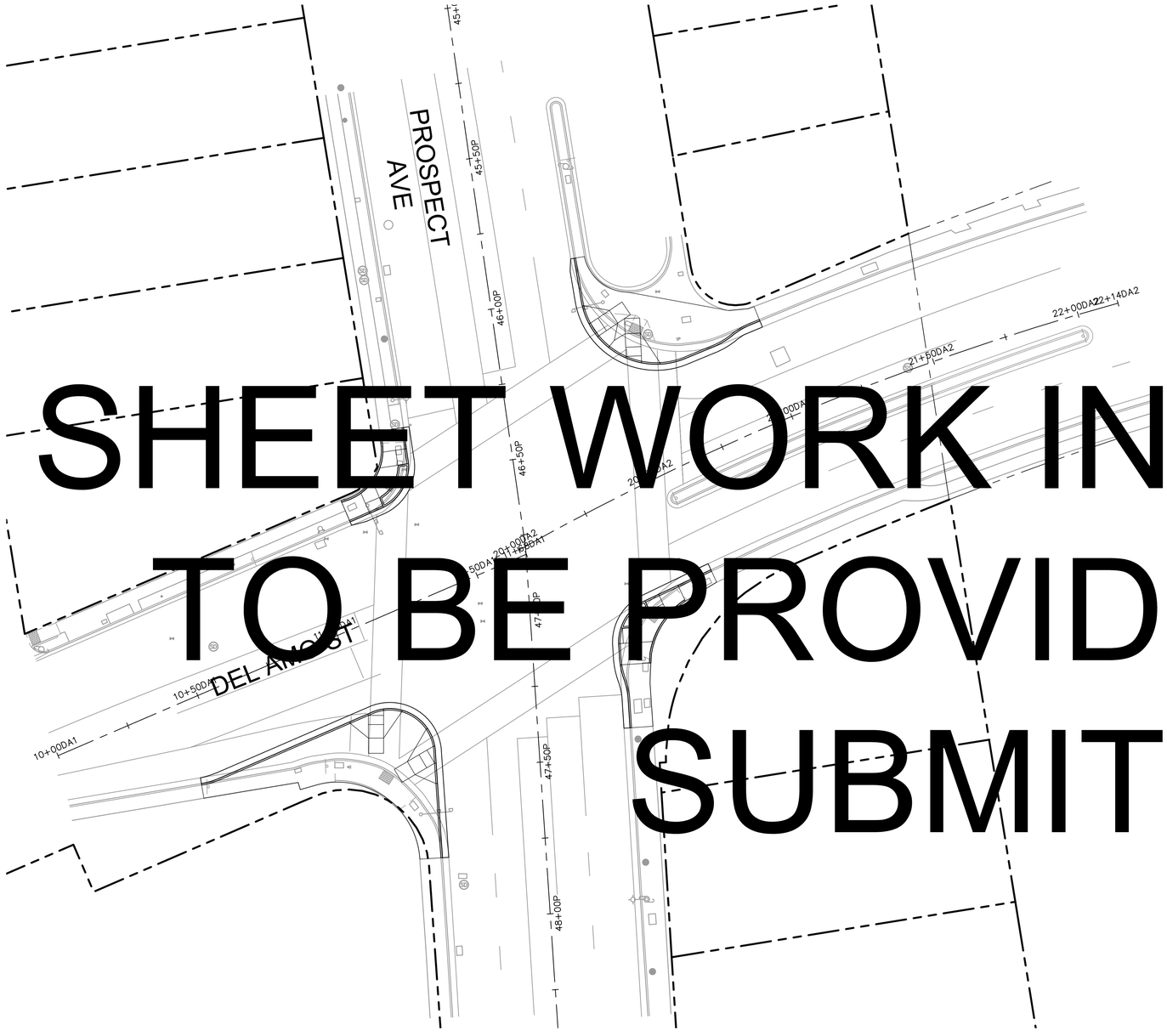
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	17 OF 58 SHEETS	CD-04

DRAWING: \\bkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-14-rb-cd-01-pros.dwg PLOTTED: 2/6/2026 3:27 PM



SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

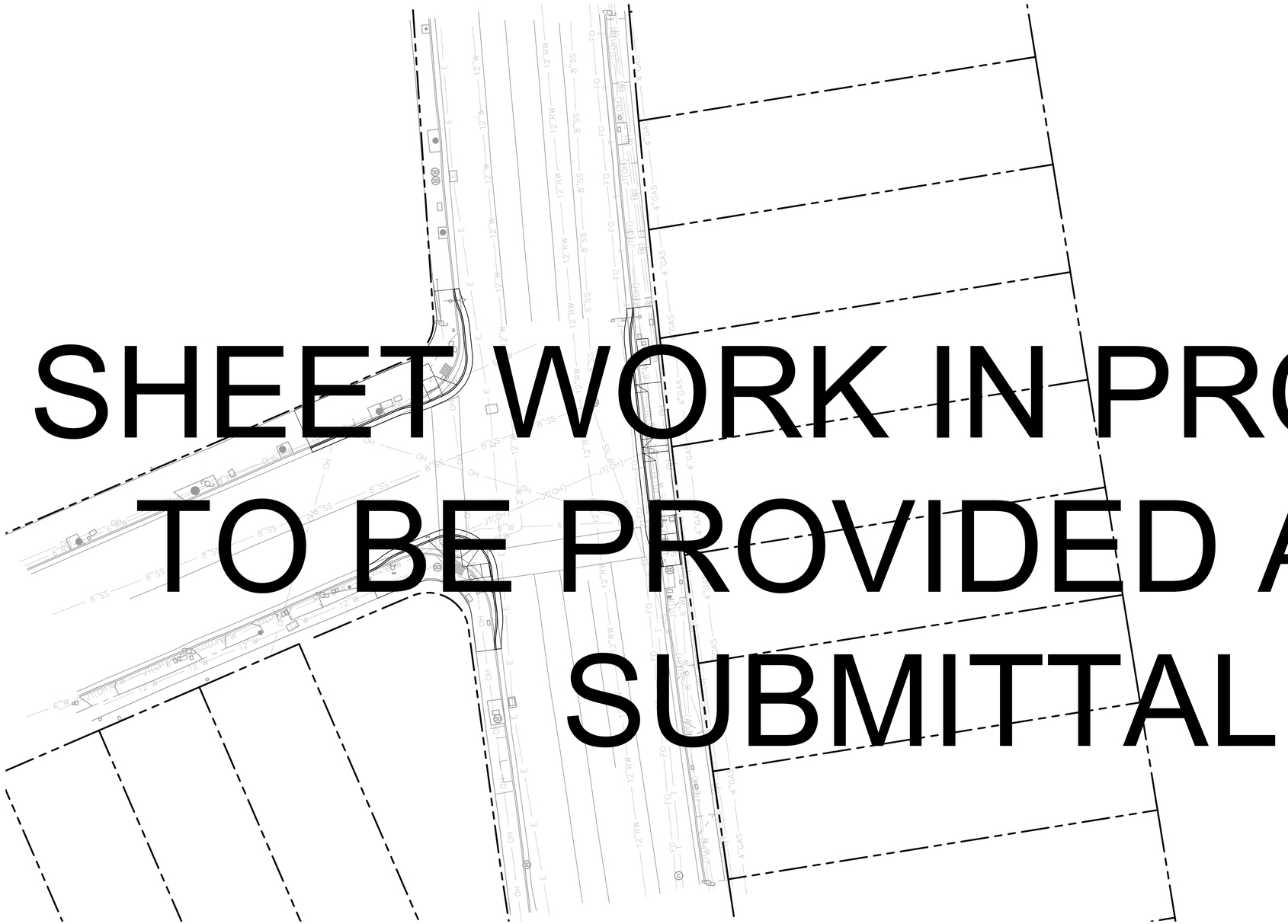
CONSTRUCTION DETAILS
PROSPECT AVENUE & DEL AMO STREET

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	18 OF 58 SHEETS	CD-05



SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

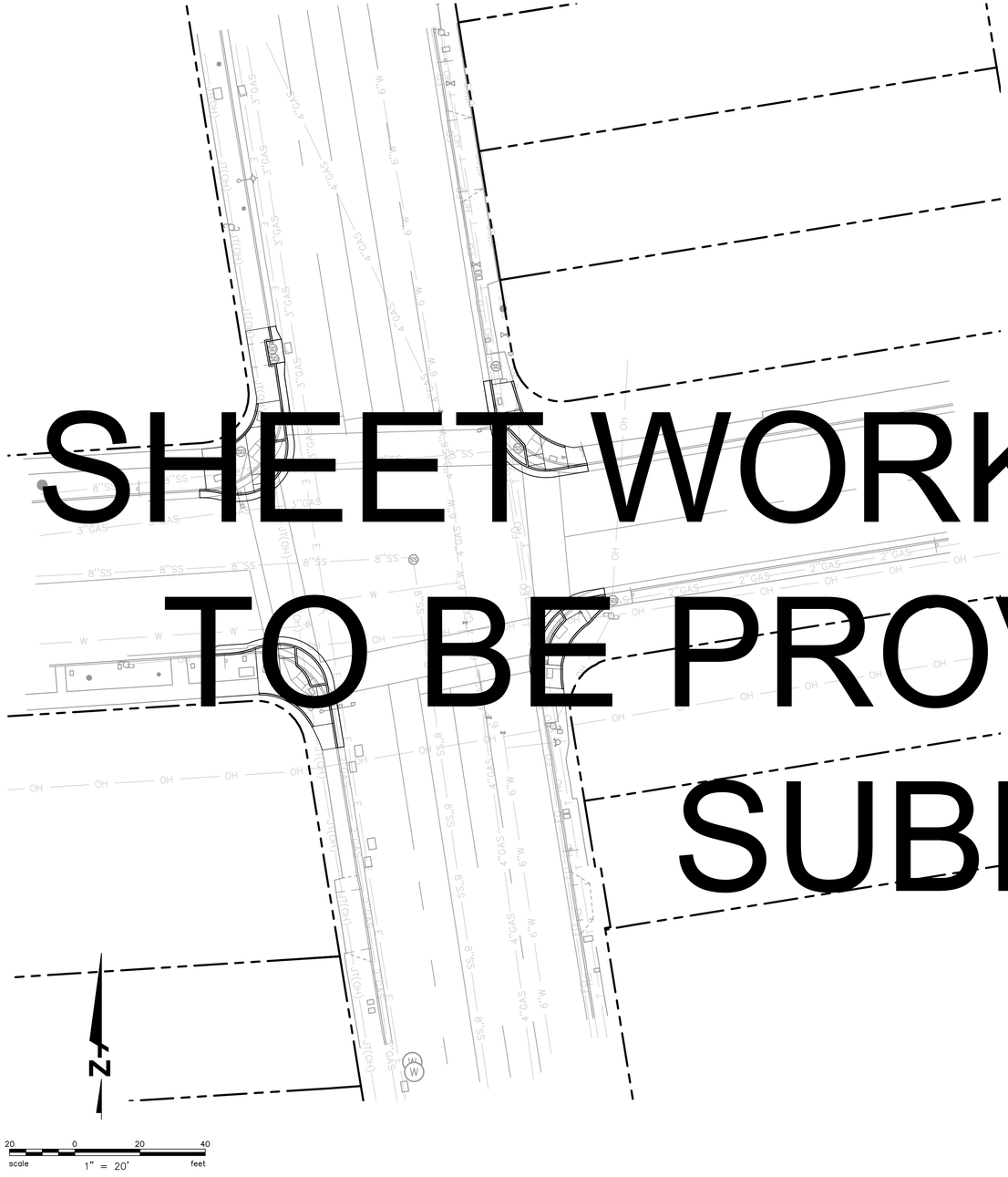
REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
CONSTRUCTION DETAILS
PROSPECT AVENUE & VINCENT STREET

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	19 OF 58 SHEETS	CD-06

DRAWING: \\pkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-15-nb-cd-02-pros.dwg PLOTTED: 2/6/2026 3:28 PM



SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90% SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
CONSTRUCTION DETAILS
PROSPECT AVENUE & EMERALD STREET

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY _____ DATE _____
ANDREW S. WINJE, P.E. CITY ENGINEER

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	20 OF 58 SHEETS	CD-07

SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
CONSTRUCTION DETAILS
PROSPECT AVENUE & TORRANCE BOULEVARD

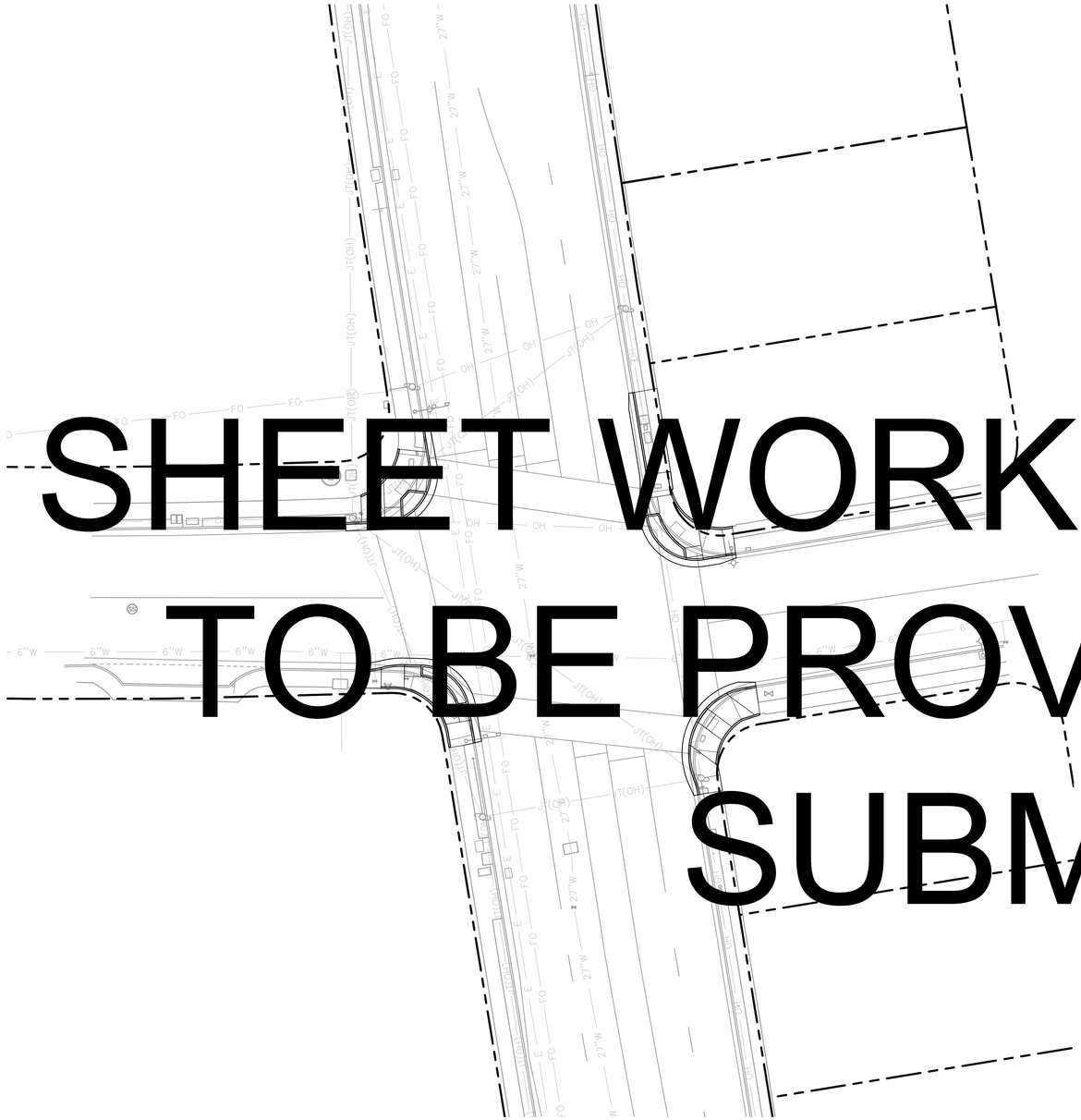
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY _____
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE _____

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	21 OF 58 SHEETS	CD-08

DRAWING: \\pw-rb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992--15--rb--cd-02-pros.dwg PLOTTED: 2/6/2026 3:28 PM



SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

CONSTRUCTION DETAILS
PROSPECT AVENUE & PEARL STREET

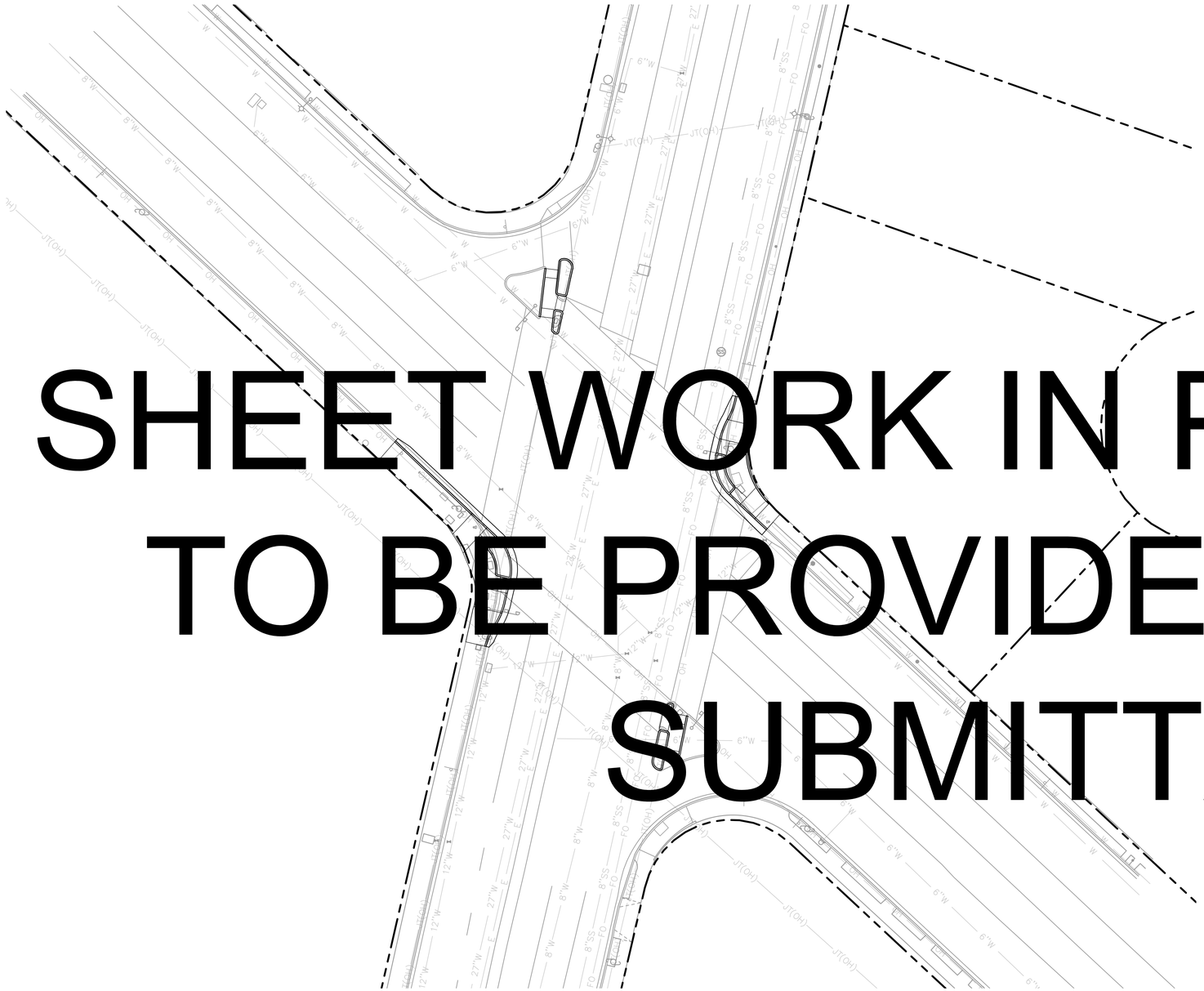
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	22 OF 58 SHEETS	CD-09

DRAWING: \\bkf-nt\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-15-rb-cd-02-pros.dwg PLOTTED: 2/6/2026 3:28 PM



SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
CONSTRUCTION DETAILS
PROSPECT AVENUE & CAMINO REAL

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	23 OF 58 SHEETS	CD-10

DRAWING: \\bkf-rnb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992--16--cd-03-pros.dwg PLOTTED: 2/6/2026 3:29 PM

SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

CONSTRUCTION DETAILS
PROSPECT AVENUE & KNOB HILL AVENUE

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	24 OF 58 SHEETS	CD-11

SHEET WORK IN PROGRESS
TO BE PROVIDED AT 90%
SUBMITTAL

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
CONSTRUCTION DETAILS
PROSPECT AVENUE & PALOS VERDES BOULEVARD

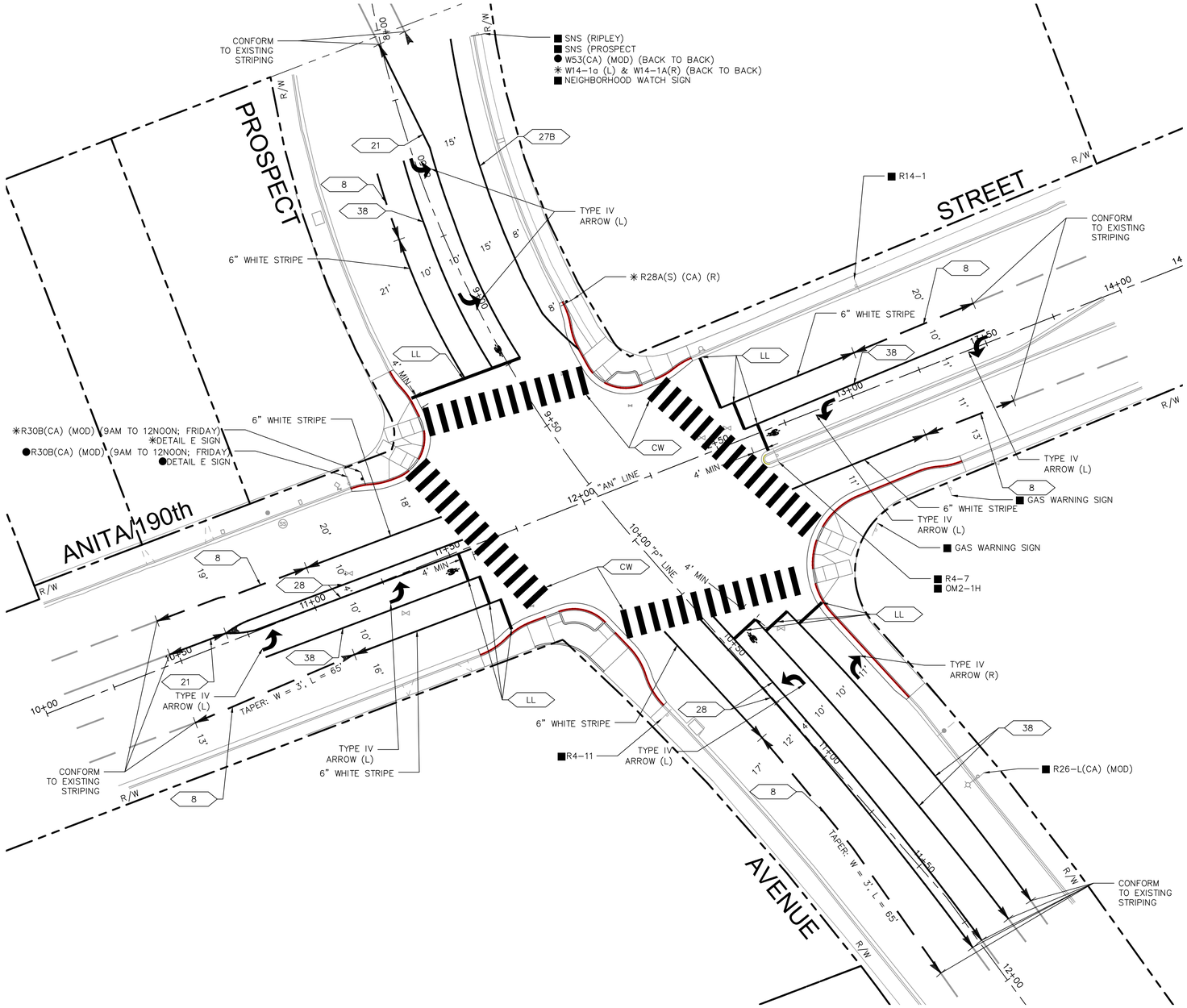
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

