

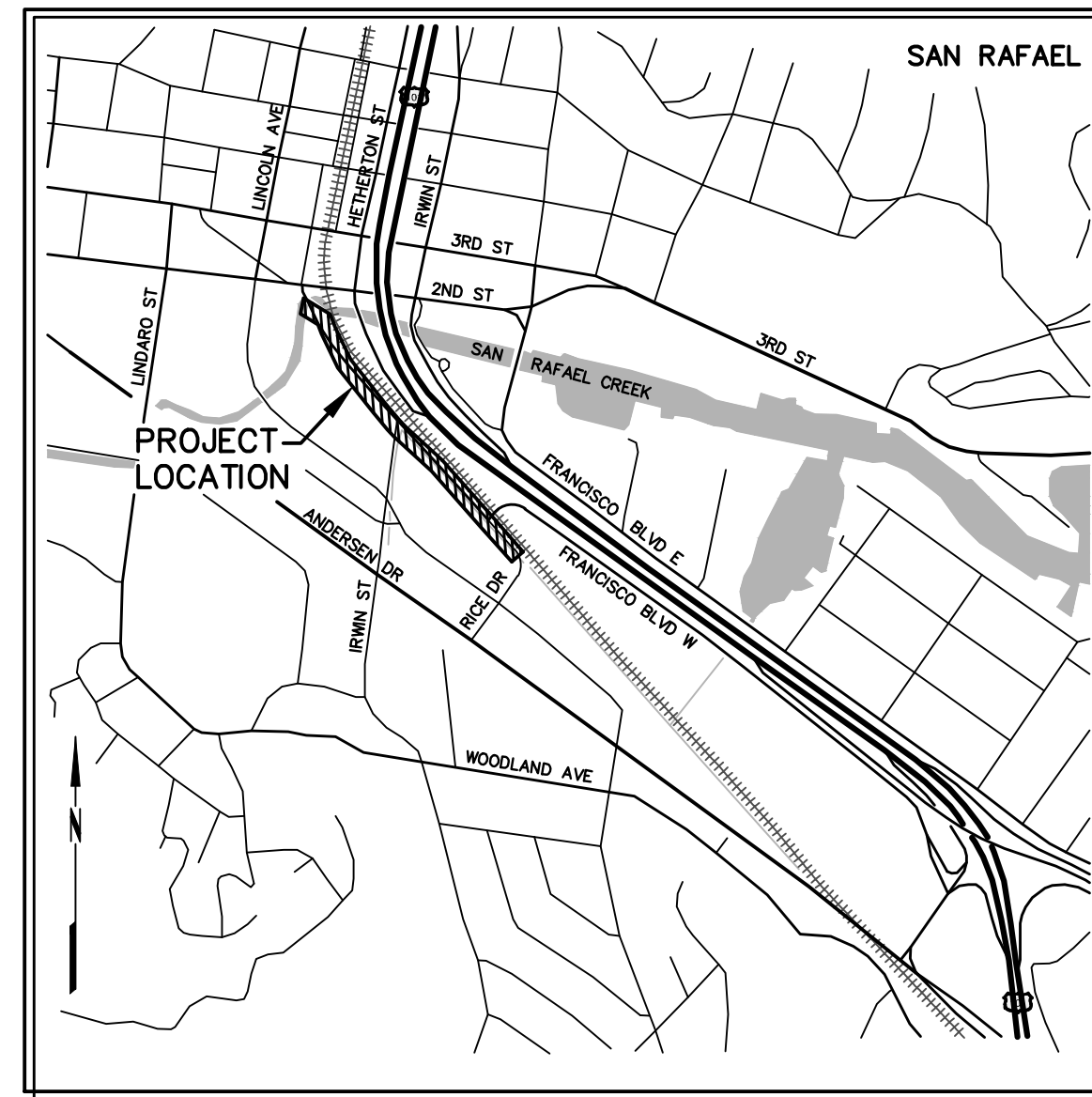
CITY OF SAN RAFAEL IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

CITY PROJECT NO. 11364

MAY 2020

SYMBOLS & LEGEND

| EXISTING | PROPOSED | |
|----------|----------|--|
| | | FIRE HYDRANT |
| | | STREET SIGN |
| | | STREET LIGHT OR TRAFFIC SIGNAL |
| | | UTILITY POLE |
| | | GUY ANCHOR |
| | | CATCH BASIN |
| | | TREE |
| | | TREE GRATE - REFER TO THE LANDSCAPE DRAWINGS |
| | | PROPERTY LINE |
| | | EASEMENT |
| | | CENTERLINE |
| | | GRADE BREAK |
| | | FLOW LINE |
| | | FENCE |
| | | SANITARY SEWER |
| | | STORM DRAIN |
| | | WATER |
| | | OVERHEAD UTILITY LINE |
| | | UNDERGROUND UTILITY LINE |
| | | UNDERGROUND STREET LIGHT CONDUIT |
| | | UNDERGROUND SPARE CONDUIT |
| | | UNDERGROUND GAS LINE |
| | | UNDERGROUND TELECOM LINE |
| | | STRIPING TO BE REMOVED |
| | | MATERIAL OR FEATURE TO BE REMOVED |
| | | ASPHALT |
| | | ASPHALT (HEAVY) |
| | | CONCRETE (PEDESTRIAN SIDEWALK/MUP) |
| | | CONCRETE (VEHICULAR AREAS) |
| | | AGGREGATE BASE |
| | | DECOMPOSED GRANITE - REFER TO THE LANDSCAPE DRAWINGS |
| | | ROCK SLOPE PROTECTION |
| | | EROSION CONTROL NETTING |
| | | DETECTABLE WARNING |
| | | VALLEY GUTTER |
| | | BIORETENTION FACILITY |
| | | KEYNOTE |
| | | DETAIL IDENTIFICATION |
| | | SHEET WHERE DETAIL IS SHOWN |



VICINITY MAP
NOT TO SCALE

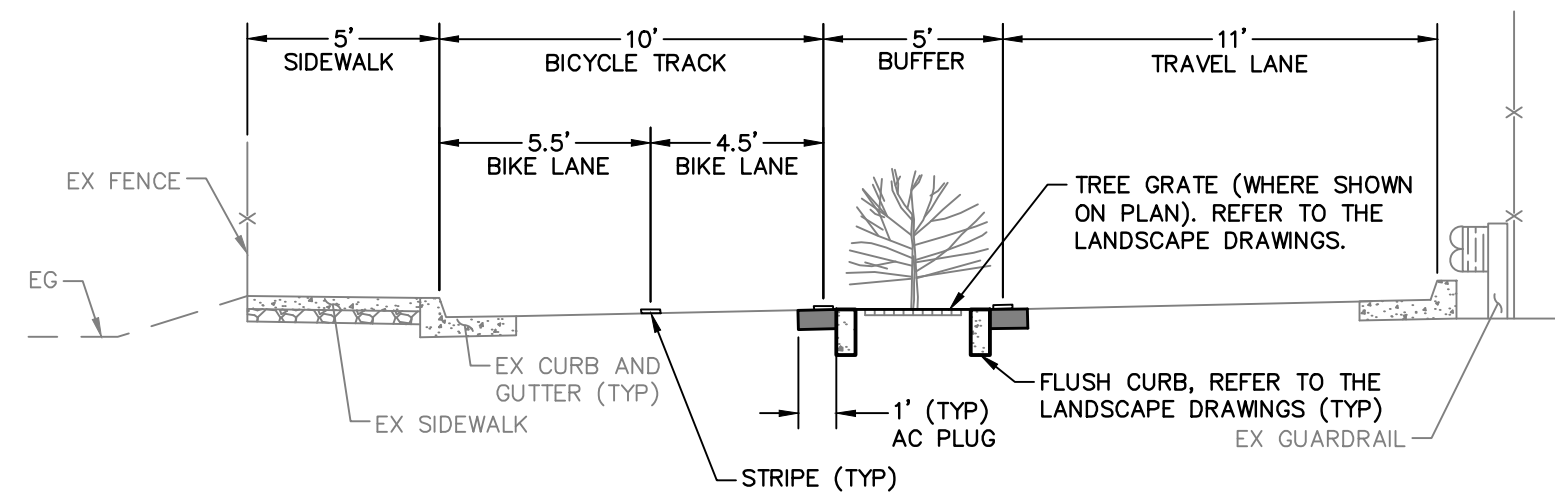
ALL EXISTING UTILITIES LOCATED WITHIN THE PROJECT AREA SHALL BE ADJUSTED TO FINISHED GROUND SURFACE ELEVATION. ALL NEW AND EXISTING UTILITY VAULTS, PULL BOXES, MANHOLES, ETC. LOCATED WITHIN ACCESSIBLE PEDESTRIAN AREAS SHALL BE EQUIPPED WITH ACCESSIBLE SLIP RESISTANT COVERS.

ABBREVIATIONS

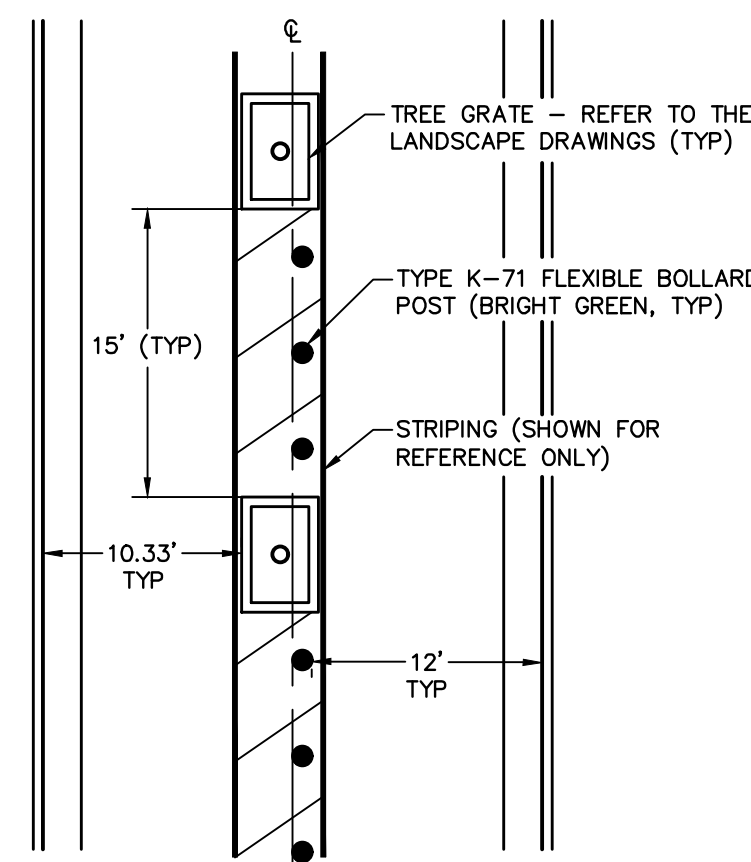
- ± MORE OR LESS
- Δ DELTA
- AB AGGREGATE BASE
- AC ASPHALT CONCRETE
- AL MUP CONTROL ALIGNMENT
- APN ASSESSOR'S PARCEL NUMBER
- BC BEGIN CURVE
- BLDG BUILDING
- BLRD BOLLARD
- BLVD BOULEVARD
- CB CATCH BASIN
- CC POINT OF COMPOUND CURVE
- CL CENTERLINE
- CL2 CLASS II
- CO CLEAN OUT
- CONC CONCRETE
- CY CUBIC YARD
- DI DROP INLET
- DIA DIAMETER
- DW DRIVEWAY
- E ELECTRIC
- EC END CURVE
- ECMH ECCENTRIC MANHOLE
- EG EXISTING GROUND
- ELEV ELEVATION
- EP EDGE OF PAVEMENT
- ER EDGE OF ROAD
- ESMT EASEMENT
- EX EXISTING
- FG FINISHED GRADE
- FH FIRE HYDRANT
- FL SURFACE FLOWLINE
- FND FOUND
- FT FOOT
- G GAS
- GB GRADE BREAK
- HDRL HANDRAIL
- HORZ HORIZONTAL
- HT HEIGHT
- INV BOTTOM INSIDE OF PIPE
- L LENGTH
- LP LIGHT POLE
- MAX MAXIMUM
- MH MANHOLE
- MIN MINIMUM
- MON MONUMENT
- MSE MECHANICALLY STABILIZED EARTH
- MUP MULTI-USE PATHWAY
- NO NUMBER
- NTS NOT TO SCALE
- OH OVERHEAD UTILITY LINE
- PCC PORTLAND CEMENT CONCRETE
- PG&E PACIFIC GAS & ELECTRIC
- PL PROPERTY LINE
- PTC PROJECTED TOP FACE OF CURB
- PUE PUBLIC UTILITY EASEMENT
- PVI POINT OF VERTICAL INTERSECTION
- R RADIUS
- RC POINT OF REVERSE CURVE
- RCB REINFORCED CONCRETE BOX
- RSPR RIPRAP ROCK SLOPE PROTECTION
- RTWL RETAINING WALL
- R/W RIGHT OF WAY
- S= SLOPE
- SD STORM DRAIN
- SDMH STORM DRAIN MANHOLE
- SF SQUARE FEET
- SHP SHEET PILE
- SL STREETLIGHT
- SMART SONOMA MARIN AREA RAIL TRANSIT
- SS SANITARY SEWER
- SSCO SANITARY SEWER CLEAN OUT
- SSMH SANITARY SEWER MANHOLE
- STA STATION
- STD STANDARD
- TB TOP OF BOX
- TC TOP FACE OF CURB
- TEL TELECOMMUNICATION LINE
- TG TOP OF GRATE
- TS TRAFFIC SIGNAL
- TW TOP OF WALL
- TYP TYPICAL
- UB UTILITY BOX
- UD UNDER DRAIN
- UP UTILITY POLE
- UT UNDERGROUND UTILITY LINE
- VC VERTICAL CURVE
- VEH VEHICULAR
- VERT VERTICAL
- VL VOLT
- W WATER
- WL WHITE LINE

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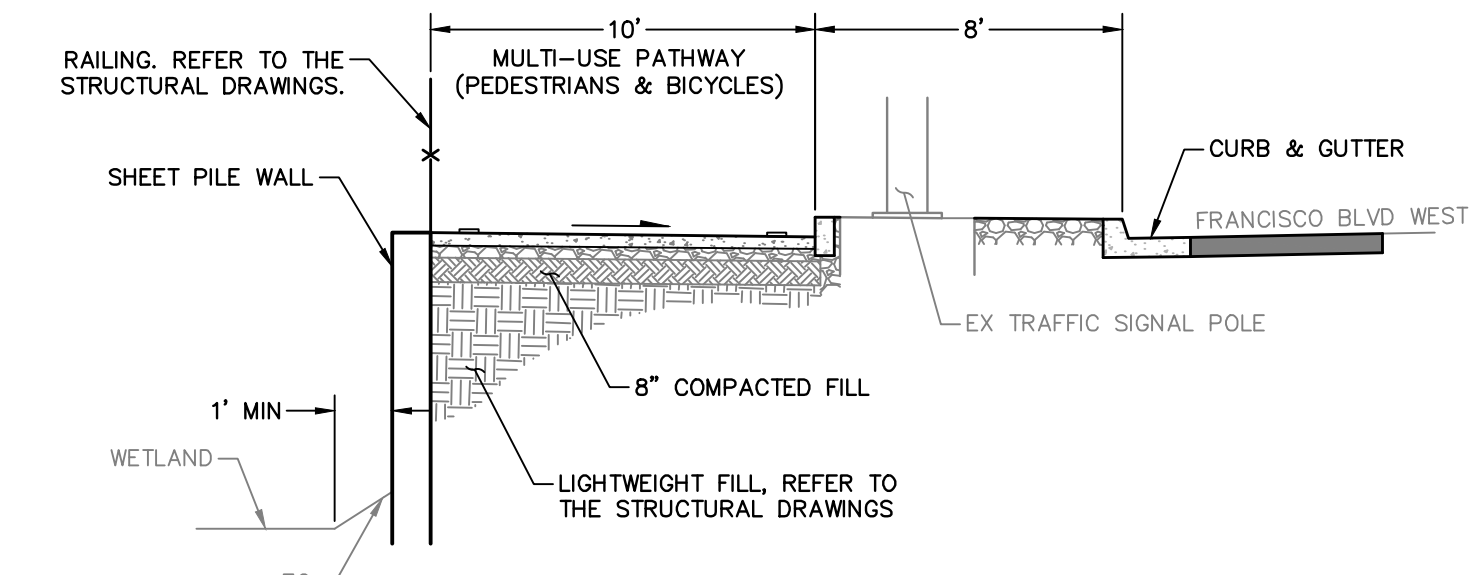
TYPICAL SECTION
FRANCISCO BLVD WEST
NO SCALE



TYPICAL BUFFER AREA LAYOUT
NO SCALE

| MATERIALS TABLE | | | |
|--------------------------|---------------------------------------|-----------|---------------|
| SURFACE TYPE | LOCATION | THICKNESS | CL2 BASE ROCK |
| PORTLAND CEMENT CONCRETE | DRIVEWAYS/VEHICULAR AREAS | 8" | 4" |
| PORTLAND CEMENT CONCRETE | PEDESTRIAN SIDEWALK/MULTI-USE PATHWAY | 4" | 4" |
| AGGREGATE BASE | PEDESTRIAN SIDEWALK/MULTI-USE PATHWAY | - | 8" |
| AGGREGATE BASE | TRASH RACK AREA | - | 12" |

NOTES
THE CONTRACTOR IS REQUIRED TO REVIEW THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT TO CONFIRM THESE CONDITIONS AND TO REVIEW SAID REPORT FOR SITE PREPARATION AND GRADING RECOMMENDATIONS.



TYPICAL SECTION
FRANCISCO BLVD WEST & RICE DRIVE INTERSECTION
NO SCALE

| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |
| | | | |
| | | | |

DESIGNED JAK
DRAWN IMC
CHECKED JAK
APPROVED JAK

PROJECT NAME
IMPROVEMENT DRAWINGS FOR
FRANCISCO BOULEVARD WEST
RICE DRIVE TO SECOND STREET

DRAWING NAME
COVER SHEET

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JASON KIRICHAKOV
C 78079
CIVIL
STATE OF CALIFORNIA
05/12/2020

CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

| |
|------------------------------|
| SCALE: AS SHOWN |
| DATE: MAY 2020 |
| BKF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: CV-1 |
| DRAWING: 1 OF 38 |

HUNTER YOUNG
ASSISTANT PUBLIC WORKS DIRECTOR / CITY ENGINEER
CITY OF SAN RAFAEL, CALIFORNIA

BKF
ENGINEERS / SURVEYORS / PLANNERS
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(415) 930-7960 FAX: (415) 930-7979

Plot: May 12, 2020 at 11:24am

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GENERAL NOTES

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

THE LOCATIONS OF UNDERGROUND OBSTRUCTIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY AND SHOULD NOT BE TAKEN AS FINAL OR ALL INCLUSIVE. THE CONTRACTOR IS CAUTIONED THAT THESE DRAWINGS MAY NOT INCLUDE ALL EXISTING UTILITIES, AND THAT THE CITY OF SAN RAFAEL AND THE DESIGN PROFESSIONAL ASSUME NO RESPONSIBILITY FOR OBSTRUCTIONS WHICH MAY BE ENCOUNTERED.

THE CONTRACTOR SHALL EXPOSE ALL EXISTING UTILITIES PRIOR TO TRENCHING TO ALLOW THE DESIGN PROFESSIONAL TO VERIFY THE GRADE AND ALIGNMENT OF THE UTILITIES, AND TO VERIFY DESIGN ASSUMPTIONS AND EXACT FIELD LOCATIONS. EXISTING UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENTS MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS.

THE CONTRACTOR SHALL RECOGNIZE THAT UNDERGROUND FACILITIES NOT SHOWN ON THESE DRAWINGS (IRRIGATION, ETC.) SHALL BE COORDINATED AND CONSTRUCTED PRIOR TO PLACEMENT OF BASE ROCK AND PAVING.

ENSURE THE CONTAINMENT OF SANITATION FACILITIES (E.G., PORTABLE TOILETS) TO PREVENT DISCHARGES OF POLLUTANTS TO THE STORM WATER DRAINAGE SYSTEM, ROADS OR RECEIVING WATERS. SANITATION FACILITIES MUST BE MAINTAINED PERIODICALLY BY A LICENSED SERVICE COMPANY TO KEEP THEM IN GOOD WORKING ORDER AND PREVENT OVERFLOWS. PORTABLE TOILETS ARE REQUIRED TO HAVE SECONDARY CONTAINMENT.

ESTABLISH AND MAINTAIN EFFECTIVE SITE PERIMETER CONTROLS AND STABILIZE ALL CONSTRUCTION ENTRANCES AND EXITS TO SUFFICIENTLY CONTROL EROSION AND SEDIMENT DISCHARGES AND TRACKED MATERIALS FROM LEAVING THE SITE. AT A MINIMUM DAILY AND PRIOR TO ANY RAIN EVENT, THE CONTRACTOR SHALL REMOVE ANY SEDIMENT OR OTHER CONSTRUCTION ACTIVITY RELATED MATERIALS THAT ARE DEPOSITED ON THE ROADS (BY VACUUMING OR SWEEPING).

PLACE EQUIPMENT OR VEHICLES WHICH ARE BEING FUELED, MAINTAINED AND STORED, IN A DESIGNATED AREA FITTED WITH APPROPRIATE BMPS.

AT A MINIMUM, ALL BMPS SHALL BE INSPECTED EACH WORKING DAY AND BEFORE ALL RAIN EVENTS. BMPS THAT REQUIRE MAINTENANCE OR REPLACEMENT TO FUNCTION PROPERLY SHALL BE COMPLETED BEFORE THE NEXT FORECASTED RAIN, OR WITHIN THE NEXT THREE (3) WORKING DAYS IF NO RAIN IS PREDICTED. MAINTENANCE INCLUDES REMOVAL OF ACCUMULATED SEDIMENT AND TRASH.

AT A MINIMUM, THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN ALL APPLICABLE BMPS LISTED ON THESE DRAWINGS AND/OR THE WATER POLLUTION CONTROL PLAN.

PUBLIC CONCRETE NOTES

EXISTING CONCRETE TO BE REMOVED SHALL BE REMOVED AT EXPANSION OR WEAKENED PLANE JOINTS OR AT SAWCUTS AS FIELD MARKED BY THE AGENCY ENGINEER. SAW CUTS MUST GO ENTIRELY THROUGH THE CONCRETE.

WHERE UNDERCUT SUBGRADE OR UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, THE AGENCY ENGINEER MAY REQUIRE REMEDIAL WORK TO BE DONE, INCLUDING OVER-EXCAVATION AND BACKFILLING WITH CRUSHED ROCK AND, WHEN DIRECTED BY THE ENGINEER, PLACING GEOTEXTILE FABRIC BENEATH THE NEW CONCRETE SECTION.

SUBGRADE SHALL BE COMPACTED TO AT LEAST 95-PERCENT RELATIVE COMPACTION IN THE TOP 6-INCHES.

NEW WORK SHALL MATCH EXISTING AS CLOSELY AS POSSIBLE IN FINISH, SCORING AND COLOR.

EXCEPT WHERE SPECIFIED OTHERWISE HEREIN, NO ADMIXTURES SHALL BE USED WITHOUT THE PERMISSION OF THE AGENCY ENGINEER.

FORMS SHALL MEET GRADE AND FORM FACES SHALL NOT VARY FROM THE DIMENSIONS SHOWN BY MORE THAN 1/2-INCH (PROVIDED THAT PEDESTRIAN AREAS ARE PROVIDED WITH CROSS SLOPES THAT DO NOT EXCEED 2-PERCENT AND RUNNING SLOPES THAT DO NOT EXCEED 5-PERCENT).

SUBGRADE/BASE SHALL BE THOROUGHLY WETTED IMMEDIATELY PRIOR TO PLACING CONCRETE.

CONCRETE SHALL BE A MINIMUM CLASS B (5-SACK MIX) WITH 1-INCH MAXIMUM AGGREGATE FROM AN APPROVED MIXING PLANT. NO BAGGED MIX IS PERMITTED.

CONCRETE SHALL HAVE A SLUMP OF NOT MORE THAN 4-INCHES.

FOR SIDEWALKS AND DRIVEWAY APPROACHES, 1/4-INCH DEEP SCORE LINES SHALL BE PLACED AT 4-FEET ON CENTER OR AS DIRECTED BY THE AGENCY ENGINEER.

WEAKENED PLANE JOINTS AT LEAST 3/4-INCH DEEP SHALL BE PLACED AT A MAXIMUM OF 5- FEET ON CENTER.

3/8-INCH THICK EXPANSION JOINTS SHALL BE PLACED ON BOTH SIDES OF DRIVEWAY APPROACHES, AT CURB AND SIDEWALK RETURN POINTS, DRAINAGE STRUCTURES AND AT A MAXIMUM INTERVAL OF 50- FEET ON CENTER.

EXPOSED EDGES SHALL BE ROUNDED WITH A 1/2-INCH RADIUS TOOL.

FLAT SURFACES SHALL BE LIGHT BROOM FINISHED UNLESS OTHERWISE SPECIFIED BY THE AGENCY ENGINEER.

CURBS, SIDEWALKS AND DRIVEWAY APPROACHES SHALL HAVE FORMS REMOVED AND BE BACKFILLED WITHIN SEVEN DAYS AFTER POURING.

THE DESIGNATED DIMENSIONS AND SLOPES MAY BE MODIFIED TO ACCOMMODATE EXISTING ADJACENT FACILITIES SUBJECT TO THE APPROVAL OF THE AGENCY ENGINEER.

CURB, GUTTER AND SIDEWALK SHALL COMPLY WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 100 AND 105 AND SHALL BE UNDERLAIN BY A MINIMUM OF 4-INCHES OF CLASS II AGGREGATE BASE COMPACTED TO 95-PERCENT RELATIVE COMPACTION.

CURB RAMPS AND DETECTABLE WARNINGS SHALL COMPLY WITH CALTRANS STANDARD PLANS A88A AND A88B.

GRADING NOTES

PERFORM GRADING IN ACCORDANCE WITH CHAPTER 18 AND APPENDIX J OF THE 2019 CALIFORNIA BUILDING CODE, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER AND IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT, PREPARED BY WRECO DATED AUGUST 14, 2018.

THE CONTRACTOR SHALL PROTECT EXISTING DRAINAGE FACILITIES FROM SEDIMENTATION DURING ALL PHASES OF CONSTRUCTION.

UTILITY NOTES

PROVIDE TRENCHING IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 330, 340 AND 350. PROVIDE STREET TRENCHING REPAIR IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 360, 370 AND 380 AND UNDER THE DIRECTION OF THE CITY'S REPRESENTATIVE.

UNLESS OTHERWISE NOTED, PROVIDE CLASS III REINFORCED CONCRETE PIPE (RCP), OR HIGH DENSITY POLYETHYLENE PIPE (HDPE) WHERE ANNOTATED AS STORM DRAIN (SD) ON THE CONSTRUCTION DRAWINGS.

UTILITY LENGTHS SHOWN REFLECT ROUNDED LENGTHS MEASURED HORIZONTALLY BETWEEN THE CENTERS OF STRUCTURES. VERIFY SLOPED UTILITY LENGTHS IN THE FIELD PRIOR TO ORDERING MATERIAL.

STORM DRAIN SYSTEM SHALL BE KEPT FREE OF DIRT AND DEBRIS DURING ALL PHASES OF CONSTRUCTION. IT IS NOT ALLOWED TO WASH DIRT/DEBRIS DOWNSTREAM IN PIPES.

STREET LIGHTING NOTES

WIRING AND EQUIPMENT CONSTRUCTION SHALL CONFORM TO THE NATIONAL ELECTRIC CODE (NEC), AND SECTIONS 86 AND 87 OF THE CALTRANS STANDARD SPECIFICATIONS.

A RUN OF CONDUIT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR 1/4 BENDS (360-DEGREES TOTAL) INCLUDING OFFSETS AND BENDS LOCATED AT PULL BOXES AND SERVICE POINTS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE 347-14.

PROVIDE NO. 5 PULL BOXES AT STREET LIGHTS IN ACCORDANCE WITH CALTRANS 2018 REVISED STANDARD PLAN RSP ES-8A (NON-TRAFFIC AREAS) AND RSP ES-8B (TRAFFIC AREAS).

LUMINAIRES SHALL BE HOLOPHANE MODEL NUMBER GVD2-P30-40K-AS-S-BZ-5-N-N-U OR EQUIVALENT.

POLES SHALL BE HOLOPHANE MODEL NUMBER SMA-14-T5C-13-P07-ABG-BZ OR EQUIVALENT.

ENDS OF CONDUIT SHALL HAVE BELL ENDS AND BE SEALED WITH A DUCT SEAL.

THE CONTRACTOR SHALL VERIFY STREET LIGHT SERVICE POINT LOCATIONS WITH THE CITY OF SAN RAFAEL PRIOR TO COMMENCING WORK.

PROVIDE (2) #8 (LIGHTING) AND (1) #8 (GROUND) CONDUCTOR WIRES FOR CONNECTIONS TO EXISTING PUBLIC STREET LIGHT CIRCUIT.

CONDUIT TO BE USED SHALL BE A MINIMUM OF 2-INCH DIAMETER, EXCEPT FROM EACH STREET LIGHT TO THE ADJACENT PULL BOX, WHICH MAY BE 1-INCH DIAMETER PVC OR METAL, AND SHALL HAVE THE FOLLOWING COVER FROM THE TOP OF CONDUIT:

- A. WITHIN SIDEWALK AREAS - 2-FOOT MINIMUM FOR SCHEDULE 40 PVC.
B. WITHIN ROADWAY AREAS - 2.5-FOOT MINIMUM FOR SCHEDULE 40/60 PVC.

STRIPING AND SIGNING NOTES

UNLESS OTHERWISE SHOWN ON PLAN, THE CONTRACTOR SHALL RESTORE EXISTING STRIPING, SIGNAGE, CURB PAINT, ETC. THAT IS DAMAGED OR REMOVED (AND DOES NOT CONFLICT WITH THE PROPOSED STRIPING & SIGNAGE IMPROVEMENTS) AS A DIRECT RESULT OF CONSTRUCTION ACTIVITY TO AT LEAST AS GOOD A CONDITION AS THEY WERE PRIOR TO CONSTRUCTION.

STRIPING, PAVEMENT MARKINGS AND SIGNING SHALL BE INSTALLED IN ACCORDANCE WITH THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS AND STANDARD PLANS (2018 EDITIONS) AND THE CURRENT EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

EXISTING STRIPING AND MARKING TO BE REMOVED SHALL BE REMOVED BY GRINDING BY THE CONTRACTOR.

UNLESS OTHERWISE SHOWN ON PLAN, PAVEMENT LEGENDS, CROSSWALKS AND STOP BARS SHALL BE INSTALLED BY USING THERMOPLASTIC IN ACCORDANCE WITH CALIFORNIA MUTCD AND CALTRANS STANDARD SPECIFICATIONS.

STOP SIGNS AND STREET NAME SIGNS SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH MUTCD AND STATE SUPPLEMENTAL GUIDELINES FOR OTHER SIGNAGE.

ALL SIGNING SHALL BE REFLECTORIZED HIGH INTENSITY SHEETING AND SHALL BE OF ALUMINUM ALLOY MATERIAL.

ALL STRIPING SHALL BE CAT-TRACKED AND APPROVED BY THE CITY OF SAN RAFAEL PRIOR TO INSTALLATION.

ADDITIONAL GENERAL NOTES

THE DESIGN PROFESSIONAL WHO PREPARED THESE DRAWINGS IS NOT RESPONSIBLE FOR THE MISUSE OF, OR UNAUTHORIZED CHANGES MADE TO THESE DRAWINGS. OBTAIN WRITTEN PERMISSION FROM THE DESIGN PROFESSIONAL WHO PREPARED THESE DRAWINGS PRIOR TO MAKING CHANGES.

IMPROVEMENTS SHOWN HEREON AS AN EXISTING CONDITION REFLECT THE THEORETICAL CONDITION OF THE PROJECT AREA UPON COMPLETION OF CONSTRUCTION ACTIVITIES AS SHOWN ON THE ROADWAY IMPROVEMENT DRAWINGS FOR SMART LARKSPUR EXTENSION (FRANCISCO BOULEVARD WEST, RICE DRIVE AND SECOND STREET IMPROVEMENTS) PREPARED BY BKF ENGINEERS DATED OCTOBER 5, 2018 (CITY OF SAN RAFAEL FILE NO. 18.06.52). IF EXISTING IMPROVEMENTS ARE FOUND TO BE IN LOCATIONS OR AT ELEVATIONS WHICH ARE NOT REFLECTED BY THE CONSTRUCTION DOCUMENTS, NOTIFY THE ENGINEER IN WRITING A MINIMUM OF FIVE (5) DAYS PRIOR TO CONDUCTING CONSTRUCTION ACTIVITY SO THAT APPROPRIATE ADJUSTMENTS CAN BE MADE.

EXISTING UNDERGROUND FACILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND HAVE BEEN LOCATED BASED ON TOPOGRAPHIC FEATURES AND AVAILABLE INFORMATION. THE PROFESSIONAL WHO PREPARED THESE DRAWINGS AND THE CITY OF SAN RAFAEL ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THESE FACILITIES OR FOR THE INADVERTENT OMISSION OF RELATED INFORMATION.

EXPOSE EXISTING UTILITIES PRIOR TO TRENCHING TO VERIFY THE ALIGNMENTS AND ELEVATIONS OF THE UTILITIES AND TO VERIFY DESIGN ASSUMPTIONS. EXISTING UTILITIES MAY REQUIRE RELOCATION AND/OR PROPOSED IMPROVEMENTS MAY REQUIRE GRADE OR ALIGNMENT REVISION DUE TO FIELD CONDITIONS. IF THE EXPOSED UTILITY IS DETERMINED TO BE IN A LOCATION WHICH IS NOT REFLECTED BY THE CONSTRUCTION DOCUMENTS, NOTIFY THE ENGINEER IN WRITING SO THAT APPROPRIATE ADJUSTMENTS CAN BE MADE.