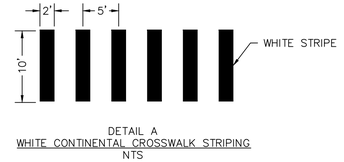
APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	25 OF 58 SHEETS	CD-12

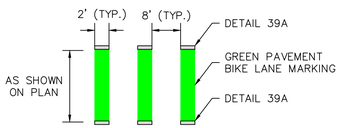
DRAWING: \\pkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-16-rb-cd-03-pros.dwg PLOTTED: 2/6/2026 3:29 PM



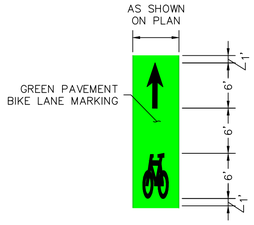


DETAIL A
WHITE CONTINENTAL CROSSWALK STRIPING
NTS

DETAIL B
YELLOW CONTINENTAL CROSSWALK STRIPING
NTS



DETAIL C
GREEN BIKE LANE HATCH
NTS



DETAIL D
GREEN BIKE LANE SYMBOL
NTS

DETAIL E
90 MIN PARKING SIGN
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

LEGEND (SHEETS SS-01 THROUGH SS-11 ONLY):

- No. — INSTALL PAVEMENT DELINEATION DETAIL PER 2025 CALTRANS STANDARD PLANS.
- CW — INSTALL 24" WIDE CONTINENTAL CROSSWALK (24" WHITE STRIPE AT 5' O.C.). SEE DETAIL A ON THIS SHEET.
- SC — INSTALL 10' WIDE CONTINENTAL CROSSWALK (24" YELLOW STRIPE AT 5' O.C.). SEE DETAIL B ON THIS SHEET.
- LL — INSTALL 12" WHITE STRIPE AS SHOWN FOR ADVANCED VEHICLE LIMIT LINE.
- INSTALL HIGH-FRICTION GREEN BIKE LANE PAVEMENT MARKING.
- INSTALL PAVEMENT MARKING DETAIL PER 2025 CALTRANS STANDARD PLANS.
- BIKE LOOP DETECTOR SYMBOL PER 2026 CAMUTCD.
- STOP — INSTALL PAVEMENT PARKING TEXT PER 2025 CALTRANS STANDARD PLANS

- EXISTING ROADSIDE SIGN AND POST
- PROPOSED ROAD SIGN ON EXISTING POST
- PROPOSED ROAD SIGN AND POST
- EXISTING SIGN TO BE REMOVED
- EXISTING SIGN TO REMAIN
- ✳ INSTALL NEW SIGN
- INSTALL RED CURB
- INSTALL YELLOW CURB

N

20 0 20 40
scale 1" = 20' feet

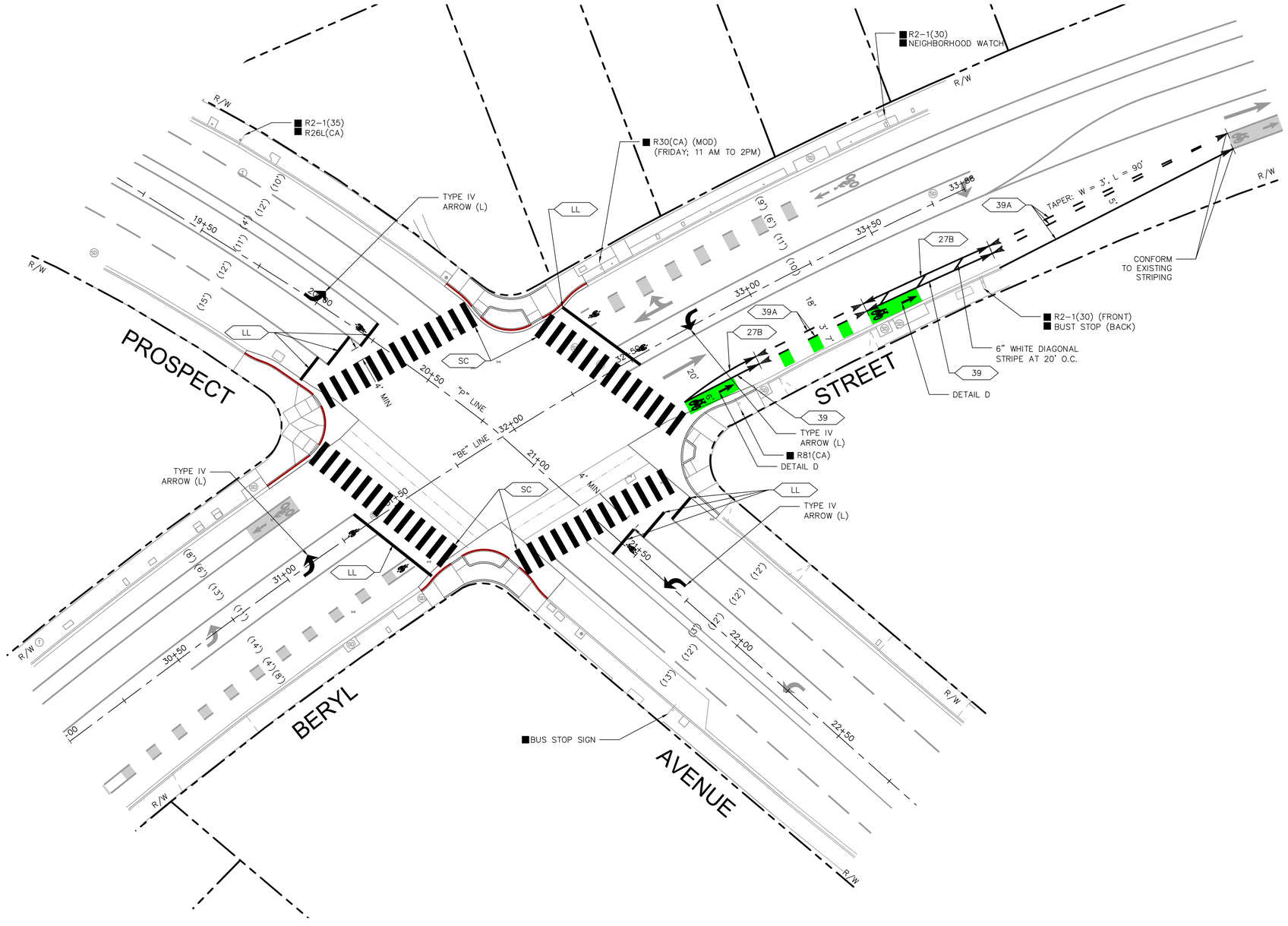
REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & ANITA/190TH STREET

DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY	ANDREW S. WINJE, P.E. CITY ENGINEER			DATE	
PROJECT NO. 41490		SHEET NO. 26 OF 58 SHEETS		DRAWING NO. SS-01	

DRAWING: \\pkf-nb\vol4\202x\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-28-rb-pd-pros-01.dwg PLOTTED: 2/5/2026 5:58 PM



FOR LEGEND AND NOTES REFER TO SHEET SS-01

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

SIGNING & STRIPING
PROSPECT AVENUE & BERYL STREET

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	27 OF 58 SHEETS	SS-02

DRAWING: \\pbf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-28-rb-pd-pros-01.dwg PLOTTED: 2/5/2026 8:09 PM

BEACH CITIES HEALTH DISTRICT

PROSPECT AVENUE

DIAMOND STREET

■CUSTOM (UNATHORIZED VEHICLE)

■BUS STOP SIGN

●NO PARKING FRIDAY

✳NO PARKING FRIDAY

■ TYPE Q(CA)

■R30(CA) (MOD)
(FRIDAY; 9 AM TO 12PM)

■R5-1■

■R30(CA) (MOD)
(FRIDAY; 9 AM TO 12PM)

■BUS STOP SIGN

TYPE IV
ARROW (L)

■R4-7

■N-1(CA)

■R30(CA) (MOD)
(FRIDAY; 9 AM TO 12PM)

■R30(CA) (MOD)
(THURSDAY; 9AM TO 12PM)

■NEIGHBORHOOD WATCHSIGN

■R6-1(R)

■R30(CA) (MOD)
(FRIDAY; 11AM TO 2PM)

■R81(CA)

✳R81a(CA)

■ R5-2(MOD) (6000LBS)

■R30(CA) (MOD)
(FRIDAY; 9 AM TO 12PM)

■ R1-1

● R30(CA) (MOD)
(FRIDAY; 9 AM TO 12PM)

■ R2-1(15)

● R30(CA)(MOD)
(THURSDAY; 9AM TO 12PM)

● R10-22

● SNS (DIAMOND)

● SNS (PROSPECT)

✳ R10-22

✳ SNS (DIAMOND)

✳ SNS (PROSPECT)

TYPE IV
ARROW (L)

"DI" LINE

"P" LINE

4' MIN

15'

(15')

(18')

(19')

R/W

22

38

CW

SC

LL

STOP

30+00 30+50 31+00 31+50 32+00 32+50 33+00 33+50 34+00 34+50 35+00 35+50 36+00

21+78 21+50 21+00

(12') (13') (11') (14') (10')

-50

20 0 20 40
scale 1" = 20' feet

FOR LEGEND AND NOTES REFER TO SHEET SS-01

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

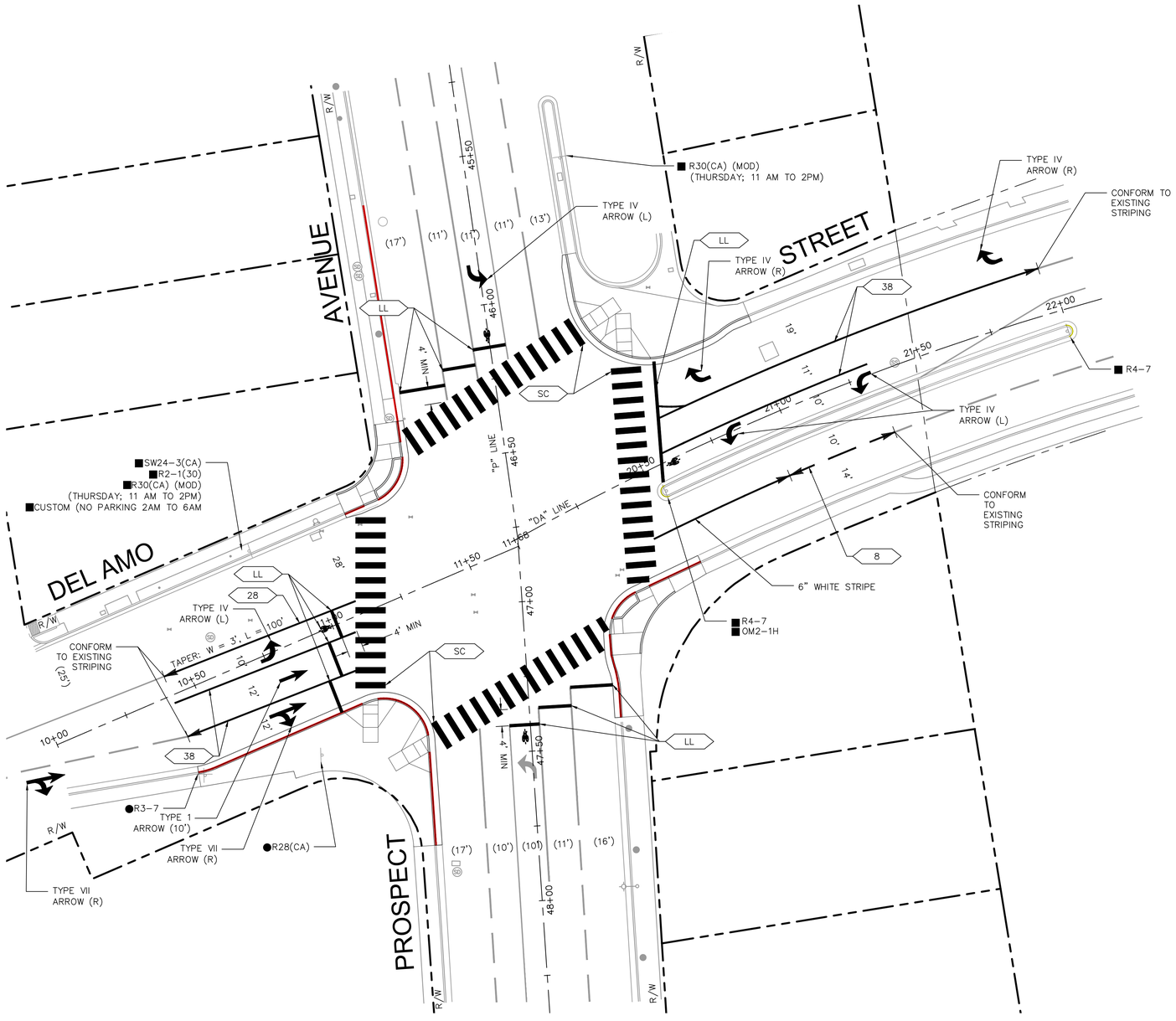
REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVE & DIAMOND ST-BEACH CITIES

DRAWN	JC	CHECKED	MB	SCALE	1" = 20'
APPROVED BY				DATE	
	ANDREW S. WINJE, P.E. CITY ENGINEER				
PROJECT NO. 41490		SHEET NO. 28 OF 58 SHEETS		DRAWING NO. SS-03	

DRAWING: \\bkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-28-rb-pd-pros-01.dwg PLOTTED: 2/5/2026 5:58 PM



N

20 0 20 40
scale 1" = 20' feet

FOR LEGEND AND NOTES REFER TO SHEET SS-01.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

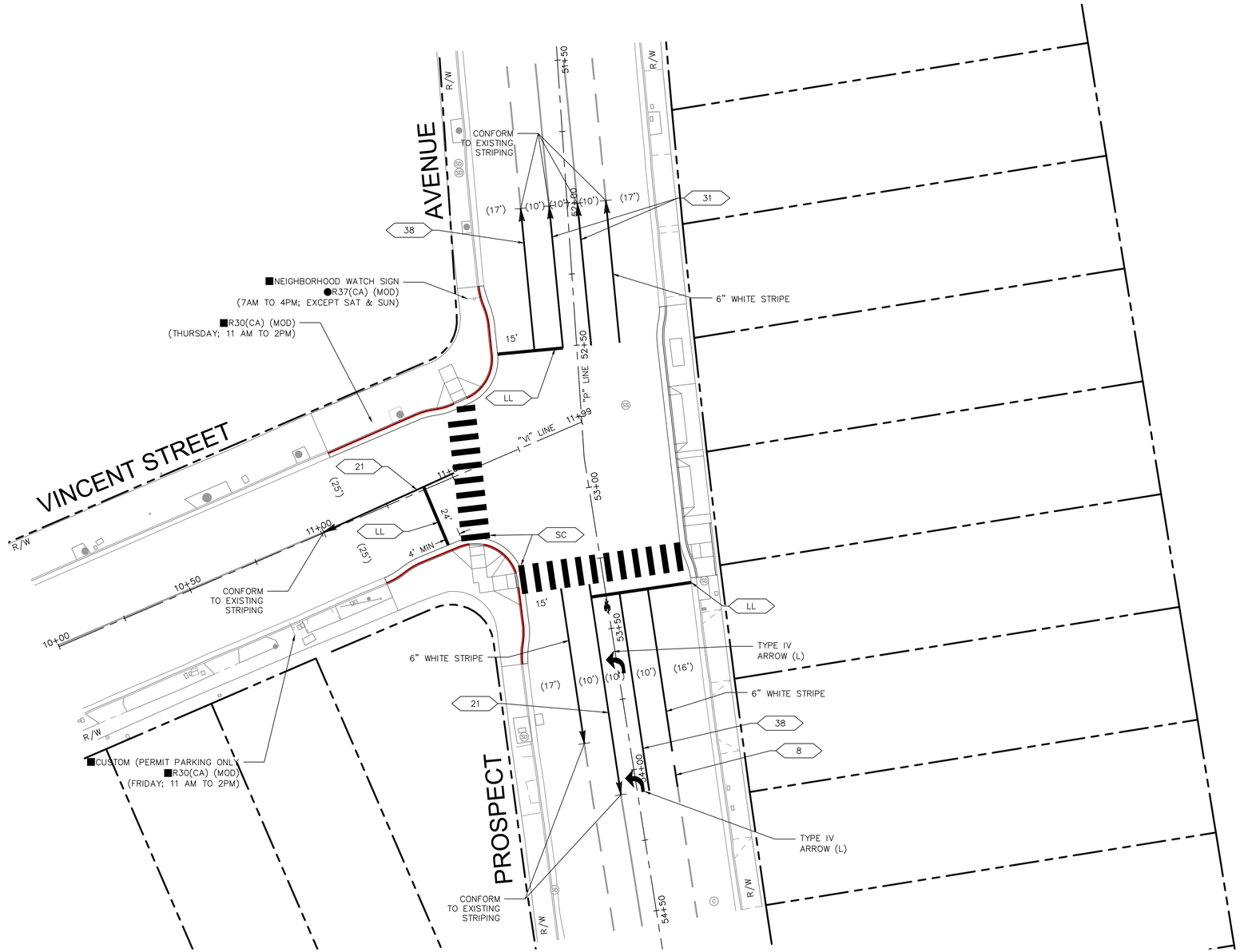
REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & DEL AMO STREET

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	29 OF 58 SHEETS	SS-04

DRAWING: \\bf-no\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-28-rb-pd-pros-01.dwg PLOTTED: 2/5/2026 5:59 PM



N

20 0 20 40
scale 1" = 20' feet

FOR LEGEND AND NOTES REFER TO SHEET SS-01.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & VINCENT STREET

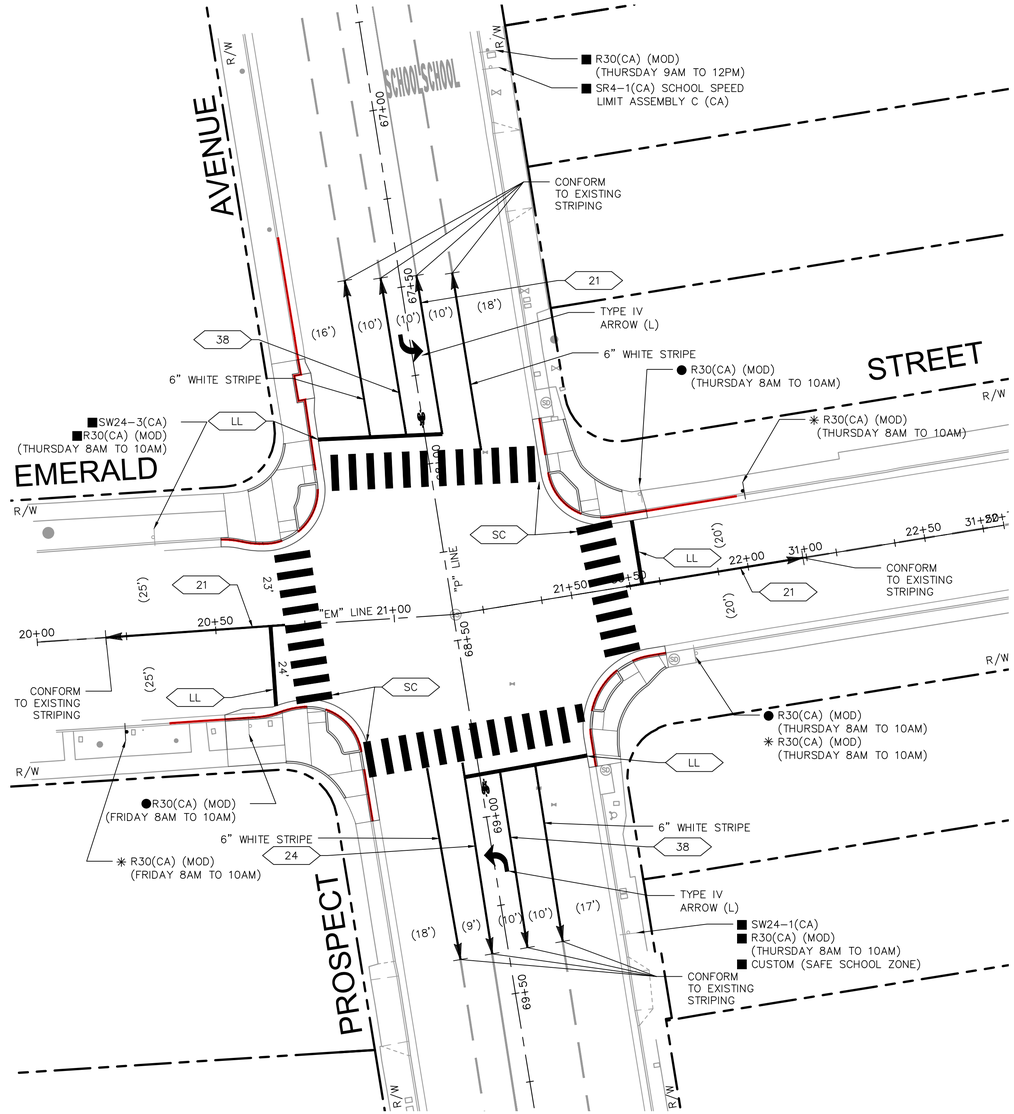
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

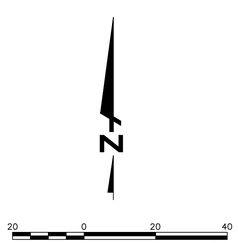
APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	30 OF 58 SHEETS	SS-05

DRAWING: \\pkf-mh\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-32-rb-psd-pros-02.dwg PLOTTED: 2/5/2026 5:59 PM





FOR LEGEND AND NOTES REFER TO SHEET SS-01.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