THE CONTRACTOR IS CAUTIONED NOT TO ORDER PRECAST ITEMS OR INSTALL IMPROVEMENTS UNTIL CONFLICTS ARE RESOLVED. IMPROVEMENTS INSTALLED OR ORDERED PRIOR TO CONFLICT RESOLUTION SHALL BE DONE SOLELY AT THE CONTRACTOR'S RISK AND AT NO EXPENSE TO THE DESIGN PROFESSIONAL OR THE CITY OF SAN RAFAEL.

UTILITY CONFLICTS MAY OCCUR IN THOSE INSTANCES WHERE TWO GRAVITY UTILITIES CROSS AND LACK THE REQUIRED SEPARATION, OR IN THOSE INSTANCES WHERE AN EXISTING UTILITY HAS NOT BEEN IDENTIFIED IN THE CONSTRUCTION DOCUMENTS.

REPORT UTILITY CONFLICTS TO THE CITY'S REPRESENTATIVE IN WRITING AS THEY ARE ENCOUNTERED SO THAT THE CITY'S REPRESENTATIVE CAN MAKE A DECISION AS TO HOW THE CONTRACTOR SHOULD PROCEED WITH THE WORK.

CROSSING UTILITIES WHICH HAVE BEEN IDENTIFIED IN THE CONSTRUCTION DOCUMENTS MAY NOT BE CONSTRUED AS UTILITY CONFLICTS. THE CONTRACTOR SHALL INSTALL GRAVITY UTILITIES TO THE LINES AND ELEVATIONS IDENTIFIED IN THE CONSTRUCTION DOCUMENTS AND INSTALL OTHER UTILITIES ABOVE OR BELOW GRAVITY UTILITIES WHILE COMPLYING WITH THE MINIMUM COVER REQUIREMENTS FOR EACH UTILITY INSTALLED.

TREE TRUNK DIAMETERS ARE REFLECTED GRAPHICALLY AND WERE MEASURED AT CHEST HEIGHT (+/-48-INCHES). DRIPLINE DIAMETERS AND TREE SPECIES ARE APPROXIMATE ONLY. CONSULT A CERTIFIED TREE ARBORIST WHEN IT IS NECESSARY TO ACCURATELY DETERMINE PERTINENT TREE INFORMATION.

THE HORIZONTAL LIMITS OF EXISTING WETLANDS SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON THE 'CONCEPT PLAN - ANDERSEN TO IRWIN STREET' DRAWINGS FOR THE MULTI-USE PATHWAY PREPARED BY ALTA PLANNING + DESIGN DATED APRIL 2017 AND PROVIDED BY THE CITY OF SAN RAFAEL FOR THE PURPOSES OF PREPARING THESE DRAWINGS.

Table with columns: NO., REVISION, BY, DATE. Includes rows for DESIGNER (JAK), DRAWN (IMC), CHECKED (JAK), APPROVED (JAK).

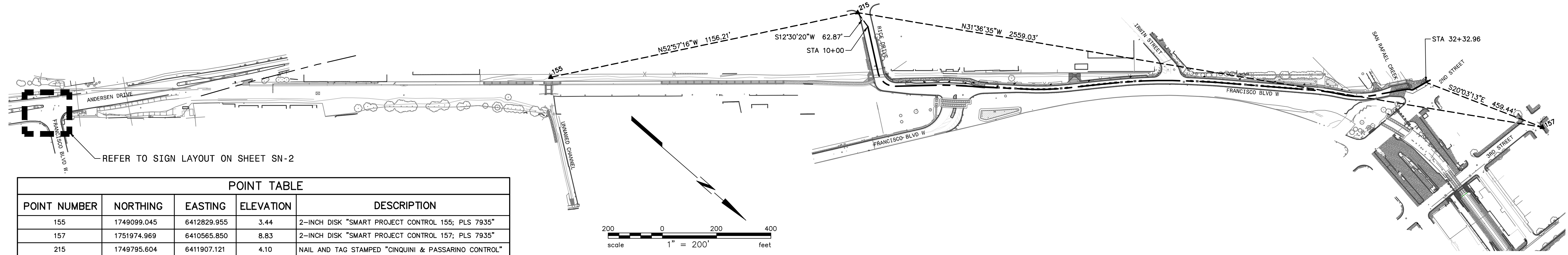
PROJECT NAME: IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST, RICE DRIVE TO SECOND STREET. DRAWING NAME: GENERAL NOTES. COUNTY OF MARIN, CALIFORNIA. SAN RAFAEL.



CITY OF SAN RAFAEL DEPARTMENT OF PUBLIC WORKS

SCALE: AS SHOWN. DATE: MAY 2020. BKF PROJECT NO.: 20169048-28. CITY PROJECT NO.: 11364. SHEET NO.: GN-1. DRAWING: 2 OF 38.



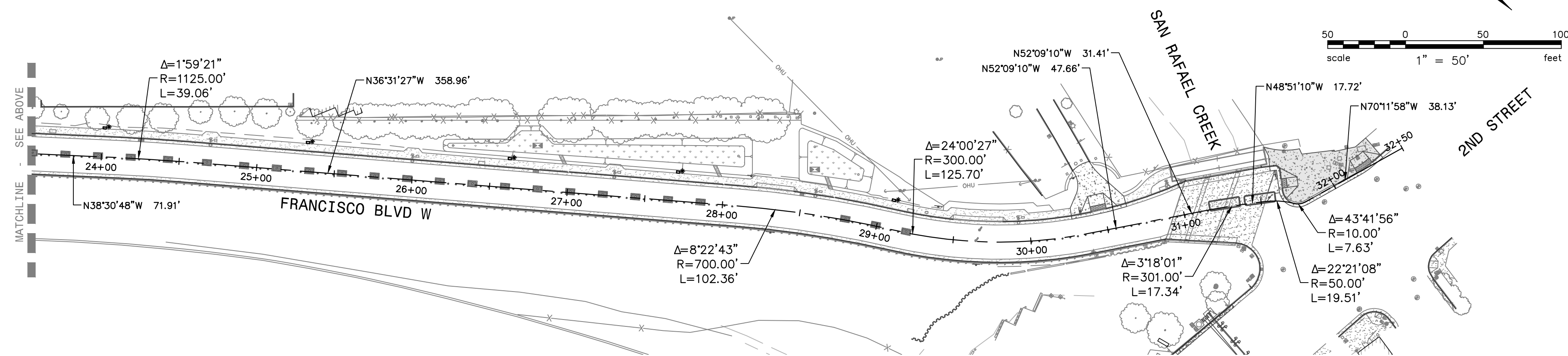
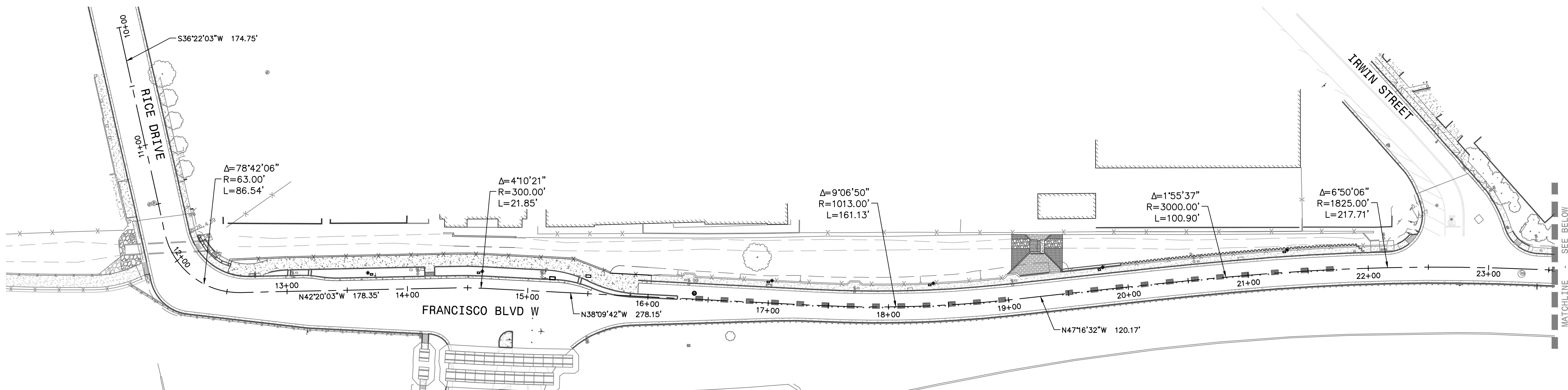


| POINT TABLE | | | | |
|--------------|-------------|-------------|-----------|---|
| POINT NUMBER | NORTHING | EASTING | ELEVATION | DESCRIPTION |
| 155 | 1749099.045 | 6412829.955 | 3.44 | 2-INCH DISK "SMART PROJECT CONTROL 155; PLS 7935" |
| 157 | 1751974.969 | 6410565.850 | 8.83 | 2-INCH DISK "SMART PROJECT CONTROL 157; PLS 7935" |
| 215 | 1749795.604 | 6411907.121 | 4.10 | NAIL AND TAG STAMPED "CINQUINI & PASSARINO CONTROL" |

NOTES

HORIZONTAL DATUM: SMART CONTROL NETWORK WHICH IS BASED ON CALIFORNIA COORDINATE SYSTEM OF 1983, ZONE 2, EPOCH 2008.00. DISTANCES ON THESE DRAWINGS ARE BASED ON GRID MEASUREMENTS. TO OBTAIN GROUND DISTANCES, MULTIPLY BY THE APPROPRIATE SCALE FACTOR. SMART CONTROL UTILIZED FOR THIS PROJECT ARE LISTED IN THE POINT TABLE ABOVE.

VERTICAL DATUM: SMART CONTROL NETWORK WHICH IS BASED ON TIES TO NAVD 88 BENCHMARKS. SMART CONTROL UTILIZED FOR THIS PROJECT IS SHOWN IN THE POINT TABLE ABOVE.



| DESIGNED | DRAWN | CHECKED | APPROVED | NO. | REVISION | BY | DATE |
|----------|-------|---------|----------|-----|----------|----|------|
| JAK | IMC | JAK | JAK | | | | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
SURVEY CONTROL PLAN

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

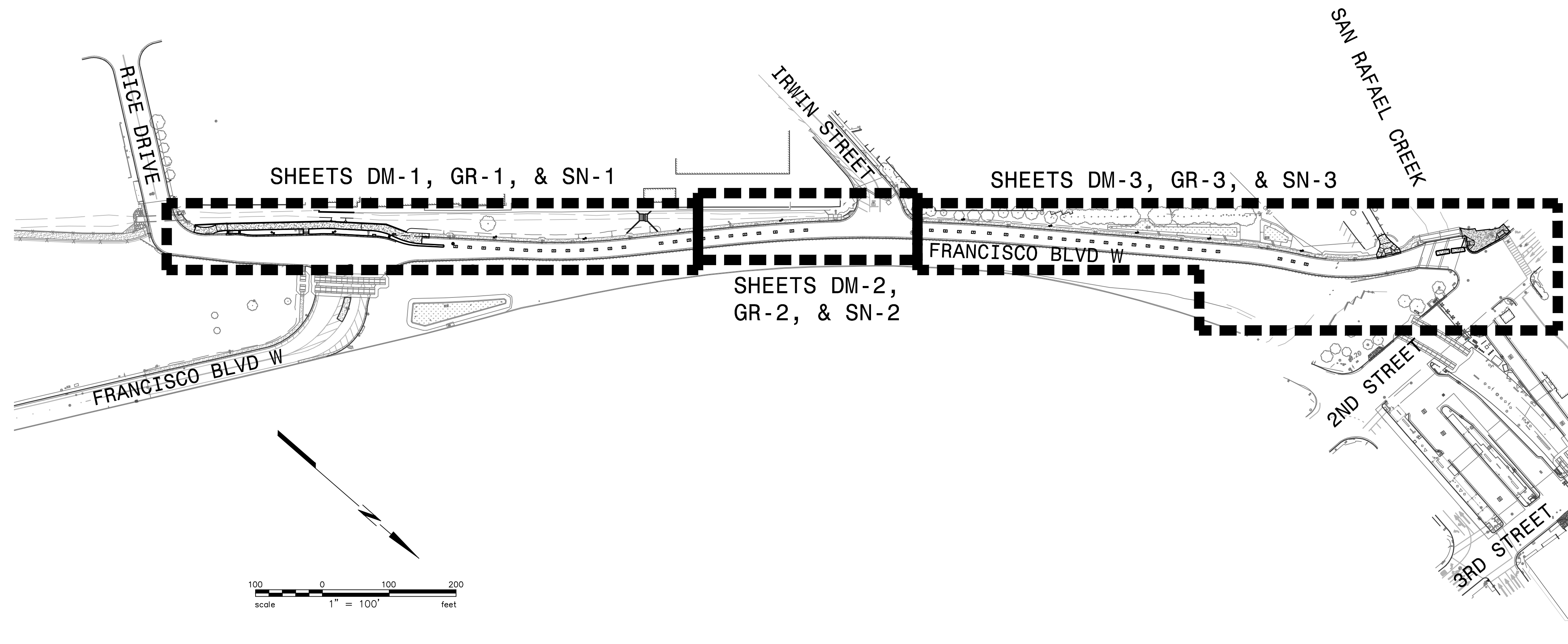


CITY OF SAN RAFAEL
 DEPARTMENT OF
 PUBLIC WORKS

SCALE: AS SHOWN
 DATE: MAY 2020
 BKF PROJECT NO.: 20169048-28
 CITY PROJECT NO.: 11364
 SHEET NO.: **SC-1**
 DRAWING: 3 OF 38



Plot: May 12, 2020 at 10:02am
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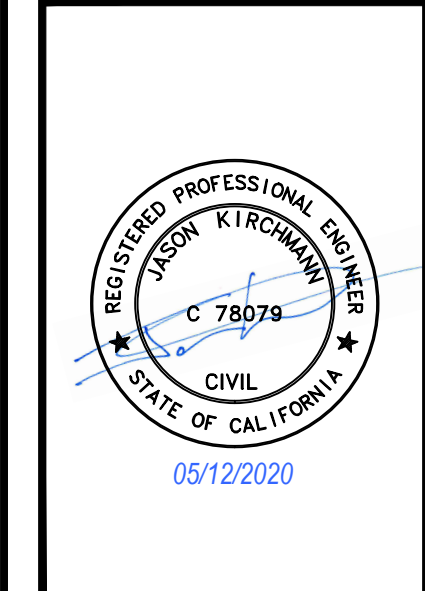


| DESIGNED | DRAWN | CHECKED | APPROVED | NO. | REVISION | BY | DATE |
|----------|-------|---------|----------|-----|----------|----|------|
| JAK | IMC | JAK | JAK | | | | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
KEY MAP

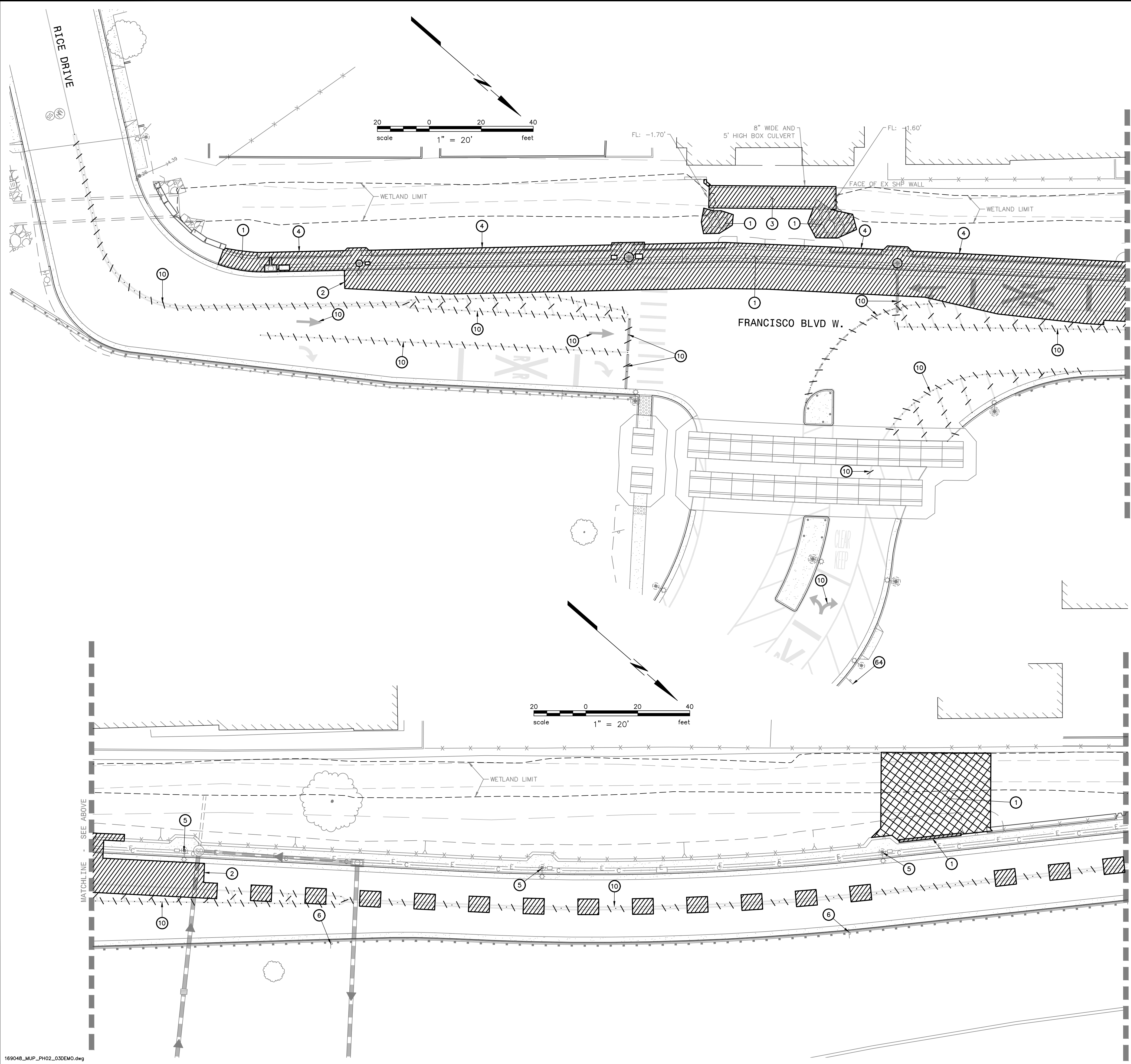
SAN RAFAEL COUNTY OF MARIN CALIFORNIA



CITY OF SAN RAFAEL
DEPARTMENT OF PUBLIC WORKS

SCALE: AS SHOWN
 DATE: MAY 2020
 BKF PROJECT NO.: 20169048-28
 CITY PROJECT NO.: 11364
 SHEET NO.: **KM-1**
 DRAWING: 4 OF 38





- KEYNOTES:**
- ① REMOVE EXISTING MATERIAL OR FEATURE TO FACILITATE THE PROPOSED IMPROVEMENTS AND DISPOSE OF UNUSED MATERIAL.
 - ② SAW CUT AND CLEANLY REMOVE EXISTING MATERIAL, OR REMOVE EXISTING MATERIAL TO THE NEAREST CONTROL JOINT WHERE APPLICABLE, TO FACILITATE THE PROPOSED IMPROVEMENTS AND DISPOSE OF UNUSED MATERIAL.
 - ③ REMOVE EXISTING BOX CULVERT TO FACILITATE THE PROPOSED IMPROVEMENTS AND DISPOSE OF UNUSED MATERIAL. REFER TO THE STRUCTURAL DRAWINGS.
 - ④ REMOVE EXISTING RETAINING WALL TO FACILITATE THE PROPOSED IMPROVEMENTS AND DISPOSE OF UNUSED MATERIAL. MATERIAL THAT IS REMOVED CLEANLY, WITHOUT DAMAGE, MAY BE RE-USED WITH THE APPROVAL OF THE CITY OF SAN RAFAEL.
 - ⑤ REMOVE EXISTING 'NO PARKING ANY TIME' SIGN FROM EXISTING STREET LIGHT POLE AND DISPOSE OF UNUSED MATERIAL.
 - ⑥ REMOVE EXISTING ROADWAY SIGN AND POST AND DISPOSE OF UNUSED MATERIAL.
 - ⑩ REMOVE EXISTING STRIPING BY SAND BLASTING OR AN EQUIVALENT METHOD WHICH PERMANENTLY REMOVES THE STRIPING WITHOUT JEOPARDIZING THE INTEGRITY OF THE EXISTING PAVEMENT.
 - ⑥4 REMOVE EXISTING 'RICE DRIVE & FRANCISCO BLVD W' DIRECTIONAL SIGN FROM EXISTING POST AND DISPOSE OF UNUSED MATERIAL.

| | | |
|----------|-----|------|
| DESIGNED | JAK | DATE |
| DRAWN | IMC | DATE |
| CHECKED | JAK | DATE |
| APPROVED | JAK | DATE |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
DEMOLITION PLAN

SAN RAFAEL COUNTY OF MARIN CALIFORNIA



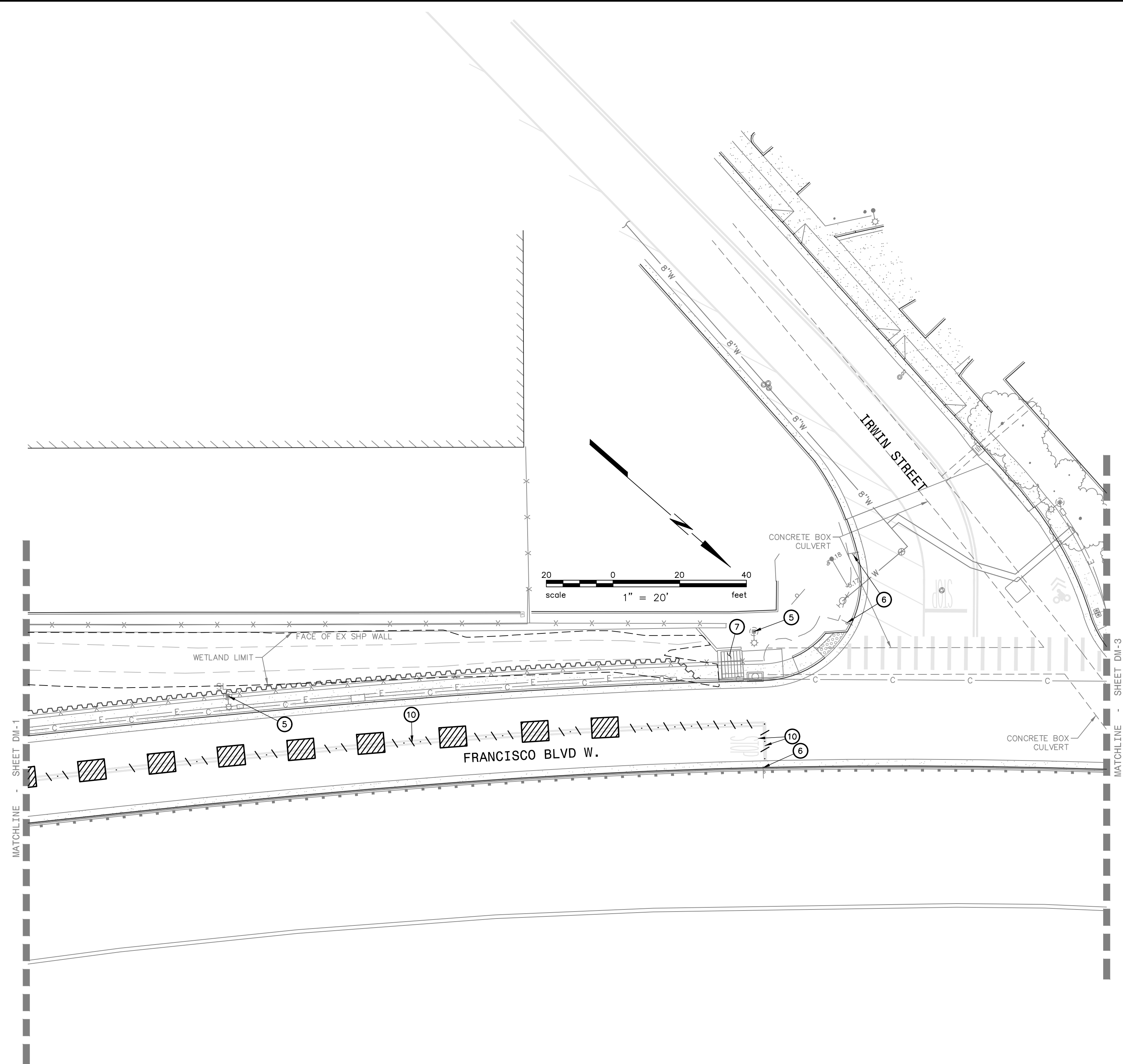
CITY OF SAN RAFAEL
 DEPARTMENT OF
 PUBLIC WORKS

| | |
|-------------------|-------------|
| SCALE: | AS SHOWN |
| DATE: | MAY 2020 |
| BKF PROJECT NO.: | 20169048-28 |
| CITY PROJECT NO.: | 11364 |
| SHEET NO.: | DM-1 |
| DRAWING: | 5 OF 38 |



Plot: May 12, 2020 at 11:33am

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- KEYNOTES:**
- ⑤ REMOVE EXISTING 'NO PARKING ANY TIME' SIGN FROM EXISTING STREET LIGHT POLE AND DISPOSE OF UNUSED MATERIAL.
 - ⑥ REMOVE EXISTING ROADWAY SIGN AND POST AND DISPOSE OF UNUSED MATERIAL.
 - ⑦ REMOVE AND RELOCATE EXISTING TRASH RACK GRATE. REFER TO THE STRUCTURAL DRAWINGS.
 - ⑩ REMOVE EXISTING STRIPING BY SAND BLASTING OR AN EQUIVALENT METHOD WHICH PERMANENTLY REMOVES THE STRIPING WITHOUT JEOPARDIZING THE INTEGRITY OF THE EXISTING PAVEMENT.

| DESIGNED | DRAWN | CHECKED | APPROVED | NO. | REVISION | BY | DATE |
|----------|-------|---------|----------|-----|----------|----|------|
| JAK | IMC | JAK | JAK | | | | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
DEMOLITION PLAN

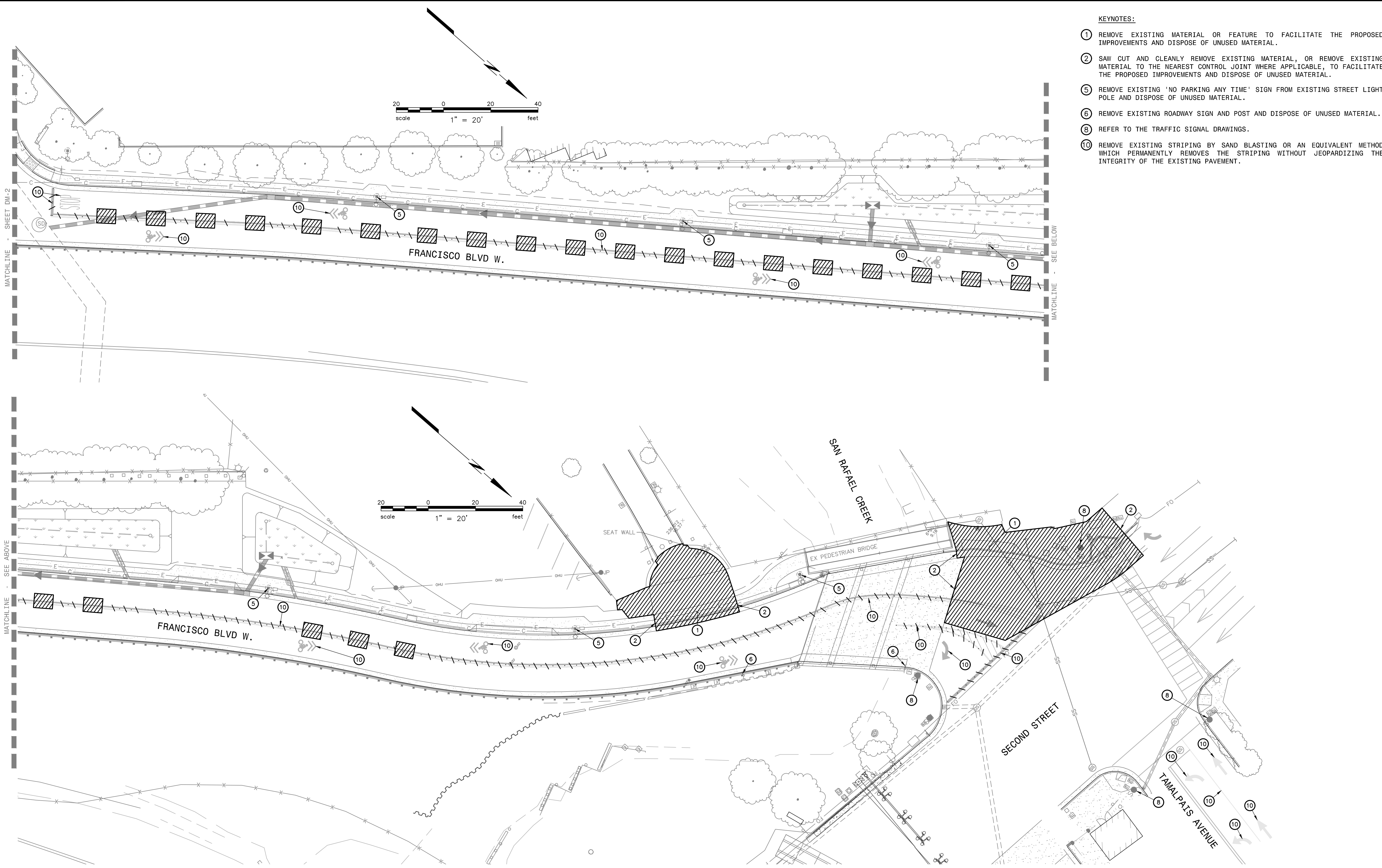
SAN RAFAEL COUNTY OF MARIN CALIFORNIA



CITY OF SAN RAFAEL
 DEPARTMENT OF
PUBLIC WORKS

SCALE: AS SHOWN
 DATE: MAY 2020
 BKF PROJECT NO.: 20169048-28
 CITY PROJECT NO.: 11364
 SHEET NO.: **DM-2**
 DRAWING: 6 OF 38





- KEYNOTES:**
- ① REMOVE EXISTING MATERIAL OR FEATURE TO FACILITATE THE PROPOSED IMPROVEMENTS AND DISPOSE OF UNUSED MATERIAL.
 - ② SAW CUT AND CLEANLY REMOVE EXISTING MATERIAL, OR REMOVE EXISTING MATERIAL TO THE NEAREST CONTROL JOINT WHERE APPLICABLE, TO FACILITATE THE PROPOSED IMPROVEMENTS AND DISPOSE OF UNUSED MATERIAL.
 - ⑤ REMOVE EXISTING 'NO PARKING ANY TIME' SIGN FROM EXISTING STREET LIGHT POLE AND DISPOSE OF UNUSED MATERIAL.
 - ⑥ REMOVE EXISTING ROADWAY SIGN AND POST AND DISPOSE OF UNUSED MATERIAL.
 - ⑧ REFER TO THE TRAFFIC SIGNAL DRAWINGS.
 - ⑩ REMOVE EXISTING STRIPING BY SAND BLASTING OR AN EQUIVALENT METHOD WHICH PERMANENTLY REMOVES THE STRIPING WITHOUT JEOPARDIZING THE INTEGRITY OF THE EXISTING PAVEMENT.

| | | |
|----------|-----|----------|
| DESIGNED | JAK | DATE |
| DRAWN | IMC | BY |
| CHECKED | JAK | REVISION |
| APPROVED | JAK | NO. |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
DEMOLITION PLAN

SAN RAFAEL COUNTY OF MARIN CALIFORNIA



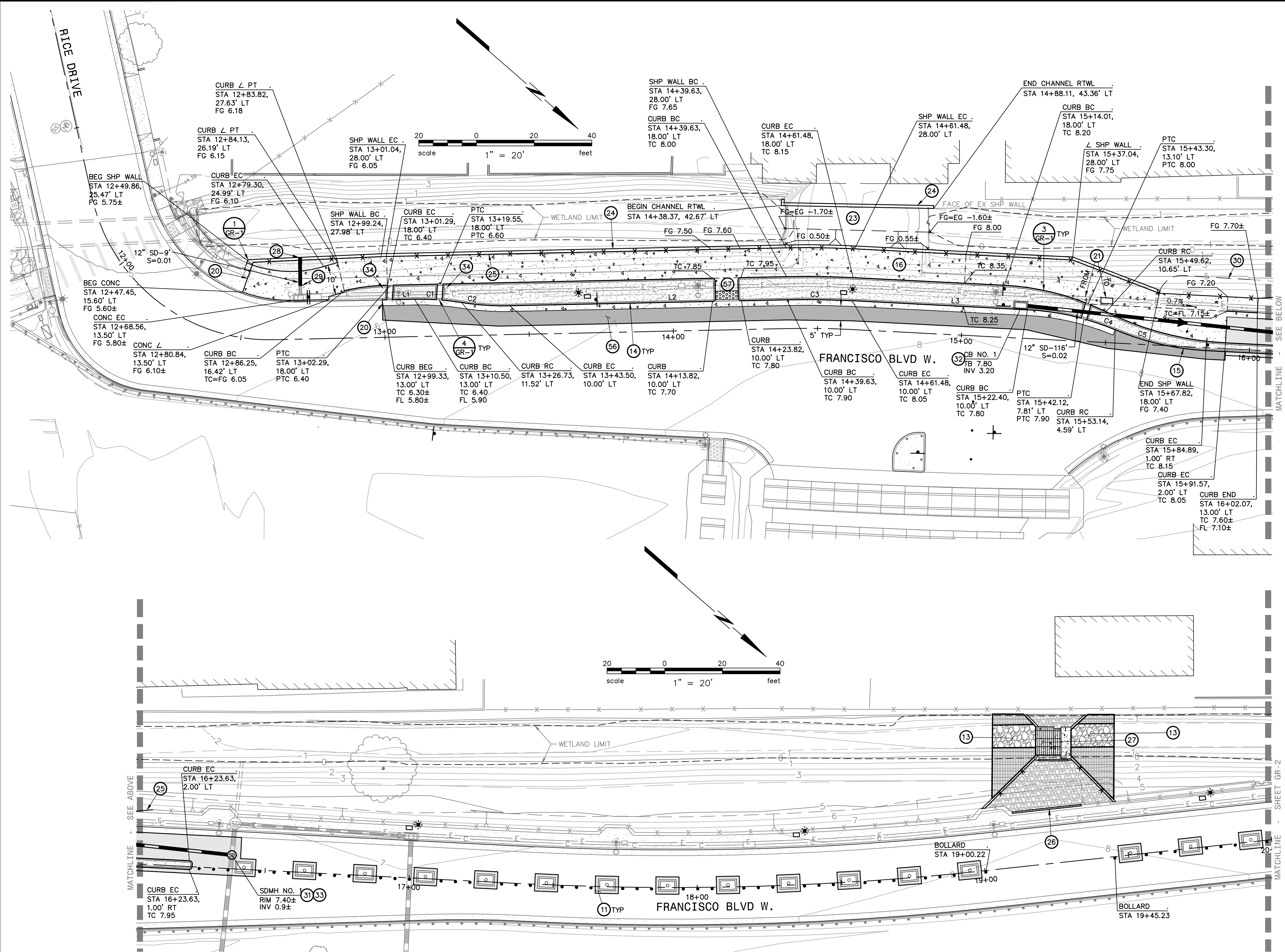
CITY OF SAN RAFAEL
 DEPARTMENT OF
 PUBLIC WORKS

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|------------------------------|
| SCALE: AS SHOWN |
| DATE: MAY 2020 |
| BKF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: DM-3 |
| DRAWING: 7 OF 38 |



Plot: May 12, 2020 at 10:05am

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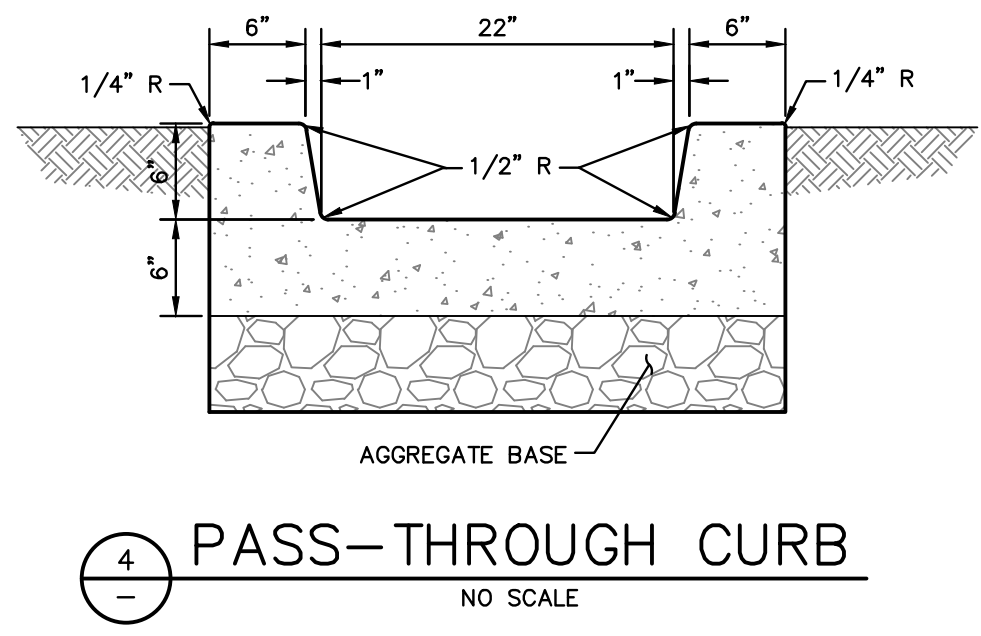
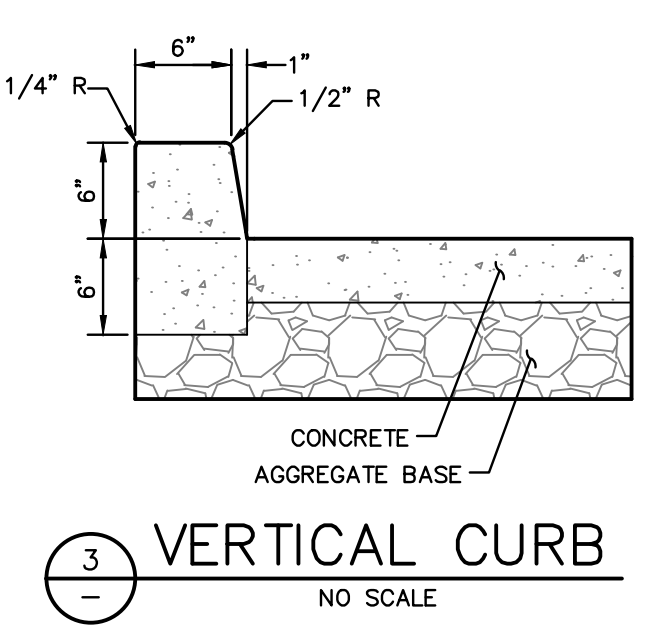
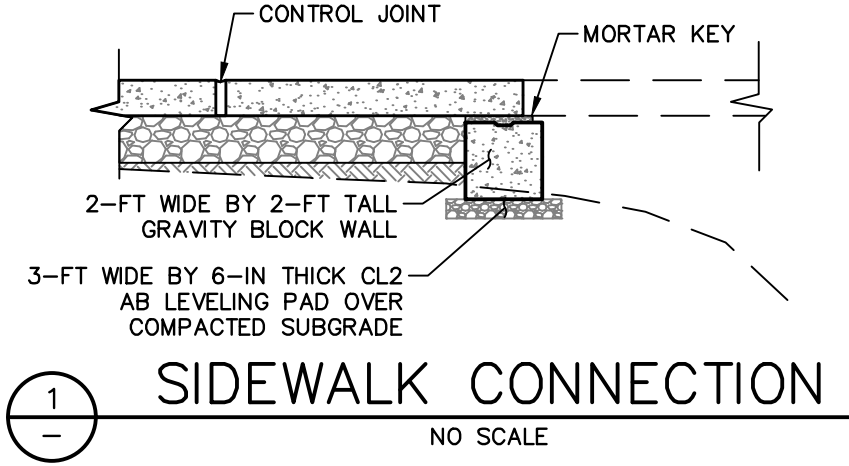
- KEYNOTES:**
- 11 SCARIFY AND RECOMPACT THE UPPER 8-INCHES OF SUBGRADE, WHERE SOIL IS ENCOUNTERED, TO AT LEAST 90-PERCENT RELATIVE COMPACTION AND PROVIDE A 6-INCH DEEP FULL DEPTH ASPHALT CONCRETE PAVEMENT PLUG TO THE LINES AND ELEVATIONS SHOWN IN A MANNER WHICH GENERATES A UNIFORM TRANSITION BETWEEN SURFACES AND DOES NOT IMPEDE DRAINAGE.
 - 13 REMOVE EXISTING MATERIAL AS REQUIRED TO PROVIDE A LAYER OF GEOSYNTHETIC FABRIC AND A BLANKET OF CALTRANS CLASS I ROCK SLOPE PROTECTION IN ACCORDANCE WITH CALTRANS 2018 STANDARD SPECIFICATIONS SECTION 72-2. SCARIFY SUBGRADE TO A DEPTH OF 8-INCHES AND RECOMPACT AT 90-PERCENT RELATIVE COMPACTION PRIOR TO PLACING FABRIC. REFER TO THE STRUCTURAL DRAWINGS.
 - 14 TYPE 'A' CURB AND GUTTER IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 100 AND 105.
 - 15 TYPE 'E' CURB IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 100 AND 105.
 - 16 SIDEWALK IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 100 AND 105 HAVING A CROSS SLOPE WHICH DOES NOT EXCEED 2-PERCENT.
 - 19 CASE 'F' CURB RAMP AND DETECTABLE WARNING SURFACE IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN AB8A.
 - 20 CONFORM TO EXISTING SURFACE ELEVATION IN A MANNER WHICH GENERATES A UNIFORM TRANSITION BETWEEN SURFACES AND DOES NOT IMPEDE DRAINAGE.
 - 21 RELOCATE EXISTING TRAFFIC SIGNAL PULLBOX WHERE SHOWN ON PLAN.
 - 23 RECONSTRUCT DRAINAGE CHANNEL. REFER TO THE STRUCTURAL DRAWINGS.
 - 24 RETAINING WALL. REFER TO THE STRUCTURAL DRAWINGS.
 - 25 RAILING. REFER TO THE STRUCTURAL DRAWINGS.
 - 26 SLIDING FENCE GATE. REFER TO THE STRUCTURAL DRAWINGS.
 - 27 TRASH RACK STRUCTURE. REFER TO THE STRUCTURAL DRAWINGS.
 - 28 STORM DRAIN UTILITY PENETRATION THROUGH RETAINING WALL. REFER TO THE STRUCTURAL DRAWINGS.
 - 29 CONNECT TO EXISTING UTILITY IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARD 295 IN A MANNER WHICH PROVIDES A PERMANENT WATER TIGHT SEAL.
 - 30 APPROXIMATE LIMIT OF GRADING.
 - 31 TYPE 'A' STORM DRAIN MANHOLE IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS (UCS) 200 AND 205 HAVING A TRAFFIC RATED FRAME AND COVER IN ACCORDANCE WITH UCS STANDARD DRAWING NUMBER 215.
 - 32 TYPE 'B' STORM DRAIN CATCH BASIN IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 200 AND 230 HAVING A STORM DRAIN INLET STENCIL IN ACCORDANCE WITH LOCAL REGULATIONS.
 - 33 REMOVE PORTIONS OF EXISTING STORM DRAIN TO FACILITATE THE PROPOSED IMPROVEMENTS AND CONNECT TO THE NEW STRUCTURE. FORM AND FILL AREA BETWEEN PIPE AND STRUCTURE WITH CONCRETE IN A MANNER WHICH PROVIDES A PERMANENT WATER TIGHT SEAL.
 - 34 SCHEDULE 40 PVC PIPE UTILITY CHASE HAVING A MINIMUM OF 18-INCHES OF COVER WITH TEMPORARY CAPS AT BOTH ENDS TO FACILITATE THE IRRIGATION SYSTEM. REFER TO THE LANDSCAPE DRAWINGS TO COORDINATE CHASE SIZES AND LOCATIONS.
 - 35 SCARIFY AND RECOMPACT THE UPPER 8-INCHES OF SUBGRADE, WHERE SOIL IS ENCOUNTERED, TO AT LEAST 90-PERCENT RELATIVE COMPACTION AND PROVIDE A 12-INCH DEEP FULL DEPTH ASPHALT CONCRETE PAVEMENT PLUG TO THE LINES AND ELEVATIONS SHOWN IN A MANNER WHICH GENERATES A UNIFORM TRANSITION BETWEEN SURFACES AND DOES NOT IMPEDE DRAINAGE.
 - 37 DETECTABLE WARNING SURFACE IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN AB8A.

LINE TABLE

| LINE | DIRECTION | LENGTH |
|------|-------------|--------|
| L1 | N42°20'03"W | 11.17' |
| L2 | N42°20'03"W | 96.13' |
| L3 | N38°09'42"W | 60.92' |

CURVE TABLE

| CURVE | DELTA | RADIUS | LENGTH |
|-------|-----------|---------|--------|
| C1 | 10°23'20" | 90.00' | 16.32' |
| C2 | 10°23'20" | 93.00' | 16.86' |
| C3 | 4°10'21" | 310.00' | 22.58' |
| C4 | 19°58'00" | 90.00' | 31.36' |
| C5 | 19°58'00" | 93.00' | 32.41' |



EXISTING DRY UTILITY CONDUITS AND BOXES SHALL BE RELOCATED TO FACILITATE THE PROPOSED IMPROVEMENTS (WHERE APPLICABLE).

PRELIMINARY
NOT FOR CONSTRUCTION
DATE: 05/12/2020



| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
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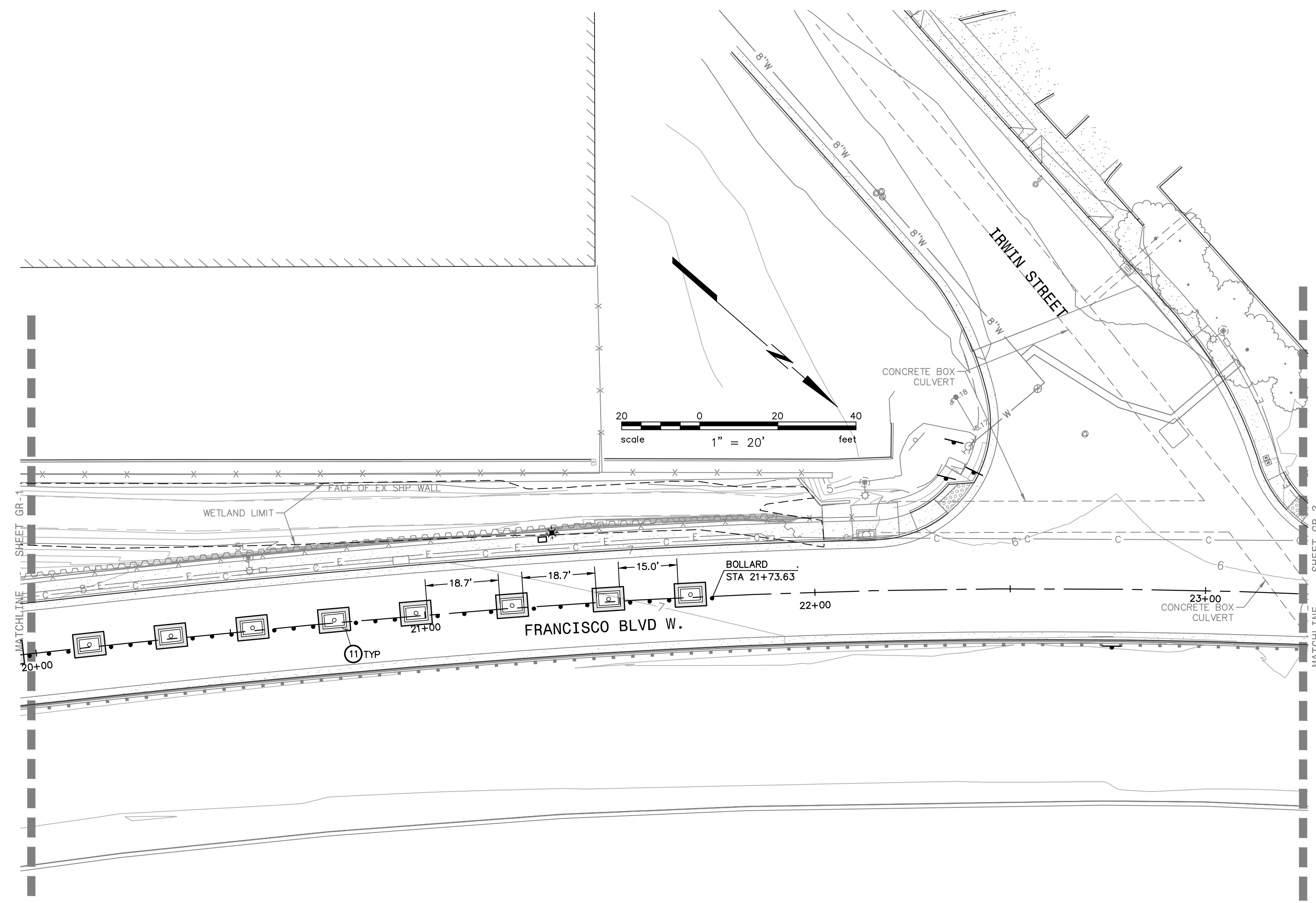
PROJECT NAME: **IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET**
DRAWING NAME: **GRADING & UTILITY PLAN STA 11+60 - 20+00**
DESIGNED: JAK
DRAWN: IMC
CHECKED: JAK
APPROVED: JAK
SAN RAFAEL, CALIFORNIA



CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

SCALE: AS SHOWN
DATE: MAY 2020
BKF PROJECT NO.: 20169048-28
CITY PROJECT NO.: 11364
SHEET NO.: **GR-1**
DRAWING: 8 OF 38

KEYNOTES:
 ① SCARIFY AND RECOMPACT THE UPPER 8-INCHES OF SUBGRADE, WHERE SOIL IS ENCOUNTERED, TO AT LEAST 90-PERCENT RELATIVE COMPACTION AND PROVIDE A 6-INCH DEEP FULL DEPTH ASPHALT CONCRETE PAVEMENT PLUG TO THE LINES AND ELEVATIONS SHOWN IN A MANNER WHICH GENERATES A UNIFORM TRANSITION BETWEEN SURFACES AND DOES NOT IMPEDE DRAINAGE.



EXISTING DRY UTILITY CONDUITS AND BOXES SHALL BE RELOCATED TO FACILITATE THE PROPOSED IMPROVEMENTS (WHERE APPLICABLE).

PRELIMINARY
 NOT FOR CONSTRUCTION
 DATE: 05/12/2020



| DESIGNED | DRAWN | CHECKED | APPROVED | NO. | REVISION | BY | DATE |
|----------|-------|---------|----------|-----|----------|----|------|
| JAK | IMC | JAK | JAK | | | | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

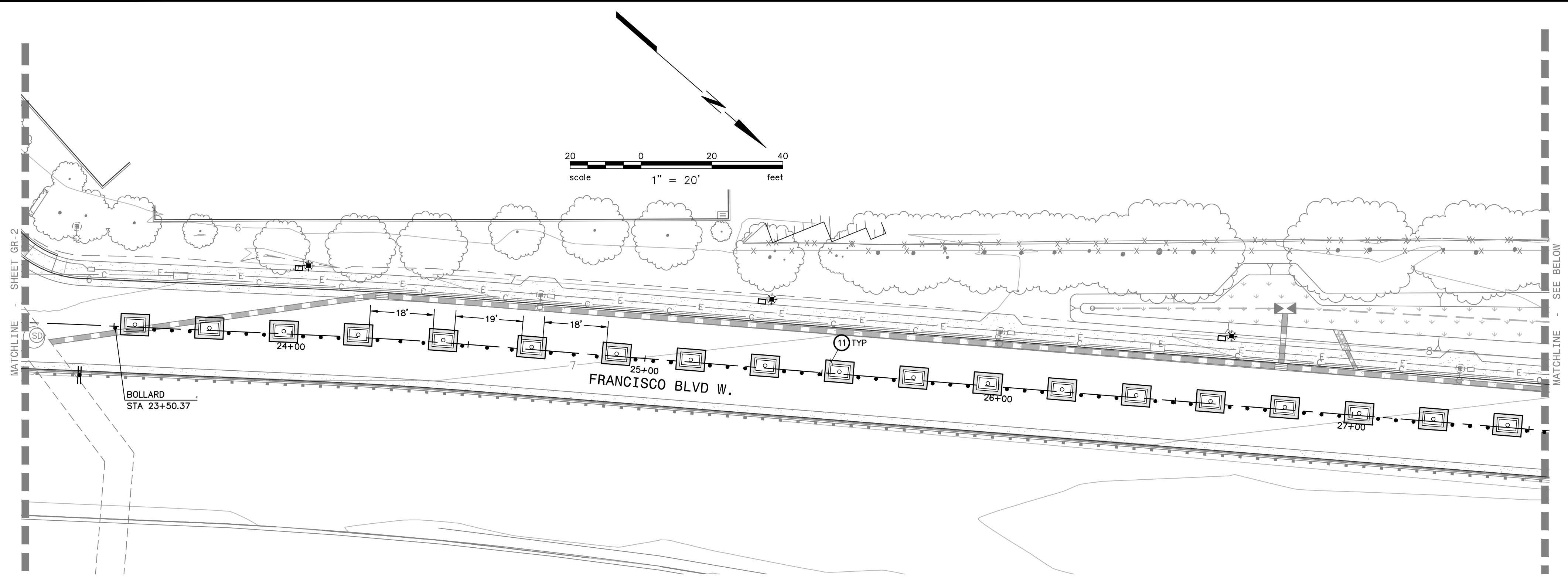
DRAWING NAME
GRADING & UTILITY PLAN STA 20+00 - 23+26

SAN RAFAEL COUNTY OF MARIN CALIFORNIA



CITY OF SAN RAFAEL
 DEPARTMENT OF PUBLIC WORKS

SCALE: AS SHOWN
 DATE: MAY 2020
 BKF PROJECT NO.: 20169048-28
 CITY PROJECT NO.: 11364
 SHEET NO.: **GR-2**
 DRAWING: 9 OF 38

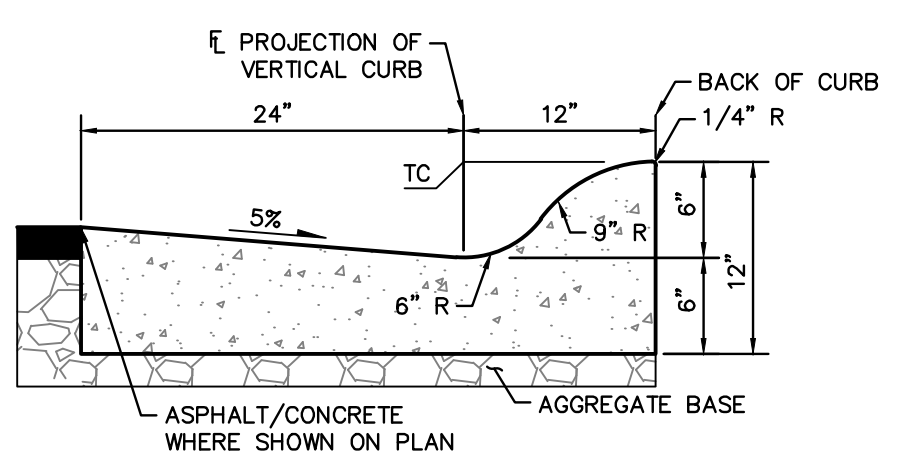
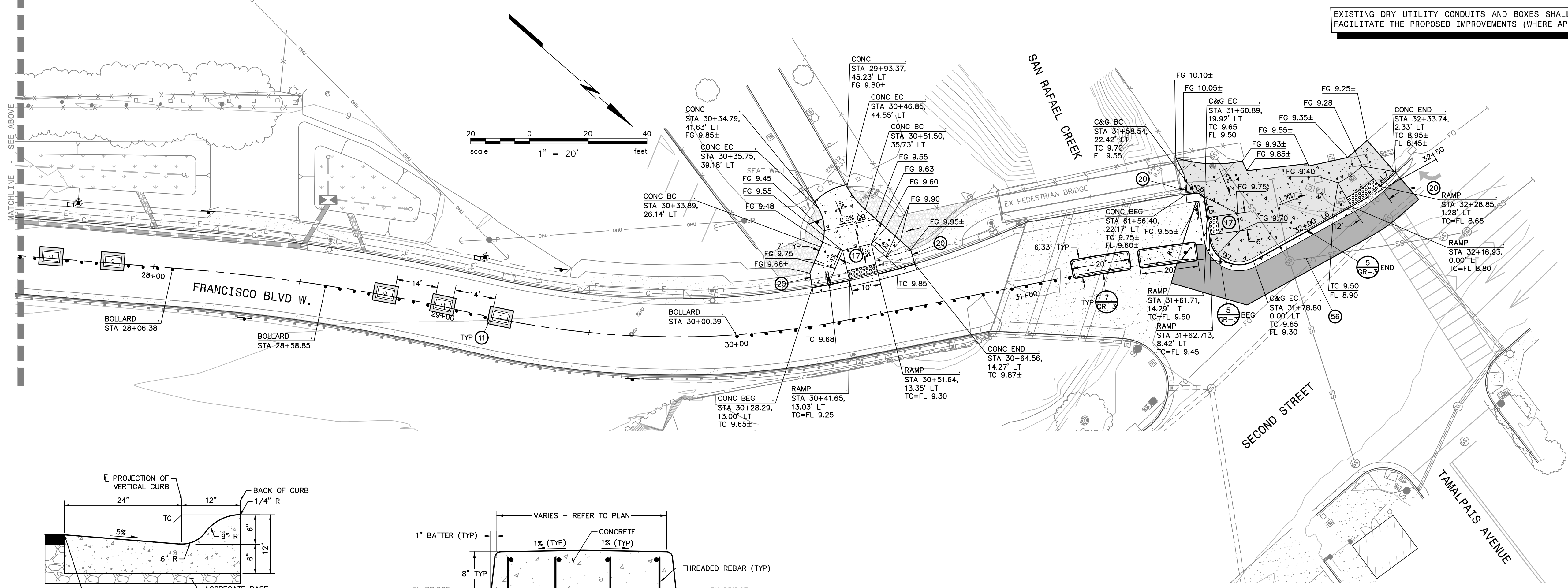


- KEYNOTES:**
- 11 SCARIFY AND RECOMPACT THE UPPER 8-INCHES OF SUBGRADE, WHERE SOIL IS ENCOUNTERED, TO AT LEAST 90-PERCENT RELATIVE COMPACTION AND PROVIDE A 6-INCH DEEP FULL DEPTH ASPHALT CONCRETE PAVEMENT PLUG TO THE LINES AND ELEVATIONS SHOWN IN A MANNER WHICH GENERATES A UNIFORM TRANSITION BETWEEN SURFACES AND DOES NOT IMPEDE DRAINAGE.
 - 15 TYPE 'E' CURB IN ACCORDANCE WITH COUNTY OF MARIN UNIFORM CONSTRUCTION STANDARDS 100 AND 105.
 - 17 CASE 'A' CURB RAMP AND DETECTABLE WARNING SURFACE IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A88A.
 - 20 CONFORM TO EXISTING SURFACE ELEVATION IN A MANNER WHICH GENERATES A UNIFORM TRANSITION BETWEEN SURFACES AND DOES NOT IMPEDE DRAINAGE.
 - 56 SCARIFY AND RECOMPACT THE UPPER 8-INCHES OF SUBGRADE, WHERE SOIL IS ENCOUNTERED, TO AT LEAST 90-PERCENT RELATIVE COMPACTION AND PROVIDE A 12-INCH DEEP FULL DEPTH ASPHALT CONCRETE PAVEMENT PLUG TO THE LINES AND ELEVATIONS SHOWN IN A MANNER WHICH GENERATES A UNIFORM TRANSITION BETWEEN SURFACES AND DOES NOT IMPEDE DRAINAGE.

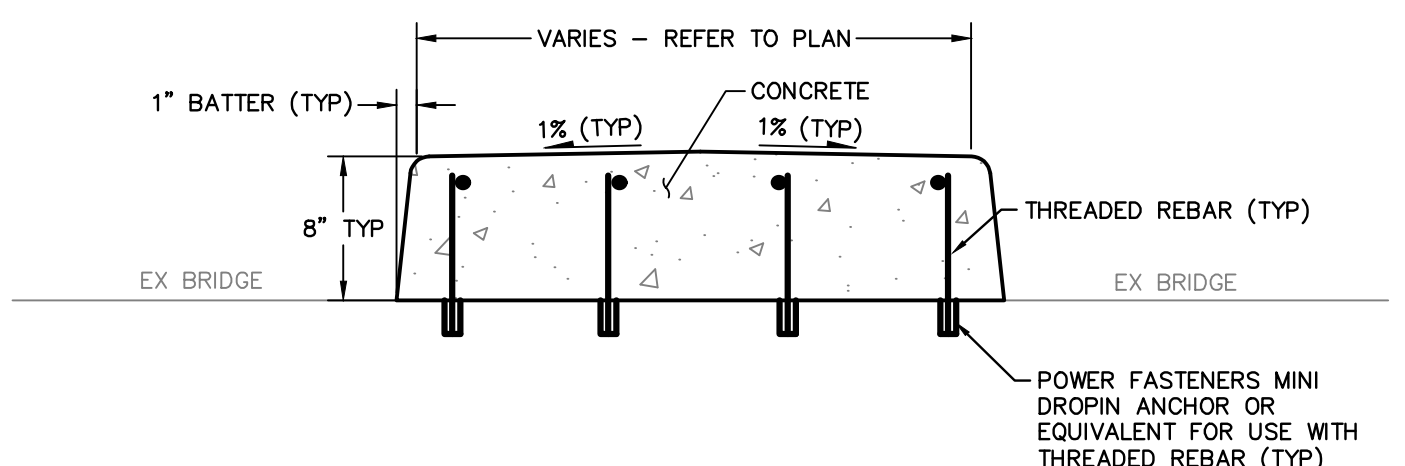
| LINE | DIRECTION | LENGTH |
|------|-------------|--------|
| L4 | N46°53'43"W | 3.11' |
| L6 | N70°11'58"W | 38.13' |
| L7 | N82°15'33"W | 6.99' |

| CURVE | DELTA | RADIUS | LENGTH |
|-------|------------|--------|--------|
| C6 | 88°02'33" | 3.00' | 4.61' |
| C7 | 111°20'48" | 10.00' | 19.43' |

EXISTING DRY UTILITY CONDUITS AND BOXES SHALL BE RELOCATED TO FACILITATE THE PROPOSED IMPROVEMENTS (WHERE APPLICABLE).