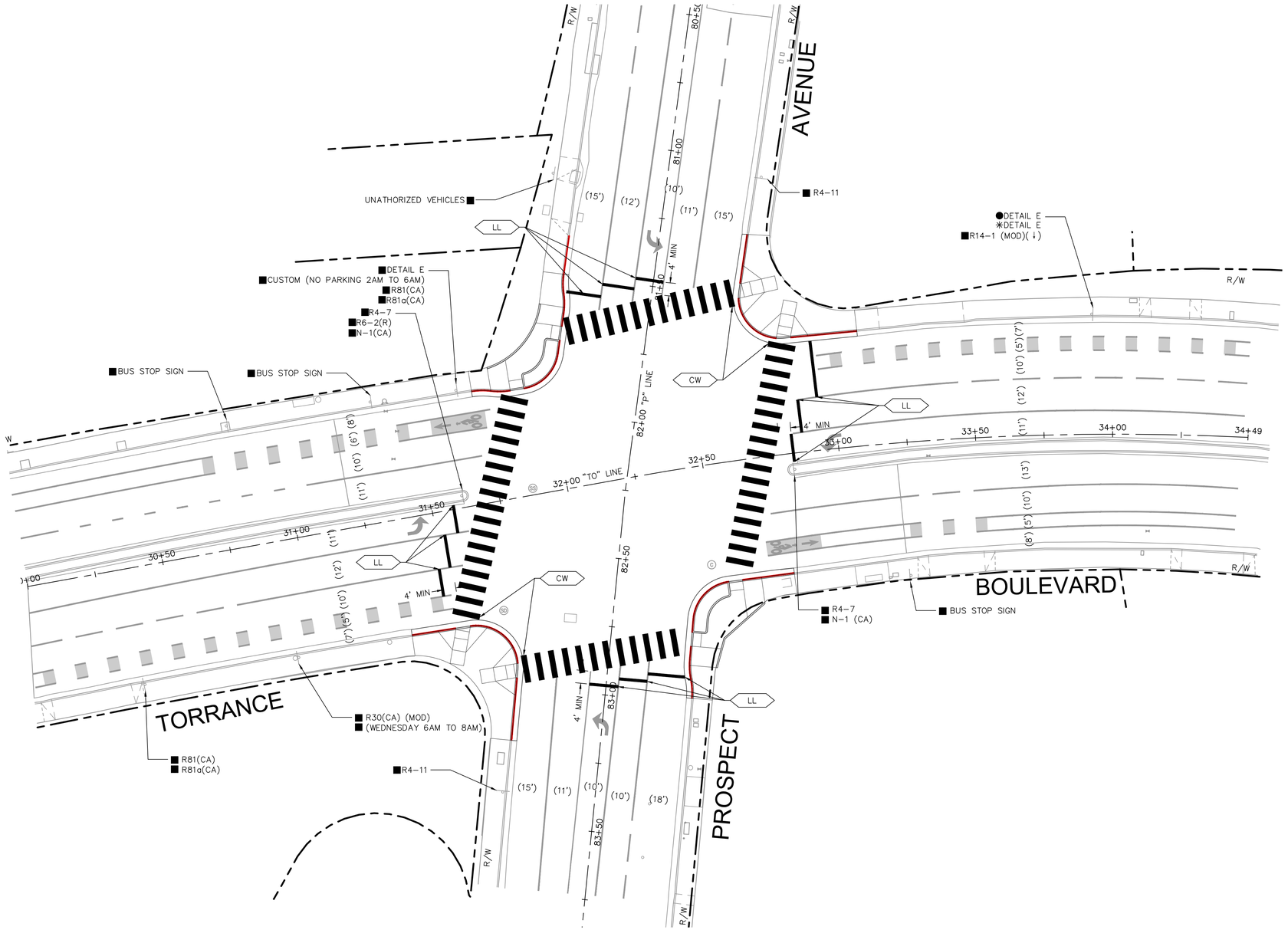
REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & EMERALD STREET

DRAWN JC	CHECKED MB	SCALE 1" = 20'	
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 31 OF 58 SHEETS	DRAWING NO. SS-06	



N

scale 1" = 20' feet

20 0 20 40

FOR LEGEND AND NOTES REFER TO SHEET SS-01.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

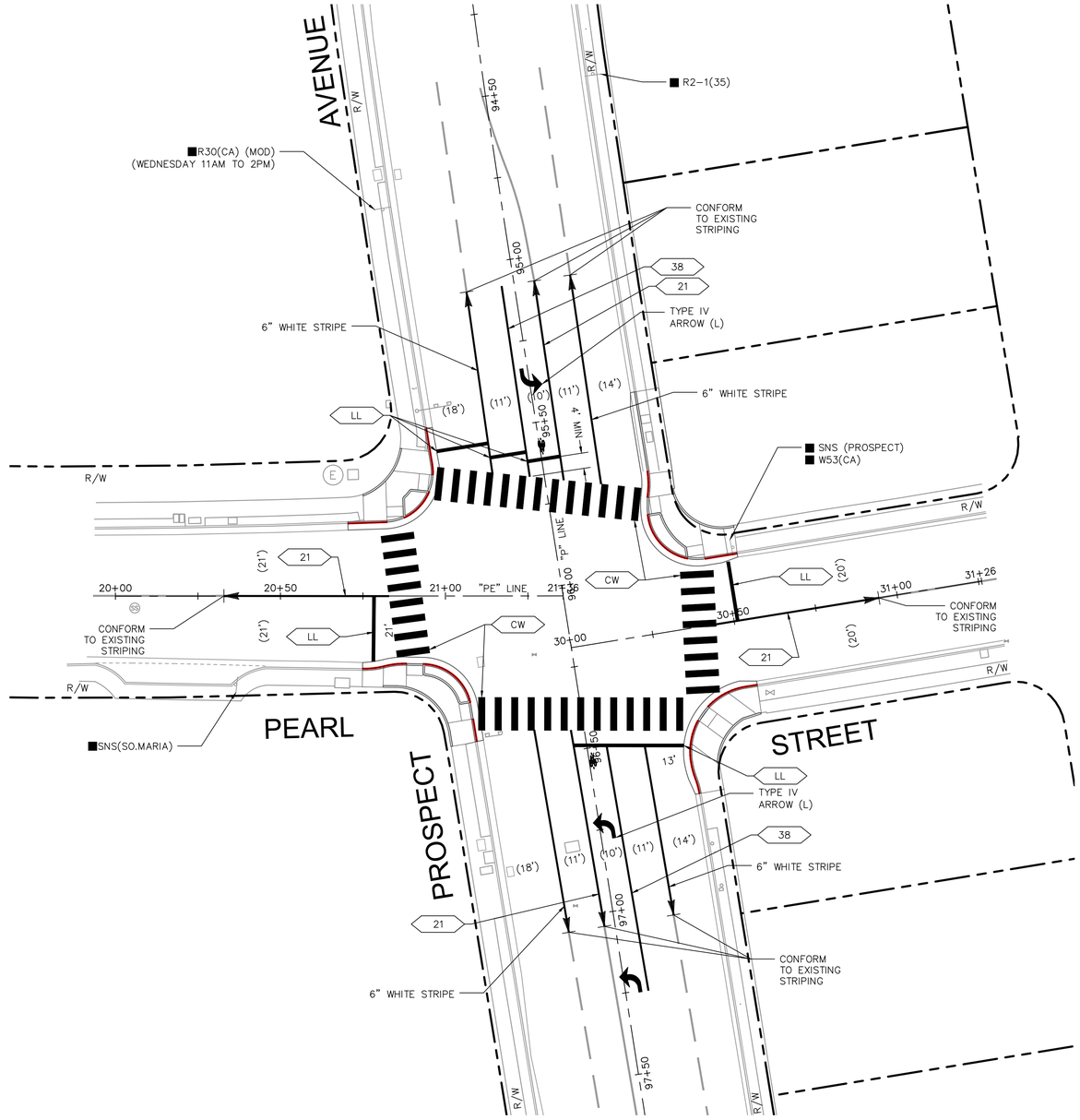
REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & TORRANCE BOULEVARD

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	32 OF 58 SHEETS	SS-07

DRAWING: \\pkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-32-rb-pros-02.dwg PLOTTED: 2/5/2026 5:59 PM



N

20 0 20 40
scale 1" = 20' feet

FOR LEGEND AND NOTES REFER TO SHEET SS-01.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

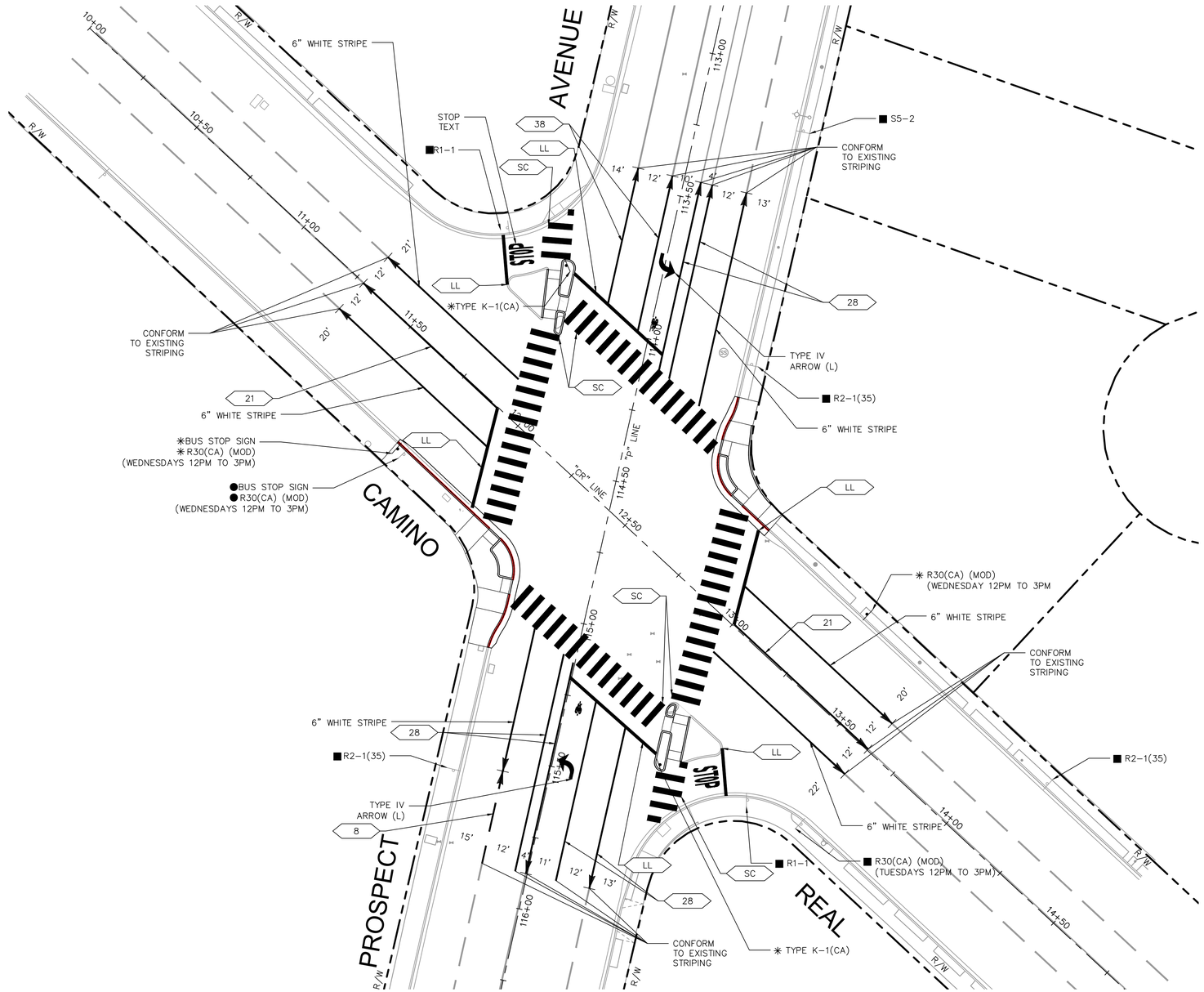
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

SIGNING & STRIPING
PROSPECT AVENUE & PEARL STREET

DRAWN JC	CHECKED MB	SCALE 1" = 20'	
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 33 OF 58 SHEETS	DRAWING NO. SS-08	

DRAWING: \\bkt-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-32-rb-pd-pros-02.dwg PLOTTED: 2/5/2026 9:44 PM



60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

FOR LEGEND AND NOTES REFER TO SHEET SS-01

REVISIONS	
DATE	DESCRIPTION

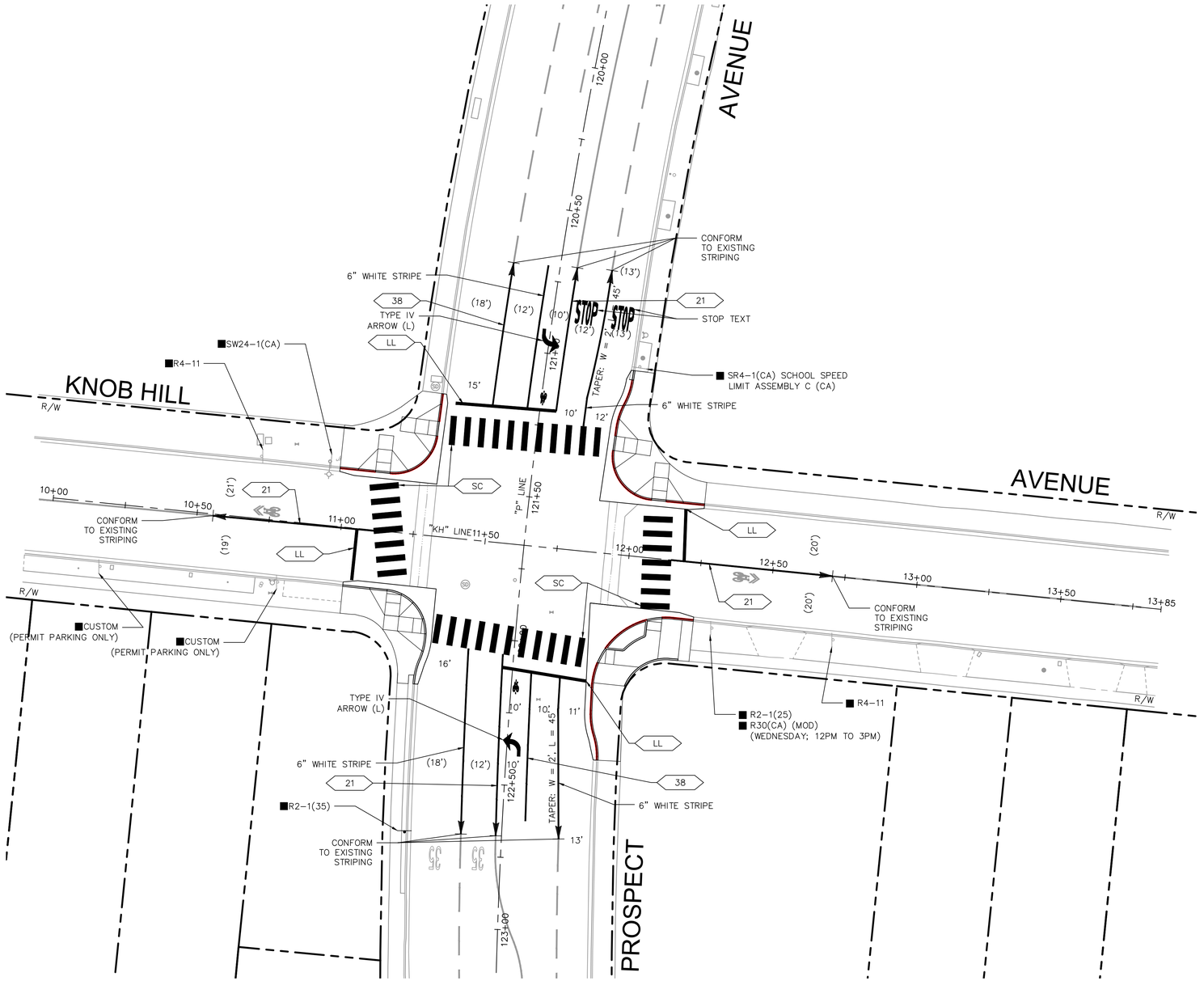
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & CAMINO REAL

DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	34 OF 58 SHEETS	SS-09



N

20 0 20 40
scale
1" = 20'
feet

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & KNOB HILL AVENUE

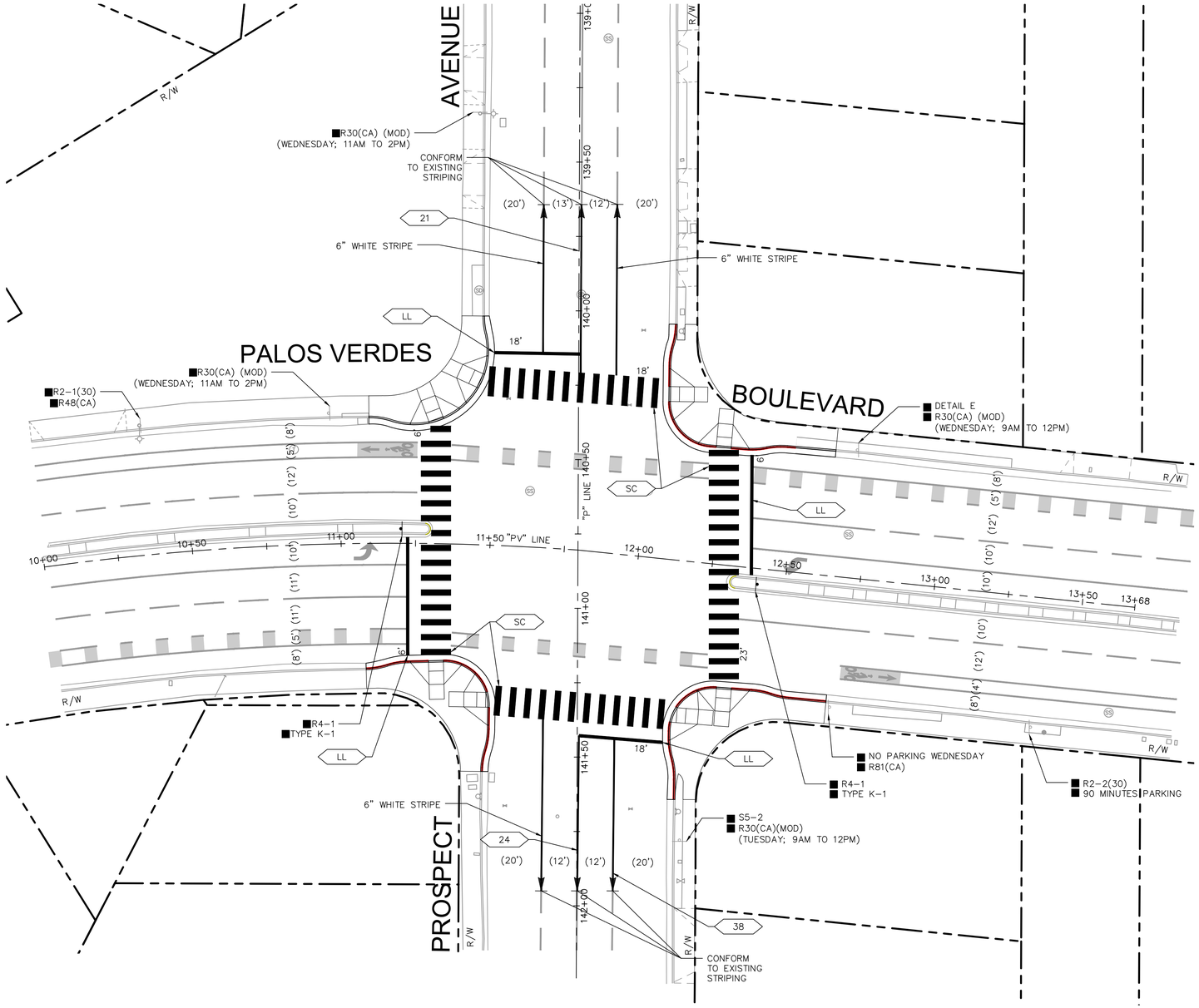
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	35 OF 58 SHEETS	SS-10

DRAWING: \\pkf-mb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-36-rb-pd-pros-03.dwg PLOTTED: 2/5/2026 6:00 PM



N

20 0 20 40
scale 1" = 20' feet

FOR LEGEND AND NOTES REFER TO SHEET SS-01

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
SIGNING & STRIPING
PROSPECT AVENUE & PALOS VERDES BOULEVARD

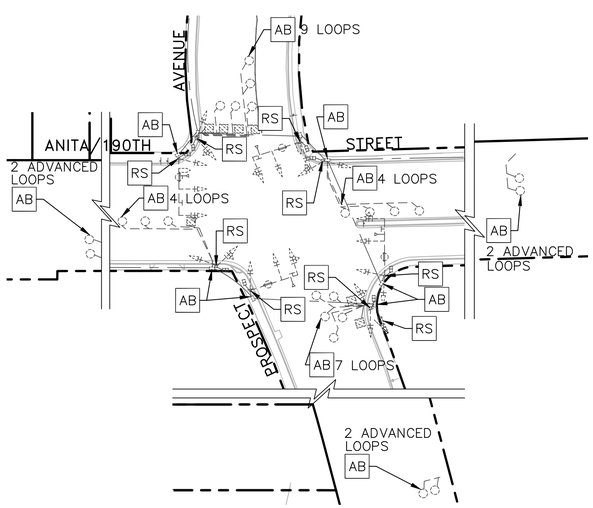
DRAWN	CHECKED	SCALE
JC	MB	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	36 OF 58 SHEETS	SS-11

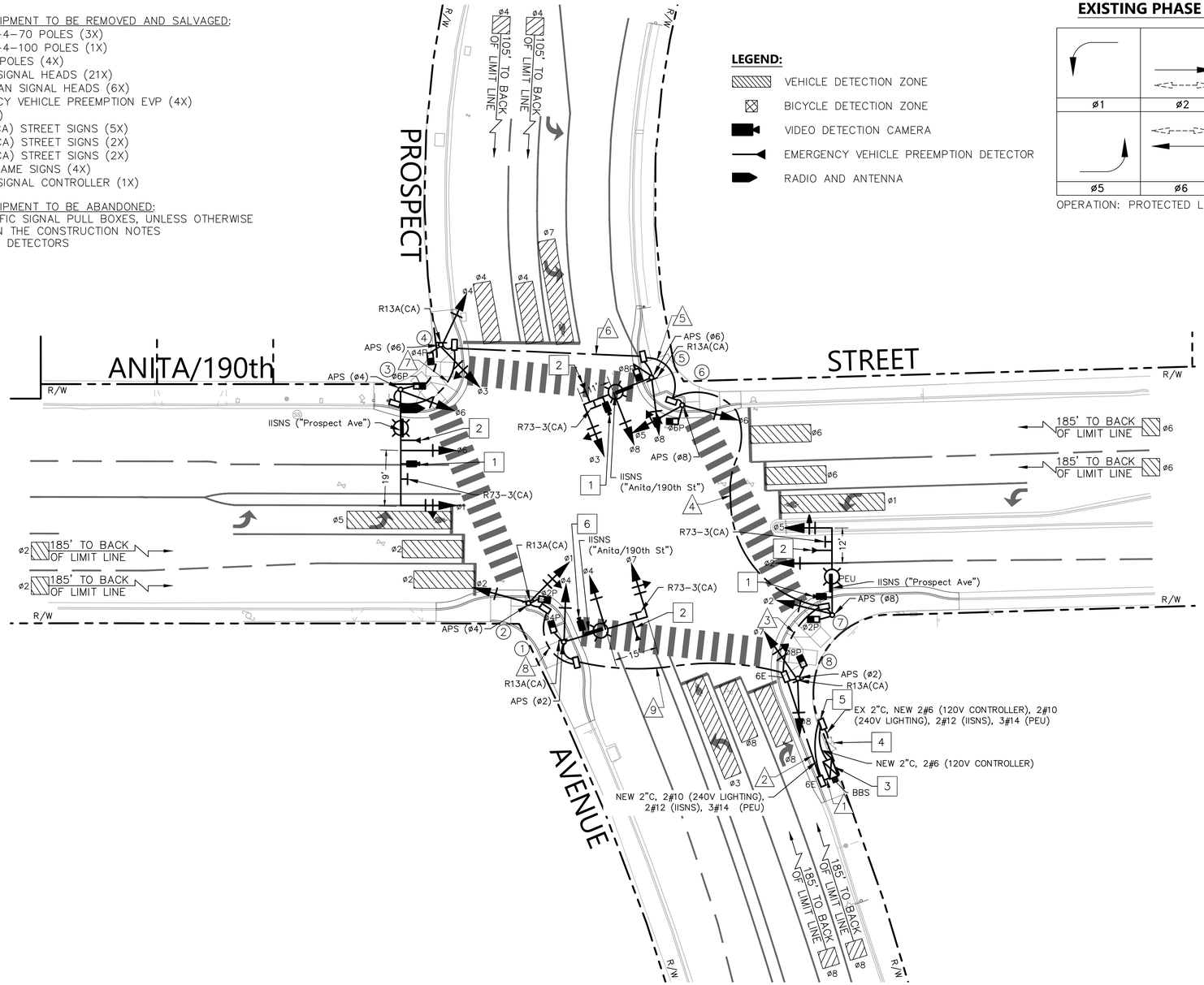
DRAWING: \\pkf-mb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-36-rb-pd-pros-03.dwg PLOTTED: 2/5/2026 6:00 PM