5 ROLLED CURB
NO SCALE



7 BRIDGE-MOUNTED CURB ISLAND
NO SCALE

| DESIGNED | DRAWN | CHECKED | APPROVED |
|----------|-------|---------|----------|
| JAK | IMC | JAK | JAK |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
GRADING & UTILITY PLAN STA 23+26 - 32+33

COUNTY OF MARIN CALIFORNIA
SAN RAFAEL

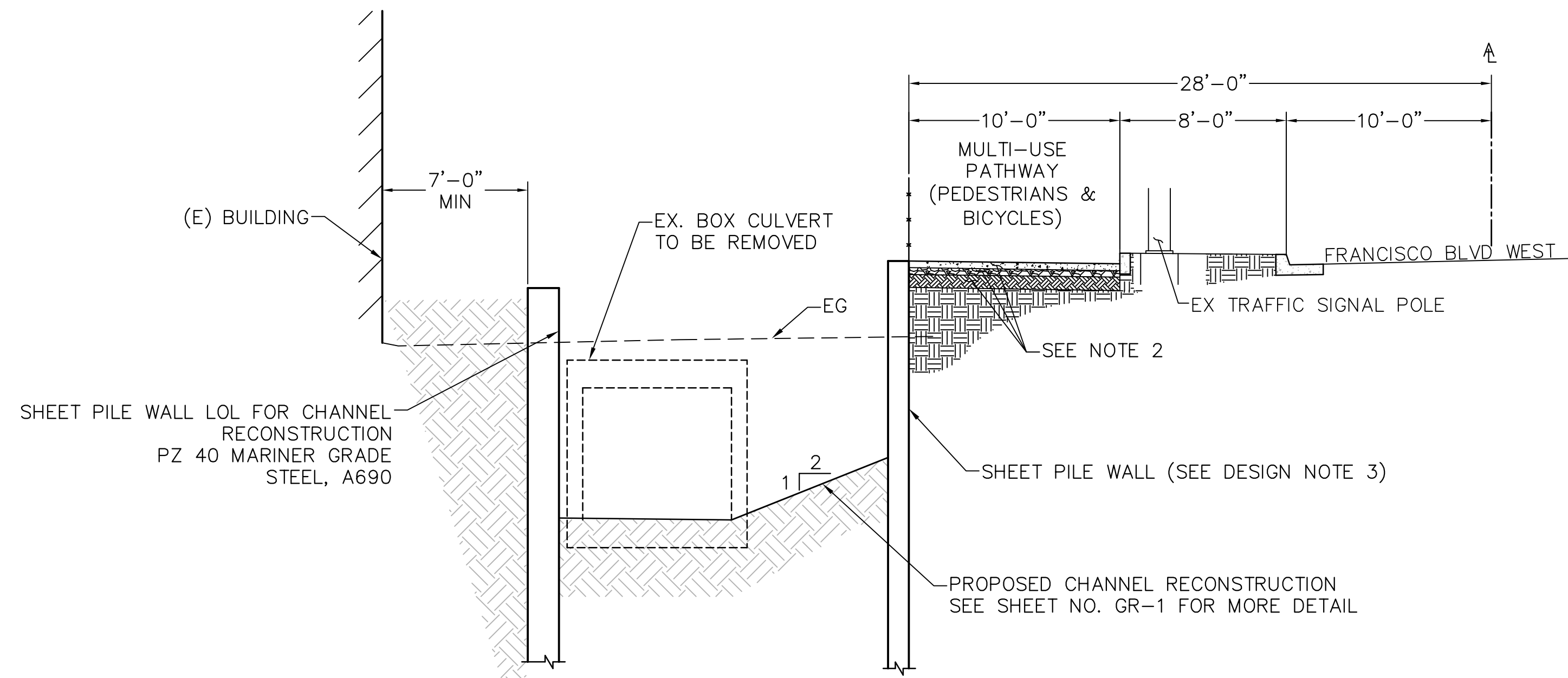


CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

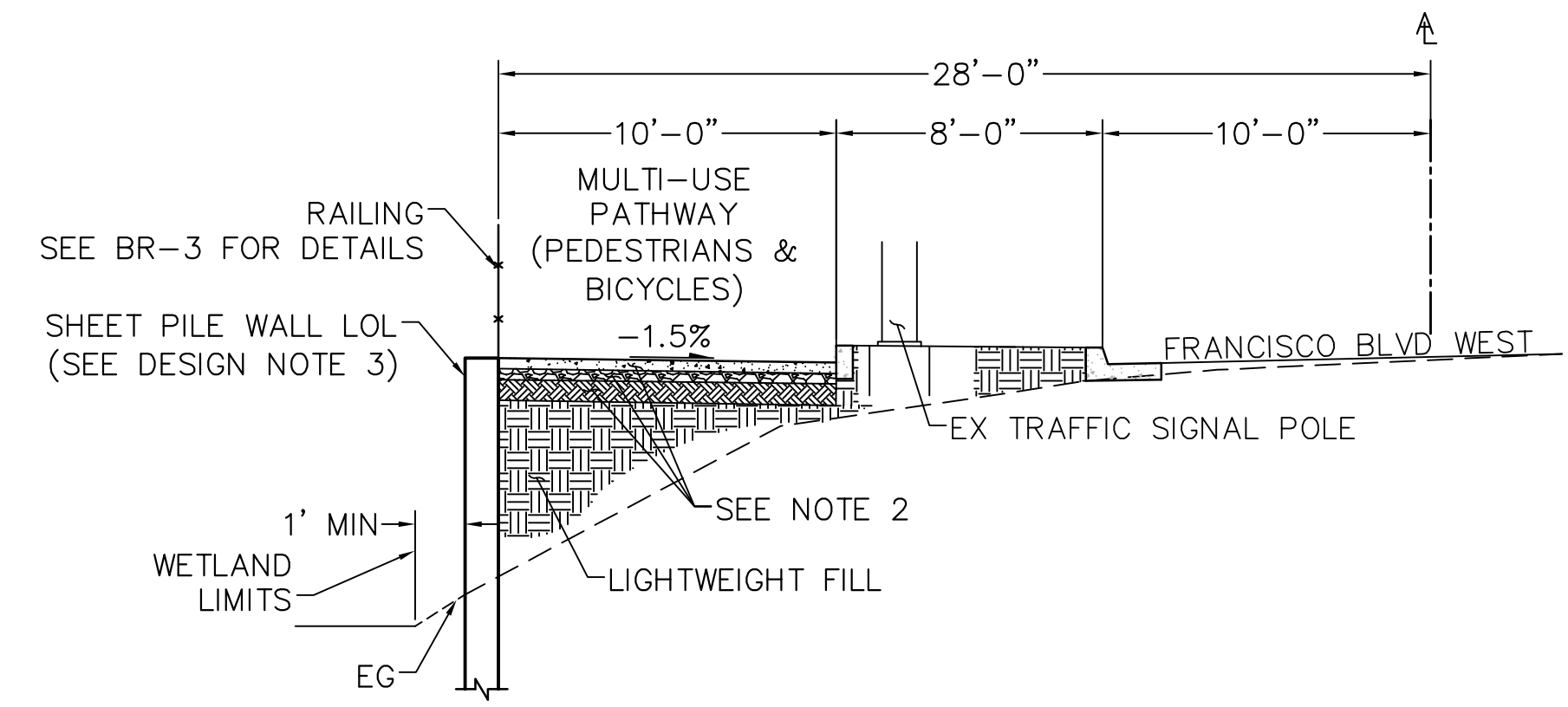
SCALE: AS SHOWN
DATE: MAY 2020
BRF PROJECT NO.: 20169048-28
CITY PROJECT NO.: 11364
SHEET NO.: GR-3
DRAWING: 10 OF 38

PRELIMINARY
NOT FOR CONSTRUCTION
DATE: 05/12/2020

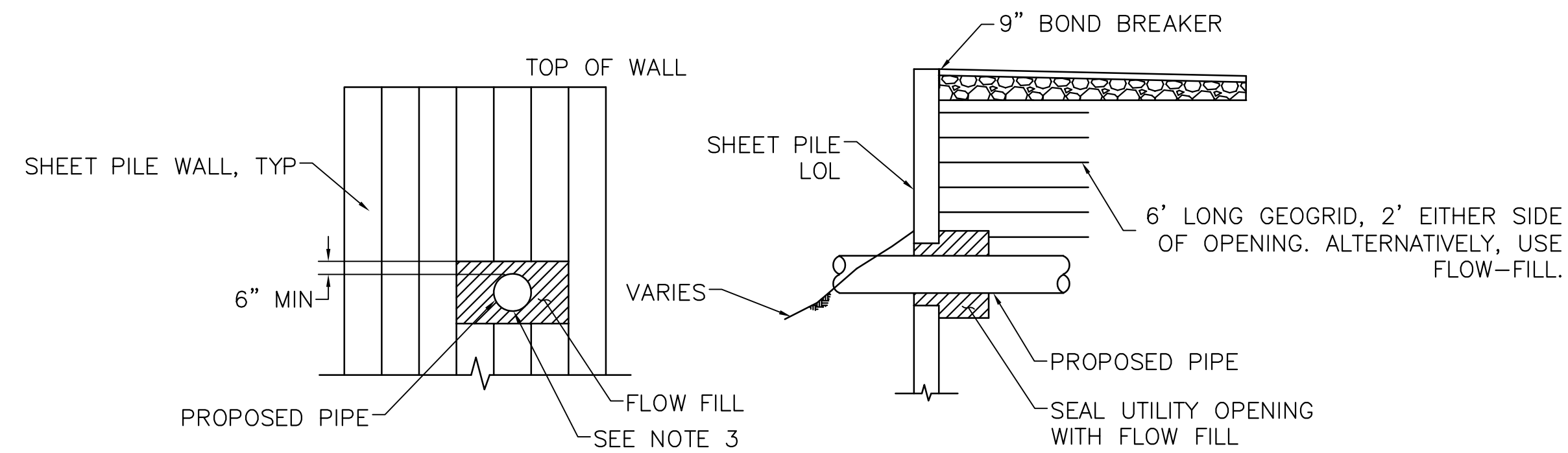




B SPW AT MASERATI DEALERSHIP
RW-2 SCALE: N.T.S.



A SPW ALONG FRANCISCO BLVD WEST
RW-1 SCALE: N.T.S.



DETAIL 1

NOTES:

1. LIGHTWEIGHT FILL SHALL BE A VOLCANIC AGGREGATE PER PROJECT TECHNICAL SPECIFICATION 18-9 OR APPROVED EQUAL. UNIT WEIGHT SHALL BE 60 PCF.
2. REFER TO SHEET CV-1 FOR CL2 BASE ROCK THICKNESS, AND TYPICAL SECTION LIMITS.
3. ALTERNATIVELY TO SEPARATE SHEETS, CUT HOLE IN SHEETING BASED ON DIAMETER OF PIPE, PLUS 6".

DESIGN NOTES:

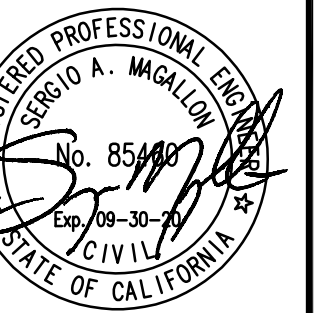
1. RETAINING WALLS ARE DESIGNED FOR 2' OF LL SURCHARGE (HS20).
2. LIGHTWEIGHT FILL SHALL BE $\gamma = 60 \text{ PCF}$, $\phi = 30^\circ$.
3. SHEET PILE SHALL BE PZ 27 MARINER GRADE STEEL PER ASTM A690 WHERE SHOWN ON PLANS.

| DESIGNED | BY | DATE |
|----------|----------|------|
| JT | | |
| DRAWN | REVISION | DATE |
| JT | | |
| CHECKED | NO. | DATE |
| SAM | | |
| APPROVED | | |
| AWS | | |

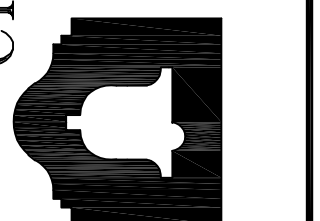
PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
TYPICAL SECTIONS

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

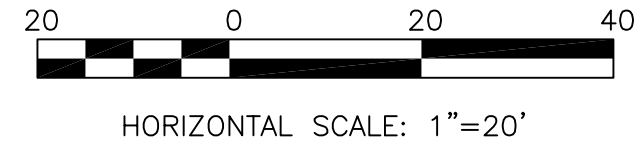


CITY OF SAN RAFAEL
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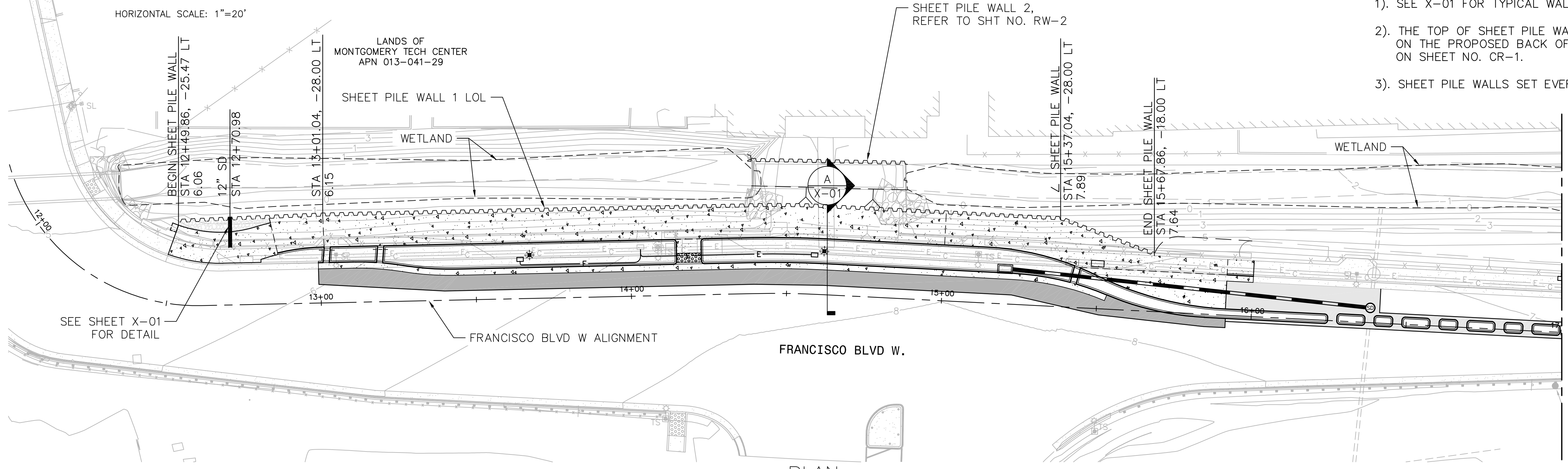
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| SCALE: AS SHOWN |
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| BKF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: X-01 |
| DRAWING: 11 OF 38 |



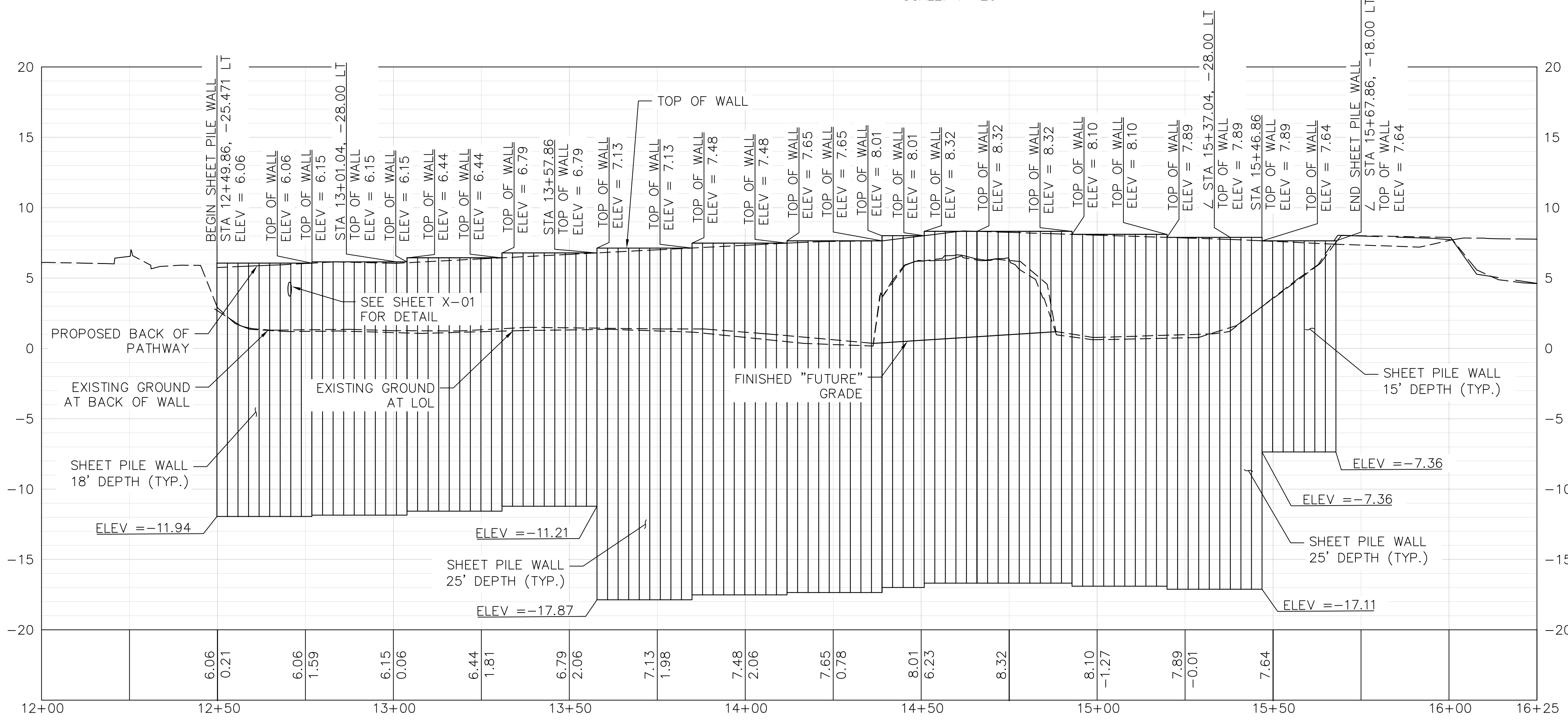


NOTES

- 1). SEE X-01 FOR TYPICAL WALL SECTIONS
- 2). THE TOP OF SHEET PILE WALL ELEVATIONS ARE BASED ON THE PROPOSED BACK OF PATHWAY ELEVATION SHOWN ON SHEET NO. CR-1.
- 3). SHEET PILE WALLS SET EVERY 27' IN LENGTH.



PLAN
SCALE: 1"=20'



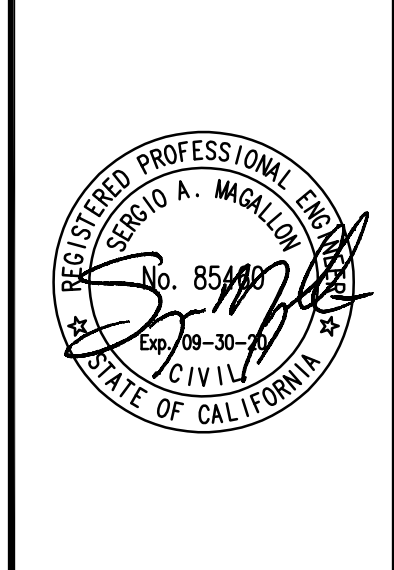
PROFILE
SCALE: 1"=20' (H) 1"=5' (V)

| | | |
|----------|-----|----------|
| DESIGNED | JT | DATE |
| DRAWN | JT | BY |
| CHECKED | SAM | REVISION |
| APPROVED | AWS | NO. |
| | | DATE |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

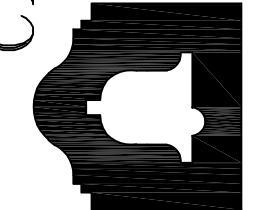
DRAWING NAME
SHEET PILE WALL 1 PLAN AND PROFILE

SAN RAFAEL COUNTY OF MARIN CALIFORNIA



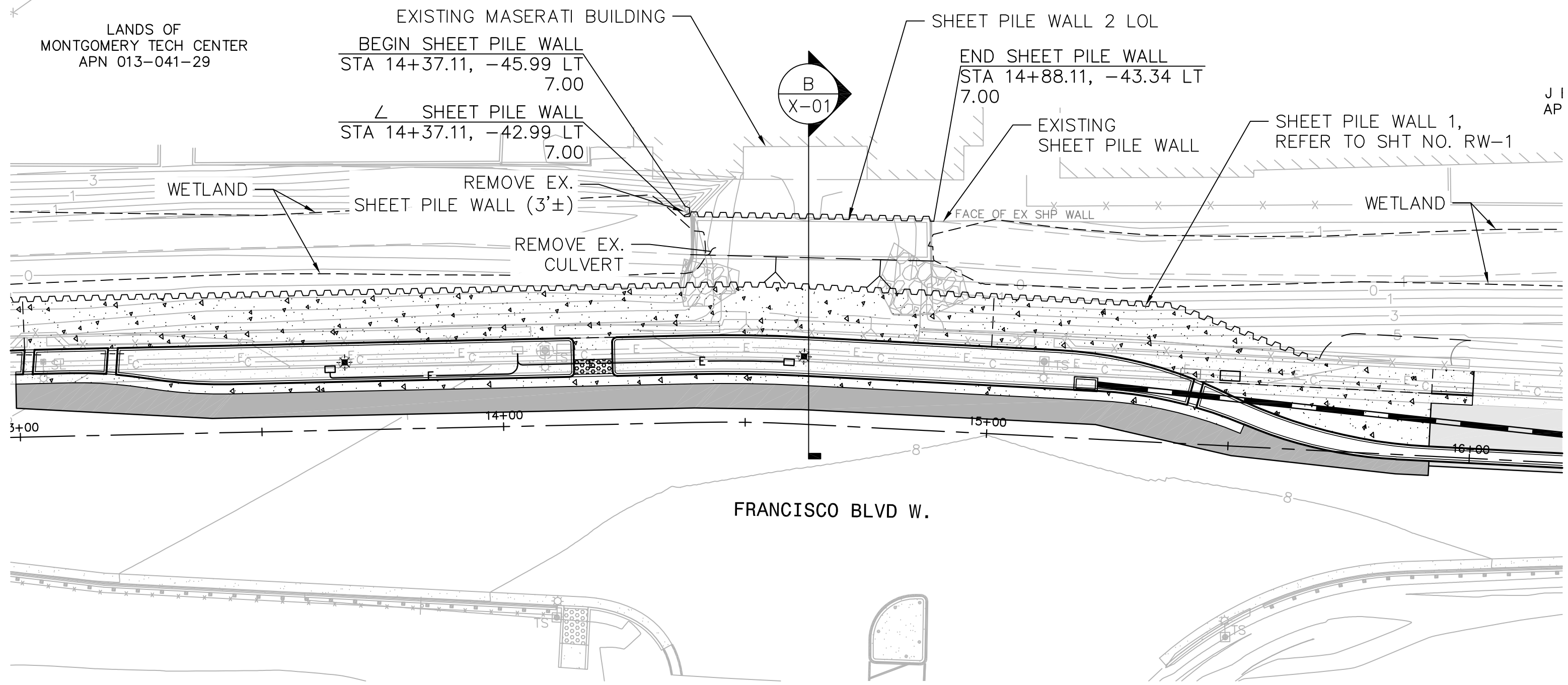
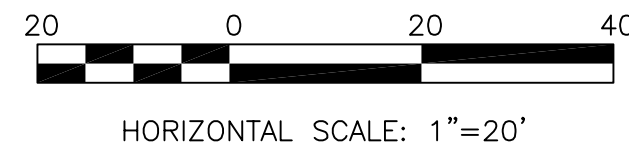
CITY OF SAN RAFAEL

DEPARTMENT OF PUBLIC WORKS

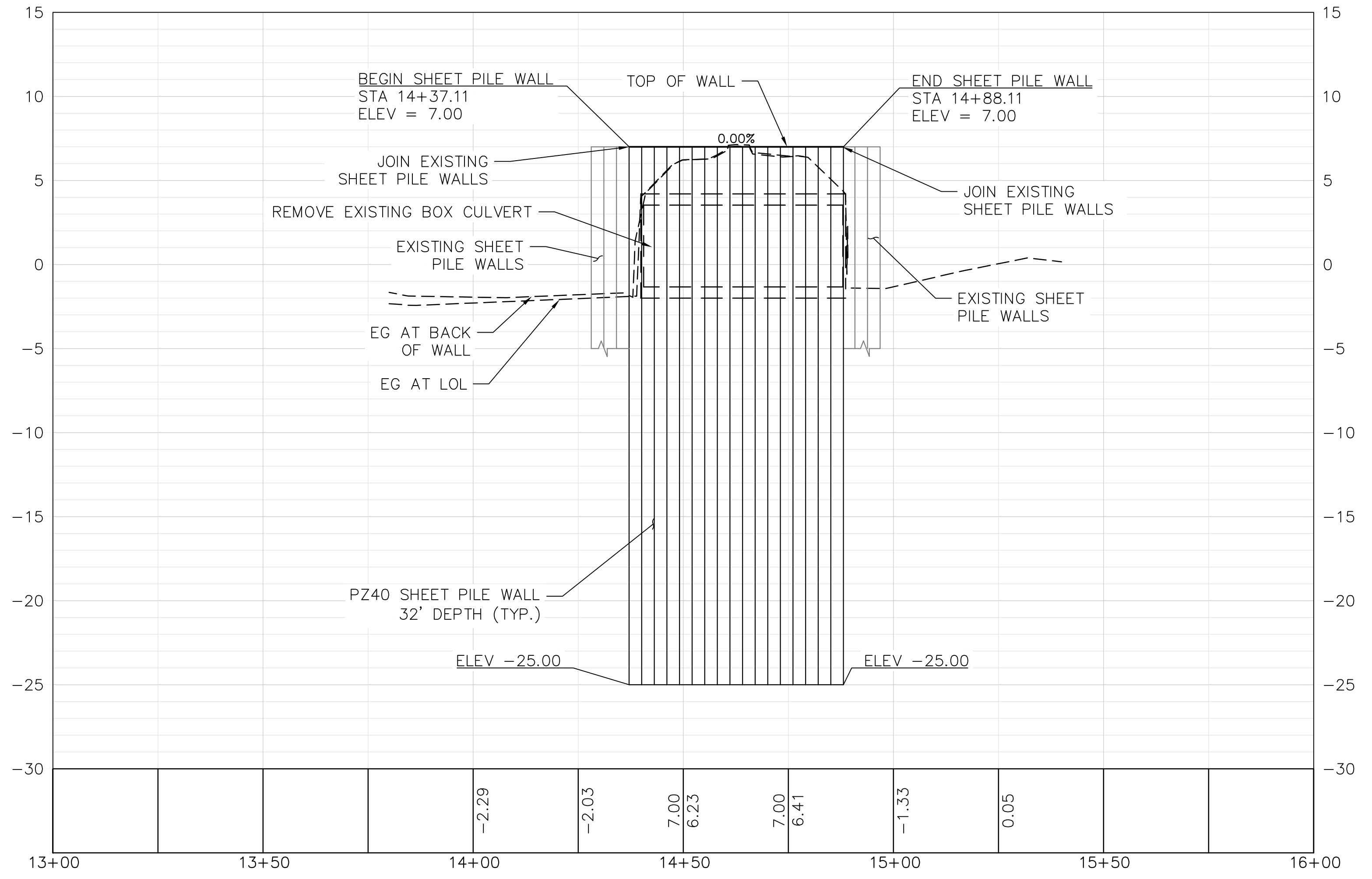


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| SCALE: | AS SHOWN |
| DATE: | APR 2020 |
| BKF PROJECT NO.: | 20169048-28 |
| CITY PROJECT NO.: | 11364 |
| SHEET NO.: | RW-1 |
| DRAWING: | 12 OF 38 |





PLAN
SCALE: 1"=20'



PROFILE
SCALE: 1"=20' (H) 1"=5' (V)

NOTES

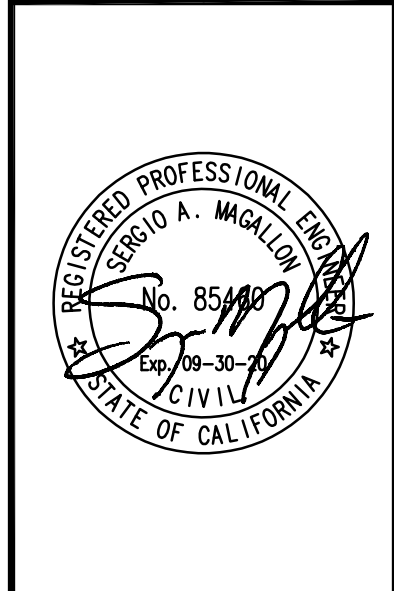
- 1) CONTRACTOR SHALL BE RESPONSIBLE FOR STABILITY OF SHEET PILE WALL, BUILDING AND REMOVAL OF CULVERT DURING CONSTRUCTION. CONTRACTOR SHALL MONITOR BUILDING SETTLEMENT TO PREVENT BUILDING MOVEMENT. SEE PROJECT TECHNICAL SPECIFICATION 18-6, SETTLEMENT & VIBRATION MONITORING.
- 2) SHEET PILE WALL SHALL BE PZ40, A690 STEEL.
- 3) CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING SHEET PILE WALL LOCATIONS AND MAKE NECESSARY ADJUSTMENTS TO CONNECT WITH PROPOSED SHEET PILE WALLS.

| DESIGNED | DRAWN | CHECKED | SAM | APPROVED | DATE |
|----------|-------|---------|-----|----------|------|
| JT | JT | JT | JT | JT | |

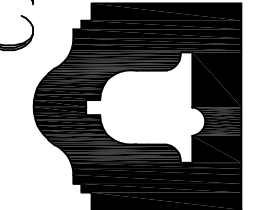
PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
SHEET PILE WALL 2 PLAN AND PROFILE

SAN RAFAEL COUNTY OF MARIN CALIFORNIA



CITY OF SAN RAFAEL
DEPARTMENT OF PUBLIC WORKS

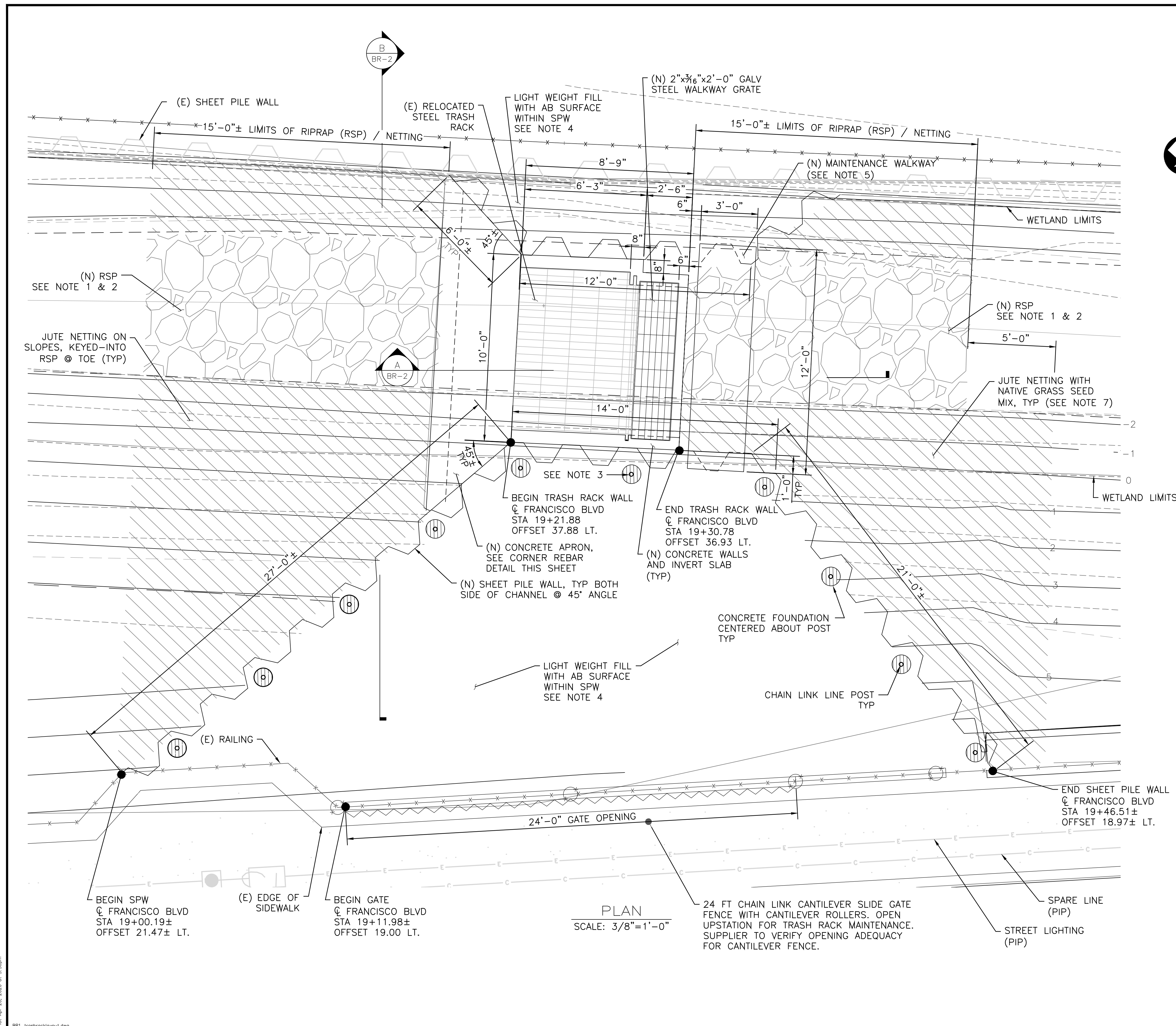


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| SCALE: AS SHOWN |
| DATE: APR 2020 |
| BKF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: RW-2 |
| DRAWING: 13 OF 38 |

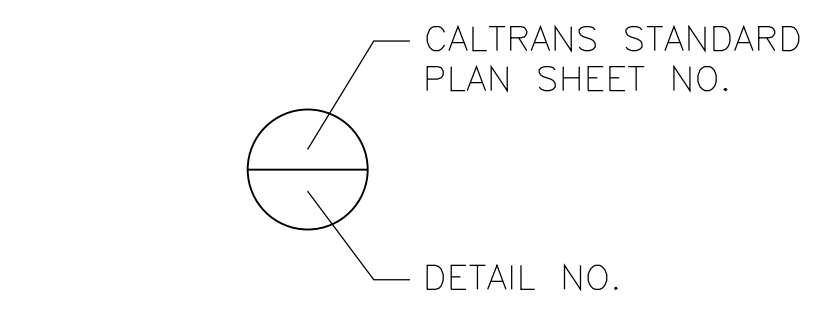
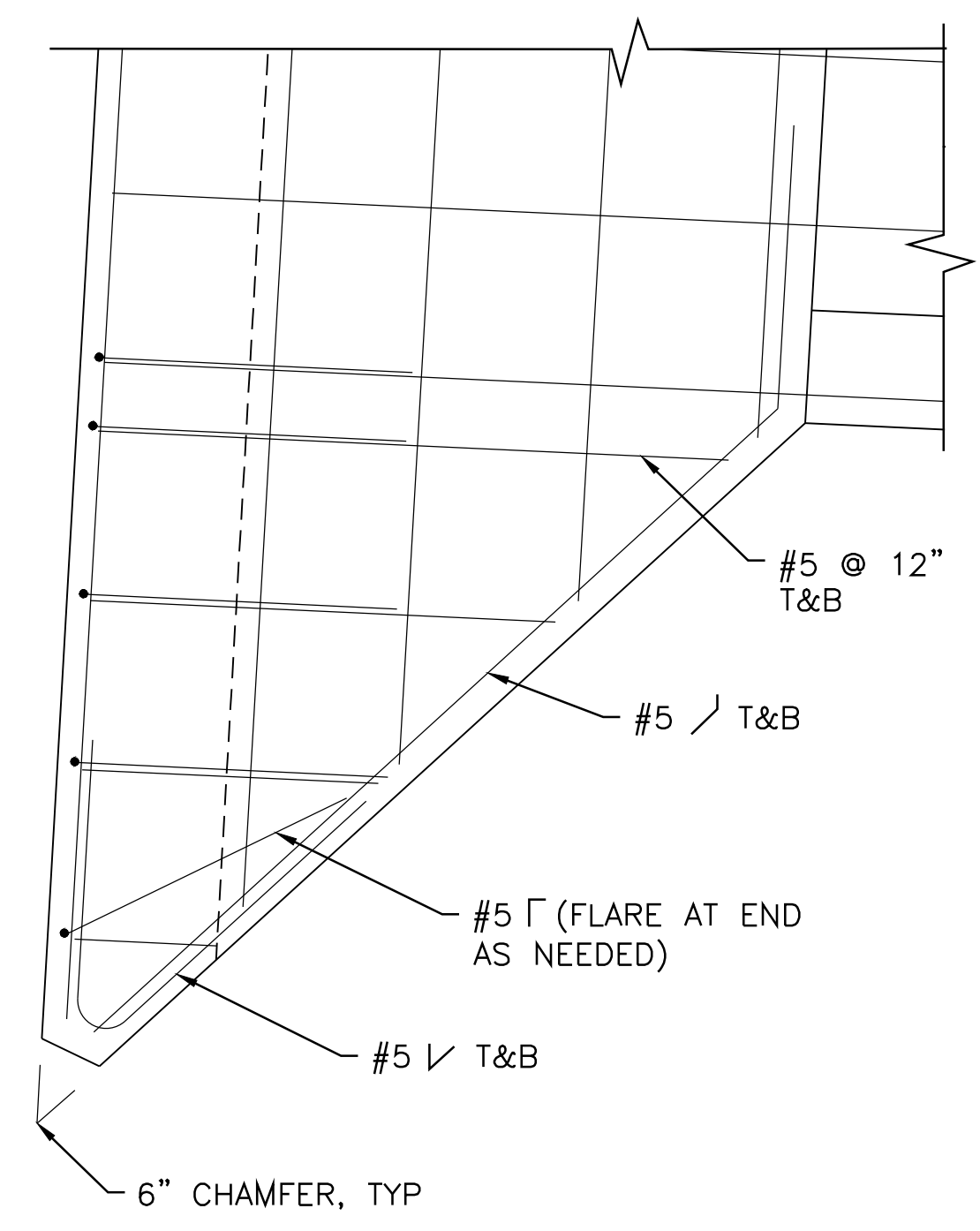


Plot: Apr 20, 2020 at 4:46pm

RW-2.dwg



- NOTES:**
- RSP SHALL BE CALTRANS CLASS I WITH A THICKNESS OF 24" IN CHANNEL BOTTOM ONLY.
 - RSP SLOPE SHALL NOT BE STEEPER THAN 1V:2H.
 - 10' CHAIN LINK FENCE DOUBLE GATE. SEE CALTRANS STD PLAN A85A.
 - LIGHTWEIGHT FILL SHALL BE A VOLCANIC AGGREGATE PER PROJECT TECHNICAL SPECIFICATION 18-9 OR APPROVED EQUIVALENT. UNIT WEIGHT SHALL BE 60 PCF.
 - PROVIDE RAILING FOR MAINTENANCE WALKWAY PER CALTRANS B11-47 OF APPROVED EQUIVALENT.
 - CONCRETE SHALL BE $f'_c=4000$ PSI AND REINFORCING SHALL BE ASTM A615 GRADE 60. MISCELLANEOUS STEEL SHALL BE ASTM A36.
 - JUTE NETTING ON LEFT & RIGHT BANKS, KEYED INTO SLOPE AT EDGES AND INTO RSP AT TOES OF BANK. BROADCAST NATIVE GRASS SEED MIX [⊙] PRIOR TO NETTING INSTALL.
- ⊙ GRASS SEED MIX TYPE PER CITY



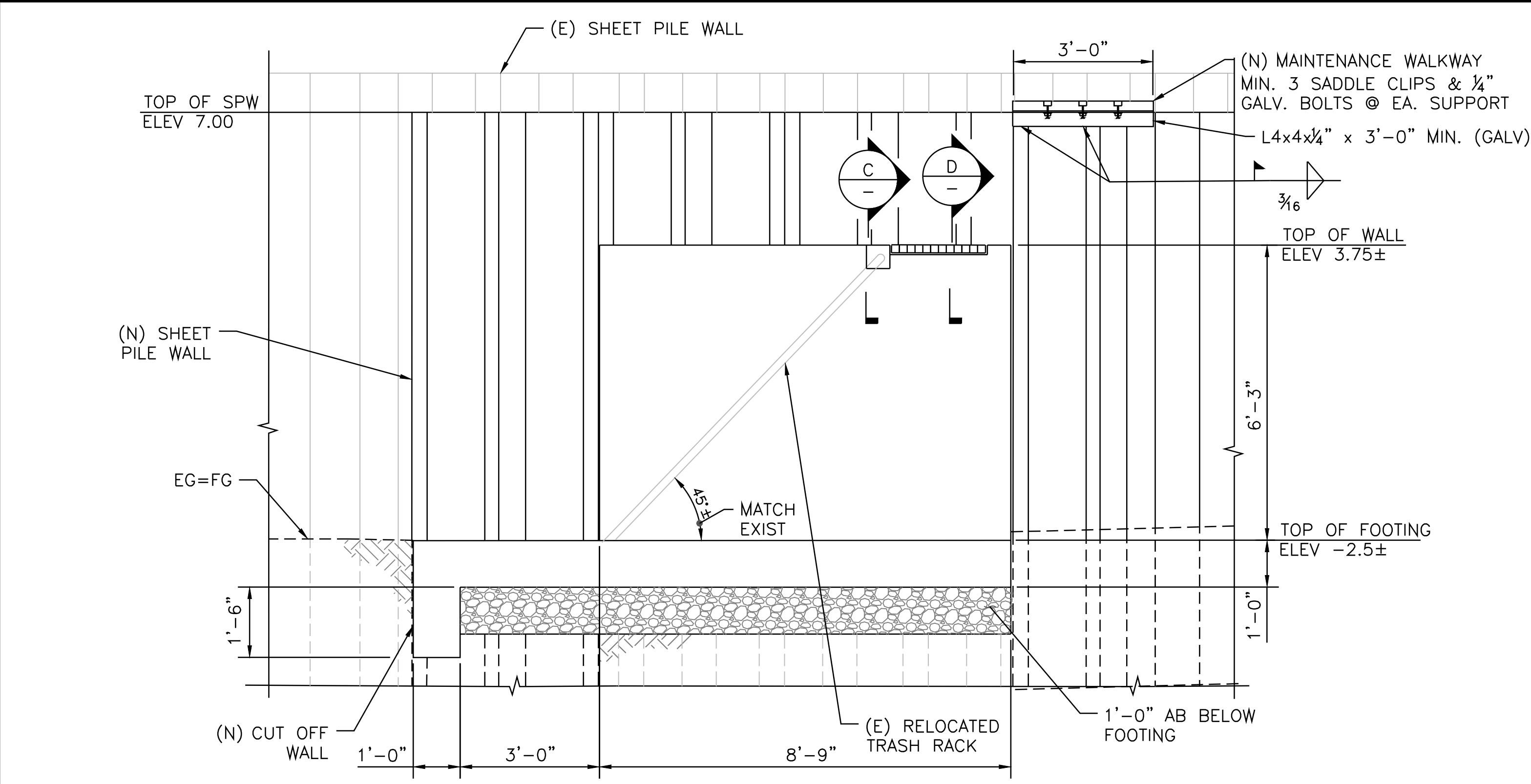
CALTRANS STANDARD PLAN SYMBOL

| | | | | | | | | | | | | |
|------------------------------|----|----------|-----|--------------------------|-----|-------|-----|-----------------------------|-----|----------|----|-----------------|
| DATE | BY | REVISION | NO. | DESIGNED | BTO | DRAWN | DES | CHECKED | YMW | APPROVED | RC | DATE |
| | | | | | | | | | | | | |
| PROJECT NAME | | | | PROJECT NO. | | | | DRAWING NAME | | | | DATE |
| IMPROVEMENT DRAWINGS FOR | | | | FRANCISCO BOULEVARD WEST | | | | RICE DRIVE TO SECOND STREET | | | | CALIFORNIA |
| CITY OF SAN RAFAEL | | | | DEPARTMENT OF | | | | PUBLIC WORKS | | | | COUNTY OF MARIN |
| TRASH RACK LAYOUT | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| SCALE: AS SHOWN | | | | | | | | | | | | |
| DATE: APR 2020 | | | | | | | | | | | | |
| BRF PROJECT NO.: 20169048-26 | | | | | | | | | | | | |
| CITY PROJECT NO.: 11364 | | | | | | | | | | | | |
| SHEET NO.: BR-1 | | | | | | | | | | | | |
| DRAWING: 14 OF 38 | | | | | | | | | | | | |

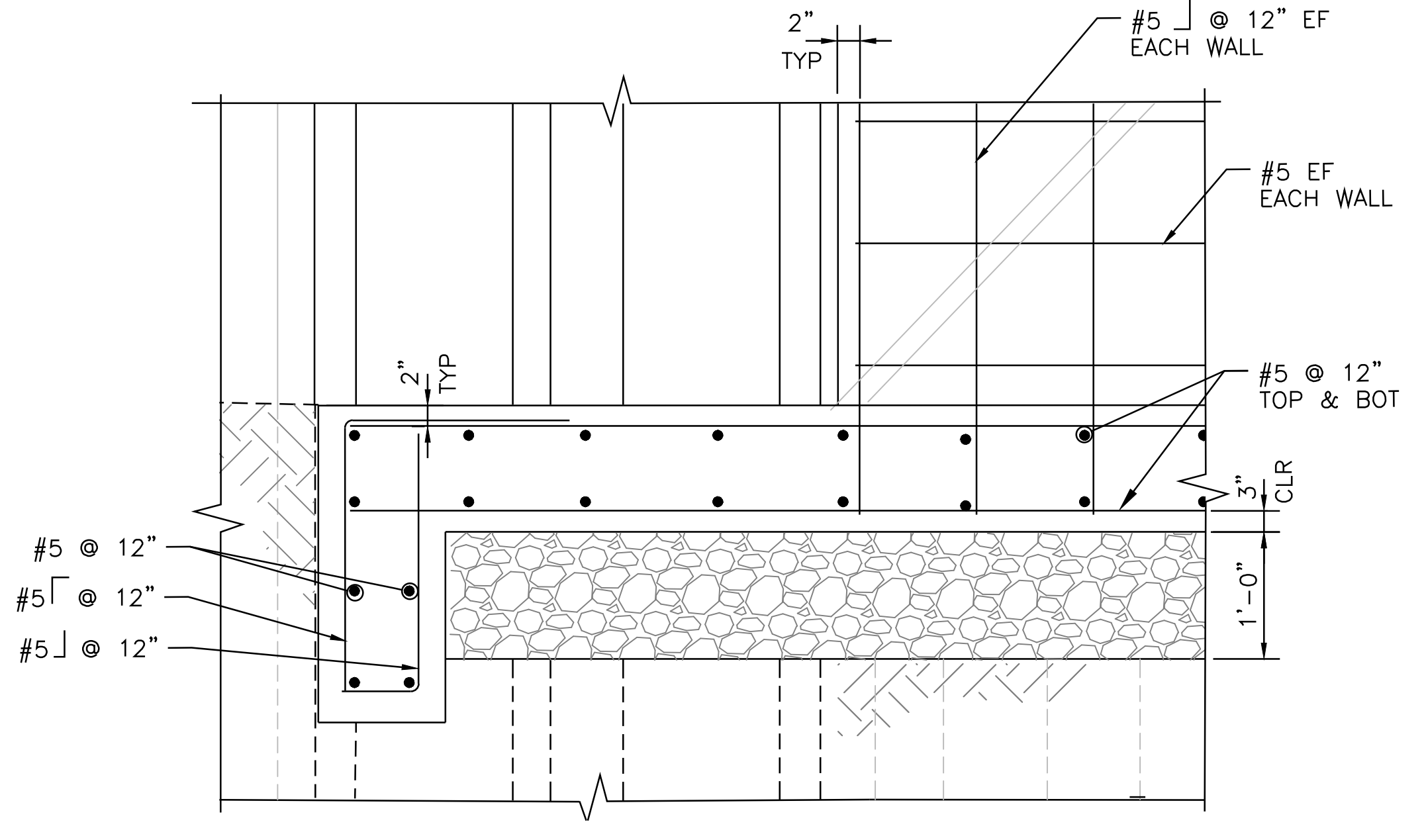
STV 100 Years
BKF ENGINEERS / SURVEYORS / PLANNERS
4040 CIVIC CENTER DR. STE. 530 SAN RAFAEL, CA 94903
(415) 930-7960 FAX: (415) 930-7973

Plot: Apr 20, 2020 at 3:56pm

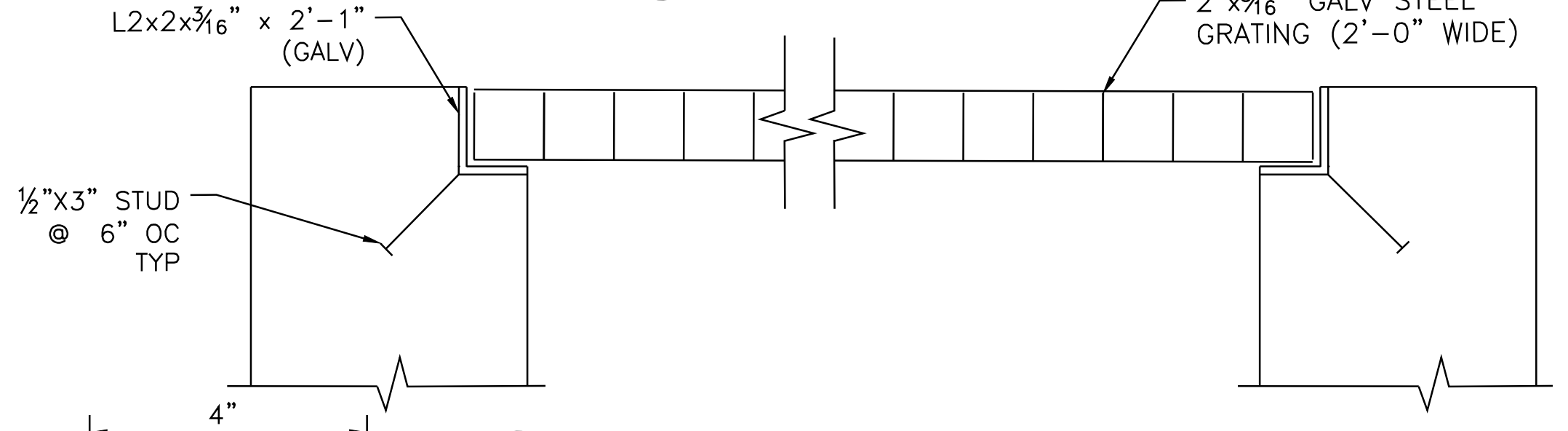
BR1_trashracklayout.dwg



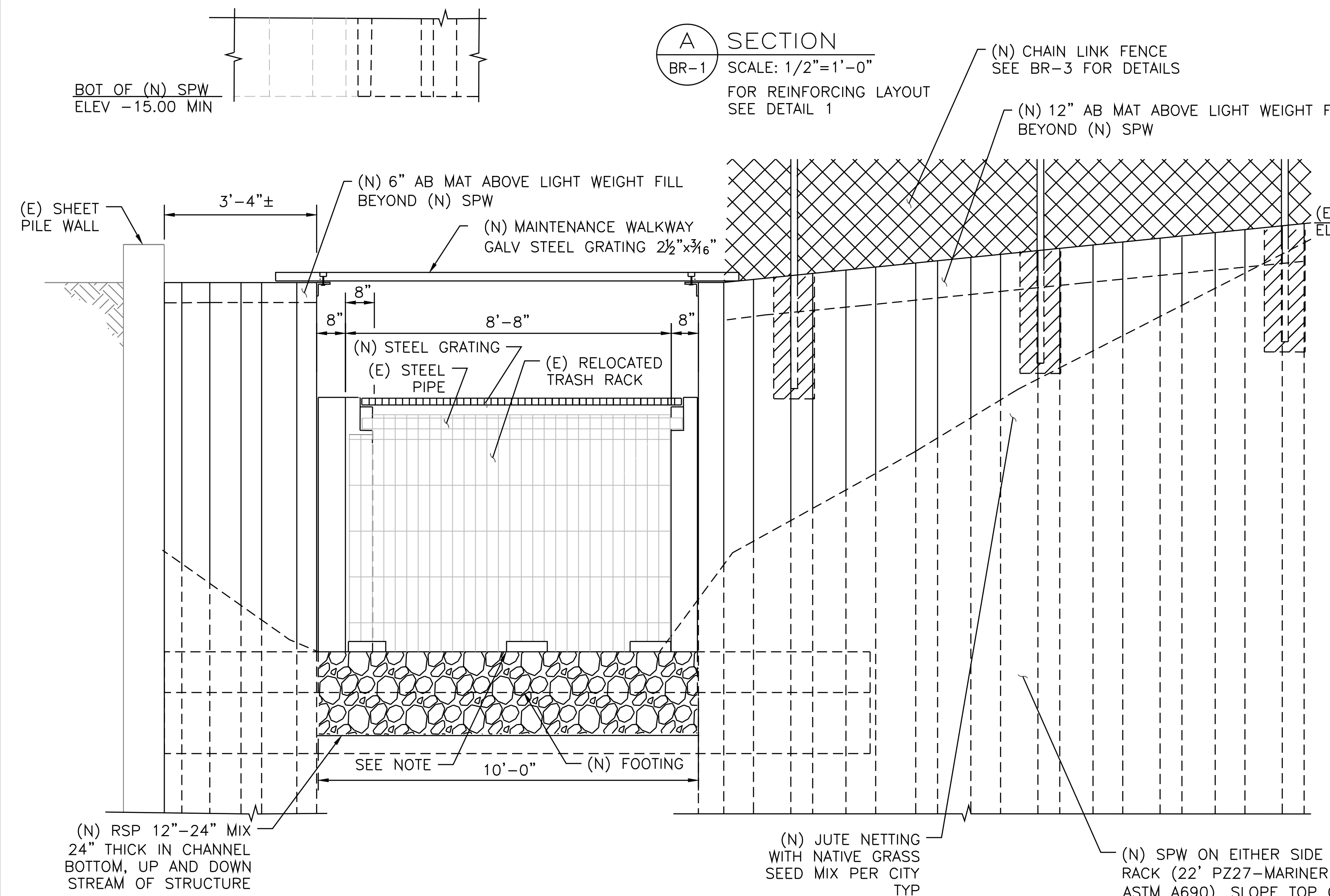
A SECTION
BR-1
SCALE: 1/2"=1'-0"
FOR REINFORCING LAYOUT
SEE DETAIL 1



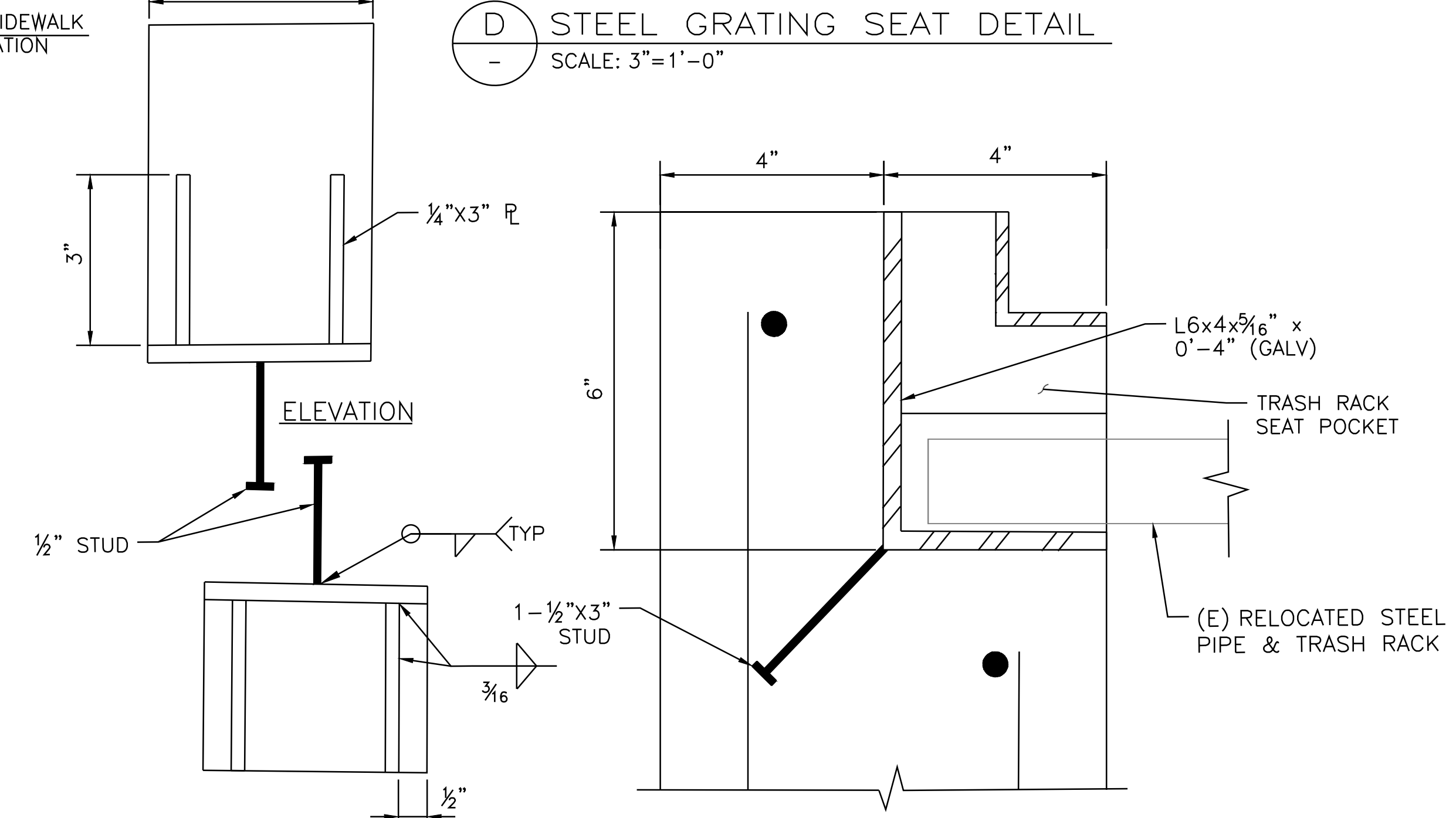
1 DETAIL
SCALE: 1"=1'-0"



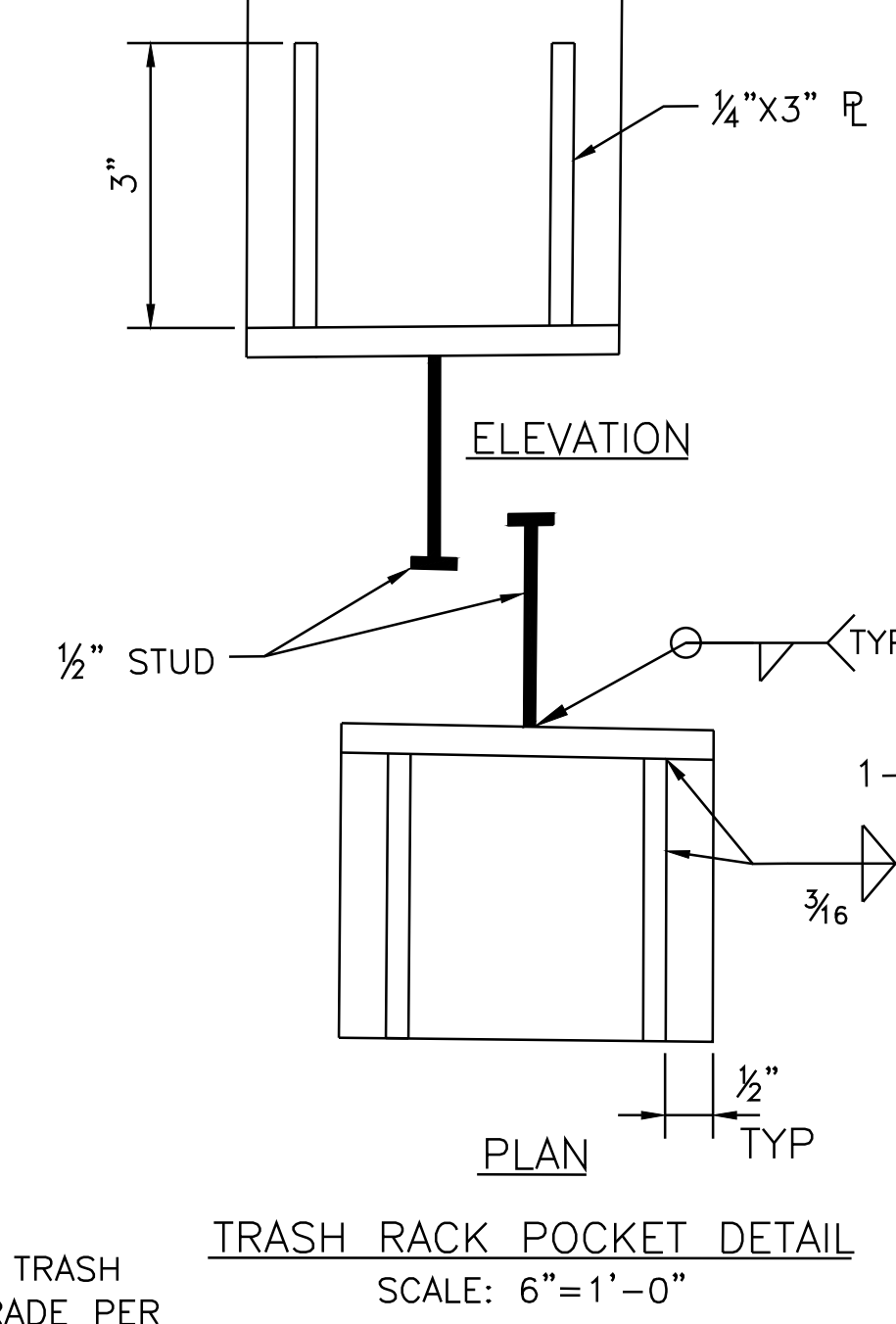
D STEEL GRATING SEAT DETAIL
SCALE: 3"=1'-0"



B SECTION
BR-1
SCALE: 1/2"=1'-0"



C TRASH RACK SEAT DETAIL
SCALE: 6"=1'-0"



TRASH RACK POCKET DETAIL
SCALE: 6"=1'-0"

NOTE: FIELD VERIFY BLOCKOUTS IN END OF EXIST TRASH RACK AND POUR 6" LONG STEPS IN BOTTOM SLAB TO MATCH GAPS IN EXIST TRASH RACK GRATING.

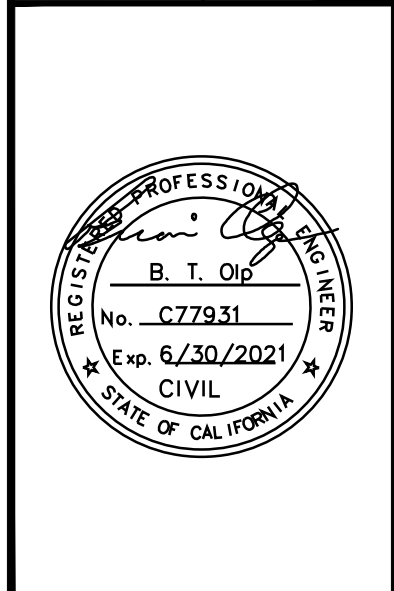
(N) SPW ON EITHER SIDE OF TRASH RACK (22' PZ27-MARINER GRADE PER ASTM A690). SLOPE TOP OF SPW FROM TRASH RACK TO MATCH BACK OF SIDEWALK ELEVATION.

(N) JUTE NETTING WITH NATIVE GRASS SEED MIX PER CITY TYP

(N) RSP 12"-24" MIX 24" THICK IN CHANNEL BOTTOM, UP AND DOWN STREAM OF STRUCTURE

| NO. | REVISION | BY | DATE |
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| DESIGNED | BTO | | |
| DRAWN | DES | | |
| CHECKED | YWW | | |
| APPROVED | | | |
| | RC | | |

PROJECT NAME: IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET
DRAWING NAME: TRASH RACK DETAILS
COUNTY OF MARIN CALIFORNIA
SAN RAFAEL

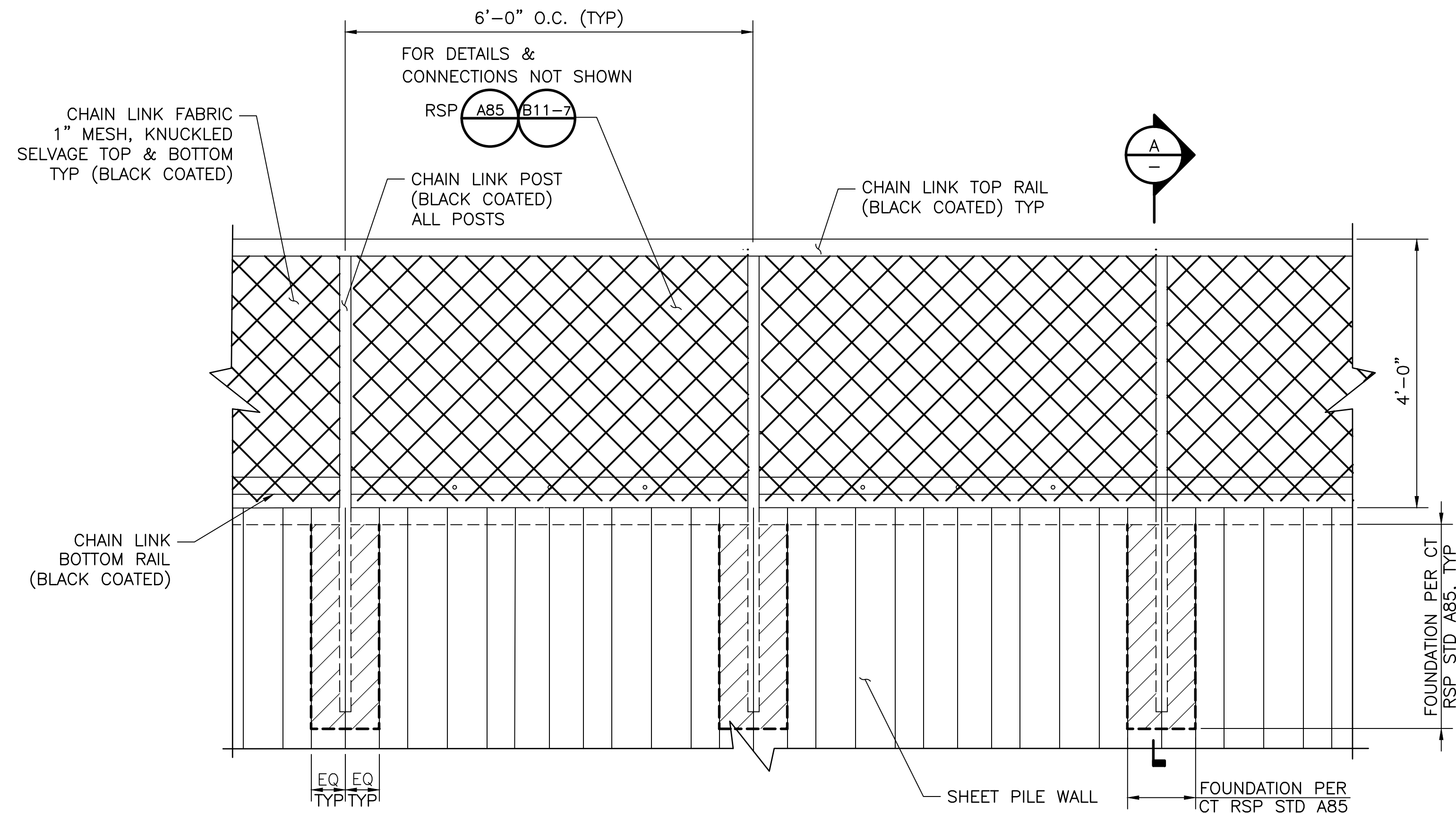


CITY OF SAN RAFAEL
DEPARTMENT OF PUBLIC WORKS

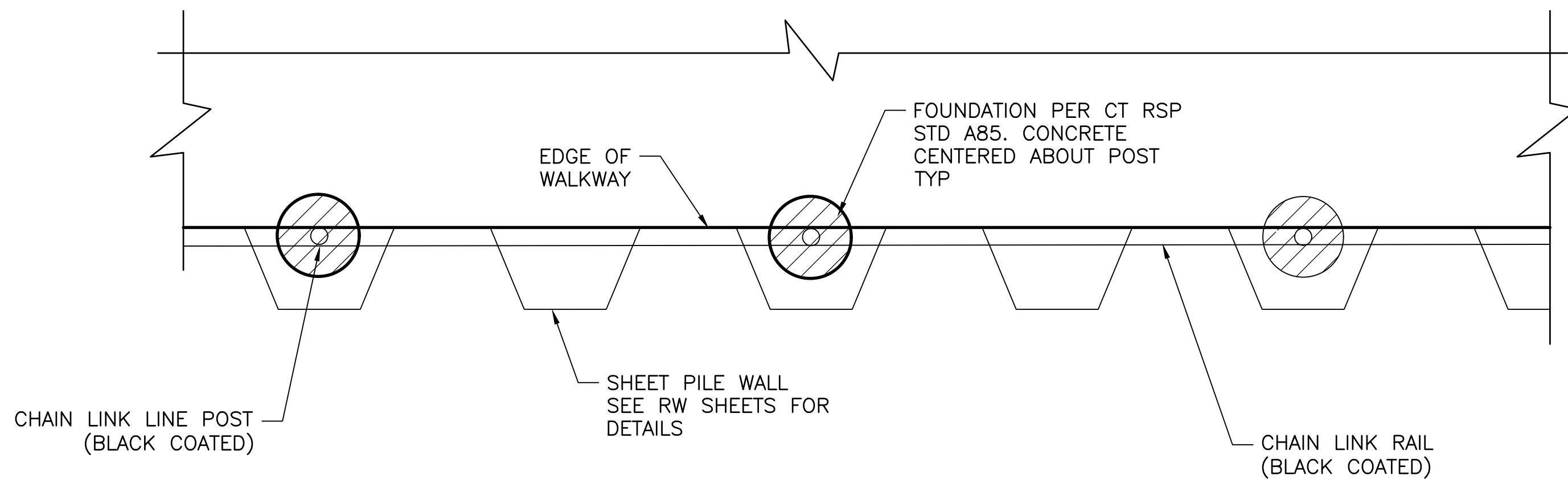
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| SCALE: AS SHOWN |
| DATE: APR 2020 |
| BRF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: BR-2 |
| DRAWING: 15 OF 38 |