REMOVAL PLAN
1"=50'

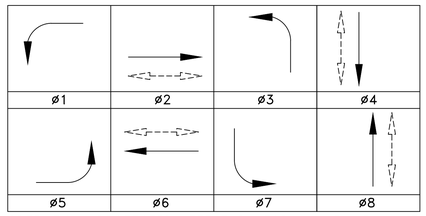
EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 24-4-70 POLES (3X)
2. TYPE 24-4-100 POLES (1X)
3. TYPE 1A POLES (4X)
4. VEHICLE SIGNAL HEADS (21X)
5. PEDESTRIAN SIGNAL HEADS (6X)
6. EMERGENCY VEHICLE PREEMPTION EVP (4X)
7. IISNS (4X)
8. R-13A (CA) STREET SIGNS (5X)
9. R73-3 (CA) STREET SIGNS (2X)
10. R73-2 (CA) STREET SIGNS (2X)
11. STREET NAME SIGNS (4X)
12. TRAFFIC SIGNAL CONTROLLER (1X)

EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION NOTES
2. ALL LOOP DETECTORS



LEGEND:
- VEHICLE DETECTION ZONE
- BICYCLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE PREEMPTION DETECTOR
- RADIO AND ANTENNA

EXISTING PHASE DIAGRAM TO REMAIN



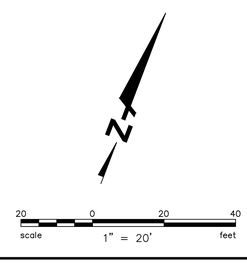
OPERATION: PROTECTED LEFT TURN FOR ø1, ø3, ø5, & ø7

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.
1. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR EXCEPT LACO-1 WWV PROGRAM, RADIO CORRECTED TIME BASE UNIT AND ANTENNA.
2. LACO-1 WWV PROGRAM, RADIO CORRECTED TIME BASE UNIT AND ANTENNA SHALL BE FURNISHED AND INSTALLED BY THE CITY.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. EXISTING SERVICE CABINET TO REMAIN.
5. WHEN NEW SIGNAL IS READY TO BE ACTIVATED, SALVAGE EXISTING SIGNAL CONTROLLER AND DEMO EXISTING FOUNDATION. PRESERVE THE EXISTING ELECTRICAL CONDUIT RUN BETWEEN THE CONTROLLER AND SERVICE CABINET. INSTALL NO. 5 PULL BOX AT THE LOCATION OF THE PREVIOUS CONTROLLER'S FOUNDATION. RUN NEW WIRES TO THE SERVICE CABINET, NEW SIGNAL CONTROLLER, AND 6E PULL BOX AS SHOWN.
6. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.



60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & ANITA STREET

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO. 41490
SHEET NO. 37 OF 58 SHEETS
DRAWING NO. E-01

CONDUCTOR SCHEDULE

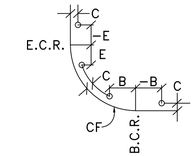
WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ4, Φ7, Φ4P	1	1							1
	②	Φ1, Φ2, Φ2P	1	1						1	1
	③	Φ1, Φ6, Φ6P	1	1	1	1	1	1	1		
	④	Φ3, Φ4, Φ4P	1	1	1	1	1	1			
	⑤	Φ3, Φ5, Φ8P	1	1	1	1	1				
	⑥	Φ5, Φ6, Φ6P	1	1	1	1					
	⑦	Φ2, Φ5, Φ2P	1	1	1						
	⑧	Φ7, Φ9, Φ8P	1	1							
		TOTAL	8	8	5	4	3	2	1	1	2
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	①	APS (Φ2)	1	1							1
	②	APS (Φ4)	1	1						1	1
	③	APS (Φ4)	1	1	1	1	1	1	1		
	④	APS (Φ6)	1	1	1	1	1	1			
	⑤	APS (Φ6)	1	1	1	1	1				
	⑥	APS (Φ8)	1	1	1	1					
	⑦	APS (Φ8)	1	1	1						
	⑧	APS (Φ2)	1	1							
		TOTAL	8	8	5	4	3	2	1	1	2
#14 AWG	PEU			3	3						
#12 AWG	IISNS			2	2	2	2	2	2	2	2
#10 AWG	LED LUMINARIES			2	2	2	2	2	2	2	2
	SIGNAL COMMON		1	1	1	1	1	1	1	1	1
	TOTAL		1	3	3	3	3	3	3	3	3
VIDEO DETECTION POWER AND VIDEO			4	4	3	2	2	1	1		1
WIRELESS RADIO (CAT5E)			1	1	1	1	1	1	1		1
EMERGENCY VEHICLE PREEMPTION			4	4	3	2	2	1	1		1
CONDUIT SIZE (IN.)			2–3	2–3	4	3	3	3	3	3	3
PERCENT FILL			15%	17%	14%	19%	17%	12%	10%	3%	12%

ALL CABLES AND CONDUITS ARE NEW

POLE SCHEDULE

STANDARD No.	TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	24–4–100	30'	35'	12'	110W*	Anita/190th St	SV–1–T	MAS MAS	SP–1–T	ø2	←	–6.0'	–	3.0'	INSTALL EVP AND R73–3(CA) ON S.M.A. INSTALL VIDEO DETECTION SYSTEM ON L.M.A. INSTALL R13A(CA) ON POLE AT A MOUNTING HEIGHT OF 25' ABOVE GRADE.
②	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø4	←	–	1.0'	2.5'	INSTALL R13A(CA) ON POLE.
③	26–4–100	30'	40'	12'	110W*	Prospect Ave	SV–1–T	MAS MAS	SP–1–T	ø4	←	–6.5'	–	6.9'	INSTALL VIDEO DETECTION SYSTEM, RADIO INTERCONNECT SYSTEM, EVP, AND R73–3(CA) ON S.M.A.
④	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø6	→	–	–8.6'	3.2'	INSTALL R13A(CA) ON POLE.
⑤	24–4–100	30'	35'	12'	110W*	Anita/190th St	SV–1–T	MAS MAS	SP–1–T	ø6	←	1.6'	–	3.4'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R73–3(CA) ON S.M.A. INSTALL R13A(CA) ON POLE AT A MOUNTING HEIGHT OF 25' ABOVE GRADE.
⑥	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø8	←	–	1.0'	2.5'	
⑦	19–4–100	30'	30'	12'	110W*	Prospect Ave	SV–1–T	MAS MAS	SP–1–T	ø8	←	6.0'	–	6.2'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R73–3(CA) ON S.M.A. INSTALL PEU ON L.M.A.
⑧	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø2	→	–	3.4'	6.8'	INSTALL R13A(CA) ON POLE.

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** ACCESSIBLE PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

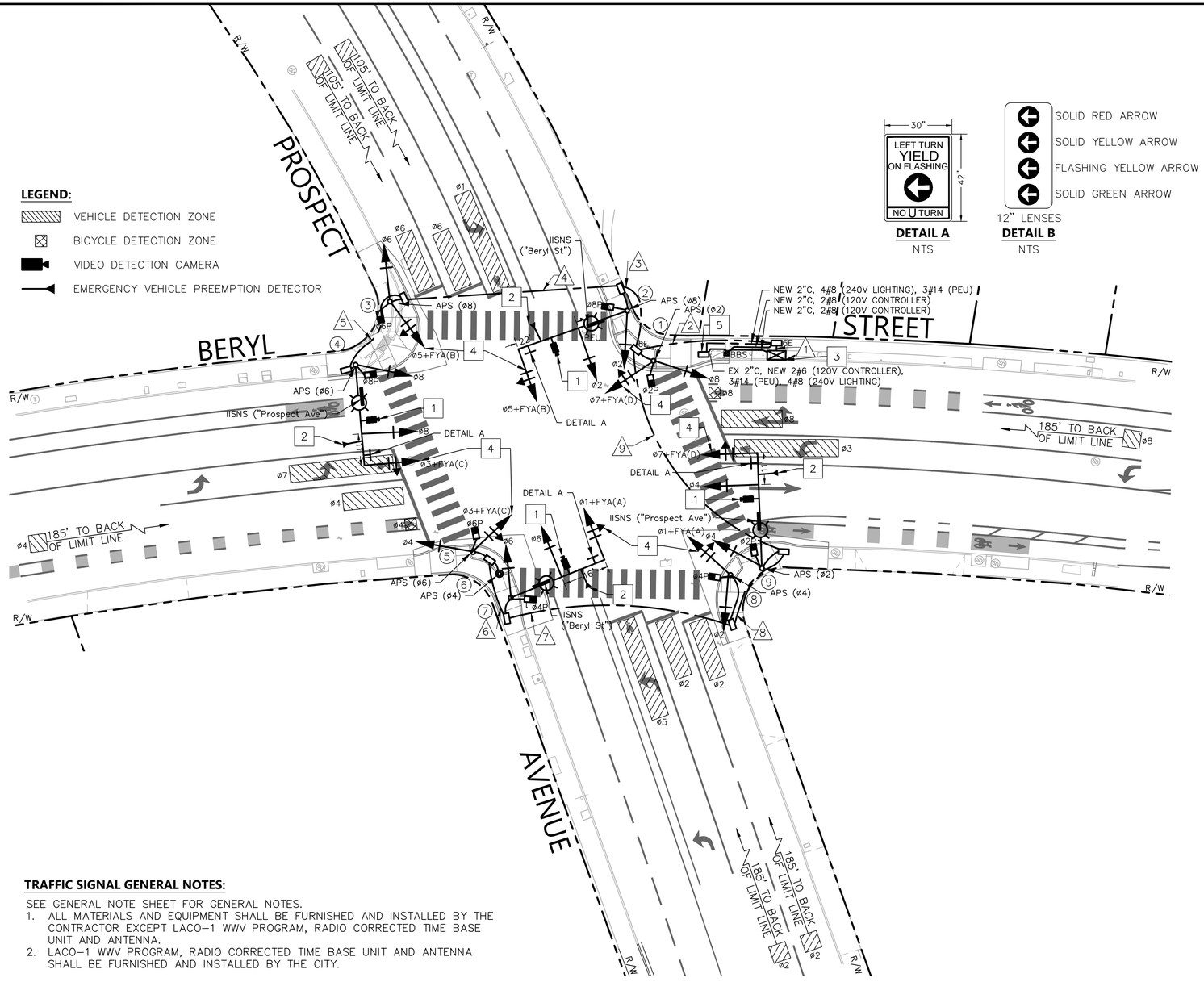
TRAFFIC SIGNAL
PROSPECT AVENUE & ANITA STREET

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	38 OF 58 SHEETS	E-02

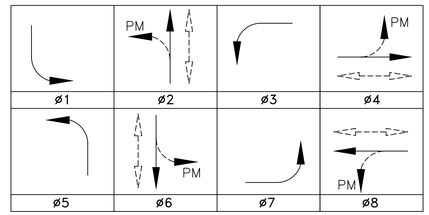


DETAIL A
NTS

12" LENSES

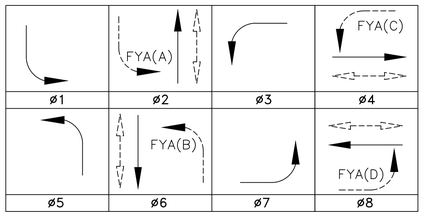
DETAIL B
NTS

EXISTING PHASE DIAGRAM

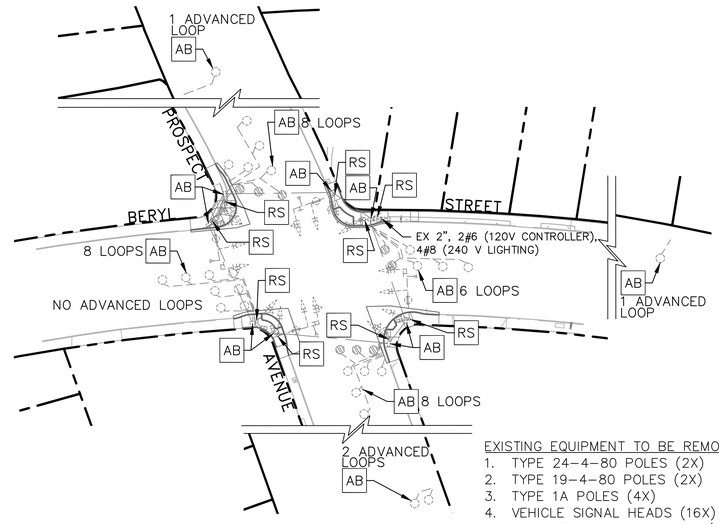


OPERATION:
PERMITTED LEFT TURN FOR ø2, ø4, ø6, & ø8
PROTECTED LEFT TURN FOR ø1, ø3, ø5, & ø7
PM = PERMITTED

PROPOSED PHASE DIAGRAM



OPERATION:
PROTECTED LEFT TURN FOR ø1, ø3, ø5, & ø7
PERMITTED OPPOSING LEFT TURN FOR ø2, ø4, ø6, & ø8
FYA = FLASHING YELLOW ARROW



REMOVAL PLAN
1"=50'

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 24-4-80 POLES (2X)
2. TYPE 19-4-80 POLES (2X)
3. TYPE 1A POLES (4X)
4. VEHICLE SIGNAL HEADS (16X)
5. PEDESTRIAN SIGNAL HEADS (8X)
6. EMERGENCY VEHICLE PREEMPTION EVP (4X)
7. IISNS (4X)
8. R10-12 STREET SIGNS (4X)
9. TRAFFIC SIGNAL CONTROLLER (1X)

EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON CONSTRUCTION NOTES
2. ALL LOOP DETECTORS

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.
1. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR EXCEPT LACO-1 WWV PROGRAM, RADIO CORRECTED TIME BASE UNIT AND ANTENNA.
2. LACO-1 WWV PROGRAM, RADIO CORRECTED TIME BASE UNIT AND ANTENNA SHALL BE FURNISHED AND INSTALLED BY THE CITY.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROLUNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. FURNISH AND INSTALL NEW 4-SECTION SIGNAL HEAD. SEE DETAIL B.
5. WHEN NEW SIGNAL IS READY TO BE ACTIVATED, SALVAGE EXISTING SIGNAL CONTROLLER AND DEMO EXISTING FOUNDATION. PRESERVE THE EXISTING ELECTRICAL CONDUIT RUN BETWEEN THE CONTROLLER AND SERVICE CABINET. INSTALL NO. 5 PULL BOX AT THE LOCATION OF THE PREVIOUS CONTROLLER'S FOUNDATION. RUN NEW WIRES TO THE SERVICE CABINET, NEW SIGNAL CONTROLLER, AND 6E PULL BOX AS SHOWN.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

N

20 0 20 40
scale 1" = 20' feet

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & BERYL STREET

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'
APPROVED BY: ANDREW S. WINJE, P.E. CITY ENGINEER		DATE:
PROJECT NO. 41490	SHEET NO. 39 OF 58 SHEETS	DRAWING NO. E-03

DRAWING: \\pkf-ns\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-17-rb-ts-pros-01.dwg PLOTTED: 2/6/2026 10:19 AM

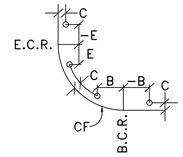
CONDUCTOR SCHEDULE

WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ7, FYA(D), Φ8, Φ2P	1	1							
	②	Φ2, Φ5, FYA(B), Φ8P	1	1	1						
	③	Φ5, FYA(B), Φ6, Φ6P	1	1	1	1					
	④	Φ3, FYA(C), Φ8, Φ8P	1	1	1	1	1				
	⑤	Φ3, FYA(C), Φ4, Φ6P	1	1				1	1	1	1
	⑦	Φ1, FYA(A), Φ6, Φ4P	1	1					1	1	1
	⑧	Φ1, FYA(A), Φ2, Φ4P	1	1						1	1
	⑨	Φ4, Φ7, FYA(D), Φ2P	1	1							1
		TOTAL	8	8	3	2	1	1	2	3	4
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	①	APS (Φ2)	1	1							
	②	APS (Φ8)	1	1	1						
	③	APS (Φ8)	1	1	1	1					
	④	APS (Φ6)	1	1	1	1	1				
	⑤	APS (Φ6)	1	1				1	1	1	1
	⑥	APS (Φ4)	1	1					1	1	1
	⑧	APS (Φ4)	1	1						1	1
	⑨	APS (Φ2)	1	1							1
		TOTAL	8	8	3	2	1	1	2	3	4
#14 AWG	PEU			3	3						
#12 AWG	IISNS			2	2	2	2		2	2	2
#10 AWG	LED LUMINARIES			2	2	2	2		2	2	2
	SIGNAL COMMON		1	1	1	1	1	1	1	1	1
	TOTAL		1	3	3	3	3	1	3	3	3
VIDEO DETECTION POWER AND VIDEO			4	4	2	1	1		1	1	2
EMERGENCY VEHICLE PREEMPTION			4	4	2	1	1		1	1	2
CONDUIT SIZE (IN.)			2–3	2–3	3	3	3	3	3	3	3
PERCENT FILL			14%	15%	15%	9%	7%	2%	9%	10%	16%

POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø2	←	–	0.95'	2.6'	
②	26–4–100	30'	40'	12'	113W*	Beryl St	SV–1–T	MAS–4B MAS	SP–1–T	ø8	←	–8.4'	–	6.1'	INSTALL VIDEO DETECTION SYSTEM, EVP AND DETAIL A SIGN ON S.M.A. INSTALL PEU ON L.M.A. SEE CONSTRUCTION NOTE 5.
③	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø8	→	–	–6.5'	6.9'	
④	24–4–100	30'	35'	12'	166W*	Prospect Ave	SV–1–T	MAS–4B MAS	SP–1–T	ø6	←	–8.6'	–	3.2'	INSTALL VIDEO DETECTION SYSTEM, EVP AND DETAIL A SIGN ON S.M.A. SEE CONSTRUCTION NOTE 5.
⑤	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø6	←	–	1.5'	2.65'	
⑥	PBA POST	–	–	–	–	–	–	–	–	ø4	→	1.35'	–	4.15'	
⑦	24–4–100	30'	35'	12'	113W*	Beryl St	SV–1–T	MAS–4B MAS	SP–1–T	–	–	–7.8'	–	3.15'	INSTALL VIDEO DETECTION SYSTEM, EVP AND DETAIL A SIGN ON S.M.A. SEE CONSTRUCTION NOTE 5.
⑧	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø4	→	–	12.7'	2.8'	
⑨	26–4–100	30'	40'	12'	166W*	Prospect Ave	SV–1–T	MAS–4B MAS	SP–1–T	ø2	←	4.7'	–	8.55'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND DETAIL A SIGN ON S.M.A. SEE CONSTRUCTION NOTE 5.

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2

TRAFFIC SIGNAL
PROSPECT AVENUE & BERYL STREET

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	40 OF 58 SHEETS	E-04

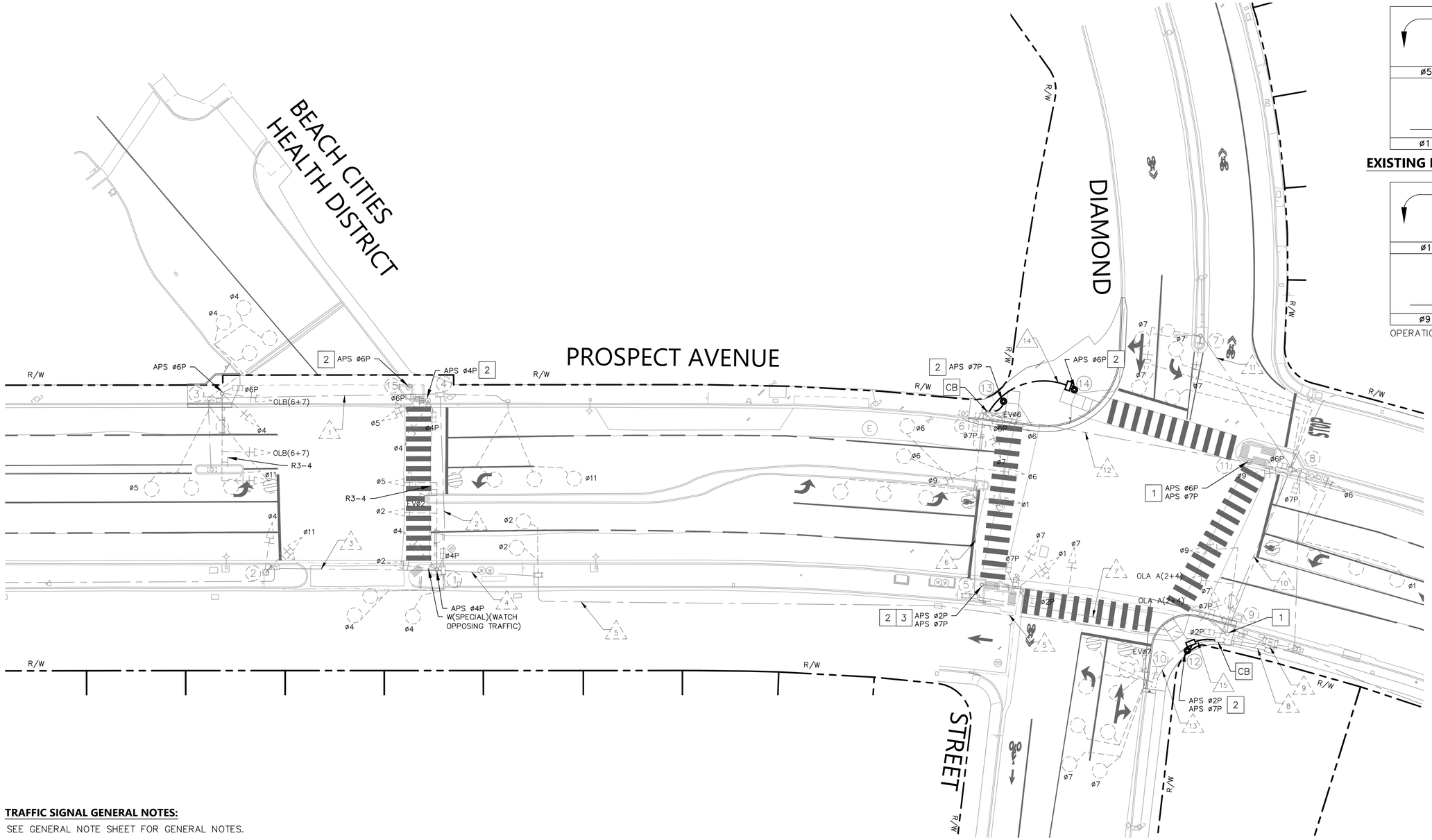
EXISTING PHASE DIAGRAM TO REMAIN: BCHD

		NOT USED	
ø5	ø2	ø3	ø4
		NOT USED	NOT USED
ø11	ø6	ø7	ø8

EXISTING PHASE DIAGRAM TO REMAIN: DIAMOND

		NOT USED	
ø1	ø2	ø3	ø7
		NOT USED	NOT USED
ø9	ø6	ø7	ø8

OPERATION: PROTECTED LEFT TURN FOR ø1, ø5, ø9, & ø11



TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.

CONSTRUCTION NOTES:

1. REMOVE EXISTING APS. FURNISH AND PLUG HOLE.
2. APS UNITS SHALL HAVE LOCATOR TONE, VIBROTACTILE WALK INDICATION, AND VOICE FEEDBACK ENABLED.
3. REMOVE EXISTING ø2P APS AND REINSTALL ON 12" EXTENSION WITH 90° BRACKET. ARROW SHALL BE PARALLEL TO CROSSWALK.

20 0 20 40
scale 1" = 20' feet

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVE & DIAMOND ST-BEACH CITIES

DRAWN	CHECKED	SCALE
RR	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	41 OF 58 SHEETS	E-05

DRAWING: \\bkf-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-17-rb-ts-pros-01.dwg PLOTTED: 2/6/2026 10:20 AM

CONDUIT AND CONDUCTOR SCHEDULE

Wire	Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
#14 AWG	Φ1							3	6	6	3		3			
	Φ2								3	3	3		3			
	Φ7							3	6	6	3	3				
	Φ9								3	3	3					
	ΦOLA (2+4)								3	3						
	Φ2P							2	2	2						
	Φ7P							2	4	4	2		2			
	Φ7 BPB								2	2	1		1			
	Φ2 PPB							1	1	1						1N
	Φ6 PPB						1	1	2		1				1N	
	Φ7 PPB							1	2	2	1		1			1N
	PPB COMMON						1N	1	1	1	1		1		1N	1N
	IISNS							1	2	2	1		1			
	SPARES							3	6	6	3	3	3			
	Total	0	0	0	0	0	2	18	43	41	22	6	15	0	2N	3N
#10 AWG	Φ2				3	3										
	Φ4	3	3	6	3	3										
	Φ5		3		3	3										
	Φ11	3	3	6	3	3										
	ΦOLB (6+7)	3	3		3	3										
	Φ4P		2		2	2										
	Φ6P	2	2		2	2										
	Φ2 BPB			1	1	1										
	Φ6 BPB		1		1	1										
	Φ4 PPB		1		1	1										
	Φ6 PPB	1	1		1	1										
	PPB COMMON	1	1	1	1	1										
	IISNS	1	1		1	1										
	SPARES	3	3	3	3	3										
	SIGNAL & SIGN COM.	1	1	1	2	2		2	4	4	2	1	1			
	LUMINAIRES	2	2		2	2		2	8	8	4	2	2			
		20	27	18	32	32	0	4	12	12	6	3	3	0	0	0
DLC	Φ1								1	1	1					
	Φ2			2	2	4		4	4	4						
	Φ4			1	2	2		2	2	2						
	Φ5	1	1		1	1		1	1	1						
	Φ6						2	2	2	4						
	Φ7								2	2	1			2		
	Φ9						1	1	1	1						
	Φ11		1		1	1		1	1	1						
	Total	1	2	3	6	8	3	11	14	16	2	0	0	2	0	0
Video Detection Power and Video														1		
Emergency Vehicle Preemption		1	1	1	1	1		1	2	2	1		1			
Conduit Size (in.)		2.5	2.5	2.5	2.5	3	2.5	3	2–3	2–3	2.5	2.5	2.5	2.5	2	2
Percent Fill		14%	0%	13%	22%	15%	1%	8%	10%	9%	14%	4%	10%	4%	1%	2%

△ EXISTING CONDUIT

△ NEW CONDUIT

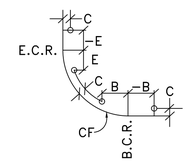
POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
(1)	24–4–70	30'	35'	12'	110W*	BEACH CITIES HEALTH DISTRICT	SV–1–T	MAS MAS	SP–1–T	ø4	←	6.0'	–	2.5'	EXISTING R3–4 ON S.M.A. TO REMAIN.
(2)	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	–	–	–	5.0'	4.0'	EXISTING BIKE PUSH BUTTON FACING STREET TO REMAIN.
(3)	24–4–70	30'	35'	12'	110W*	BEACH CITIES HEALTH DISTRICT	SV–2–T	MAS MAS	SP–1–T	ø6	←	9'	–	2.5'	EXISTING R3–4 ON S.M.A. TO REMAIN.
(4)	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø4	→	–	3.0'	2.5'	EXISTING BIKE PUSH BUTTON FACING STREET TO REMAIN. SEE CONSTRUCTION NOTE 2.
(5)	24–3–70	30'	35'	12'	110W*	Prospect Ave	SV–2–T	MAS MAS	SP–1–T	ø2 ø7	← →	–	0'	2.5'	EXISTING BIKE PUSH BUTTON FACING STREET TO REMAIN. SEE CONSTRUCTION NOTES 2 AND 3.
(6)	24–4–70	30'	35'	12'	110W*	Diamond St	SV–2–T	–	SP–1–T	–	–	10'	–	2.5'	EXISTING BIKE PUSH BUTTON FACING STREET TO REMAIN.
(7)	17D–1–70	30'	18'	12'	110W*	–	SV–1–T	MAS MAS	SP–1–T	–	–	–	0'	2'	
(8)	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	–	–	–	0'	2'	EXISTING BIKE PUSH BUTTON FACING STREET TO REMAIN.
(9)	24–4–70	30'	35'	–	110W*	Diamond St	SV–2–T	MAS MAS	SP–1–T	–	–	5.0'	–	2.5'	
(10)	15	30'	–	12'	110W*	–	–	–	SP–1–T	–	–	–	7.0'	2.5'	EXISTING BIKE PUSH BUTTON FACING STREET TO REMAIN. REMOVE EXISTING PUSH BUTTONS AND PLUG HOLE. SEE CONSTRUCTION NOTE 1.
(11)	2	–	–	–	–	–	–	–	–	ø6 ø7	→ ←	–	–	1.0'	
(12)	2	–	–	–	–	–	–	–	–	ø2 ø7	→ ←	0.4'	–	14.5'	SEE CONSTRUCTION NOTE 2.
(13)	2	–	–	–	–	–	–	–	–	ø7	←	–14.8'	–	8.4'	SEE CONSTRUCTION NOTE 2.
(14)	2	–	–	–	–	–	–	–	–	ø6	→	–	14.6'	11.0'	SEE CONSTRUCTION NOTE 2.
(15)	2	–	–	–	–	–	–	–	–	ø6	→	–	6.0'	3.8'	SEE CONSTRUCTION NOTE 2.

IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* EXISTING WATTAGE IS ESTIMATED.
** ACCESSIBLE PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).

◌ EXISTING POLE

○ NEW POLE



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

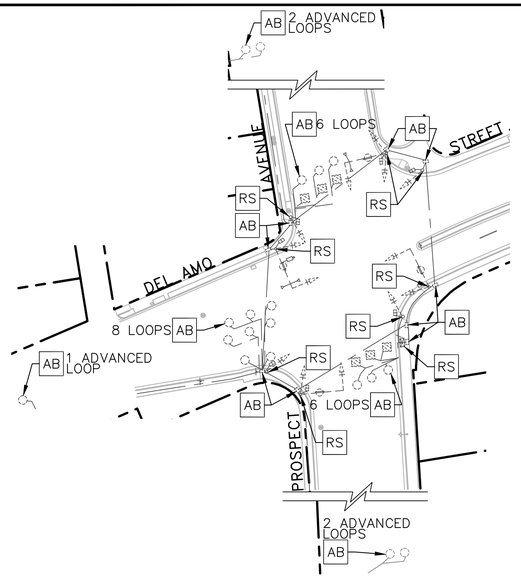
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVE & DIAMOND ST-BEACH CITIES

DRAWN	CHECKED	SCALE
RR	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	42 OF 58 SHEETS	E-06



REMOVAL PLAN
1"=50'

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 1A POLES (4X)
2. TYPE 19-2-129 POLES (4X)
3. VEHICLE SIGNAL HEADS (12X)
4. PEDESTRIAN SIGNAL HEADS (8X)
5. EMERGENCY VEHICLE PREEMPTION EVP (2X)
6. CAMERA (1X)
7. IISNS (4X)
8. TRAFFIC SIGNAL CONTROLLER (1X)

EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION NOTES
2. ALL DETECTORS LOOPS

LEGEND:

- VEHICLE DETECTION ZONE
- BICYCLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE PREEMPTION DETECTOR

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.

EXISTING PHASE DIAGRAM

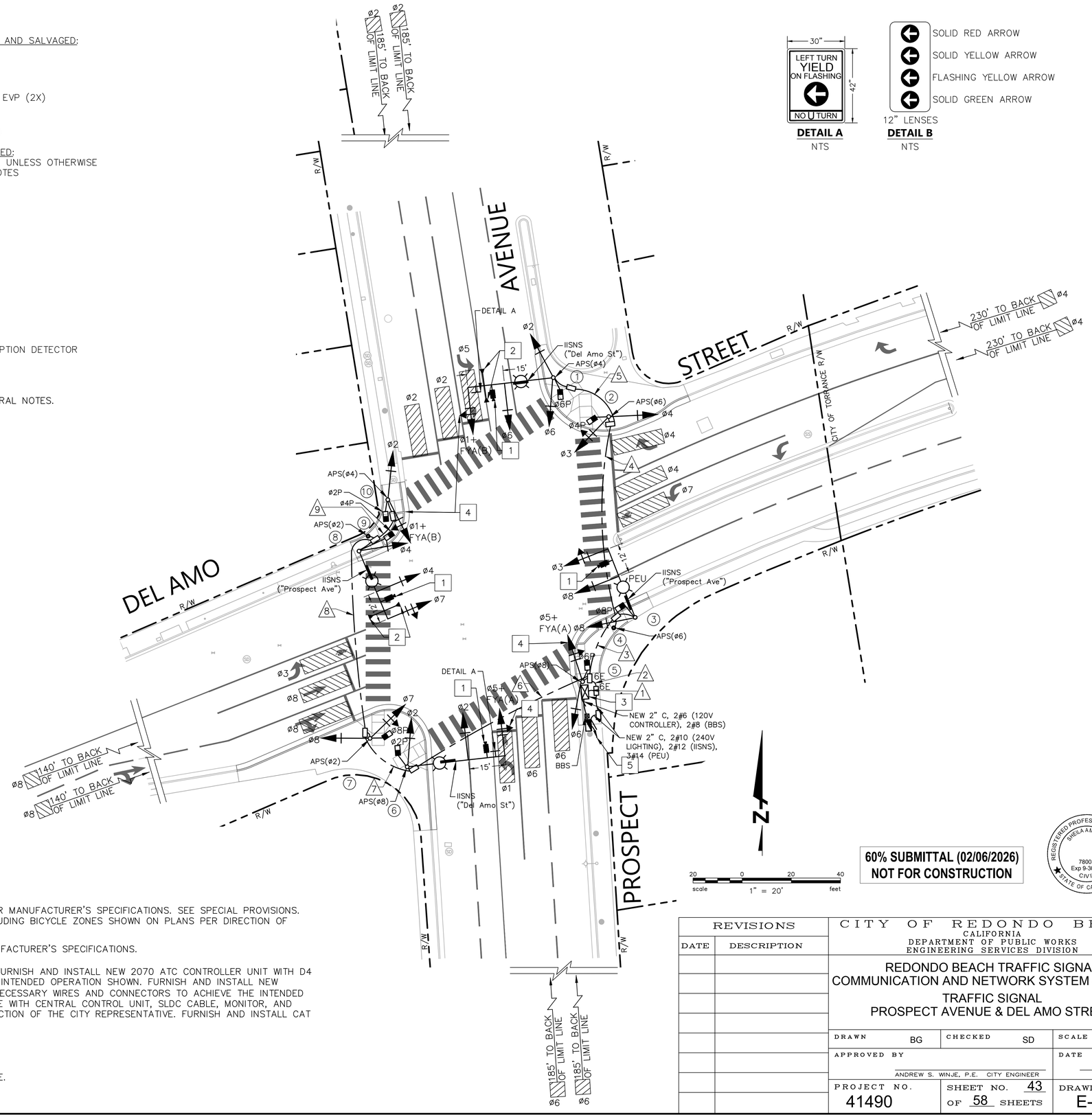
NOT USED	PM		
ø1	ø2	ø3	ø4
NOT USED	PM		
ø5	ø6	ø7	ø8

OPERATION:
SPLIT PHASE.
PROTECTED LEFT TURN FOR ø3, ø7.
PERMITTED OPPOSING LEFT TURN FOR ø2, ø6.

PROPOSED PHASE DIAGRAM

	FYA(B)		
ø1	ø2	ø3	ø4
	FYA(A)		
ø5	ø6	ø7	ø8

OPERATION:
PROTECTED LEFT TURN FOR ø1, ø3, ø5, & ø7.
LEADING LEFT TURN FOR ø3, LAGGING LEFT TURN FOR ø7
PERMITTED OPPOSING LEFT TURN FOR ø2 & ø6.
FYA = FLASHING YELLOW ARROW



DETAIL A
NTS

DETAIL B
NTS

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. FURNISH AND INSTALL NEW 4-SECTION SIGNAL HEAD. SEE DETAIL B.
5. INSTALL NEW SERVICE CABINET TO SERVICE POINT; FINAL DESIGN WILL BE IN COORDINATION WITH SCE.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2

TRAFFIC SIGNAL
PROSPECT AVENUE & DEL AMO STREET

DRAWN	CHECKED	SCALE
BG	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER

DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	43 OF 58 SHEETS	E-07

DRAWING: \\lat-nb\vol4\2024\241992_redondo_beach_traffic_signal_communication\eng-1\dwg\sheets\241992-17-rb-ts-pros-01.dwg PLOTTED: 2/6/2026 10:20 AM

CONDUIT AND CONDUCTOR SCHEDULE

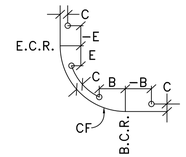
WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ1, FYA(A), Φ6, Φ6P	1	1	1	1	1				
	②	Φ3, Φ4, Φ4P	1	1	1	1					
	③	Φ3, Φ8, Φ8P	1	1	1						
	⑤	Φ5, FYA(B), Φ6, Φ6P	1	1							
	⑥	Φ2, Φ5, FYA(B), Φ2P	1	1				1			
	⑦	Φ7, Φ8, Φ8P	1	1				1	1		
	⑧	Φ4, Φ7, Φ4P	1	1				1	1	1	
	⑩	Φ1, FYA(A), Φ2, Φ2P	1	1				1	1	1	1
		TOTAL	8	8	3	2	1	4	3	2	1
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	①	APS (Φ4); Φ2	1	1	1	1	1				
	②	APS (Φ6)	1	1	1	1					
	④	APS (Φ6)	1	1	1						
	⑤	APS (Φ8)	1	1							
	⑥	APS (Φ8)	1	1				1			
	⑦	APS (Φ2)	1	1				1	1		
	⑨	APS (Φ2)	1	1				1	1	1	
	⑩	APS (Φ4)	1	1				1	1	1	1
		TOTAL	8	8	3	2	1	4	3	2	1
#14 AWG		PEU		3	3						
#12 AWG		IISNS		2	2	2	2	2	2	2	
#10 AWG		LED LUMINARIES		2	2	2	2	2	2	2	
		SIGNAL COMMON	1	1	1	1	1	1	1	1	1
		TOTAL	1	3	3	3	3	3	3	3	1
VIDEO DETECTION POWER AND VIDEO			4	4	2	1	1	2	1	1	
EMERGENCY VEHICLE PREEMPTION			4	4	2	1	1	2	1	1	
CONDUIT SIZE (IN.)			2–3	2–3	3	3	3	3	3	3	3
PERCENT FILL			14%	15%	15%	9%	7%	16%	10%	9%	2%

ALL CABLES AND CONDUITS ARE NEW

POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	24–3–100	30'	35'	12'	166W*	Del Amo St	SV–2–T	MAS MAS	SP–1–T	ø4	←	–6.0'	–	3.9'	INSTALL VIDEO DETECTION SYSTEM AND EVP ON S.M.A. SEE CONSTRUCTION NOTE 5. MOUNT ø2 SIGNAL HEAD AT 17' ABOVE GRADE.
②	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø6	→	–	5.7'	5.9'	
③	19–3–100	30'	30'	12'	113W*	Prospect Ave	SV–1–T	MAS MAS	SP–1–T	–	–	–	–15.5'	5.1'	INSTALL VIDEO DETECTION SYSTEM ON S.M.A. INSTALL PEU ON L.M.A. SEE CONSTRUCTION NOTE 5.
④	2	3'–6"	–	–	–	–	–	–	–	ø6	←	–	–5.8'	5.2'	
⑤	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø8	→	–9.9'	–	2.8'	
⑥	26–3–100	30'	40'	12'	166W*	Del Amo St	SV–1–T	MAS MAS	SP–1–T	ø8	←	–8.9'	–	8.3'	INSTALL VIDEO DETECTION SYSTEM ON S.M.A. SEE CONSTRUCTION NOTE 5.
⑦	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø2	→	–	–5.9'	8.9'	
⑧	19–3–100	30'	30'	12'	166W*	Prospect Ave	SV–1–T	MAS MAS	SP–1–T	–	–	–	–9.2'	2.5'	INSTALL VIDEO DETECTION SYSTEM AND EVP ON S.M.A. SEE CONSTRUCTION NOTE 5.
⑨	2	3'–6"	–	–	–	–	–	–	–	ø2	←	–	–3.4'	6.6'	
⑩	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø4	→	–0.7'	–	6.0'	

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

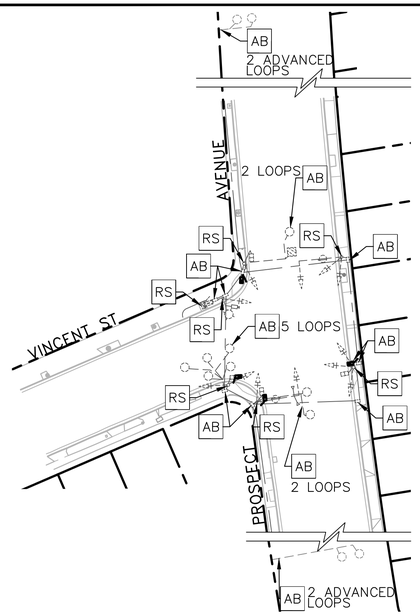
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & DEL AMO STREET

DRAWN	CHECKED	SCALE
BG	SD	1" = 20'

APPROVED BY _____ DATE _____
ANDREW S. WINJE, P.E. CITY ENGINEER

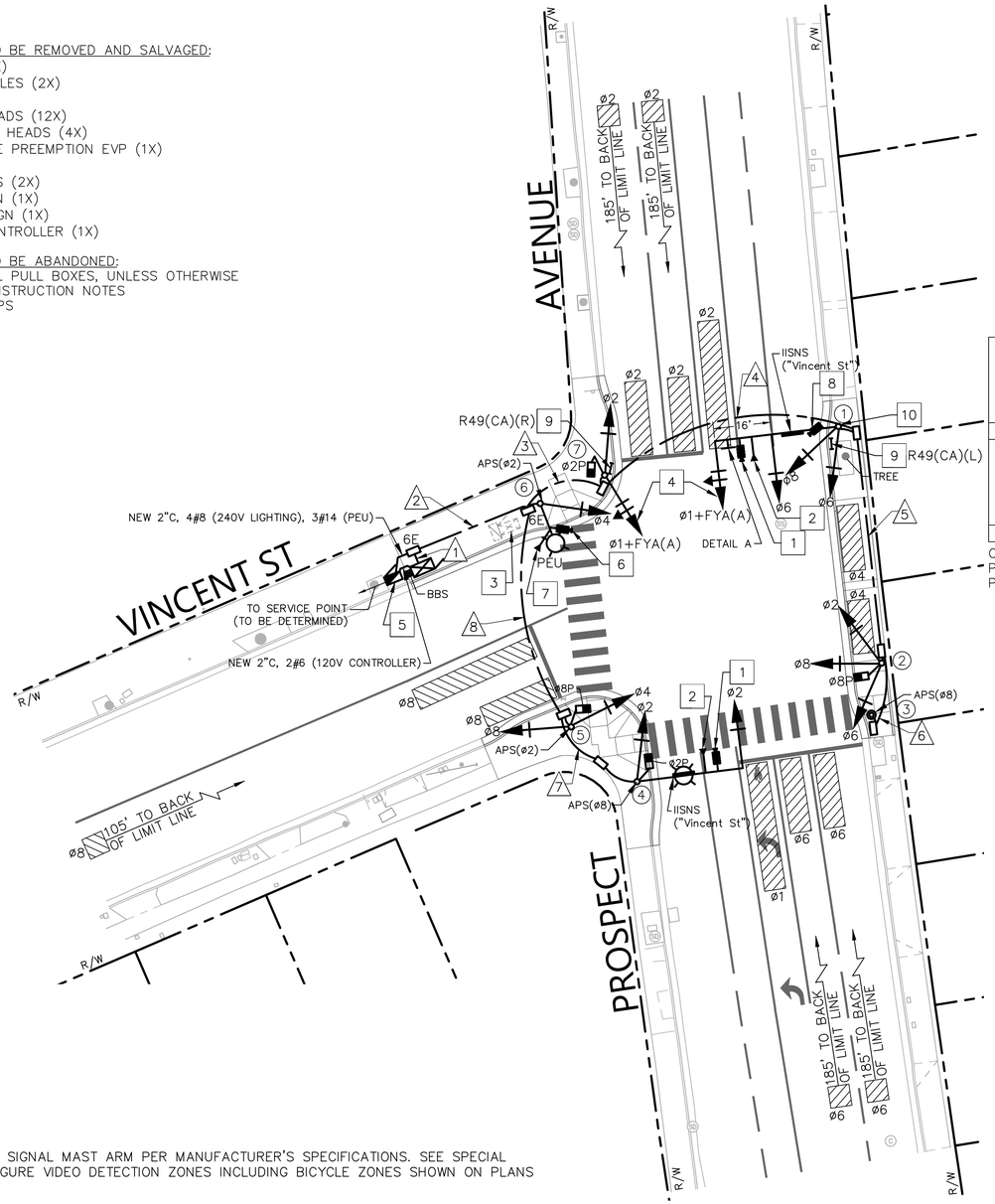
PROJECT NO.	SHEET NO.	DRAWING NO.
41490	44 OF 58 SHEETS	E-08



REMOVAL PLAN
1"=50'

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 1A POLES (3X)
2. TYPE 19–2–129 POLES (2X)
3. TYPE 15 (1X)
4. VEHICLE SIGNAL HEADS (12X)
5. PEDESTRIAN SIGNAL HEADS (4X)
6. EMERGENCY VEHICLE PREEMPTION EVP (1X)
7. IISNS (2X)
8. R9–3 STREET SIGNS (2X)
9. R9–3B STREET SIGN (1X)
10. R49(CA) STREET SIGN (1X)
11. TRAFFIC SIGNAL CONTROLLER (1X)

EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION NOTES
2. ALL DETECTOR LOOPS



LEGEND:
- VEHICLE DETECTION ZONE
- BICYCLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE PREEMPTION DETECTOR
- PEDESTRIAN BARRICADE

EXISTING PHASE DIAGRAM

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

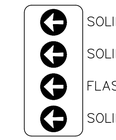
OPERATION:
PERMITTED LEFT TURN FOR ø2, ø4, ø6, & ø8
PM = PERMITTED

PROPOSED PHASE DIAGRAM

	FYA(A) PM	NOT USED	PM
ø1	ø2	ø3	ø4
NOT USED		NOT USED	PM
ø5	ø6	ø7	ø8

OPERATION:
PROTECTED LEFT TURN FOR ø1
PERMITTED LEFT TURN FOR ø2, ø4, & ø8
PERMITTED OPPOSING LEFT TURN (FYA) FOR ø2
FYA = FLASHING YELLOW ARROW

DETAIL A
NTS



12" LENSES

DETAIL B
NTS

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. FURNISH AND INSTALL NEW 4–SECTION SIGNAL HEAD. SEE DETAIL B.
5. INSTALL NEW SERVICE CABINET TO SERVICE POINT; FINAL DESIGN WILL BE IN COORDINATION WITH SCE.
6. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
7. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON LUMINAIRE MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
8. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA WITH A 5' RISER ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
9. INSTALL PEDESTRIAN BARRICADE.
10. CONTRACTOR SHALL WORK WITH THE CITY PRIOR TO THE INSTALLATION OF THE TRAFFIC SIGNAL AND SHALL COORDINATE WITH THE CITY ARBORIST ON TREE CONDITION.