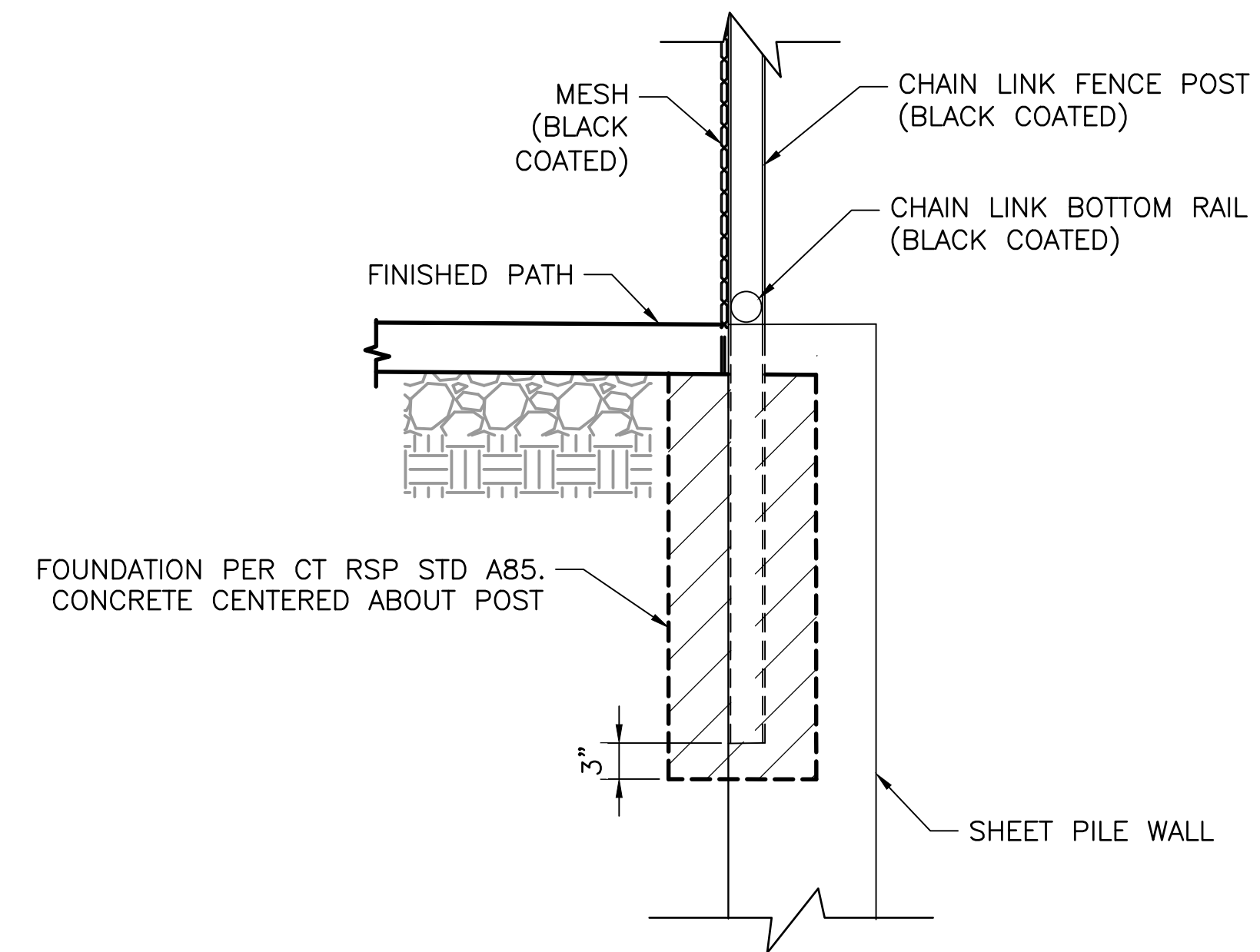
Plot: Apr 20, 2020 at 4:26pm
BR2_ne@trashrackdetails.dwg



CHAIN LINK FENCE RAILING ELEVATION
SCALE: 3/4"=1'-0"



CHAIN LINK FENCE RAILING PARTIAL PLAN
SCALE: 3/4"=1'-0"



A SECTION - RAILING
SCALE: SCALE: 1"=1'-0"

NOTE:

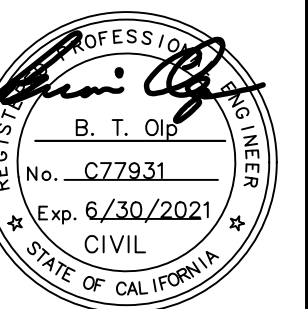
1. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.

| NO. | REVISION | BY | DATE |
|----------|----------|----|------|
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| DRAWN | DES | | |
| CHECKED | BTO | | |
| APPROVED | | | |
| RC | | | |

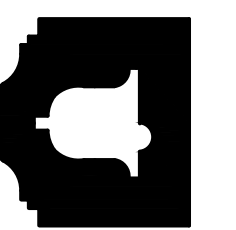
PROJECT NAME
IMPROVEMENT DRAWINGS FOR
FRANCISCO BOULEVARD WEST
RICE DRIVE TO SECOND STREET

DRAWING NAME
RAILING SHEET PILE WALL
DETAILS

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

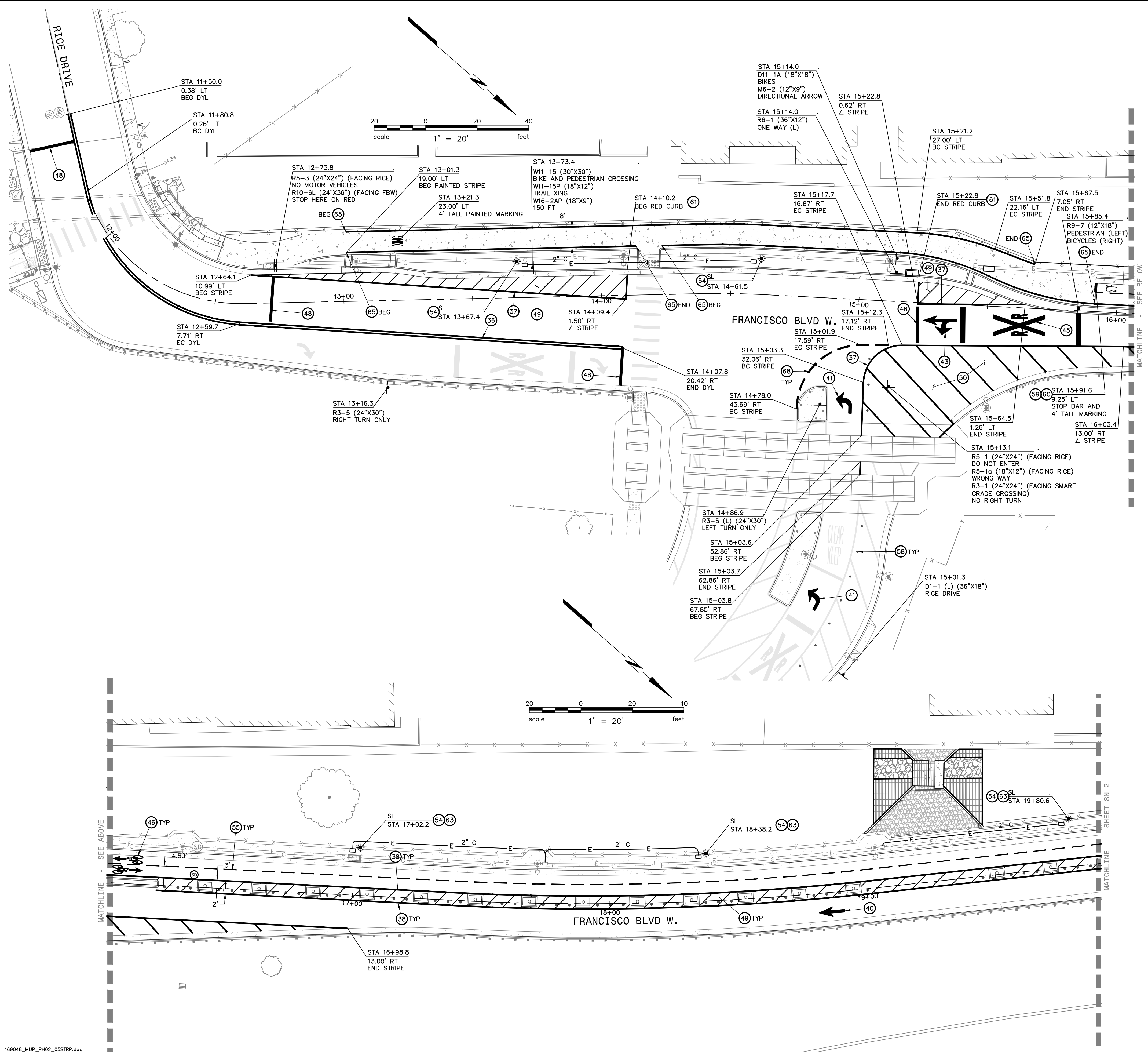


CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

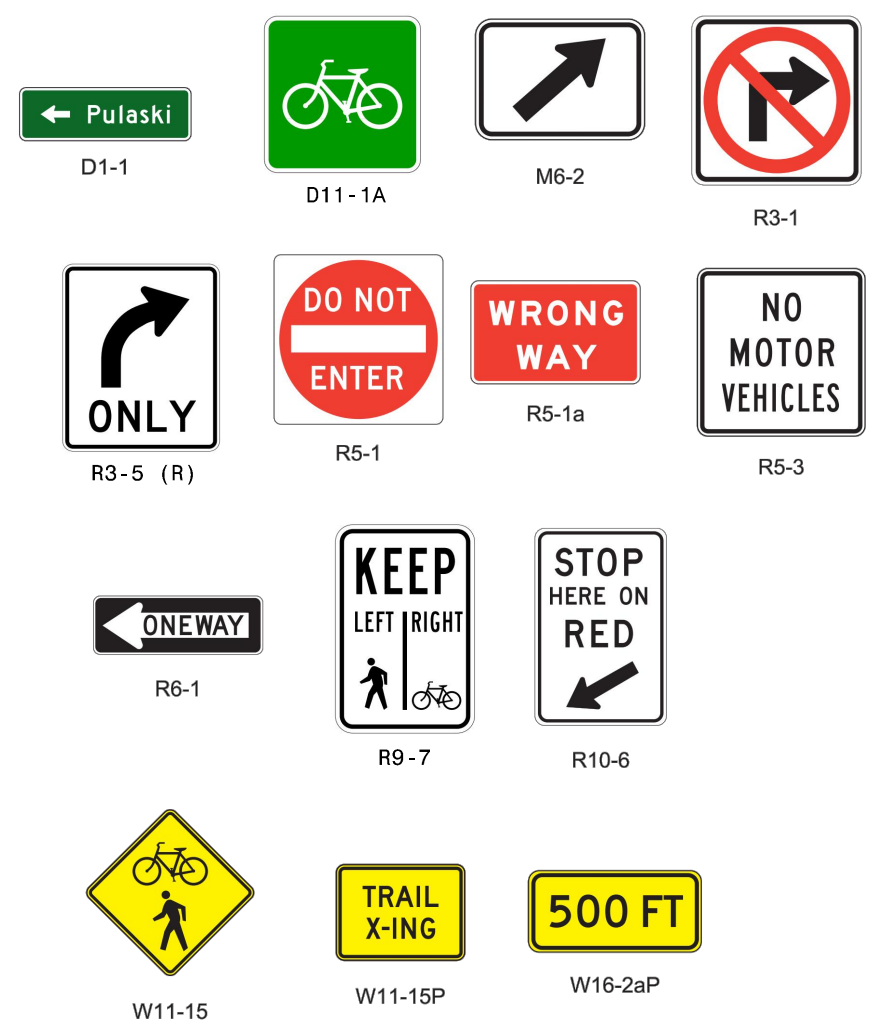


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| SCALE: AS SHOWN |
| DATE: APR 2020 |
| BKF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: BR-3 |
| DRAWING: 16 OF 38 |





- KEYNOTES:**
- 36 "NO PASSING ZONES - TWO DIRECTION" DOUBLE YELLOW STRIPING IN ACCORDANCE WITH DETAIL 22 OF CALTRANS 2018 STANDARD PLAN A20A.
 - 37 THERMOPLASTIC CHANNELIZING LINE IN ACCORDANCE WITH DETAIL 38A OF CALTRANS 2018 STANDARD PLAN A20D.
 - 38 THERMOPLASTIC BIKE LANE LINE IN ACCORDANCE WITH DETAIL 39 OF CALTRANS 2018 STANDARD PLAN A24A.
 - 41 THERMOPLASTIC TYPE IV (L) ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 43 THERMOPLASTIC TYPE VII (L) ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 44 THERMOPLASTIC TYPE VII (R) ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 45 THERMOPLASTIC 'RAILROAD CROSSING SYMBOL' PAVEMENT MARKINGS IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24B.
 - 46 THERMOPLASTIC BIKE LANE ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A AND 'BIKE LANE SYMBOL WITHOUT PERSON' PAVEMENT MARKINGS IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24C.
 - 48 THERMOPLASTIC 1-FOOT WIDE SOLID WHITE STOP LIMIT LINE IN ACCORDANCE WITH SECTION 3B.16.06 OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - 49 THERMOPLASTIC DIAGONAL SOLID WHITE STRIPING WHERE SHOWN ON PLAN HAVING 8-INCH WIDE STRIPES AT 5-FEET ON CENTER.
 - 50 THERMOPLASTIC DIAGONAL SOLID WHITE STRIPING WHERE SHOWN ON PLAN HAVING 6-INCH WIDE STRIPES AT 10-FEET ON CENTER.
 - 54 STREET LIGHT HAVING A CONCRETE BASE IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLANS ES-6A AND ES-11 FOR A TYPE 15 POLE (WITH FOUNDATION DEPTH MEASURED FROM LOWEST ADJACENT GRADE AT FOOTING FOUNDATION). CONNECT TO THE EXISTING PUBLIC STREET LIGHT CIRCUIT.
 - 55 THERMOPLASTIC 4-INCH WIDE BROKEN YELLOW LINE (3-FOOT STRIPES, 9-FOOT GAPS, NO REFLECTORS) IN ACCORDANCE WITH FIGURE 9C-2(A) OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - 58 TYPE Q (CA) SURFACE-MOUNTED OBJECT MARKER IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A73A AT 10- FEET ON CENTER.
 - 59 THERMOPLASTIC 'STOP' LEGEND.
 - 60 THERMOPLASTIC 1-FOOT WIDE SOLID WHITE STOP LIMIT LINE IN ACCORDANCE WITH SECTION 1A.13.104a OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - 61 PAINT CURB RED.
 - 63 REBUILD EXISTING FENCE AND SIDEWALK IN THE VICINITY OF THE STREET LIGHT TO FACILITATE THE PROPOSED IMPROVEMENTS.
 - 65 PAINTED BIKE LANE LINE IN ACCORDANCE WITH DETAIL 39 OF CALTRANS 2018 STANDARD PLAN A20D.
 - 68 THERMOPLASTIC LANE LINE EXTENSION IN ACCORDANCE WITH DETAIL 41 OF CALTRANS 2018 STANDARD PLAN A20D.



| NO. | REVISION | BY | DATE |
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| DESIGNED | JAK |
| DRAWN | IMC |
| CHECKED | JAK |
| APPROVED | JAK |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
STRIPING, LIGHTING, & SIGNAGE PLAN STA 11+50 - 20+00

COUNTY OF MARIN
SAN RAFAEL, CALIFORNIA

CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

SCALE: AS SHOWN
DATE: MAY 2020
BRF PROJECT NO.: 20169048-28
CITY PROJECT NO.: 11364
SHEET NO.: **SN-1**
DRAWING: 17 OF 38



Plot: May 12, 2020 at 12:36pm
169048_MUP_PH02_05STRP.dwg

- KEYNOTES:
- 38 THERMOPLASTIC BIKE LANE LINE IN ACCORDANCE WITH DETAIL 39 OF CALTRANS 2018 STANDARD PLAN A20D.
 - 40 10-FOOT LONG THERMOPLASTIC TYPE I ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 42 THERMOPLASTIC TYPE IV (R) ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 46 THERMOPLASTIC BIKE LANE ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A AND 'BIKE LANE SYMBOL WITHOUT PERSON' PAVEMENT MARKINGS IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24C.
 - 47 THERMOPLASTIC 'STOP' LEGEND IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24D.
 - 49 THERMOPLASTIC DIAGONAL SOLID WHITE STRIPING WHERE SHOWN ON PLAN HAVING 8-INCH WIDE STRIPES AT 5-FEET ON CENTER.
 - 54 STREET LIGHT HAVING A CONCRETE BASE IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLANS ES-6A AND ES-11 FOR A TYPE 15 POLE (WITH FOUNDATION DEPTH MEASURED FROM LOWEST ADJACENT GRADE AT FOOTING FOUNDATION). CONNECT TO THE EXISTING PUBLIC STREET LIGHT CIRCUIT.
 - 55 THERMOPLASTIC 4-INCH WIDE BROKEN YELLOW LINE (3-FOOT STRIPES, 9-FOOT GAPS, NO REFLECTORS) IN ACCORDANCE WITH FIGURE 9C-2(A) OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - 59 THERMOPLASTIC 'STOP' LEGEND.
 - 60 THERMOPLASTIC 1-FOOT WIDE SOLID WHITE STOP LIMIT LINE IN ACCORDANCE WITH SECTION 1A.13.104a OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - 63 REBUILD EXISTING FENCE AND SIDEWALK IN THE VICINITY OF THE STREET LIGHT TO FACILITATE THE PROPOSED IMPROVEMENTS.

| NO. | REVISION | BY | DATE |
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| DESIGNED | JAK |
| DRAWN | IMC |
| CHECKED | JAK |
| APPROVED | JAK |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
STRIPING, LIGHTING, & SIGNAGE PLAN STA 20+00 - 23+26

SAN RAFAEL COUNTY OF MARIN CALIFORNIA



CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

SCALE: AS SHOWN

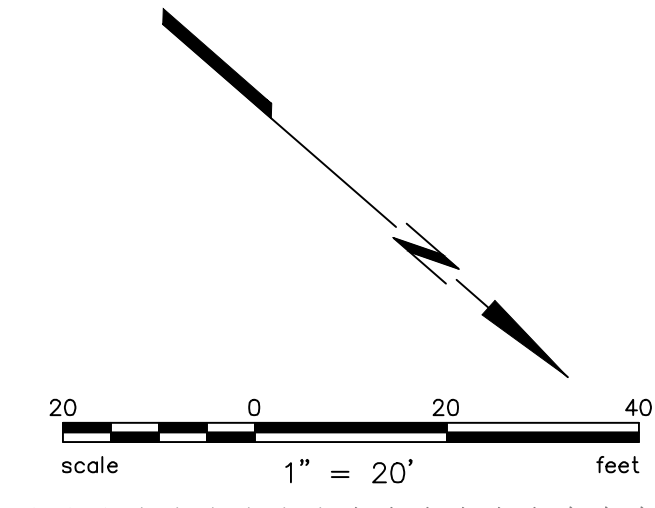
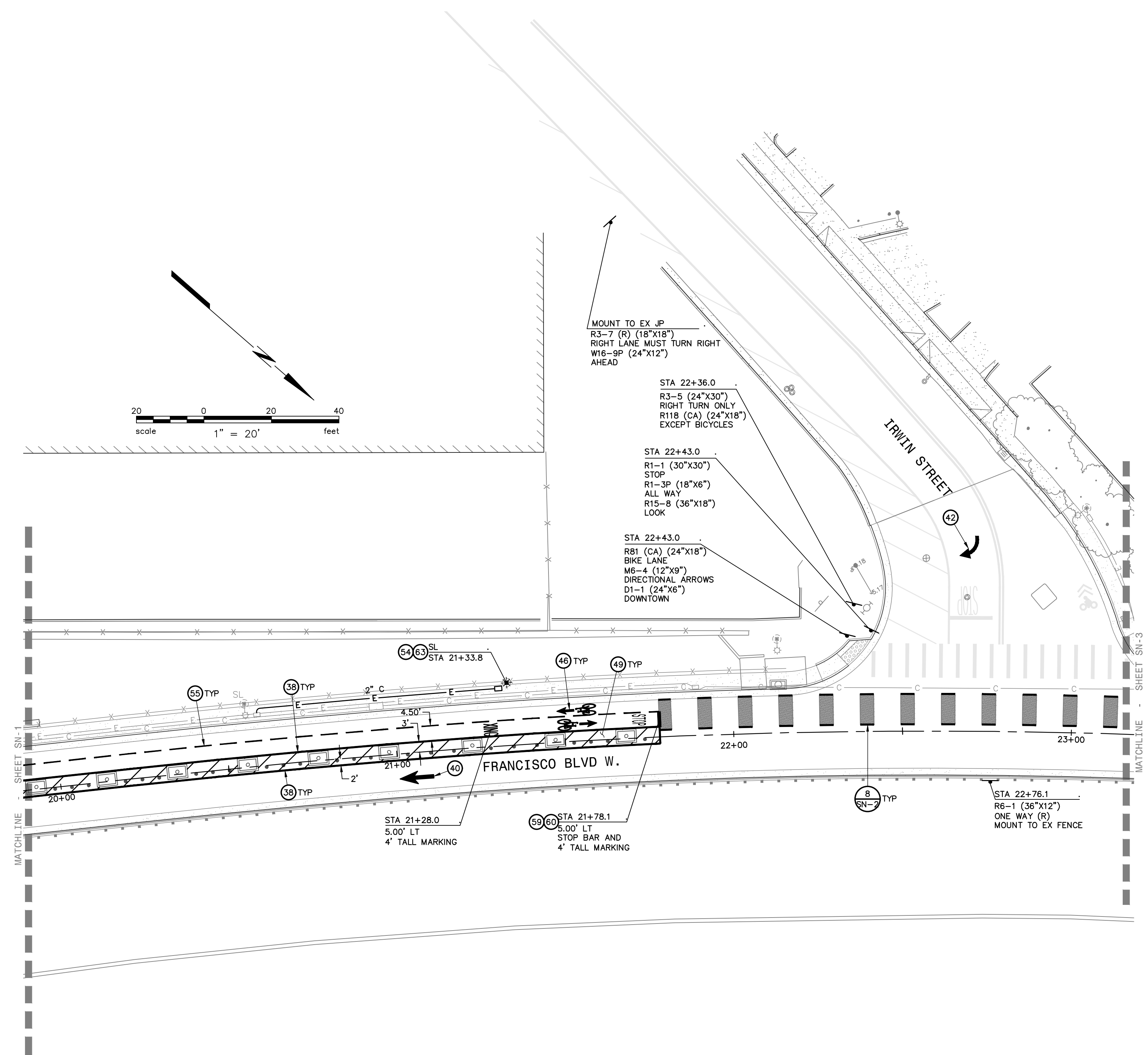
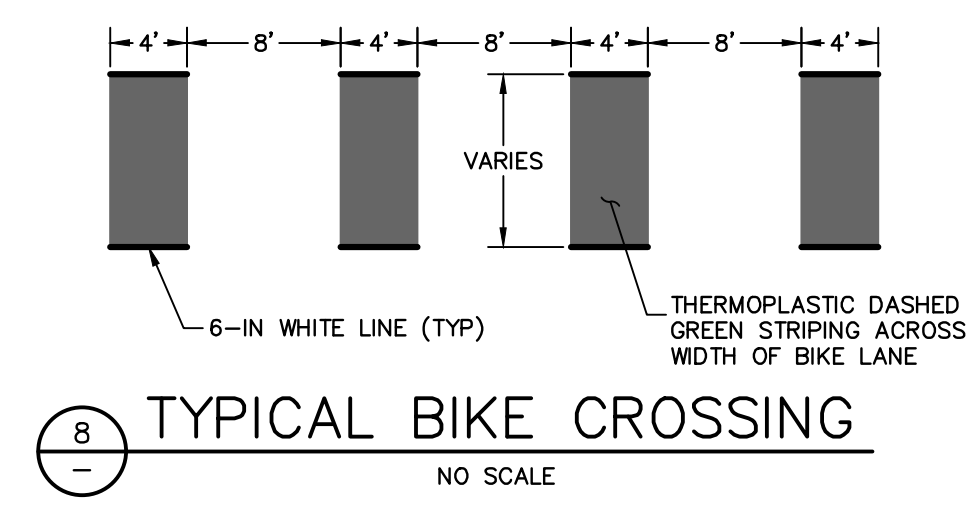
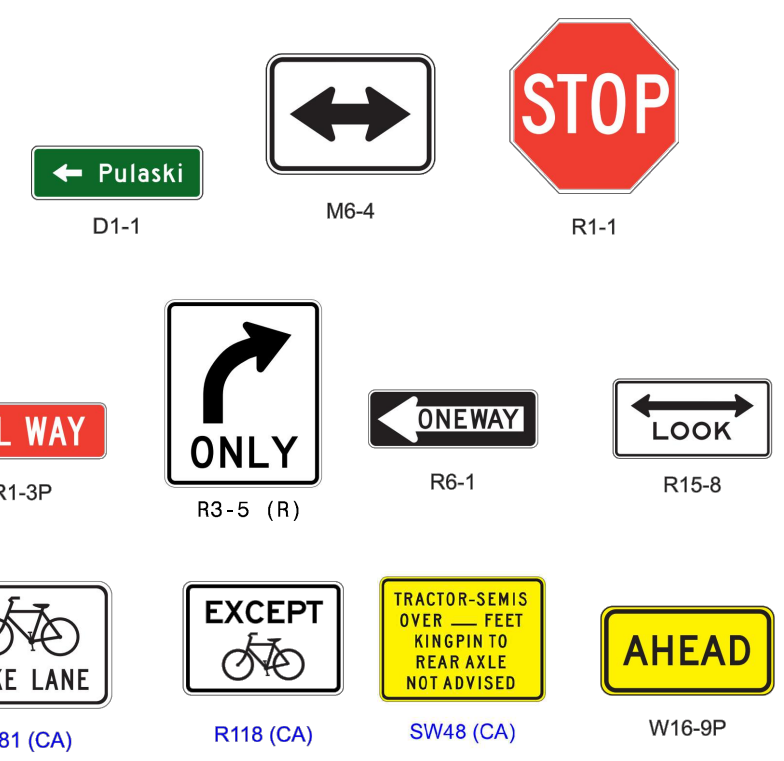
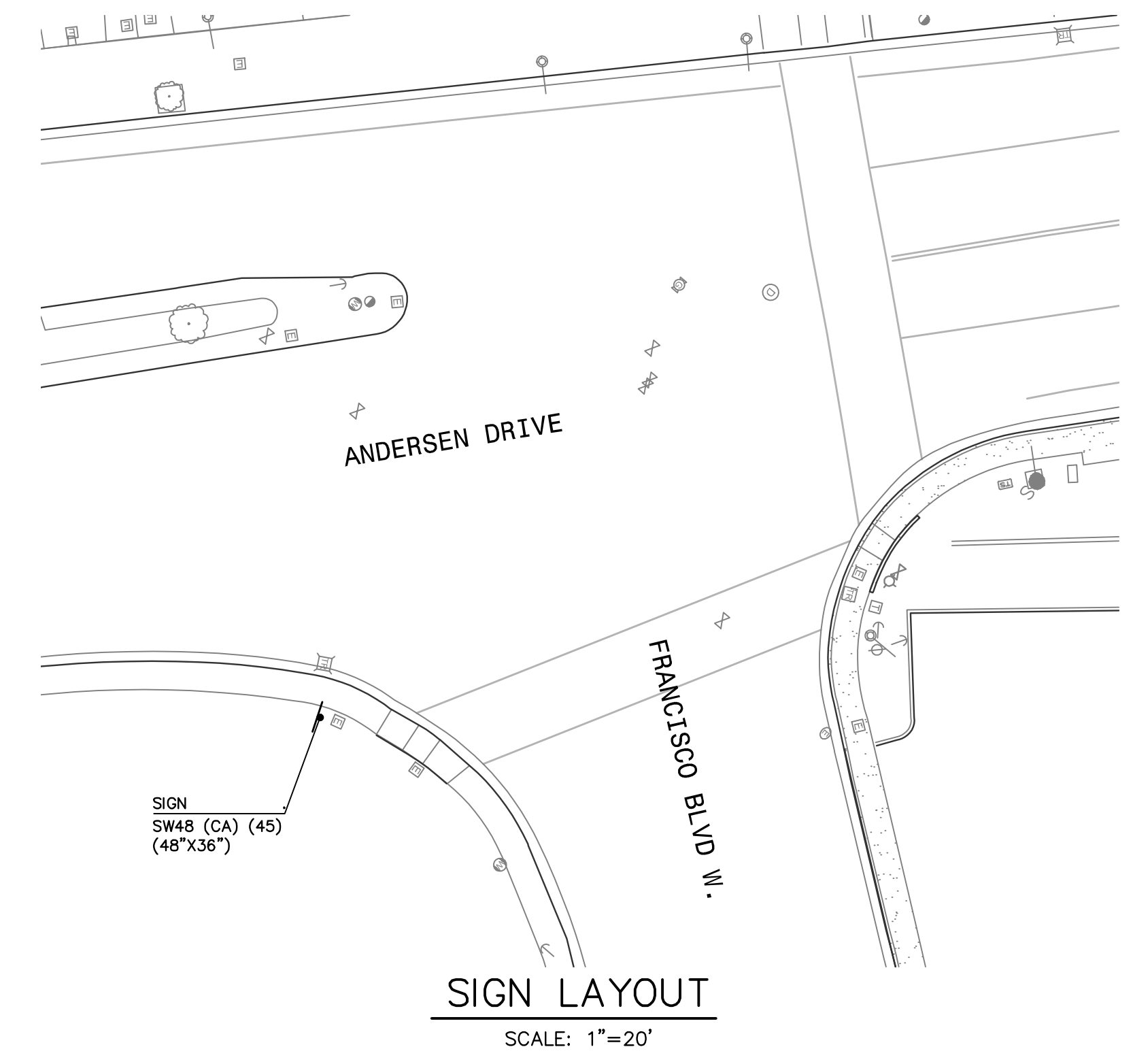
DATE: MAY 2020

BKF PROJECT NO.: 20169048-28

CITY PROJECT NO.: 11364

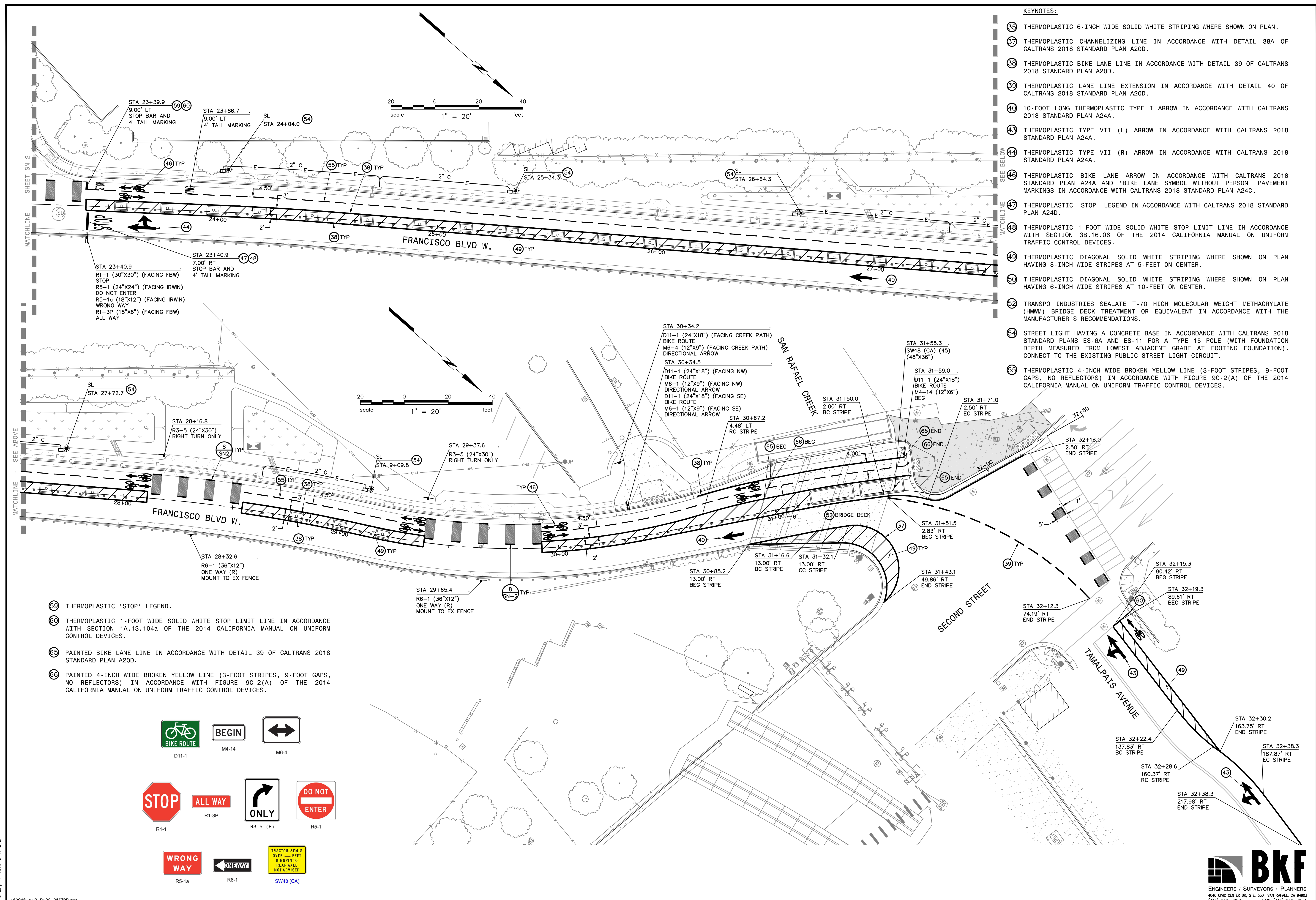
SHEET NO.: **SN-2**

DRAWING: 18 OF 38



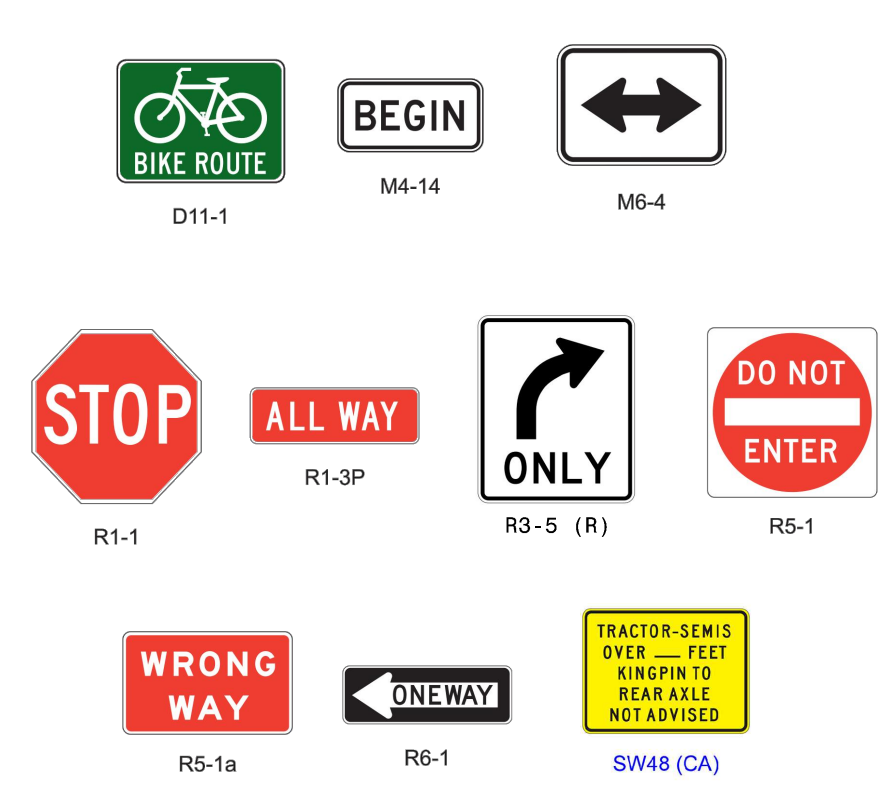
Plot: May 12, 2020 at 11:58am

169048_MUP_PH02_05STRP.dwg



- KEYNOTES:**
- 35 THERMOPLASTIC 6-INCH WIDE SOLID WHITE STRIPING WHERE SHOWN ON PLAN.
 - 37 THERMOPLASTIC CHANNELIZING LINE IN ACCORDANCE WITH DETAIL 38A OF CALTRANS 2018 STANDARD PLAN A20D.
 - 38 THERMOPLASTIC BIKE LANE LINE IN ACCORDANCE WITH DETAIL 39 OF CALTRANS 2018 STANDARD PLAN A20D.
 - 39 THERMOPLASTIC LANE LINE EXTENSION IN ACCORDANCE WITH DETAIL 40 OF CALTRANS 2018 STANDARD PLAN A24A.
 - 40 10-FOOT LONG THERMOPLASTIC TYPE I ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 43 THERMOPLASTIC TYPE VII (L) ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 44 THERMOPLASTIC TYPE VII (R) ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A.
 - 46 THERMOPLASTIC BIKE LANE ARROW IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24A AND 'BIKE LANE SYMBOL WITHOUT PERSON' PAVEMENT MARKINGS IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24C.
 - 47 THERMOPLASTIC 'STOP' LEGEND IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLAN A24D.
 - 48 THERMOPLASTIC 1-FOOT WIDE SOLID WHITE STOP LIMIT LINE IN ACCORDANCE WITH SECTION 3B.16.06 OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - 49 THERMOPLASTIC DIAGONAL SOLID WHITE STRIPING WHERE SHOWN ON PLAN HAVING 8-INCH WIDE STRIPES AT 5-FEET ON CENTER.
 - 50 THERMOPLASTIC DIAGONAL SOLID WHITE STRIPING WHERE SHOWN ON PLAN HAVING 6-INCH WIDE STRIPES AT 10-FEET ON CENTER.
 - 52 TRANSP INDUSTRIES SEALATE T-70 HIGH MOLECULAR WEIGHT METHACRYLATE (HMM) BRIDGE DECK TREATMENT OR EQUIVALENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - 54 STREET LIGHT HAVING A CONCRETE BASE IN ACCORDANCE WITH CALTRANS 2018 STANDARD PLANS ES-6A AND ES-11 FOR A TYPE 15 POLE (WITH FOUNDATION DEPTH MEASURED FROM LOWEST ADJACENT GRADE AT FOOTING FOUNDATION), CONNECT TO THE EXISTING PUBLIC STREET LIGHT CIRCUIT.
 - 55 THERMOPLASTIC 4-INCH WIDE BROKEN YELLOW LINE (3-FOOT STRIPES, 9-FOOT GAPS, NO REFLECTORS) IN ACCORDANCE WITH FIGURE 9C-2(A) OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