N

20 0 20 40
scale 1" = 20' feet

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & VINCENT STREET

DRAWN KW/MO	CHECKED SD	SCALE 1" = 20'
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE
PROJECT NO. 41490	SHEET NO. 45 OF 58 SHEETS	DRAWING NO. E-09

CONDUCTOR SCHEDULE

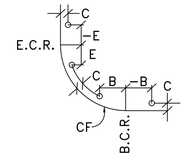
WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ1, FYA(A), Φ6, Φ8	1	1	1	1				
	②	Φ2, Φ6, Φ8 Φ8P	1	1	1	1	1			
	④	Φ2, Φ2P	1	1					1	1
	⑤	Φ4, Φ8, Φ8P	1	1						1
	⑥	Φ4	1	1						
	⑦	Φ2, Φ4, FYA(A), Φ2P	1	1	1					
		TOTAL	6	6	3	2	1	0	1	2
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	③	APS (Φ8)	1	1	1	1	1			
	④	APS (Φ8)	1	1					1	1
	⑤	APS (Φ2)	1	1						1
	⑥	APS (Φ2)	1	1						
		TOTAL	4	4	1	1	1	0	1	2
#14 AWG	PEU			1						
#12 AWG	IISNS			2	2	2			2	2
#10 AWG	LED LUMINARIES			2	2				2	2
	SIGNAL COMMON		1	1	1	1	1	1	1	1
	TOTAL		1	3	3	1	1	1	3	3
VIDEO DETECTION POWER AND VIDEO			4	4	2	2			1	1
EMERGENCY VEHICLE PREEMPTION			3	3	1	1			1	1
CONDUIT SIZE (IN.)			2–3	2–3	3	3	3	3	3	3
PERCENT FILL			10%	11%	10%	9%	2%	1%	7%	9%

ALL CABLES AND CONDUITS ARE NEW

POLE SCHEDULE

No.	TYPE	STANDARD HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	23–4–100	30'	35'	–	–	Vincent St	SV–2–T	MAS–4B MAS	–	–	–	–	–	3.2'	INSTALL VIDEO DETECTION SYSTEM (ONE ON SMA AND ONE ON SMA WITH A 5' RISER), EVP, AND DETAIL "A" SIGN ON S.M.A. SEE CONSTRUCTION NOTE 5 AND 10.
②	1A	10'	–	–	–	–	TV–3–T	–	SP–1–T	–	–	–	–	8.3'	
③	PBA POST	–	–	–	–	–	–	–	–	ø8	→	–	–	2.4'	
④	19–4–100	30'	30'	12'	113W*	Vincent St	SV–1–T	MAS	SP–1–T	ø8	←	–8.0'	–	9.5'	INSTALL VIDEO DETECTION SYSTEM AND EVP ON S.M.A.
⑤	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø2	→	–	–3.3'	6.2'	
⑥	15TS (CUSTOM)	25'	–	12'	113W*	–	SV–1–T	–	–	ø2	←	–9.8'	–	7.35'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND PEU ON L.M.A.
⑦	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	–	–	–	3.7'	2.7'	SEE CONSTRUCTION NOTE 5.

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** ACCESSIBLE PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

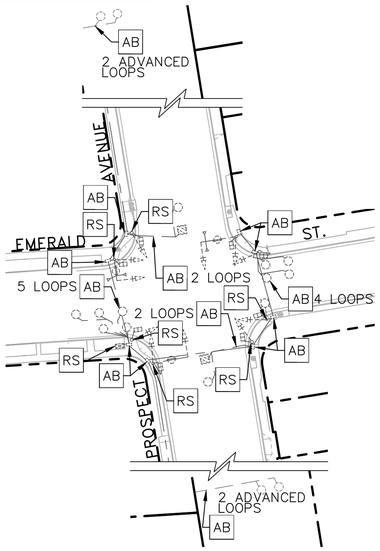
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & VINCENT STREET

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	46 OF 58 SHEETS	E-10

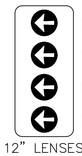


REMOVAL PLAN
1"=50'

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 19-2-129 POLES (2X)
2. TYPE 17-2-129 POLE (1X)
3. TYPE 1A POLES (4X)
4. TYPE 15 POLE (1X)
5. VEHICLE SIGNAL HEADS (11X)
6. PEDESTRIAN SIGNAL HEADS (8X)
7. EMERGENCY VEHICLE PREEMPTION EVP (2X)
8. IISNS (3X)
9. STREET NAME SIGNS (2X)
10. TRAFFIC SIGNAL CONTROLLER (1X)

EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION NOTES
2. ALL BIKE DETECTOR LOOPS

DETAIL A
NTS



DETAIL B
NTS

LEGEND:

- VEHICLE DETECTION ZONE
- BICYCLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE PREEMPTION DETECTOR

EXISTING PHASE DIAGRAM

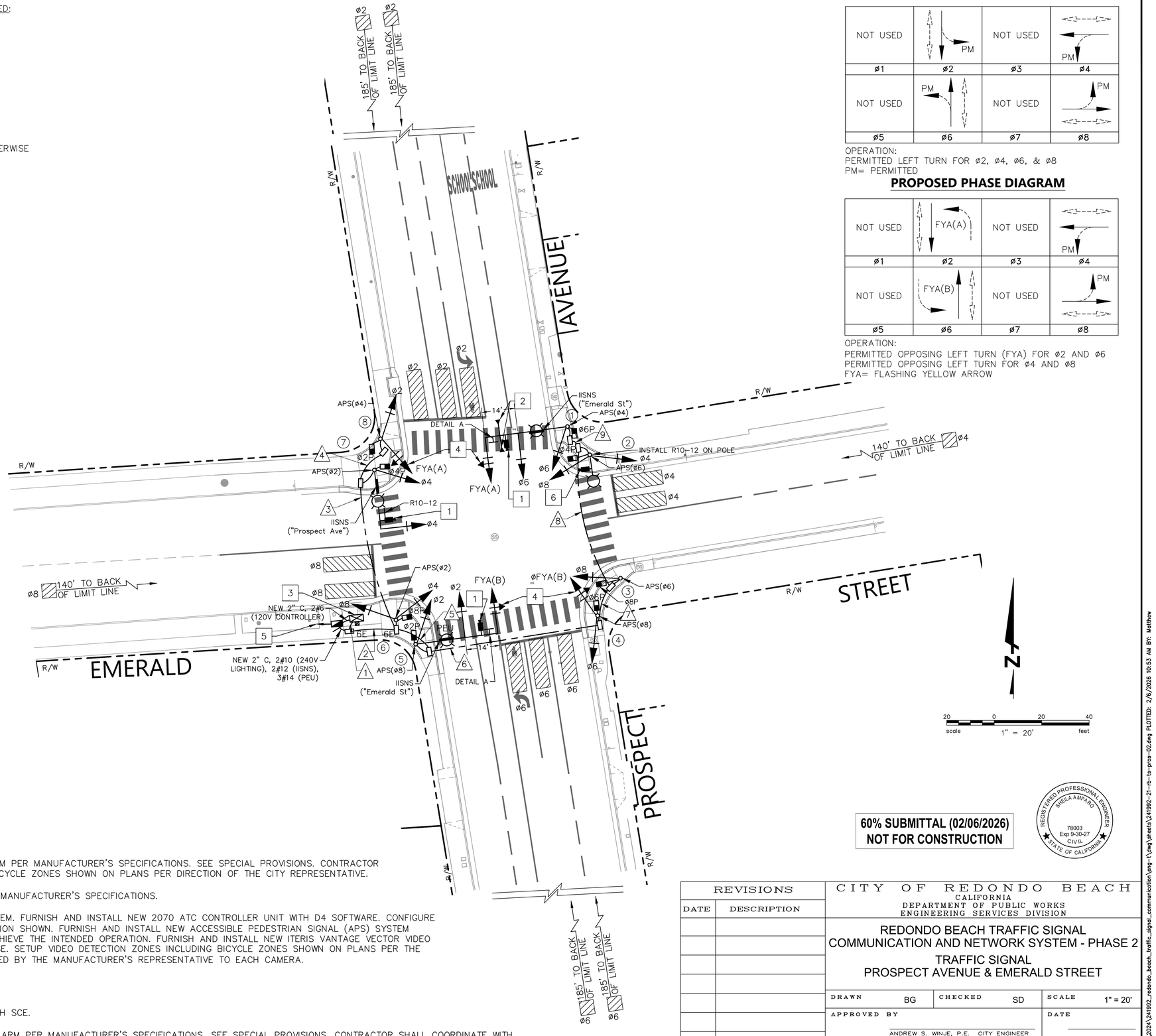
NOT USED	PM	NOT USED	PM
ø1	ø2	ø3	ø4
NOT USED	PM	NOT USED	PM
ø5	ø6	ø7	ø8

OPERATION:
PERMITTED LEFT TURN FOR ø2, ø4, ø6, & ø8
PM= PERMITTED

PROPOSED PHASE DIAGRAM

NOT USED	FYA(A)	NOT USED	PM
ø1	ø2	ø3	ø4
NOT USED	FYA(B)	NOT USED	PM
ø5	ø6	ø7	ø8

OPERATION:
PERMITTED OPPOSING LEFT TURN (FYA) FOR ø2 AND ø6
PERMITTED OPPOSING LEFT TURN FOR ø4 AND ø8
FYA= FLASHING YELLOW ARROW



TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. FURNISH AND INSTALL NEW 4-SECTION SIGNAL HEAD. SEE DETAIL B.
5. INSTALL NEW SERVICE CABINET TO SERVICE POINT; FINAL DESIGN WILL BE IN COORDINATION WITH SCE.
6. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & EMERALD STREET

DRAWN BG	CHECKED SD	SCALE 1" = 20'	
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 47 OF 58 SHEETS	DRAWING NO. E-11	

CONDUCTOR SCHEDULE

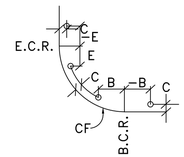
Wire	Pole No.	Phase	1	2	3	4	5	6	7	8	9
12 Wire Conductor Signal Cable (CSC) 12–#14	①	Φ6, FYA(A), Φ6P	1	1			1	1	1	1	1
	②	Φ4, Φ8, Φ4P	1	1			1	1	1	1	
	③	Φ8, Φ8P	1	1			1	1	1		
	④	Φ2, FYA(B), Φ6, Φ6P	1	1			1	1			
	⑤	Φ2, FYA(B), Φ2P	1	1			1				
	⑥	Φ4, Φ8, Φ8P	1	1							
	⑦	Φ4, Φ4P	1	1	1						
	⑧	Φ2, Φ6, FYA(A), Φ2P	1	1	1	1					
		Total	8	8	2	1	5	4	3	2	1
3 Wire Conductor Signal Cable (CSC) 3–#14	①	APS (Φ4)	1	1			1	1	1	1	1
	②	APS (Φ6)	1	1			1	1	1	1	
	③	APS (Φ6)	1	1			1	1	1		
	④	APS (Φ8)	1	1			1	1			
	⑤	APS (Φ8)	1	1			1				
	⑥	APS (Φ2)	1	1							
	⑦	APS (Φ2)	1	1	1						
	⑧	APS (Φ4)	1	1	1	1					
		Total	8	8	2	1	5	4	3	2	1
#14 AWG	PEU			3			3				
#12 AWG	IISNS			2	2		2	2	2	2	2
#10 AWG	LED Luminaries			2	2		2	2	2	2	2
	Singal Common		1	1	1	1	1	1	1	1	1
	Total		1	3	3	1	3	3	3	3	3
Video Detection Power and Video			4	4	1		3	2	2	1	1
Emergency Vehicle Preemption			2	2			2	2	2	2	2
Conduit Size (in.)			2–3	2–3	3	3	3	3	3	3	3
Percent Fill			13%	14%	8%	2%	21%	16%	14%	10%	8%

ALL CABLES AND CONDUITS ARE NEW

POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	**PPB PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	24–4–100	30'	35'	12'	113W*	Emerald St	SV–1–T	MAS–4B MAS	SP–1–T	ø4	←	–6.0'	–	5.8'	INSTALL VIDEO DETECTION SYSTEM, TWO EVP'S (BACK TO BACK), AND DETAIL A SIGN ON SIGNAL MAST ARM. SEE CONSTRUCTION NOTE 4.
②	15TS	30'	–	12'	113W*	–	SV–2–T	–	SP–1–T	ø6	→	–	1.8'	7.5'	INSTALL VIDEO DETECTION SYSTEM ON LIGHTING MAST ARM. INSTALL R10–12 SIGN ABOVE POLE–MOUNTED ø6 SIGNAL HEAD. SEE CONSTRUCTION NOTE 6.
③	1A	10'	–	–	–	–	TV–1–T	–	SP–1–T	ø6	←	–	2.2'	5.4'	
④	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø8	→	0.4'	–	5.6'	
⑤	24–4–100	30'	35'	12'	113W*	Emerald St	SV–1–T	MAS–4B MAS	SP–1–T	ø8	←	–5.7'	–	8.0'	INSTALL VIDEO DETECTION SYSTEM AND DETAIL A SIGN ON SIGNAL MAST ARM. INSTALL PEU ON LIGHTING MAST ARM. SEE CONSTRUCTION NOTE 4.
⑥	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø2	→	–	13.9'	9.2'	
⑦	19–3–100	30'	25'	12'	113W*	Prospect Ave	SV–1–T	MAS	SP–1–T	ø2	←	–	15.6'	7.9'	INSTALL VIDEO DETECTION SYSTEM, TWO EVP'S (BACK TO BACK), AND R10–12 SIGN ON SIGNAL MAST ARM.
⑧	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø4	→	–5.8'	–	8.7'	

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

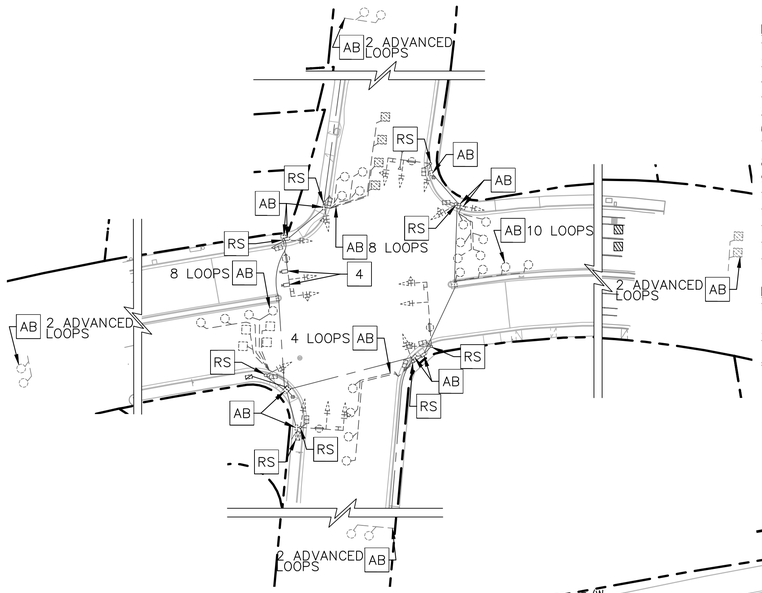
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & EMERALD STREET

DRAWN	CHECKED	SCALE
BG	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	48 OF 58 SHEETS	E-12



REMOVAL PLAN
1"=50'

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 19-3-70 POLES (2X)
2. TYPE 26-3-70 POLES (2X)
3. TYPE 1A POLES (4X)
4. VEHICLE SIGNAL HEADS (13X)
5. PV VEHICLE SIGNAL HEADS (3X)
6. PEDESTRIAN SIGNAL HEADS (8X)
7. EMERGENCY VEHICLE PREEMPTION EVP (1X)
8. IISNS (4X)
9. R73-3 (CA) STREET SIGNS (2X)
10. R73-2 (CA) STREET SIGNS (2X)
11. STREET NAME SIGNS (4X)
12. TRAFFIC SIGNAL CONTROLLER AND CABINET (1X)
13. AUTOMATIC LICENSE PLATE RECOGNITION CAMERAS* (2X)
14. VANTAGE VECTOR BY ITERIS (4X)

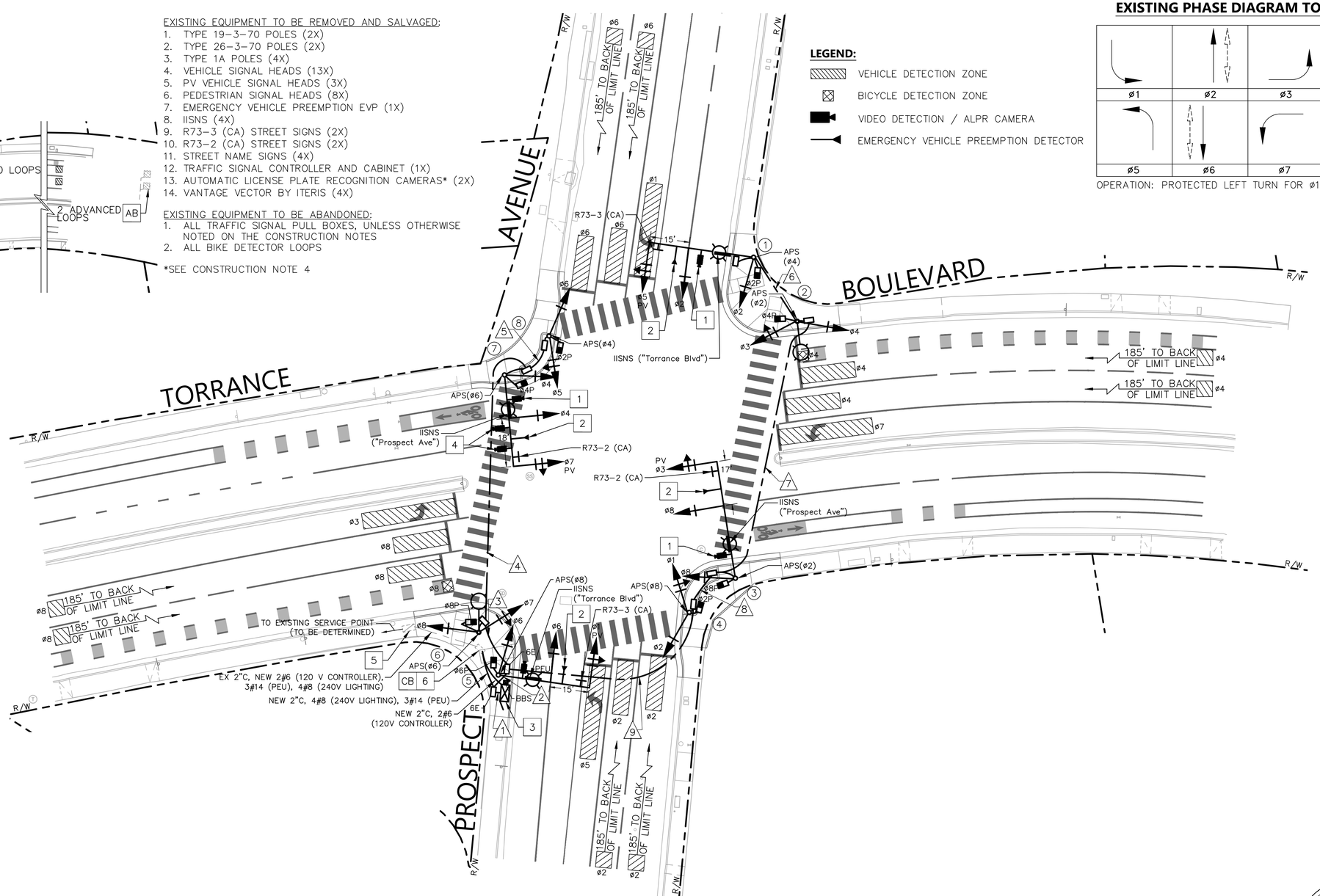
EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION NOTES
2. ALL BIKE DETECTOR LOOPS

*SEE CONSTRUCTION NOTE 4

EXISTING PHASE DIAGRAM TO REMAIN

ø1	ø2	ø3	ø4
ø5	ø6	ø7	ø8

OPERATION: PROTECTED LEFT TURN FOR ø1, ø3, ø5, & ø7



TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. CONTRACTOR TO REMOVE TWO EXISTING ALPR CAMERAS ALONG WITH THEIR MOUNTS AND OTHER EQUIPMENT, AND STORE SAFELY DURING CONSTRUCTION TO PREVENT DAMAGE. CONTRACTOR SHALL INSTALL CAMERAS ONTO THE NEW SIGNAL POLE, SIMILAR TO EXISTING CONDITIONS. ANY DAMAGED CAMERAS OR THEIR RESPECTIVE EQUIPMENT SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
5. EXISTING SERVICE CABINET TO REMAIN.
6. CONTRACTOR TO REPLACE EXISTING NO. 3.5 PULL BOX WITH NO. 5 PULL BOX. MAINTAIN EXISTING ELECTRICAL CONDUIT TO EXISTING SERVICE CABINET.

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & TORRANCE BOULEVARD

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	49 OF 58 SHEETS	E-13

CONDUCTOR SCHEDULE

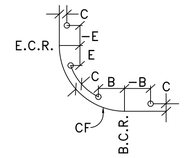
WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ2, Φ5, Φ2P	1	1				1	1	1	1
	②	Φ3, Φ4, Φ4P	1	1					1	1	1
	③	Φ3, Φ8, Φ8P	1	1						1	1
	④	Φ1, Φ2, Φ2P	1	1							1
	⑤	Φ1, Φ6, Φ6P	1	1							
	⑥	Φ7, Φ8, Φ8P	1	1	1						
	⑦	Φ4, Φ7, Φ4P	1	1	1	1					
	⑧	Φ5, Φ6, Φ2P	1	1	1	1	1				
		TOTAL	8	8	3	2	1	1	2	3	4
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	①	APS (Φ4)	1	1				1	1	1	1
	②	APS (Φ2)	1	1					1	1	1
	③	APS (Φ2)	1	1						1	1
	④	APS (Φ8)	1	1							1
	⑤	APS (Φ8)	1	1							
	⑥	APS (Φ6)	1	1	1						
	⑦	APS (Φ6)	1	1	1	1					
	⑧	APS (Φ4)	1	1	1	1	1				
		TOTAL	8	8	3	2	1	1	2	3	4
#14 AWG	PEU			3							
#12 AWG	IISNS			2	2	2		2	2	2	2
#10 AWG	LED LUMINARIES			2	2	2		2	2	2	2
	SIGNAL COMMON	1	1	1	1	1	1	1	1	1	1
	TOTAL	1	3	3	3	1	3	3	3	3	3
VIDEO DETECTION POWER AND VIDEO		4	4	1	1		1	1	2	2	
ALPR POWER AND VIDEO (CAT6E)		2	2	2	2						
EMERGENCY VEHICLE PREEMPTION		4	4	1	1		1	1	2	2	
CONDUIT SIZE (IN.)		2–3	2–3	3	3	3	3	3	3	3	
PERCENT FILL		17%	18%	16%	15%	2%	7%	9%	14%	16%	

ALL CABLES AND CONDUITS ARE NEW

POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	26–4–100	30'	40'	12'	110W*	Torrance Blvd	SV–1–T	MAS MAS	SP–1–T	ø4	←	–12.9'	–	8.2'	INSTALL EVP AND R73–3 (CA) ON S.M.A. INSTALL VIDEO DETECTION SYSTEM ON L.M.A.
②	TS–15	30'	–	–	–	–	SV–2–T	–	SP–1–T	ø2	→	–	–10.8'	3.3'	
③	26–4–100	30'	45'	12'	110W*	Prospect Ave	SV–1–T	MAS MAS	SP–1–T	ø2	←	–6.0'	–	5.65'	INSTALL EVP AND R73–2 (CA) ON S.M.A. INSTALL VIDEO DETECTION SYSTEM ON L.M.A.
④	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø8	←	–	–4.0'	2.5'	
⑤	24–4–100	30'	35'	12'	110W*	Torrance Blvd	SV–1–T	MAS MAS	SP–1–T	ø8	←	–9.9'	–	5.7'	INSTALL EVP AND 73–3 (CA) ON S.M.A. INSTALL VIDEO DETECTION SYSTEM AND PEU ON L.M.A.
⑥	TS–15	30'	–	–	–	–	SV–2–T	–	SP–1–T	ø6	←	–	1.8'	9.35'	
⑦	24–4–100	30'	35'	12'	110W*	Prospect Ave	SV–1–T	MAS MAS	SP–1–T	ø6	←	–6.0'	–	3.2'	INSTALL EVP AND R73–2 (CA) ON S.M.A. REINSTALL ALPR CAMERAS ON S.M.A. INSTALL VIDEO DETECTION SYSTEM ON L.M.A. SEE CONSTRUCTION NOTE 4.
⑧	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø4	←	–	–4.05'	2.5'	

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL. PENDING LIGHTING ANALYSIS.
** ACCESSIBLE PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & TORRANCE BOULEVARD

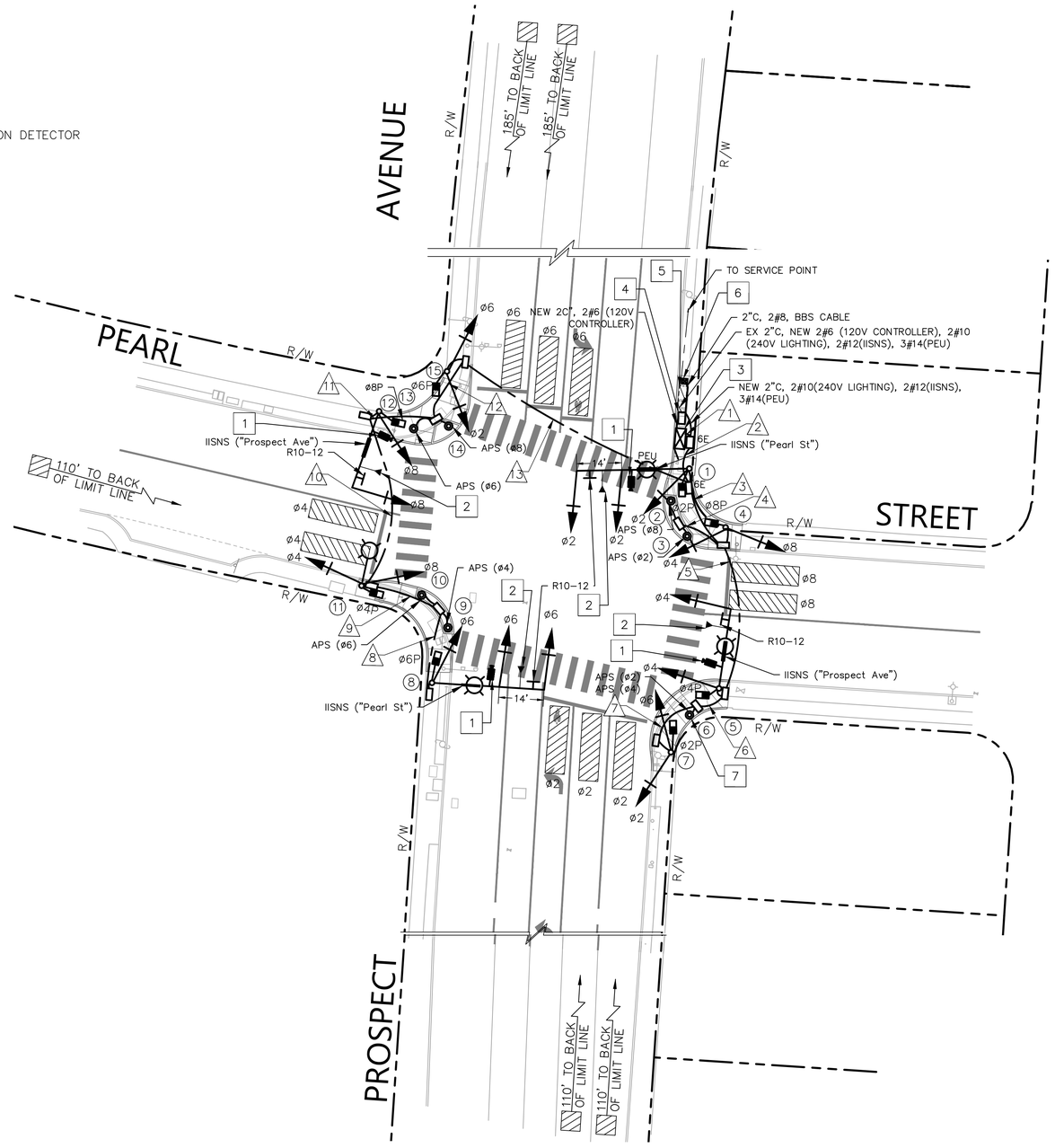
DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

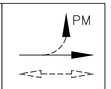
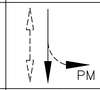
PROJECT NO.	SHEET NO.	DRAWING NO.
41490	50 OF 58 SHEETS	E-14

LEGEND:

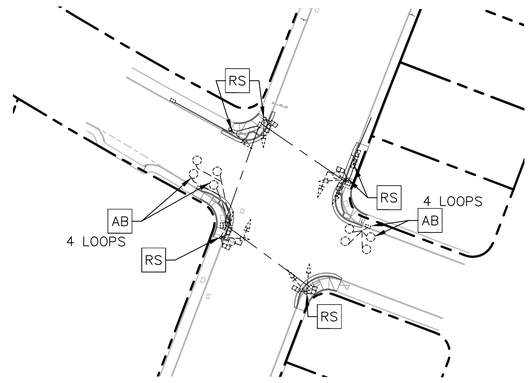
- VEHICLE DETECTION ZONE
- BICYCLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE PREEMPTION DETECTOR



EXISITNG PHASE DIAGRAM TO REMAIN

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

OPERATION:
PERMITTED LEFT TURN FOR ø2, ø6, ø4, ø8



REMOVAL PLAN
1"=50'

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE TYPE III POLES (2X)
2. TYPE 1A POLES (3X)
3. VEHICLE SIGNAL HEADS (10X)
4. PEDESTRIAN SIGNAL HEADS (8X)
5. R26 (CA) STREET SIGNS (1X)
6. STREET NAME SIGNS (2X)
7. TYPE II CABINET (1X)
8. TRAFFIC SIGNAL CONTROLLER (1X)

EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS
2. ALL DETECTOR LOOPS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

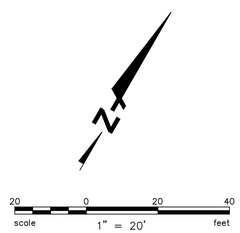
REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION.FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'SREPRESENTATIVE TO EACH CAMERA.
4. CONTRACTOR TO REPLACE EXISTING NO. 3.5 PULL BOX WITH NO. 5 PULL BOX. MAINTAIN EXISTING ELECTRICAL CONDUIT TO EXISTING SERVICE CABINET.
5. EXISTING SERVICE CABINET TO REMAIN.
6. FURNISH AND INSTALL NEW BATTERY BACK UP SYSTEM.
7. APS UNIT(S) SHALL HAVE LOCATOR TONE, VIBROTACTILE WALK INDICATION, AND VOICE FEEDBACK ENABLED.

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.



REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & PEARL STREET

DRAWN RS	CHECKED SD	SCALE 1" = 20'	
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 51 OF 58 SHEETS	DRAWING NO. E-15	

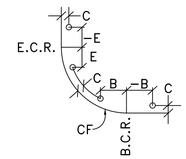
CONDUIT AND CONDUCTOR SCHEDULE

WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ2, Φ2P	1	1											
	④	Φ4, Φ8, Φ8P	1	1	1										
	⑤	Φ4, Φ4P	1	1	1		1								
	⑦	Φ2, Φ6, Φ2P	1	1	1		1	1	1						
	⑧	Φ6, Φ6P	1	1						1	1	1	1	1	1
	⑪	Φ4, Φ8, Φ4P	1	1								1	1	1	1
	⑫	Φ8, Φ8P	1	1									1	1	1
	⑮	Φ2, Φ6, Φ6P	1	1											1
		TOTAL	8	8	3	0	2	1	1	1	1	2	3	3	4
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	②	APS (Φ8)	1	1	1	1									
	③	APS (Φ2)	1	1	1	1									
	⑥	APS (Φ2), APS (Φ4)	2	2	2		2	2							
	⑨	APS (Φ4)	1	1							1	1	1	1	1
	⑩	APS (Φ6)	1	1							1	1	1	1	1
	⑬	APS (Φ6)	1	1										1	1
	⑭	APS (Φ8)	1	1										1	1
		TOTAL	8	8	4	2	2	2	0	0	2	2	2	4	4
#14 AWG	PEU			3											
#12 AWG	IISNS			2	2		2			2	2	2	2	2	2
#10 AWG	LED LUMINARIES			2	2		2			2	2	2	2	2	2
	SIGNAL COMMON		1	1	1	1	1	1	1	1	1	1	1	1	1
	TOTAL		1	3	3	1	3	1	1	3	3	3	3	3	3
VIDEO DETECTION POWER AND VIDEO			4	4		1				1	1	1	2	2	2
EMERGENCY VEHICLE PREEMPTION			4	4		1				1	1	1	2	2	2
CONDUIT SIZE (IN.)			2–3	2–3	3	3	3	3	3	3	3	3	3	3	3
PERCENT FILL			14%	15%	4%	7%	5%	3%	1%	6%	9%	5%	5%	4%	3%

POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	**PPB PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	19–4–100	30'	35'	12'	113W	Pearl St	SV–1–T	MAS MAS	SP–1–T			–2.6'		5.5'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, EVP, AND DETAIL A SIGN ON S.M.A. INSTALL PEU ON LMA. SEE CONSTRUCTION NOTES 1 & 2.
②	PBA POST	–	–	–	–	–	–	–	–	ø8	→	7.8'		2.5'	
③	PBA POST	–	–	–	–	–	–	–	–	ø2	←		6.8'	1.7'	
④	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	–	–		–5.0'	6.7'	
⑤	19–3–100	30'	25'	12'	113W	Prospect Ave	SV–1–T	MAS	SP–1–T	–	–	3.2'		2.8'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, AND EVP ON S.M.A. SEE CONSTRUCTION NOTES 1 & 2.
⑥	PBA POST	–	–	–	–	–	–	–	–	ø2 ø4	← →	11.9'		8.26'	INSTALL APS SYSTEMS WITH TWO MOUNTING ADAPTOR
⑦	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	–	–		1.3'	5.9'	
⑧	19–4–100	30'	35'	12'	113W	Pearl St	SV–1–T	MAS MAS	SP–1–T	–	–		–10.5'	5.9'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, AND EVP ON S.M.A. SEE CONSTRUCTION NOTES 1 & 2.
⑨	PBA POST	–	–	–	–	–	–	–	–	ø4	→		6.8'	1.75'	
⑩	PBA POST	–	–	–	–	–	–	–	–	ø6	←	1.8'		2.0'	
⑪	15TS	–	–	12'	113W	–		–	SP–1–T	–	–	–17.1'		2.1'	
⑫	18–3–100	17'	25'	–	–	Prospect Ave	SV–1–T	MAS	SP–1–T	–	–		–12.3'	8.0'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, AND EVP ON S.M.A. SEE CONSTRUCTION NOTES 1 & 2.
⑬	PBA POST	–	–	–	–	–	–	–	–	ø6	←		–0.6'	4.8'	
⑭	PBA POST	–	–	–	–	–	–	–	–	ø8	←	9.8'		2.7'	
⑮	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	–	–	–6.2'		7.8'	

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & PEARL STREET

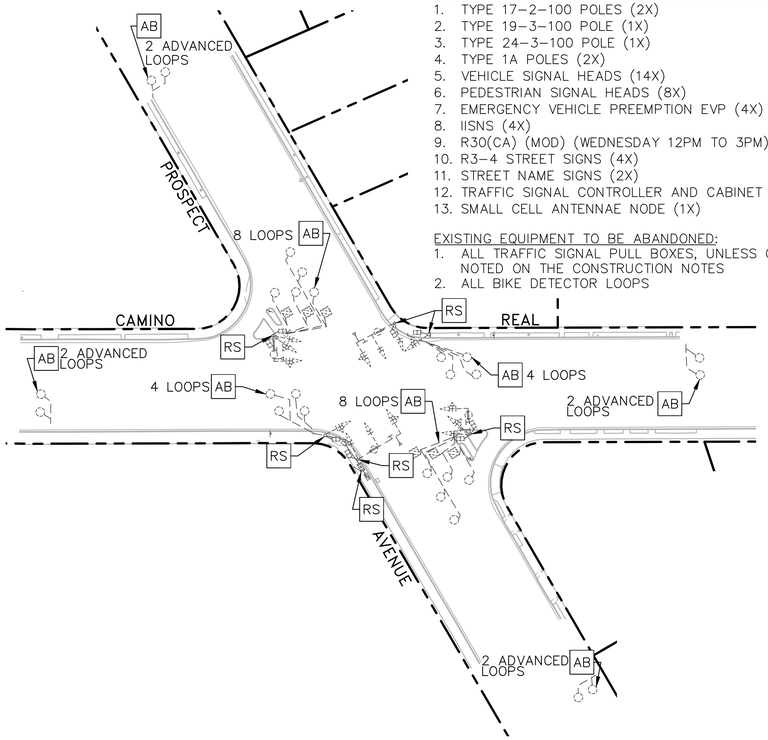
DRAWN	CHECKED	SCALE
RS	SD	1" = 20'

APPROVED BY _____ DATE _____
ANDREW S. WINJE, P.E. CITY ENGINEER

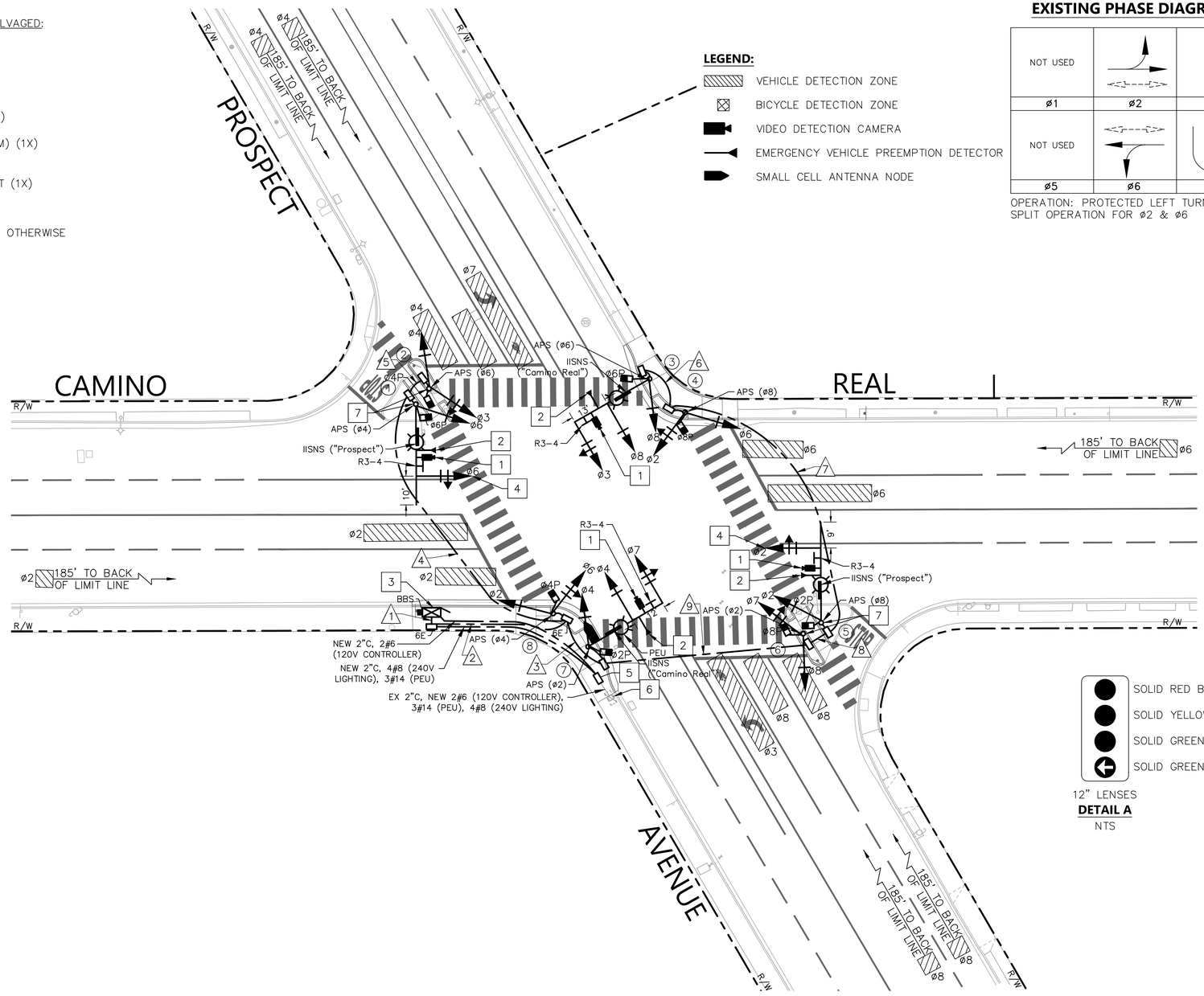
PROJECT NO.	SHEET NO.	DRAWING NO.
41490	52 OF 58 SHEETS	E-16

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 17-2-100 POLES (2X)
2. TYPE 19-3-100 POLE (1X)
3. TYPE 24-3-100 POLE (1X)
4. TYPE 1A POLES (2X)
5. VEHICLE SIGNAL HEADS (14X)
6. PEDESTRIAN SIGNAL HEADS (8X)
7. EMERGENCY VEHICLE PREEMPTION EVP (4X)
8. IISNS (4X)
9. R30(CA) (MOD) (WEDNESDAY 12PM TO 3PM) (1X)
10. R3-4 STREET SIGNS (4X)
11. STREET NAME SIGNS (2X)
12. TRAFFIC SIGNAL CONTROLLER AND CABINET (1X)
13. SMALL CELL ANTENNAE NODE (1X)

EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION NOTES
2. ALL BIKE DETECTOR LOOPS



REMOVAL PLAN
1"=50'



LEGEND:
- VEHICLE DETECTION ZONE
- BICYCLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE PREEMPTION DETECTOR
- SMALL CELL ANTENNA NODE

EXISTING PHASE DIAGRAM TO REMAIN

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

OPERATION: PROTECTED LEFT TURN FOR ø3 & ø7
SPLIT OPERATION FOR ø2 & ø6

12" LENSES
DETAIL A
NTS

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.
1. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR EXCEPT SMALL CELL ANTENNA NODE.
2. SMALL CELL ANTENNA NODE SHALL BE FURNISHED AND INSTALLED BY THE CITY.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. FURNISH AND INSTALL NEW 4-SECTION HEAD. SEE DETAIL A.
5. WHEN NEW SIGNAL IS READY TO BE ACTIVATED, SALVAGE EXISTING SIGNAL CONTROLLER AND DEMO EXISTING FOUNDATION. PRESERVE THE EXISTING ELECTRICAL CONDUIT RUN BETWEEN THE CONTROLLER AND SERVICE CABINET. INSTALL NO. 5 PULL BOX AT THE LOCATION OF THE PREVIOUS CONTROLLER'S FOUNDATION. RUN NEW WIRES TO THE SERVICE CABINET, NEW SIGNAL CONTROLLER, AND 6E PULL BOX AS SHOWN.
6. EXISTING SERVICE CABINET TO REMAIN.
7. FURNISH AND INSTALL NEW APS WITH VOICE ACTIVATION.