- 59 THERMOPLASTIC 'STOP' LEGEND.
- 60 THERMOPLASTIC 1-FOOT WIDE SOLID WHITE STOP LIMIT LINE IN ACCORDANCE WITH SECTION 1A.13.104a OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 65 PAINTED BIKE LANE LINE IN ACCORDANCE WITH DETAIL 39 OF CALTRANS 2018 STANDARD PLAN A20D.
- 66 PAINTED 4-INCH WIDE BROKEN YELLOW LINE (3-FOOT STRIPES, 9-FOOT GAPS, NO REFLECTORS) IN ACCORDANCE WITH FIGURE 9C-2(A) OF THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



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DESIGNED BY: JAK
 DRAWN BY: IMC
 CHECKED BY: JAK
 APPROVED BY: JAK

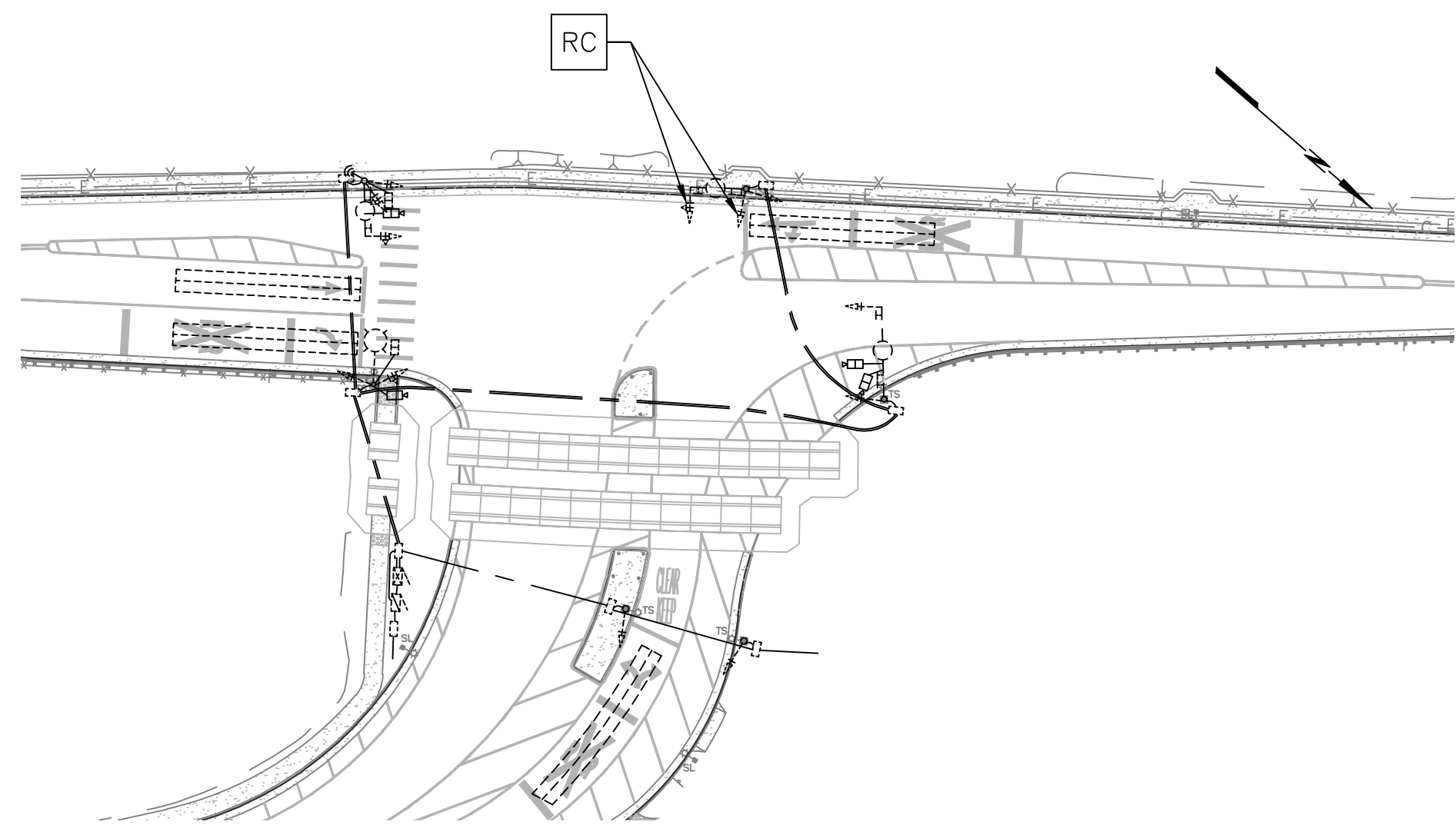
PROJECT NAME: IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET
 DRAWING NAME: STRIPING, LIGHTING, & SIGNAGE PLAN STA 23+26 - 32+33
 COUNTY OF MARIN
 SAN RAFAEL, CALIFORNIA

CITY OF SAN RAFAEL
 DEPARTMENT OF PUBLIC WORKS

SCALE: AS SHOWN
 DATE: MAY 2020
 BRK PROJECT NO.: 20169048-28
 CITY PROJECT NO.: 11364
 SHEET NO.: SN-3
 DRAWING: 19 OF 38

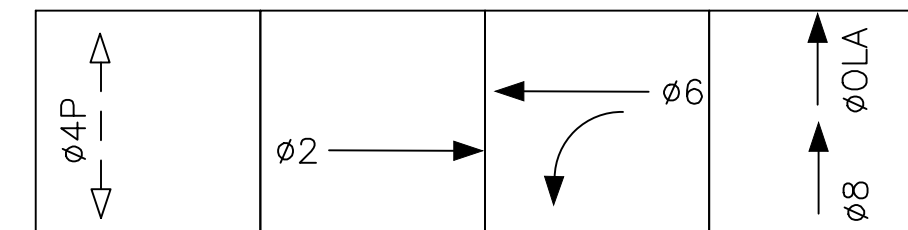


Plot: May 12, 2020 at 12:00pm
 169048_MUP_PH02_05STRP.dwg



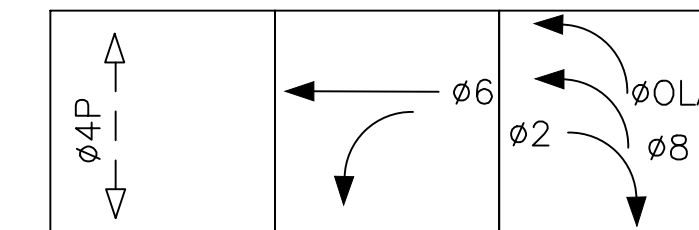
SCALE: 1"=40'

EXISTING EQUIPMENT TO BE REMOVED:
1. 2 SIGNAL HEADS



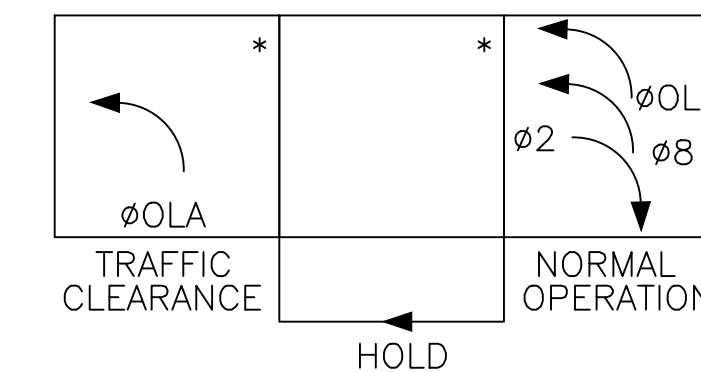
EXISTING PHASE DIAGRAM

- 0OLA GREEN PHASE SHALL CONTINUE AFTER 08 RED PHASE BEGINS.
0OLA = 08 + GREEN EXTENSION



PROPOSED PHASE DIAGRAM

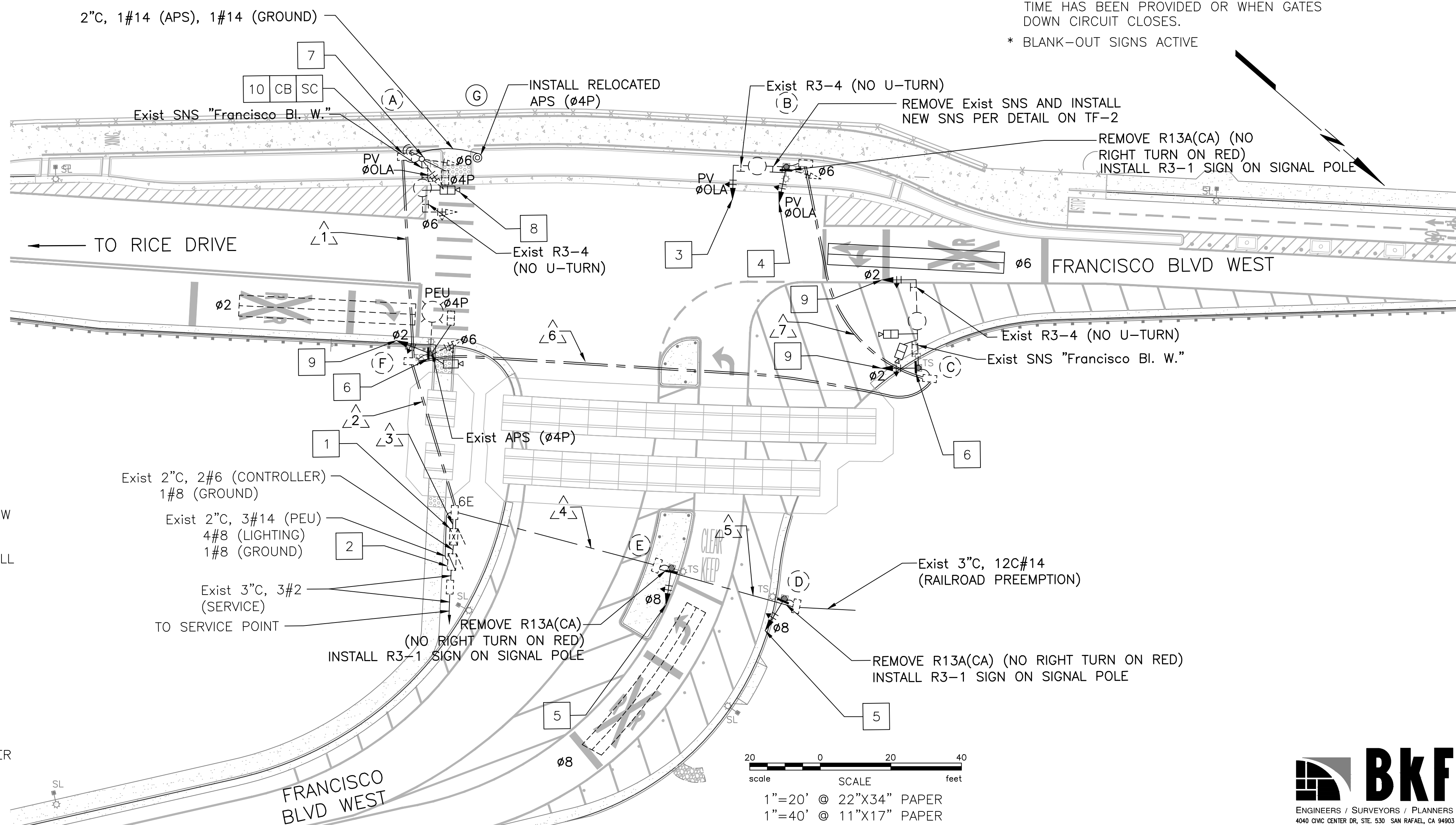
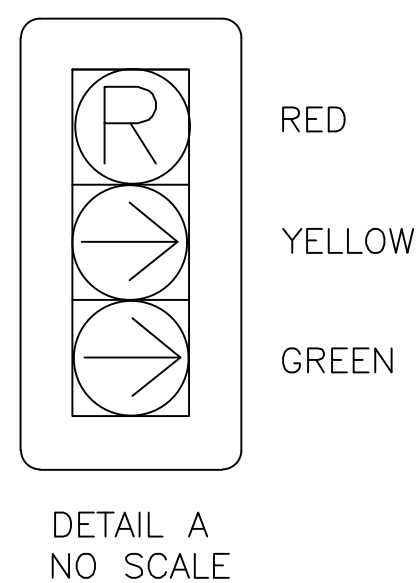
- 0OLA GREEN PHASE SHALL CONTINUE AFTER 08 RED PHASE BEGINS.
0OLA = 08 + GREEN EXTENSION



PROPOSED R/R PRE-EMPTION SEQUENCE

- CURRENTLY SERVING VEHICLE GREEN PHASE AND PEDESTRIAN GREEN PHASE WILL BE TRUNCATED AT THE BEGINNING OF THE PREEMPTION SEQUENCE.
- ADVANCE TO 0OLA TRACK CLEARANCE GREEN (TCG) PHASE WHEN THE TRAFFIC CONTROL RELAY CIRCUIT OPENS.
- ADVANCE TO HOLD OPERATIONS WHEN FULL TCG TIME HAS BEEN PROVIDED OR WHEN GATES DOWN CIRCUIT CLOSES.

* BLANK-OUT SIGNS ACTIVE



GENERAL NOTES:

- THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.
- CITY TO REPROGRAM COBALT CONTROLLER TO ACCOMMODATE CHANGES.

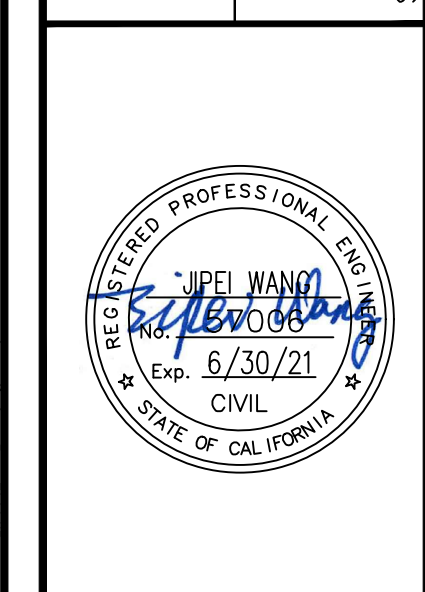
CONSTRUCTION NOTES:

- EXISTING TYPE OL SIGNAL CONTROLLER CABINET WITH BATTERY BACKUP SYSTEM, COBALT TRAFFIC SIGNAL CONTROLLER, TO REMAIN.
- EXISTING TYPE III-AF SERVICE ENCLOSURE TO REMAIN.
- REMOVE EXISTING 4-SECTION SIGNAL HEAD AND MOUNTING AND REPLACE WITH NEW 3-SECTION ALL LEFT ARROW SIGNAL HEAD WITH NEW MAS MOUNTING.
- REMOVE EXISTING 3-SECTION SIGNAL HEAD AND REPLACE WITH NEW 3-SECTION ALL LEFT ARROW SIGNAL HEAD ON EXISTING MOUNTING.
- REMOVE EXISTING ALL CIRCLE LED MODULES AND REPLACE WITH ALL LEFT ARROW LED MODULES.
- EXISTING R3-1 (30"x30") BLANK-OUT SIGN TO REMAIN ON SIGNAL POLE. SIGN SHALL BE ON DURING R/R PRE-EMPTION SEQUENCE.
- REMOVE EXISTING APS (04P) FROM POLE (A) AND INSTALL ON POLE (G).
- ADJUST VIDEO DETECTION CAMERA DETECTION ZONE.
- REMOVE EXISTING ALL CIRCLE LED MODULES AND REPLACE WITH LED MODULES PER DETAIL A ON THIS SHEET.
- ADJUST EXISTING PULL BOX TO GRADE.

| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |
| | | | |
| | | | |

| DESIGNED | DRAWN | CHECKED | APPROVED |
|----------|-------|---------|----------|
| JAK | IMC | JAK | JAK |

PROJECT NAME: IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET
DRAWING NAME: TRAFFIC SIGNAL MODIFICATION PLAN
SAN RAFAEL COUNTY OF MARIN CALIFORNIA



CITY OF SAN RAFAEL
DEPARTMENT OF PUBLIC WORKS

| |
|------------------------------|
| SCALE: AS SHOWN |
| DATE: MAY 2020 |
| BKF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: TF-1 |
| DRAWING: 20 OF 38 |



Plot: May 07, 2020 at 10:11am

169048_MUP_PH02_06TRAF.dwg

CONDUCTOR AND CONDUIT SCHEDULE

| AWG OR CABLE | CONDUCTOR RUN | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----------------------------|------------------------------|--------------|------|----|----|------|------|----|
| No. 14 | No. 14 CONDUCTORS | | | | | | | |
| | ø2 | | 3 | 3 | | | 3 | |
| | ø6 | 3 | 6 | 6 | | | 3 | 3 |
| | ø8 | | | 3 | 3 | 3 | | |
| | øOLA | 3 | 6 | 6 | | | 3 | 3 |
| | ø4P | 2 | 2 | 2 | | | | |
| | APS(ø4P) | 1 | 1 | 1 | | | | |
| | APS COMMON | 1 | 1 | 1 | | | | |
| | PEU | | 3 | | | | | |
| | R3-1 BLANKOUT SIGN | | 3 | 3 | | | 3 | |
| SPARES | 6 | 12 | 18 | 6 | 6 | 6 | 6 | |
| TOTAL No. 14 | | 16 | 37 | 43 | 9 | 9 | 18 | 12 |
| No. 8 | No. 8 CONDUCTORS | | | | | | | |
| | LIGHTING | 2 | 4 | | | | 2 | 2 |
| | SIGNAL COMMON | 1 | 1 | 1 | | | 1 | 1 |
| | BOND (BARE) | 1 | 1 | 1 | | | 1 | 1 |
| TOTAL No. 8 | | 4 | 6 | 2 | | | 4 | 4 |
| VIDEO | VIDEO DETECTION CABLES | | | | | | | |
| | ø2 | | 1 | 1 | | | 1 | |
| | ø6 | 1 | 1 | 1 | | | | |
| | ø8 | | 1 | 1 | | | 1 | |
| TOTAL VIDEO DETECTION CABLE | 1 | 3 | 3 | | | 2 | | |
| CABLE | CCTV CAMERA CABLE | | 1 | 1 | | | | |
| | RADIO CAT6 CABLE | 1 | 1 | 1 | | | | |
| | RR PREEMPTION CABLE (12C#14) | | | 1 | 1 | 1 | | |
| CONDUIT SIZE (INCHES) | 2-4" | 2-4" 1-3" | 2-4" | 3" | 3" | 2-4" | 2-4" | |
| CONDUIT FILL (%) | 4 | 7 | 11 | 9 | 9 | 3 | 3 | |

△ EXISTING CONDUIT AND CONDUCTOR TO REMAIN.

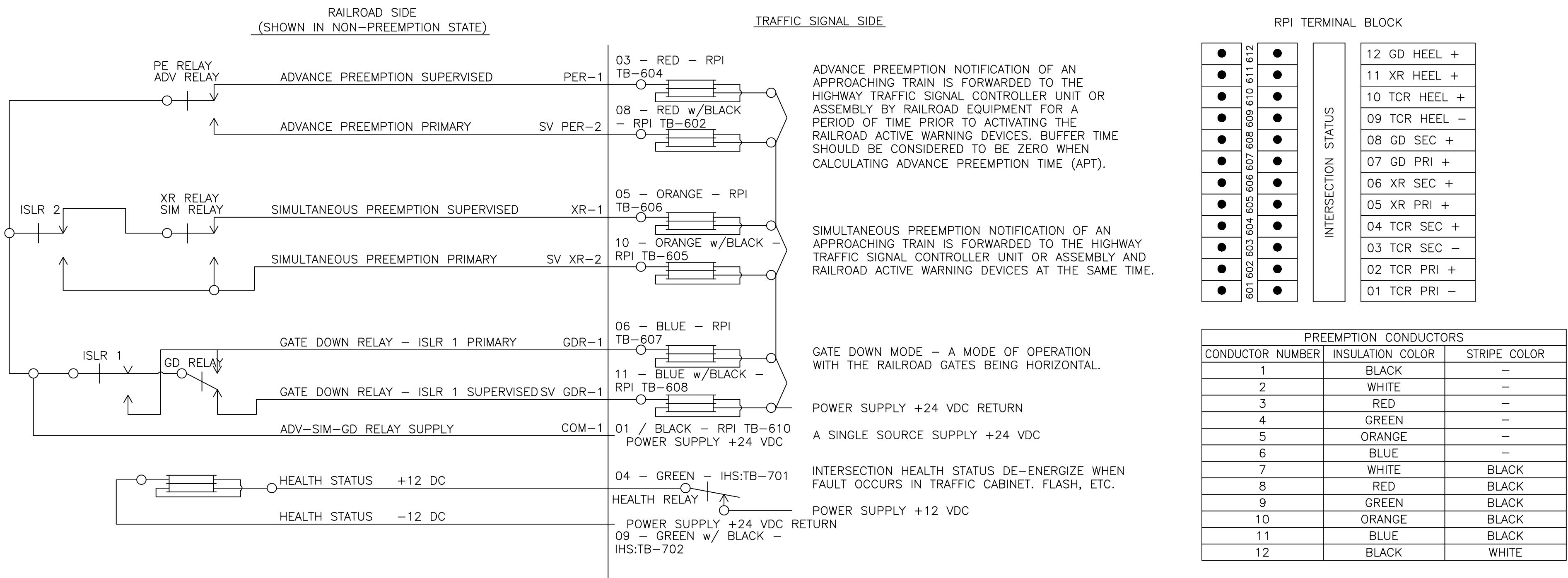


STREET NAME SIGN DETAIL ON POLE B
NTS

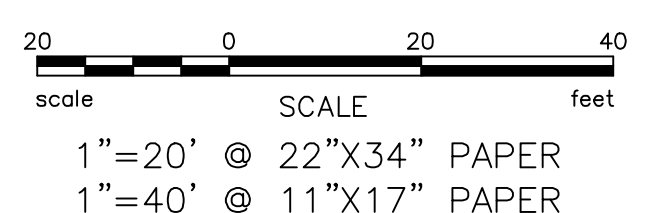
POLE AND EQUIPMENT SCHEDULE

| LOCATION | STANDARD | | | VEH SIG MTG | | PED SIGNAL MTG | APS | | LED LUMINAIRE (WATTS) | SPECIAL REQUIREMENTS |
|----------|----------|-----|-----|-------------|----------|----------------|-----|-------|-----------------------|--|
| | TYPE | SMA | LMA | MAST ARM | POLE | | ø | ARROW | | |
| (A) | 19-4-100 | 15' | 12' | MAS-4B | SV-2-T | SP-1-T | | | 107 | REMOVE EXISTING ACCESSIBLE PEDESTRIAN SIGNALS (APS) PUSH BUTTON. |
| (B) | 19-4-100 | 15' | 12' | MAS*** | SV-2-T** | | | | 107 | REMOVE EXISTING R13A(CA) SIGN AND REPLACE WITH R3-1 ON THE POLE. ** REMOVE EXISTING 3-SECTION SIGNAL HEAD AND REPLACE WITH NEW 3-SECTION ALL LEFT ARROW SIGNAL HEAD ON EXISTING MOUNTING. ***REMOVE EXISTING 4-SECTION SIGNAL HEAD AND MOUNTING AND REPLACE WITH NEW 3-SECTION ALL LEFT ARROW SIGNAL HEAD WITH NEW MAS MOUNTING. REMOVE EXISTING SNS AND INSTALL NEW SNS (Rice Dive). SEE DETAIL ON THIS SHEET. |
| (C) | 19-4-100 | 25' | 15' | MAS | SV-1-T | | | | 107 | REMOVE EXISTING ALL CIRCLE LED MODULES AND REPLACE WITH LED MODULES PER DETAIL A ON SHEET TF-1. |
| (D) | 1-B | | | | TV-1-T | | | | | REMOVE EXISTING ALL CIRCLE LED MODULES AND REPLACE WITH ALL LEFT ARROW LED MODULES. REMOVE EXISTING R13A(CA) AND REPLACE WITH R3-1 SIGN ON THE POLE. |
| (E) | 1-B | | | | TV-1-T | | | | | REMOVE EXISTING ALL CIRCLE LED MODULES AND REPLACE WITH ALL LEFT ARROW LED MODULES. REMOVE EXISTING R13A(CA) AND REPLACE WITH R3-1 SIGN ON THE POLE. |
| (F) | 15TS | | 15' | | SV-2-T | SP-1-T | 4 | → | 107 | REMOVE EXISTING 3-SECTION SIGNAL HEAD AND REPLACE WITH NEW 3-SECTION SIGNAL HEAD ON EXISTING MOUNTING. SEE DETAIL A ON SHEET TF-1. |
| (G) | PPB POST | | | | | | 4* | → | | *REINSTALL APS FROM POLE A. |

○ NEW POLE TO BE INSTALLED
⊖ EXISTING POLE TO REMAIN



RAILROAD PREEMPTION CIRCUITS

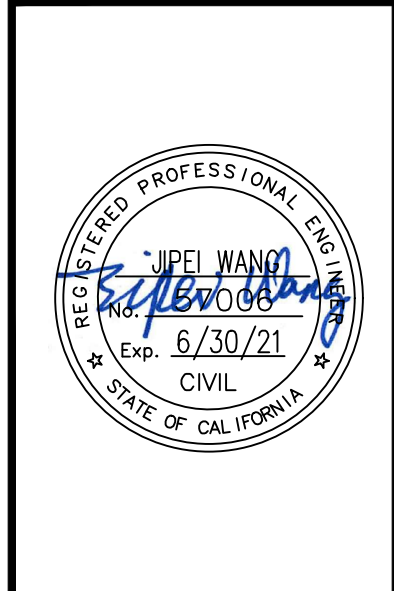


| | |
|----------|-----|
| DATE | |
| BY | |
| REVISION | |
| NO. | |
| DESIGNED | JAK |
| DRAWN | IMC |
| CHECKED | JAK |
| APPROVED | JAK |
| DATE | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET

DRAWING NAME
EQUIPMENT AND CONDUCTOR SCHEDULES

COUNTY OF MARIN CALIFORNIA
SAN RAFAEL



CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

| | |
|-------------------|-------------|
| SCALE: | AS SHOWN |
| DATE: | MAY 2020 |
| BKF PROJECT NO.: | 20169048-28 |
| CITY PROJECT NO.: | 11364 |
| SHEET NO.: | TF-2 |
| DRAWING: | 21 OF 38 |



Plot: May 07, 2020 at 10:21am

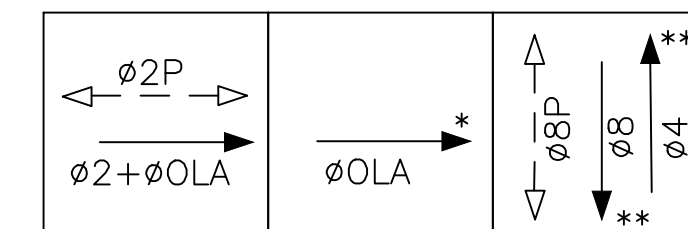
169048_MUP_PH02_07TRAF.dwg

GENERAL NOTES:

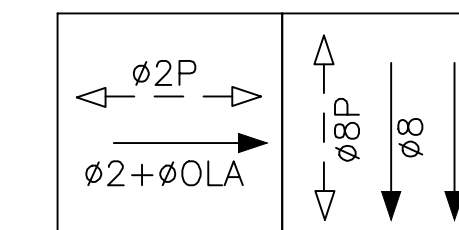
1. THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.
2. CITY TO REPROGRAM COBALT CONTROLLER TO ACCOMMODATE CHANGES.
3. CONTRACTOR SHALL ABANDON ANY UNUSED LOOP DETECTORS AND REMOVE ANY UNUSED DLCs.
4. ALL SALVAGED EQUIPMENT SHALL BE DELIVERED TO THE CITY'S MAINTENANCE YARD AS DIRECTED BY THE CITY.

CONSTRUCTION NOTES:

- 1 REMOVE AND SALVAGE EXISTING SIGNAL POLE. RELOCATE EXISTING STREET NAME SIGN AND RADIO TO NEW POLE. RC ALL OTHER EQUIPMENT.
- 2 REMOVE TWO EXISTING #4 SIGNAL HEADS AND MOUNTINGS, EXISTING STREET NAME SIGN, AND EXISTING R3-1(RIGHT) BLANK-OUT SIGN FROM THE SIGNAL POLE. REMOVE EXISTING TRAFFIC SIGNAL MAST ARM AND INSTALL A STEEL PLATE TO COVER THE FLANGE. PLUG HOLES IN SHAFT TO ENSURE WATER TIGHT SEAL.
- 3 EXISTING TYPE 0L SIGNAL CONTROLLER CABINET WITH BATTERY BACK SYSTEM, COBALT TRAFFIC SIGNAL CONTROLLER, TO REMAIN.
- 4 ADJUST EXISTING PULL BOX TO GRADE.
- 5 REMOVE EXISTING #8 AND #4 SIGNAL HEADS AND GEAR. REMOVE #4 BLANK-OUT SIGN. INSTALL NEW #8 VEHICLE HEAD AND MOUNTING.
- 6 INSTALL BICYCLE SIGNAL HEAD. SEE DETAIL A ON THIS SHEET.
- 7 INSTALL 4'x6' BIKE DETECTOR LOOP.
- 8 INSTALL R13A (NO RIGHT TURN ON RED) SIGN ON SIGNAL POLE.
- 9 FURNISH AND INSTALL "DO NOT STOP ON TRACKS" BLANK-OUT SIGN ON EXISTING SIGNAL MAST ARM PER DETAIL "B" ON THIS SHEET.
- 10 FURNISH AND INSTALL "DO NOT STOP ON TRACKS" BLANK-OUT SIGN ON SIGNAL POLE PER DETAIL "B" ON THIS SHEET.
- 11 INSTALL CITY-FURNISHED LOAD SWITCHES FOR BLANK-OUT SIGNS IN EXISTING CABINET.