20 0 20 40
scale 1" = 20' feet

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER SHEILA AMPARO 78003 Exp 9-30-27 CIVIL STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & CAMINO REAL

DRAWN KW/MO	CHECKED SD	SCALE 1" = 20'	
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE	
PROJECT NO. 41490	SHEET NO. 53 OF 58 SHEETS	DRAWING NO. E-17	

CONDUCTOR SCHEDULE

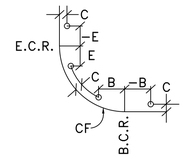
WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ6, Φ6P	1	1		1					
	②	Φ3, Φ4, Φ4P	1	1		1	1				
	③	Φ3, Φ8, Φ6P	1	1	1			1	1	1	1
	④	Φ2, Φ6, Φ8P	1	1	1				1	1	1
	⑤	Φ2, Φ2P	1	1	1					1	1
	⑥	Φ7, Φ8, Φ8P	1	1	1						1
	⑦	Φ4, Φ7, Φ2P	1	1	1						
	⑧	Φ2, Φ6, Φ4P	1	1							
		TOTAL	8	8	5	2	1	1	2	3	4
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	①	APS (Φ4)	1	1		1					
	②	APS (Φ6)	1	1		1	1				
	③	APS (Φ6)	1	1	1			1	1	1	1
	④	APS (Φ8)	1	1	1				1	1	1
	⑤	APS (Φ8)	1	1	1					1	1
	⑥	APS (Φ2)	1	1	1						1
	⑦	APS (Φ2)	1	1	1						
	⑧	APS (Φ4)	1	1							
		TOTAL	8	8	5	2	1	1	2	3	4
#14 AWG	PEU			3	3						
#12 AWG	IISNS			2	2	2		2	2	2	2
#10 AWG	LED LUMINARIES			2	2	2		2	2	2	2
	SIGNAL COMMON		1	1	1	1	1	1	1	1	1
	TOTAL		1	3	3	3	1	3	3	3	3
VIDEO DETECTION POWER AND VIDEO			4	4	3	1		1	1	2	2
WIRELESS RADIO (CAT5E)			1	1	1						
EMERGENCY VEHICLE PREEMPTION			4	4	3	1		1	1	2	2
CONDUIT SIZE (IN.)			2–3	2–3	4	3	3	3	3	3	3
PERCENT FILL			15%	17%	14%	9%	2%	7%	9%	14%	16%

ALL CABLES AND CONDUITS ARE NEW

POLE SCHEDULE

No.	TYPE	STANDARD HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	24–4–100	30'	35'	12'	166W*	Prospect	SV–1–T	MAS–4B	SP–1–T	ø4	←	–	–	1.5'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R3–4 ON S.M.A. INSTALL APS VOICE ACTIVATION. SEE CONSTRUCTION NOTE 5.
②	1A	10'	–	–	–	–	TV–1–T	–	SP–1–T	ø6	→	–	–	1.0'	INSTALL APS VOICE ACTIVATION.
③	19–4–100	30'	30'	12'	113W*	Camino Real	SV–1–T	MAS MAS	SP–1–T	ø6	←	–6.5'	–	3.0'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R3–4 ON S.M.A.
④	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø8	←	–	1.0'	2.5'	DO NOT REINSTALL R30(CA) (MOD) (WEDNESDAY 12PM TO 3PM) ON POLE. MOVE SIGN; SEE SS PLANS.
⑤	24–4–100	30'	35'	12'	166W*	Prospect	SV–1–T	MAS–4B	SP–1–T	ø8	←	–	–	1.5'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R3–4 ON S.M.A. INSTALL APS VOICE ACTIVATION. SEE CONSTRUCTION NOTE 5.
⑥	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø2	→	–	–	1.3'	INSTALL APS VOICE ACTIVATION.
⑦	19–4–100	30'	30'	12'	113W*	Camino Real	SV–1–T	MAS MAS	SP–1–T	ø2	←	–7.5'	–	3.3'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R3–4 ON S.M.A. INSTALL PEU ON L.M.A.
⑧	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø4	←	–	1.0'	2.6'	

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** ACCESSIBLE PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

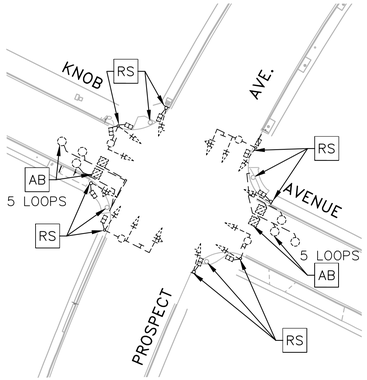
CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & CAMINO REAL

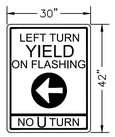
DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	54 OF 58 SHEETS	E-18



REMOVAL PLAN
1"=50'



DETAIL "A"
NTS

12" LENSES
DETAIL "B"
NTS

LEGEND:

- VEHICLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY VEHICLE PREEMPTION DETECTOR

EXISITING PHASE DIAGRAM

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

OPERATION:
PERMITTED LEFT TURN FOR ø2, ø6, ø4, ø8
PM=PERMISSIVE

PROPOSED PHASE DIAGRAM

	FYA(A)	NOT USED	PM
ø1	ø2	ø3	ø4
	FYA(B)	NOT USED	PM
ø5	ø6	ø7	ø8

OPERATION: PROTECTED LEFT TURN FOR ø1, ø5
PERMISSIVE LEFT TURN FOR ø4, ø8
PERMITTED OPPOSING LEFT TURN (FYA) FOR ø2, ø6
FYA = FLASHING YELLOW ARROW

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:
1. TYPE 17-2-100 POLES (3X)
2. TYPE 16-1-100 POLES (1X)
3. TYPE 1A POLES (4X)
4. VEHICLE SIGNAL HEADS (12X)
5. PEDESTRIAN SIGNAL HEADS (8X)
6. PUSH BUTTON ASSEMBLY (PBA) (4X)
7. R-30B (CA) STREET SIGNS (2X)
8. R26 (CA) STREET SIGNS (2X)
9. STREET NAME SIGNS (2X)
10. TRAFFIC SIGNAL CONTROLLER (1X)
11. SERVICE CONTROLLER

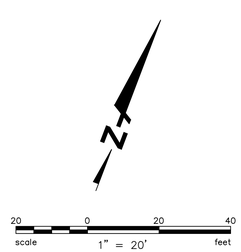
EXISTING EQUIPMENT TO BE ABANDONED:
1. ALL TRAFFIC SIGNAL PULL BOXES UNLESS OTHERWISE NOTED IN THE CONSTRUCTION NOTES
2. ALL BIKE DETECTOR LOOPS

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.
1. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR EXCEPT LACO-1 WWV PROGRAM, RADIO CORRECTED TIME BASE UNIT AND ANTENNA.
2. LACO-1 WWV PROGRAM, RADIO CORRECTED TIME BASE UNIT AND ANTENNA SHALL BE FURNISHED AND INSTALLED BY THE CITY.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION.FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'SREPRESENTATIVE TO EACH CAMERA.
4. FURNISH AND INSTALL 4-SECTION SIGNAL HEAD WITH FLASHING YELLOW ARROW. SEE DETAIL B ON THIS STREET.
5. CONTRACTOR TO REMOVE EXISTING CONTROLLER CABINET AND INSTALL WITH NO. 5 PULL BOX. MAINTAIN EXISTING ELECTRICAL CONDUIT TO EXISTING SERVICE CABINET.
6. FURNISH AND INSTALL NEW BATTERY BACK UP SYSTEM.



60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & KNOB HILL AVENUE

DRAWN RS	CHECKED SD	SCALE 1" = 20'
APPROVED BY ANDREW S. WINJE, P.E. CITY ENGINEER		DATE
PROJECT NO. 41490	SHEET NO. 55 OF 58 SHEETS	DRAWING NO. E-19

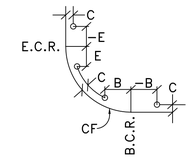
CONDUIT AND CONDUCTOR SCHEDULE

WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9	10	11
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12–#14	①	Φ2, Φ5, FYA(B), Φ2P	1	1									1
	②	Φ4, Φ8, Φ4P	1	1									
	③	Φ4, Φ4P	1	1	1								
	⑥	Φ1, FYA(A), Φ2, Φ2P	1	1	1	1	1						
	⑦	Φ1, FYA(A), Φ6, Φ6P	1	1				1	1	1	1	1	1
	⑨	Φ4, Φ8, Φ4P	1	1						1	1	1	1
	⑩	Φ8, Φ8P	1	1							1	1	1
	⑪	Φ5, FYA(B), Φ6, Φ6P	1	1								1	1
		TOTAL	8	8	2	1	1	1	1	2	3	4	5
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3–#14	①	APS (Φ8)	1	1									1
	②	APS (Φ2)	1	1									
	④	APS (Φ2)	1	1	1	1							
	⑤	APS (Φ4)	1	1	1	1							
	⑦	APS (Φ4)	1	1				1	1	1	1	1	1
	⑧	APS (Φ6)	1	1					1	1	1	1	1
	⑩	APS (Φ6)	1	1							1	1	1
	⑪	APS (Φ8)	1	1								1	1
		TOTAL	8	8	2	2	0	1	2	2	3	4	5
#14 AWG	PEU			3	3								3
#12 AWG	IISNS			2	2			2	2	2	2	2	2
#10 AWG	LED LUMINARIES			2	2			2	2	2	2	2	2
	SIGNAL COMMON		1	1	1	1	1	1	1	1	1	1	1
	TOTAL		1	3	3	1	1	3	3	3	3	3	3
VIDEO DETECTION POWER AND VIDEO			4	4	1			1	1	1	2	2	3
EMERGENCY VEHICLE PREEMPTION			4	4	1			1	1	1	2	2	3
CONDUIT SIZE (IN.)			2–3	2–3	3	3	3	3	3	3	3	3	3
PERCENT FILL			14%	15%	10%	3%	1%	7%	9%	9%	14%	16%	12%

POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	**PPB PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	19–4–100	30'	35'	12'	165W	Knob Hill Ave	SV–1–T	MAS–4B MAS	SP–1–T	ø8	←	–10.8'		8.9'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, EVP, AND DETAIL A SIGN ON S.M.A. INSTALL PEU ON LMA. SEE CONSTRUCTION NOTES 1, 2 & 4
②	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø2	→		–9.4'	9.2'	
③	19–3–100	30'	30'	12'	113W	Prospect Ave	SV–1–T	MAS	SP–1–T			0.0'		4.2'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, AND EVP ON S.M.A. SEE CONSTRUCTION NOTES 1 & 2.
④	PBA POST	–	–	–	–	–		–	–	ø2	→	9.5'		2.6'	
⑤	PBA POST	–	–	–	–	–		–	–	ø4	←		15.5'	2.1'	
⑥	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T				5.7'	4.3'	
⑦	19–4–100	30'	35'	12'	165W	Knob Hill Ave	SV–1–T	MAS–4B MAS	SP–1–T	ø4	←		–4.1	8.8'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, EVP, AND DETAIL A SIGN ON S.M.A. SEE CONSTRUCTION NOTES 1, 2 & 4
⑧	PBA POST	–	–	–	–	–		–	–	ø6	→	–1.42		12.6'	
⑨	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T			–12.1'		3.5'	INSTALL R28 (CA)(MOD)(TUESDAY; 11AM TO 2AM) ON THE POLE.
⑩	18–3–100	17'	30'	12'	–	Prospect Ave	SV–1–T	MAS	SP–1–T	ø6	←		–6.5'	12.7'	INSTALL VEHICLE DETECTION CAMERA SYSTEM, AND EVP ON S.M.A. SEE CONSTRUCTION NOTES 1 & 2.
⑪	1A	10'	–	–	–	–	TV–2–T	–	SP–1–T	ø8	→	–9.9'		8.4'	

ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SIGNAL (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & KNOB HILL AVENUE

DRAWN	CHECKED	SCALE
RS	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	56 OF 58 SHEETS	E-20

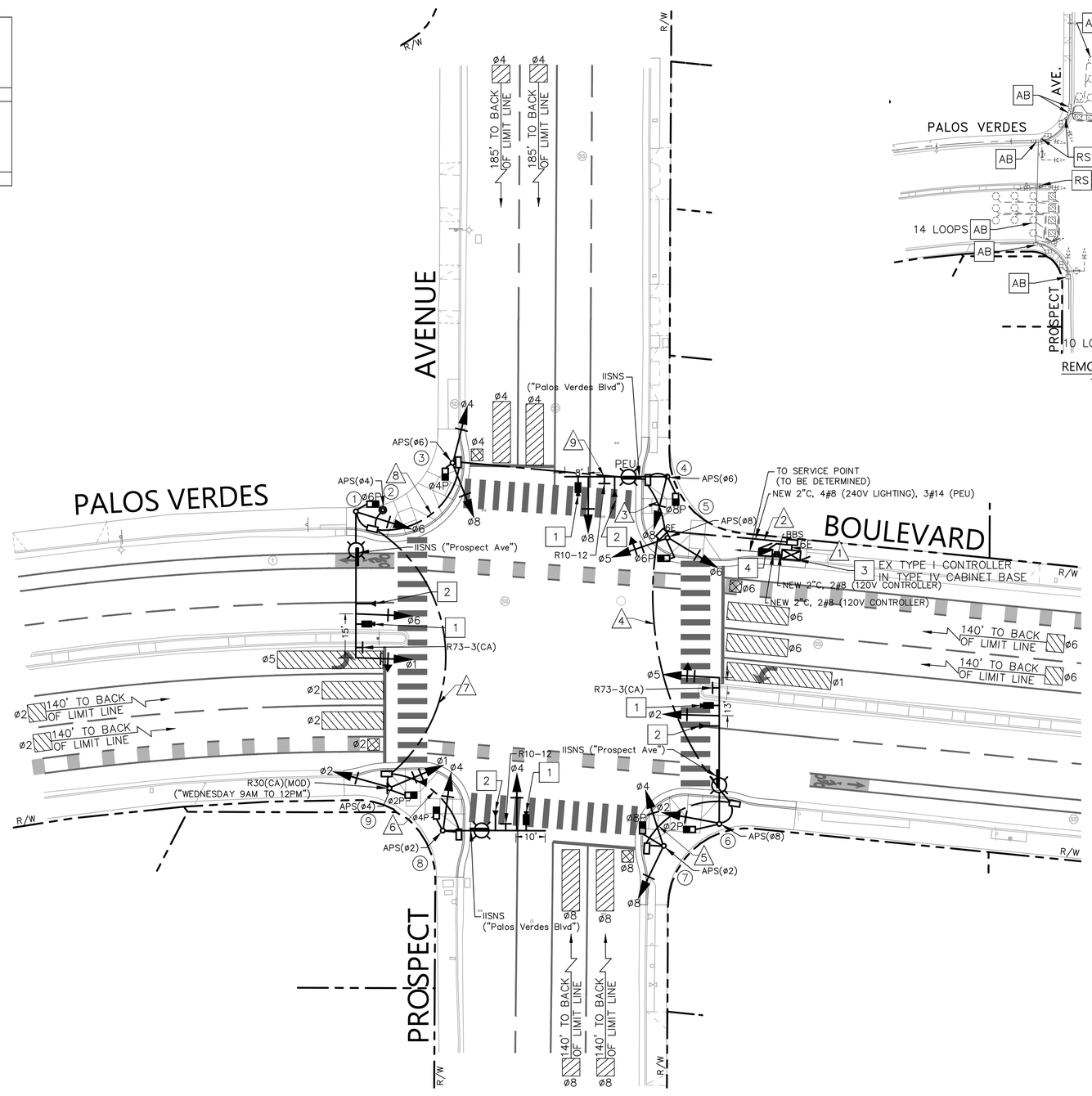
EXISTING PHASE DIAGRAM TO REMAIN

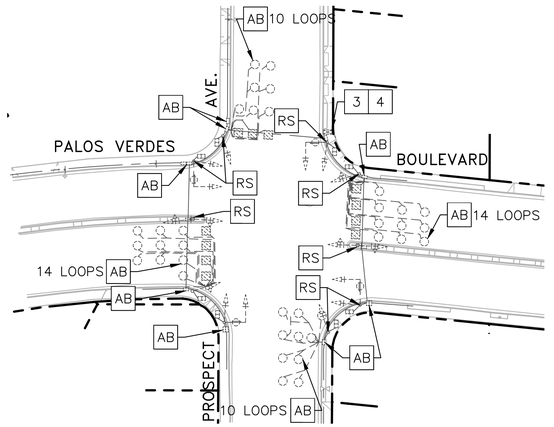
ø1	ø2	ø3	ø4
		NOT USED	PM
ø5	**ø6**	**ø7**	**ø8**
		NOT USED	PM

OPERATION: PROTECTED LEFT TURN FOR ø1 AND ø5
PM = PERMITTED
PERMITTED LEFT TURN FOR ø4 & ø8

LEGEND:

- VEHICLE DETECTION ZONE
- BICYCLE DETECTION ZONE
- VIDEO DETECTION CAMERA
- EMERGENCY PREEMPTION DETECTOR





REMOVAL PLAN
1"=50'

EXISTING EQUIPMENT TO BE REMOVED AND SALVAGED:

1. TYPE 1 POLE (4X)
2. TYPE XVII POLE (4X)
3. P.P.B. & POST (2X)
4. VEHICLE SIGNAL HEADS (16X)
5. PEDESTRIAN SIGNAL HEADS (8X)
6. STREET SIGNS (8X)
7. STREET NAME SIGNS (3X)
8. IISNS (4X)
9. TRAFFIC SIGNAL CABINET (1X)

EXISTING EQUIPMENT TO BE ABANDONED:

1. ALL TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED ON THE CONSTRUCTION NOTES
2. ALL DETECTOR LOOPS

TRAFFIC SIGNAL GENERAL NOTES:

SEE GENERAL NOTE SHEET FOR GENERAL NOTES.

CONSTRUCTION NOTES:

1. FURNISH AND INSTALL ITERIS VANTAGE VECTOR VIDEO DETECTION CAMERA ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER TO CONFIGURE VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER DIRECTION OF THE CITY REPRESENTATIVE.
2. FURNISH AND INSTALL EMERGENCY VEHICLE PREEMPTION DETECTOR ON SIGNAL MAST ARM PER MANUFACTURER'S SPECIFICATIONS.
3. FURNISH AND INSTALL NEW CABINET WITH NEW TYPE 332 CABINET AND BACKUP BATTERY SYSTEM. FURNISH AND INSTALL NEW 2070 ATC CONTROLLER UNIT WITH D4 SOFTWARE. CONFIGURE NEW CONTOLLER UNIT AND PROVIDE ALL NECESSARY EQUIPMENT TO ACHIEVE INTENDED OPERATION SHOWN. FURNISH AND INSTALL NEW ACCESSIBLE PEDESTRIAN SIGNAL (APS) SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, AND ALL NECESSARY WIRES AND CONNECTORS TO ACHIEVE THE INTENDED OPERATION. FURNISH AND INSTALL NEW ITERIS VANTAGE VECTOR VIDEO DETECTION SYSTEM COMPLETE WITH CENTRAL CONTROL UNIT, SLDC CABLE, MONITOR, AND MOUSE. SETUP VIDEO DETECTION ZONES INCLUDING BICYCLE ZONES SHOWN ON PLANS PER THE DIRECTION OF THE CITY REPRESENTATIVE. FURNISH AND INSTALL CAT 5E CABLE OR AS SPECIFIED BY THE MANUFACTURER'S REPRESENTATIVE TO EACH CAMERA.
4. INSTALL NEW SERVICE CABINET TO SERVICE POINT; FINAL DESIGN WILL BE IN COORDINATION WITH SCE.

N

20 0 20 40
scale 1" = 20' feet

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA

REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & PALOS VERDES BOULEVARD

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'
APPROVED BY: ANDREW S. WINJE, P.E. CITY ENGINEER		DATE:
PROJECT NO. 41490	SHEET NO. 57 OF 58 SHEETS	DRAWING NO. E-21

CONDUCTOR SCHEDULE

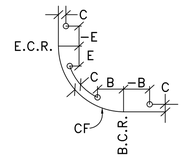
WIRE	POLE NO.	PHASE	1	2	3	4	5	6	7	8	9
12 WIRE CONDUCTOR SIGNAL CABLE (CSC) 12-#14	①	Φ1, Φ6, Φ6P	1	1	1					1	1
	②	Φ4, Φ8, Φ4P	1	1	1						1
	③	Φ8, Φ8P	1	1	1						
	④	Φ5, Φ6, Φ6P	1	1							
	⑤	Φ2, Φ5, Φ2P	1	1		1					
	⑥	Φ4, Φ8, Φ8P	1	1		1	1				
	⑦	Φ4, Φ4P	1	1	1			1	1	1	1
	⑧	Φ1, Φ2, Φ2P	1	1	1				1	1	1
		TOTAL	8	8	5	2	1	1	2	3	4
3 WIRE CONDUCTOR SIGNAL CABLE (CSC) 3-#14	①	APS (Φ4)	1	1	1					1	1
	②	APS (Φ6)	1	1	1						1
	③	APS (Φ6)	1	1	1						
	④	APS (Φ8)	1	1							
	⑤	APS (Φ8)	1	1		1					
	⑥	APS (Φ2)	1	1		1	1				
	⑦	APS (Φ2)	1	1	1			1	1	1	1
	⑧	APS (Φ4)	1	1	1				1	1	1
		TOTAL	8	8	5	2	1	1	2	3	4
#14 AWG	PEU			3	3						
#12 AWG	IISNS			2	2	2		2	2	2	2
#10 AWG	LED LUMINARIES			2	2	2		2	2	2	2
	SIGNAL COMMON		1	1	1	1	1	1	1	1	1
	TOTAL		1	3	3	3	1	3	3	3	3
VIDEO DETECTION POWER AND VIDEO			4	4	3	1		1	1	2	2
EMERGENCY VEHICLE PREEMPTION			4	4	3	1		1	1	2	2
CONDUIT SIZE (IN.)			2-3	2-3	4	3	3	3	3	3	3
PERCENT FILL			4%	15%	12%	9%	2%	7%	9%	14%	16%

ALL CABLES AND CONDUITS ARE NEW

POLE SCHEDULE

No.	STANDARD TYPE	HEIGHT	S.M.A.	L.M.A.	LUM. LED	IISNS LEGEND	SIGNAL MOUNTING VEH	M.A.	PED	PPB** PHASE	ARROW	POLE LOCATION E	B	C	REMARKS
①	29-5-100	30'	50'	15'	166W*	Prospect Ave	SV-1-T	MAS MAS	SP-1-T	–	–	-6.4'	–	6.2'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R73-3(CA) ON S.M.A.
②	PBA POST	–	–	–	–	–	–	–	–	ø4	←	2.25'	–	8.6'	
③	1A	10'	–	–	–	–	TV-2-T	–	SP-1-T	ø6	→	–	4.85'	3.95'	
④	24-4-100	30'	35'	12'	129*	Palos Verdes Blvd	SV-1-T	MAS	SP-1-T	ø6	←	-12.6'	–	8.7'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R10-12 ON S.M.A. INSTALL SIGNAL HEAD ON S.M.A. 10 FEET FROM END OF POLE. INSTALL PEU ON L.M.A.
⑤	1A	10'	–	–	–	–	TV-2-T	–	SP-1-T	ø8	→	–	5.4'	4.7'	
⑥	29-5-100	30'	50'	15'	166W*	Prospect Ave	SV-1-T	MAS MAS	SP-1-T	ø8	←	-11.3'	–	9.4'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R73-3(CA) ON S.M.A.
⑦	1A	10'	–	–	–	–	TV-2-T	–	SP-1-T	ø2	→	–	-2.8'	7.8'	
⑧	24-4-100	30'	35'	12'	129W*	Palos Verdes Blvd	SV-1-T	MAS	SP-1-T	ø2	←	-6.3'	–	7.4'	INSTALL VIDEO DETECTION SYSTEM, EVP, AND R10-12 ON S.M.A. INSTALL SIGNAL HEAD ON S.M.A. 10 FEET FROM END OF POLE.
⑨	1A	10'	–	–	–	–	TV-2-T	–	SP-1-T	ø4	→	–	-10.5'	6.7'	INSTALL R30(CA)(MOD) ON POLE.

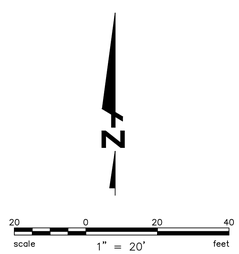
ALL POLES AND EQUIPMENT ARE NEW.
IISNS = LED INTERNALLY ILLUMINATED STREET NAME SIGN.
* LED LUMINAIRE TO BE NAV NAVION LED OR CITY APPROVED EQUAL.
** PEDESTRIAN PUSH BUTTON (PPB) SHALL BE AN ACCESSIBLE PEDESTRIAN SYSTEMS (APS).



POLE PLACEMENT DETAIL
NTS

60% SUBMITTAL (02/06/2026)
NOT FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
SHEILA AMPARO
78003
Exp 9-30-27
CIVIL
STATE OF CALIFORNIA



REVISIONS	
DATE	DESCRIPTION

CITY OF REDONDO BEACH
CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
ENGINEERING SERVICES DIVISION

REDONDO BEACH TRAFFIC SIGNAL
COMMUNICATION AND NETWORK SYSTEM - PHASE 2
TRAFFIC SIGNAL
PROSPECT AVENUE & PALOS VERDES BOULEVARD

DRAWN	CHECKED	SCALE
KW/MO	SD	1" = 20'

APPROVED BY
ANDREW S. WINJE, P.E. CITY ENGINEER
DATE

PROJECT NO.	SHEET NO.	DRAWING NO.
41490	58 OF 58 SHEETS	E-22