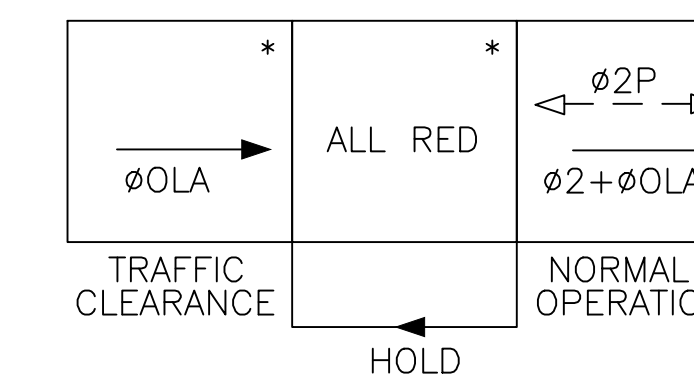


EXISTING PHASE DIAGRAM



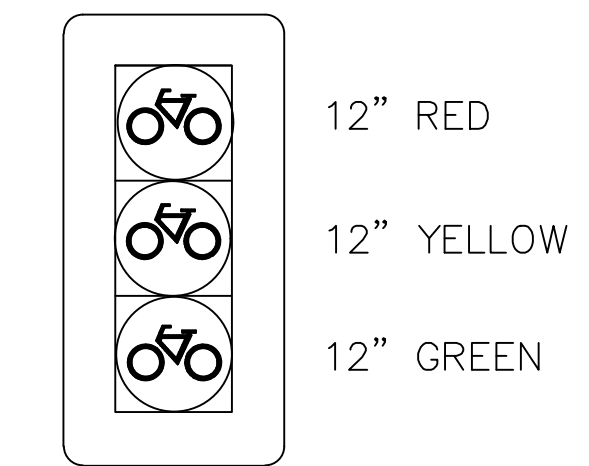
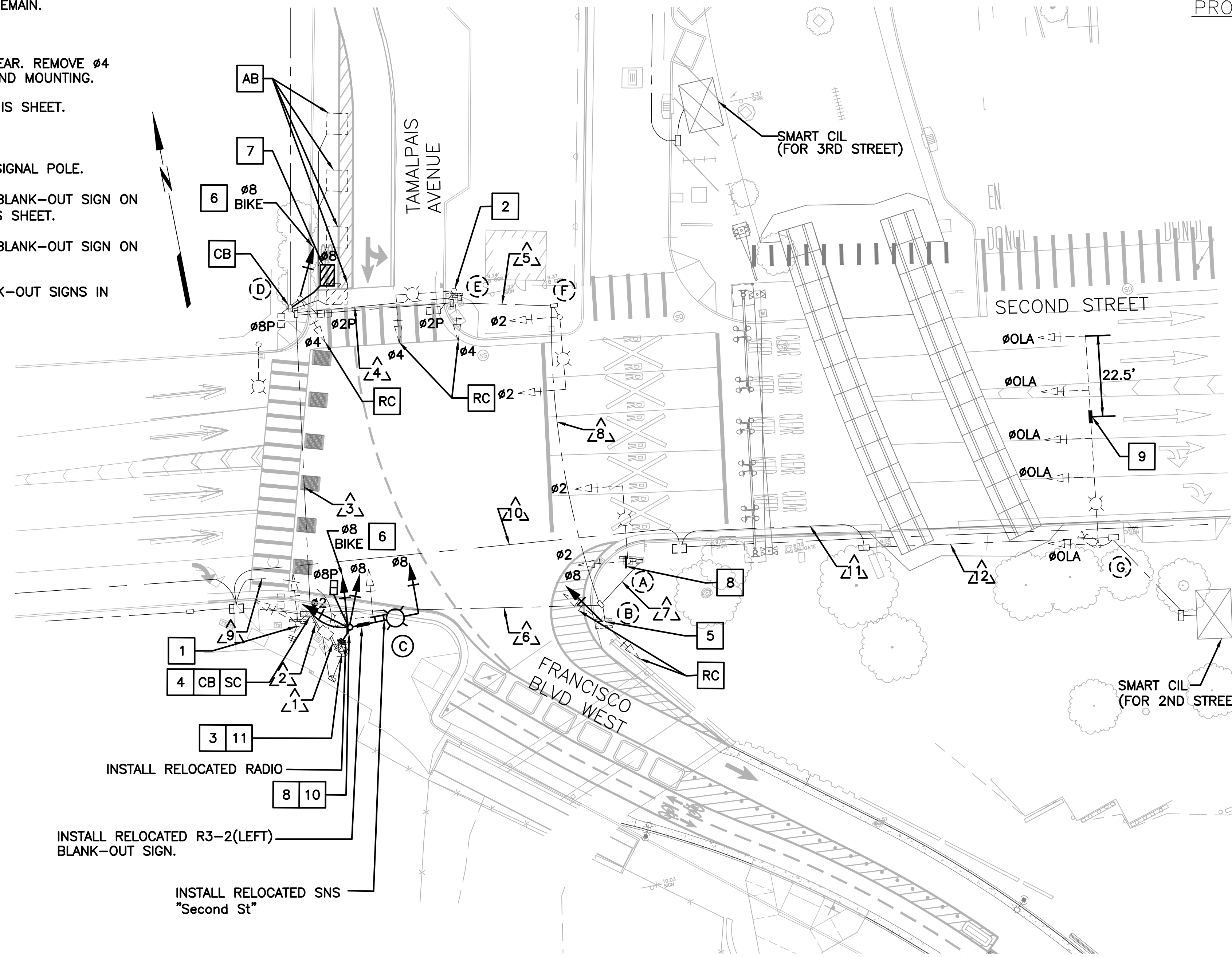
PROPOSED PHASE DIAGRAM

OLA = $\phi 2 + \text{GREEN EXTENSION}$

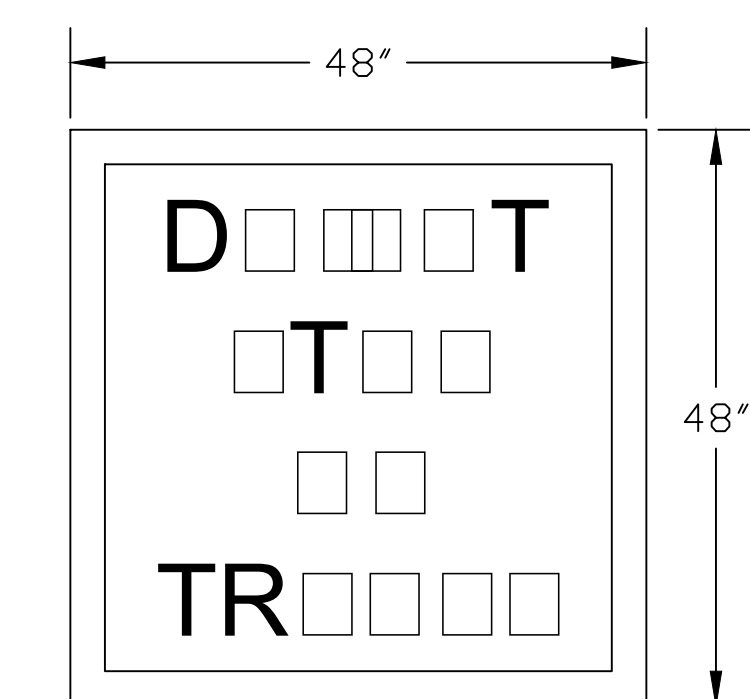


PROPOSED R/R PRE-EMPTION SEQUENCE

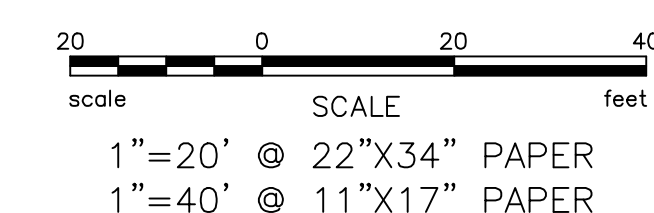
1. CURRENTLY SERVING VEHICLE GREEN PHASE AND PEDESTRIAN GREEN PHASE WILL BE TRUNCATED AT THE BEGINNING OF THE PREEMPTION SEQUENCE.
 2. ADVANCE TO $\phi 0LA$ TRACK CLEARANCE GREEN (TCG) PHASE WHEN THE TRAFFIC CONTROL RELAY CIRCUIT OPENS.
 3. ADVANCE TO HOLD OPERATIONS WHEN FULL TCG TIME HAS BEEN PROVIDED OR WHEN GATES DOWN CIRCUIT CLOSES.
- * BLANK-OUT SIGNS ACTIVE



DETAIL A
BICYCLE SIGNAL HEAD
NO SCALE

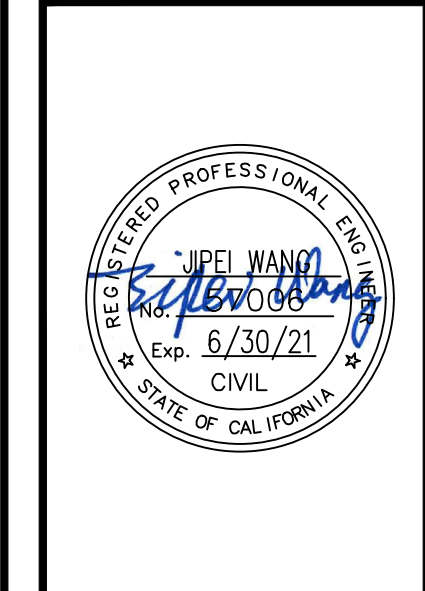


DETAIL B
NO SCALE



| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |

| | | | | | | | |
|--------------|---|-------|-----|---------|--------------|-----------------------------|-----|
| DESIGNED | JAK | DRAWN | IMC | CHECKED | JAK | APPROVED | JAK |
| PROJECT NAME | IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET | | | | DRAWING NAME | TRAFFIC SIGNAL MODIFICATION | |
| CITY | SAN RAFAEL | | | | COUNTY | MARIN | |
| STATE | CALIFORNIA | | | | DATE | | |



CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

| | |
|-------------------|-------------|
| SCALE: | AS SHOWN |
| DATE: | MAY 2020 |
| BKF PROJECT NO.: | 20169048-28 |
| CITY PROJECT NO.: | 11364 |
| SHEET NO.: | TF-3 |
| DRAWING: | 22 OF 38 |

Plot: May 07, 2020 at 10:24am

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CONDUCTOR AND CONDUIT SCHEDULE

| AWG OR CABLE | CONDUCTOR RUN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | |
|--------------|--|------|------|----|----|----|----|----|----|----|----|------|------|----|---|----|
| No. 14 | No. 14 CONDUCTORS | | | | | | | | | | | | | | | |
| | ø2 | 9 | 9 | 3 | 3 | 3 | 6 | 3 | 3 | | | | | | | |
| | ø4 | 6 | 6 | 3 | 3 | 3 | 3 | | | | | | | | | |
| | ø8 | 3 | 3 | | | | | | | | | | | | | |
| | ø8 BIKE | 6N | 6N | 3N | | | | | 3N | | | | | | | |
| | øOLA | 3 | 3 | | | | | | | 3 | 3 | 3 | 3 | | | |
| | ø2P | 2 | 2 | 2 | 2 | | | | | | | | | | | |
| | ø8P | 2 | 2 | 2 | | | | | | | | | | | | |
| | BLANKOUT | 4 | 4 | | | 2 | 4 | 2 | 2 | | | | | | | |
| | "DO NOT STOP ON TRACKS" BLANK-OUT SIGN | 6N | 6N | | | | | | | | | 3N | 3N | | | |
| SPARES | 3 | 3 | | | | | | | | 3 | 3 | 3 | | | | |
| TOTAL No. 14 | | 32 | 32 | 10 | 3N | 8 | 5 | 16 | 5 | 5 | 3N | 6 | 6 | 3N | 6 | 3N |
| No. 8 | No. 8 CONDUCTORS | | | | | | | | | | | | | | | |
| | SIGNAL COMMON | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| | BOND | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| TOTAL No. 8 | | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| No. 10 | STREET LIGHTING | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| | TOTAL NO. 10 | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| DLC * | DETECTOR LOOP CABLES | 9 | 9 | 3 | | | 2 | | | | | | | | | |
| | | 1N | 1N | 1N | | | | | | | | | | | | |
| SIC | SIGNAL INTERCONNECT | 3 | 3 | 2 | 1 | 1 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| SMFO | FIBER OPTIC CABLE | 1 | | | | | | | | 1 | 1 | | | | | |
| | | | | | | | | | | | | | | | | |
| RADIO | ETHERNET CABLE | 1 | 1 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| CCTV | CCTV POWER | 1 | | | | | | | | 1 | 1 | 1 | 1 | | | |
| | CCTV DATA | 1 | | | | | | | | 1 | 1 | 1 | 1 | | | |
| RAILROAD | RR PREEMPTION CABLE (12C#14) | 1 | | | | | | | | 1 | 1 | 1 | 1 | | | |
| | | | | | | | | | | | | | | | | |
| | CONDUIT SIZE (INCHES) | 2-3" | 2-3" | 3" | 2" | 2" | 3" | 2" | 3" | 3" | 3" | 2-4" | 2-4" | | | |
| | CONDUIT FILL (%) | 20 | 18 | 19 | 22 | 20 | 9 | 9 | 4 | 10 | 10 | 2 | 2 | | | |

△ EXISTING CONDUIT AND CONDUCTOR TO REMAIN.

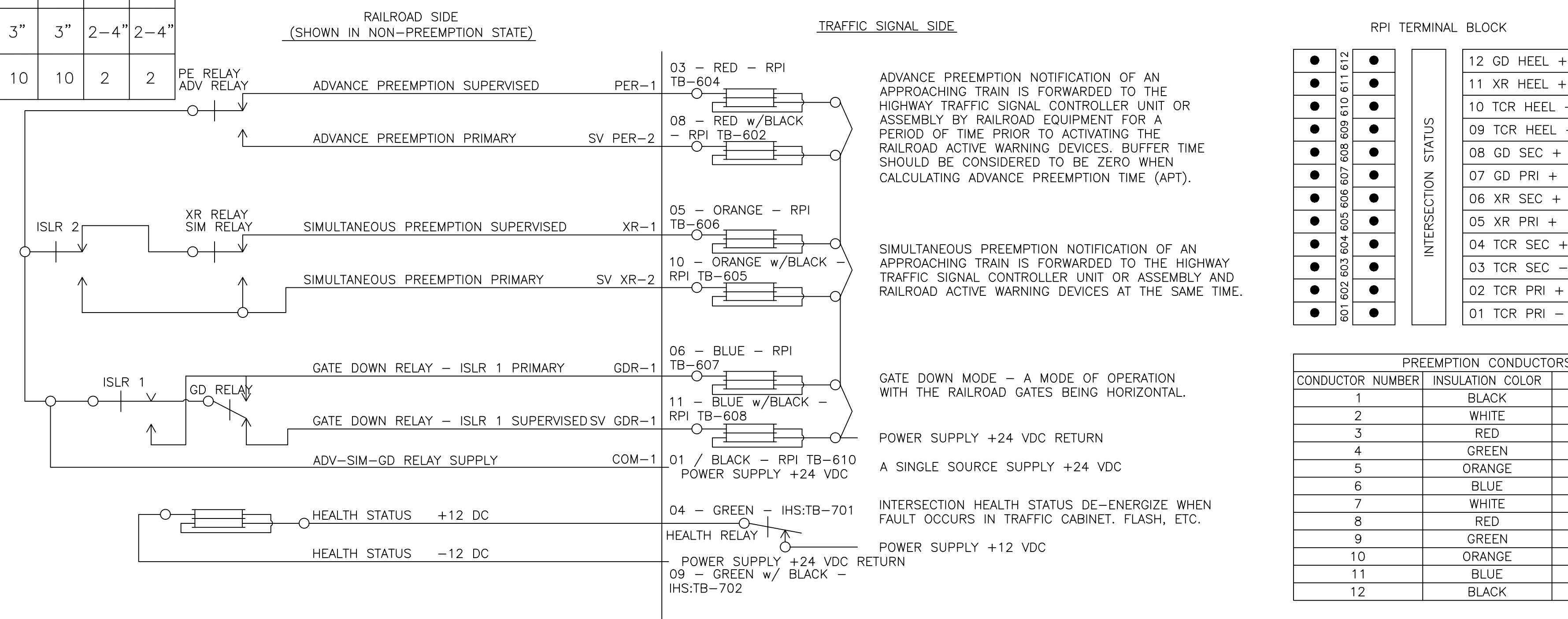
N DENOTES NEW EQUIPMENT

* CONTRACTOR SHALL ABANDON ANY UNUSED LOOP DETECTORS AND REMOVE ANY UNUSED DLCs.

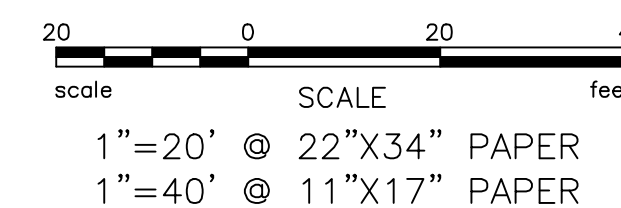
POLE AND EQUIPMENT SCHEDULE

| LOCATION | STANDARD | | | VEH SIG MTG | | PED SIGNAL MTG | LED LUMINAIRE (WATTS) | SPECIAL REQUIREMENTS |
|----------|---------------|----------|----------|--------------------------|--------------|----------------|-----------------------|---|
| | TYPE | SMA | LMA | MAST ARM | POLE | | | |
| (A) | 17-2-100 | 20' | 12' | MAS | SV-1-T | - | 100 | INSTALL R13A(CA) (NO TURN ON RED) SIGN ON SIGNAL POLE. |
| (B) | 1-A | - | - | - | TV-1-T N | - | - | REMOVE EXISTING TV-2-T MOUNTING AND BLANK-OUT SIGN FOR NB MOVEMENT AND REPLACE WITH TV-1-T MOUNTING. |
| (C) | 19-4-100 N | 20' N | 12' N | MAS N | SV-3-TC N | SP-1-T N | 100 N | INSTALL R13A(CA) (NO TURN ON RED) SIGN FACING SECOND STREET ON SIGNAL POLE. FURNISH AND INSTALL "DO NOT STOP ON TRACKS" BLANK-OUT SIGN FACING SECOND STREET ON SIGNAL POLE. INSTALL R3-1 (RIGHT) AND R6-1L SIGNS FACING TAMALPAIS STREET ON THE POLE. INSTALL RELOCATED R3-2 (LEFT) BLANK-OUT SIGN ON SIGNAL MAST ARM. INSTALL RELOCATED STREET NAME SIGN ON SIGNAL MAST ARM. |
| (D) | 1-A | - | - | - | TV-1-T N | SP-2-T | | REMOVE EXISTING ø4 SIGNAL HEAD AND INSTALL ø8 BIKE SIGNAL HEAD ON TV-1-T MOUNTING. |
| (E) | 17-2-100 | - | 12' | - | - | SP-1-T | 100 | REMOVE TWO EXISTING ø4 SIGNAL HEADS AND MOUNTINGS. EXISTING STREET NAME SIGN, AND EXISTING R3-1(RIGHT) BLANK-OUT SIGN. REMOVE EXISTING TRAFFIC SIGNAL MAST ARM AND INSTALL A STEEL PLATE TO COVER THE FLANGE. PLUG HOLES IN SHAFT TO ENSURE WATER TIGHT SEAL. |
| (F) | 17-2-100 | 20' | 12' | MAS | SV-1-T | | 100 | |
| (G) | 61-5-100 | 60' | 15' | MAT MAT MAT MAT | SV-1-T | | 143 | FURNISH AND INSTALL "DO NOT STOP ON TRACKS" BLANK-OUT SIGN ON SIGNAL MAST ARM. |

- NEW POLE TO BE INSTALLED
- ⊙ EXISTING POLE TO REMAIN
- N DENOTES NEW EQUIPMENT



RAILROAD PREEMPTION CIRCUITS



| RPI TERMINAL BLOCK | |
|--------------------|---------------|
| ● | 12 GD HEEL + |
| ● | 11 XR HEEL + |
| ● | 10 TCR HEEL + |
| ● | 09 TCR HEEL - |
| ● | 08 GD SEC + |
| ● | 07 GD PRI + |
| ● | 06 XR SEC + |
| ● | 05 XR PRI + |
| ● | 04 TCR SEC + |
| ● | 03 TCR SEC - |
| ● | 02 TCR PRI + |
| ● | 01 TCR PRI - |

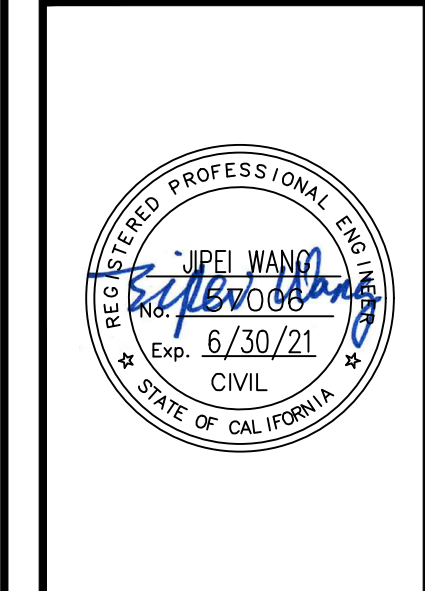
| PREEMPTION CONDUCTORS | | |
|-----------------------|------------------|--------------|
| CONDUCTOR NUMBER | INSULATION COLOR | STRIPE COLOR |
| 1 | BLACK | - |
| 2 | WHITE | - |
| 3 | RED | - |
| 4 | GREEN | - |
| 5 | ORANGE | - |
| 6 | BLUE | - |
| 7 | WHITE | BLACK |
| 8 | RED | BLACK |
| 9 | GREEN | BLACK |
| 10 | ORANGE | BLACK |
| 11 | BLUE | BLACK |
| 12 | BLACK | WHITE |

| NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |

DESIGNED: JAK
DRAWN: IMC
CHECKED: JAK
APPROVED: JAK

PROJECT NAME: IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET
DRAWING NAME: TRAFFIC SIGNAL MODIFICATION

SAN RAFAEL COUNTY OF MARIN CALIFORNIA



CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

| |
|------------------------------|
| SCALE: AS SHOWN |
| DATE: MAY 2020 |
| BKF PROJECT NO.: 20169048-28 |
| CITY PROJECT NO.: 11364 |
| SHEET NO.: TF-4 |
| DRAWING: 23 OF 38 |



EROSION & SEDIMENT CONTROL NOTES

EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THESE DRAWINGS ARE GENERAL IN NATURE AND MAY NOT BE APPLICABLE DURING CERTAIN PHASES OF CONSTRUCTION.

THE CONTRACTOR SHALL INTEGRATE APPROPRIATE MEASURES DURING EACH CONSTRUCTION PHASE TO ENSURE THAT SEDIMENT AND OTHER POLLUTANTS DO NOT ENTER THE STORM DRAIN SYSTEM.

THE CONTRACTOR SHALL USE WATER OR DUST PALLIATIVE TO MINIMIZE WIND EROSION. THE CONTRACTOR SHALL DESIGNATE AN AREA ON SITE TO STOCKPILE MATERIAL. THE STOCKPILED MATERIAL SHALL BE COVERED AT ALL TIMES TO PREVENT EROSION FROM WIND, RAIN AND STORM WATER RUNOFF.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED TO ENSURE THAT WATER ENTERING THE STORM DRAIN SYSTEM BELOW THE CONSTRUCTION SITE IS OF EQUIVALENT QUALITY AND CHARACTER AS THE WATER ABOVE THE SITE.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED IN FRONT OF INCOMPLETE STORM DRAIN SYSTEMS TO PREVENT DEBRIS AND SEDIMENT-LADEN WATER FROM ENTERING INTO THE PUBLIC STORM DRAIN SYSTEM. BEST MANAGEMENT PRACTICES SHALL BE USED WHEN DESIGNING AND INSTALLING SUCH DEVICES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTANT MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES TO THE SATISFACTION OF THE CITY OF SAN RAFAEL. EROSION AND SEDIMENT CONTROL MEASURES AND THEIR INSTALLATION SHALL BE ACCOMPLISHED USING BEST MANAGEMENT PRACTICES.

IF THE STORM DRAIN SYSTEM IS NOT INSTALLED PRIOR TO A PRECIPITATION EVENT, ADDITIONAL MEASURES SHALL BE TAKEN SUCH AS TEMPORARY SETTLING BASINS WHICH MEET THE SATISFACTION OF THE CITY OF SAN RAFAEL. SILT AND/OR CATCH BASINS MUST BE CLEANED OUT ON A REGULAR BASIS AFTER STORMS TO MAINTAIN DESIGN CAPACITY.

STORM WATER RUNOFF FROM THE CONSTRUCTION SITE SHALL BE DIRECTED TOWARD AN INLET WITH A SEDIMENT OR FILTRATION INTERCEPTOR PRIOR TO ENTERING THE STORM DRAIN SYSTEM.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING WATER THAT HAS BECOME POLLUTED DUE TO NOT TAKING NECESSARY EROSION AND SEDIMENT CONTROL ACTIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF MUD AND DEBRIS CARRIED ONTO SURROUNDING STREETS AND ROADS AS A RESULT OF CONSTRUCTION ACTIVITY ON THE SITE TO THE SATISFACTION OF THE CITY OF SAN RAFAEL.

DENUDED OR DISTURBED SOILS SHALL BE PROTECTED USING BEST MANAGEMENT PRACTICES.

PRIOR TO AND DURING A PRECIPITATION EVENT, PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED BY THE CONTRACTOR SO THAT A MINIMUM OF SEDIMENT-LADEN RUNOFF LEAVES THE SITE.

THE CONTRACTOR IS TO INFORM ALL CONSTRUCTION SITE WORKERS ABOUT THE MAJOR PROVISIONS OF THE EROSION AND SEDIMENT CONTROL PLAN AND SEEK THEIR COOPERATION IN AVOIDING THE DISTURBANCE OF THESE CONTROL MEASURES.

BEST MANAGEMENT PRACTICES SHALL BE VISUALLY MONITORED ON A DAILY BASIS AND RECORDED IN AN INSPECTION CHECKLIST ON A WEEKLY BASIS. RAIN EVENT VISUAL MONITORING SHALL BE PERFORMED WITHIN 48 HOURS PRIOR TO AN ANTICIPATED RAIN EVENT, DAILY DURING A RAIN EVENT AND WITHIN 48 HOURS FOLLOWING A RAIN EVENT. REMOVE SEDIMENTS WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE BARRIER AND REPLACE FILTER DEVICES AS NECESSARY TO ENSURE PROPER FUNCTION.

UNSTABILIZED AREAS SHALL BE REPAIRED AS SOON AS POSSIBLE AFTER BEING DAMAGED.

GRADED OR DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING IS COMPLETE.

ENTRANCE TO THE PROJECT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS-OF-WAY. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED ROCK THAT DRAINS INTO A SEDIMENT TRAP.

SEDIMENT SPILLED, DROPPED, OR TRACKED INTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY USING BEST MANAGEMENT PRACTICES.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR PURPOSE SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REPAIRED OR REPLACED WHEN THEY ARE NO LONGER FUNCTIONING IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

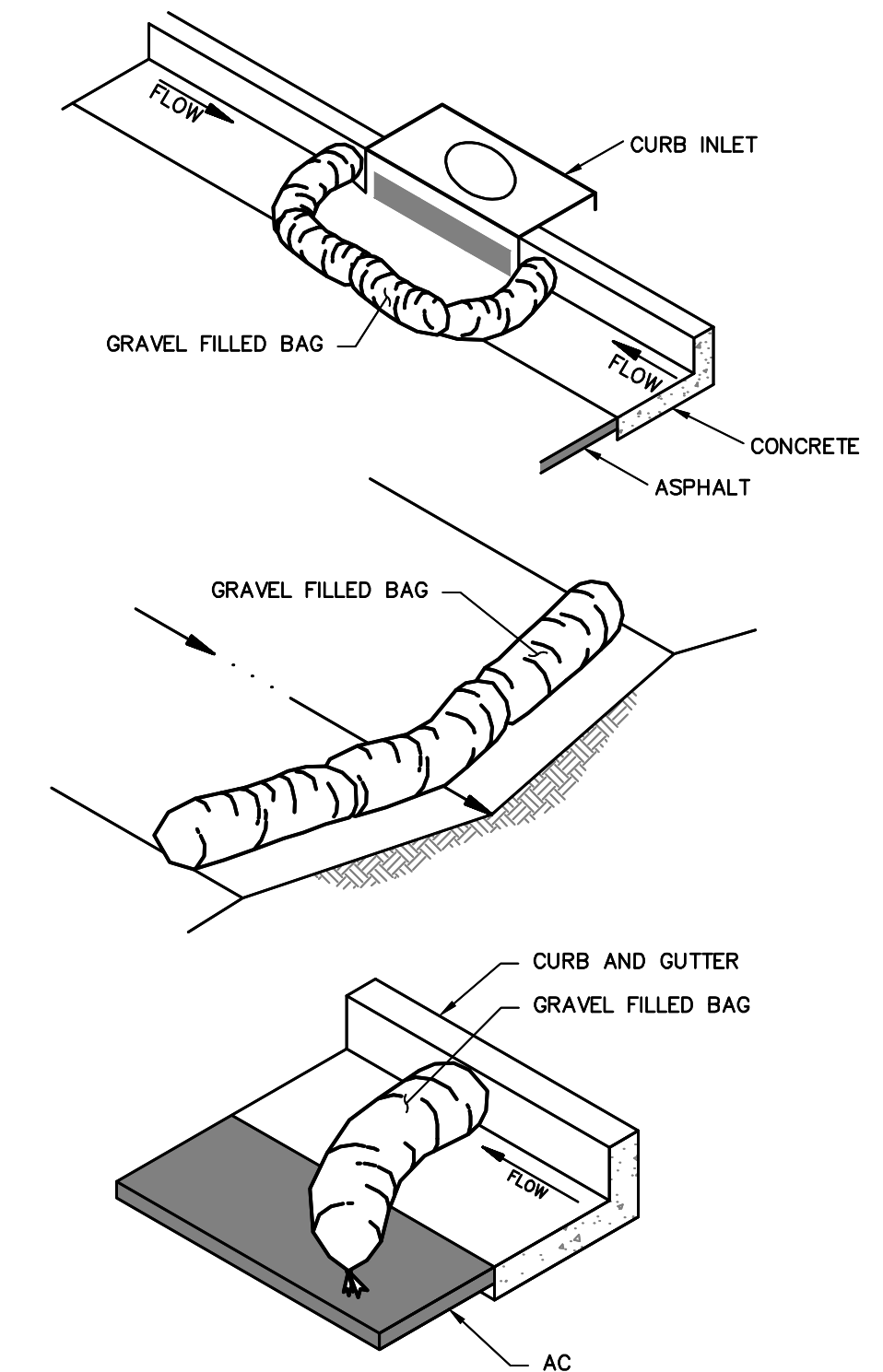
THE CONTRACTOR SHALL DISPOSE OF UNUSED CONSTRUCTION MATERIALS AND WASTE PRIOR TO THE COMPLETION OF CONSTRUCTION.

AFTER CONSTRUCTION IS COMPLETE, STORM DRAIN SYSTEMS ASSOCIATED WITH THIS PROJECT SHALL BE INSPECTED AND CLEARED OF ACCUMULATED SEDIMENTS AND DEBRIS.

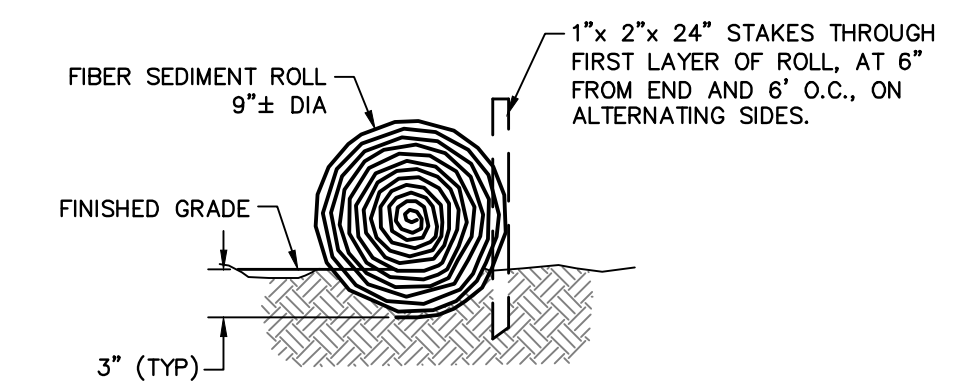
GRADED AREAS TO BE SEEDED FOR EROSION CONTROL SHALL USE GRASS SEED AT THE RATE OF 75-100 POUNDS PER ACRE. SEEDED AREAS SHALL BE IRRIGATED TO ENSURE COVER IS ROOTED.

HYDROSEED SHALL BE EITHER APPLIED MECHANICALLY OR BY HYDROSEEDING. HYDROSEEDING REQUIRES THE APPLICATION OF FIBER AND STABILIZING EMULSION. MECHANICAL APPLICATION SHALL REQUIRE ROLLING, TAMPING, OR OTHERWISE WORKING THE SEED APPROXIMATELY 0.5-INCHES INTO THE TOPSOIL.

STABILIZATION OF EXPOSED GRADED AREAS WITH STRAW MULCH SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE.



9
NO SCALE



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NO SCALE

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DESIGNED: JAK
DRAWN: IMC
CHECKED: JAK
APPROVED: JAK

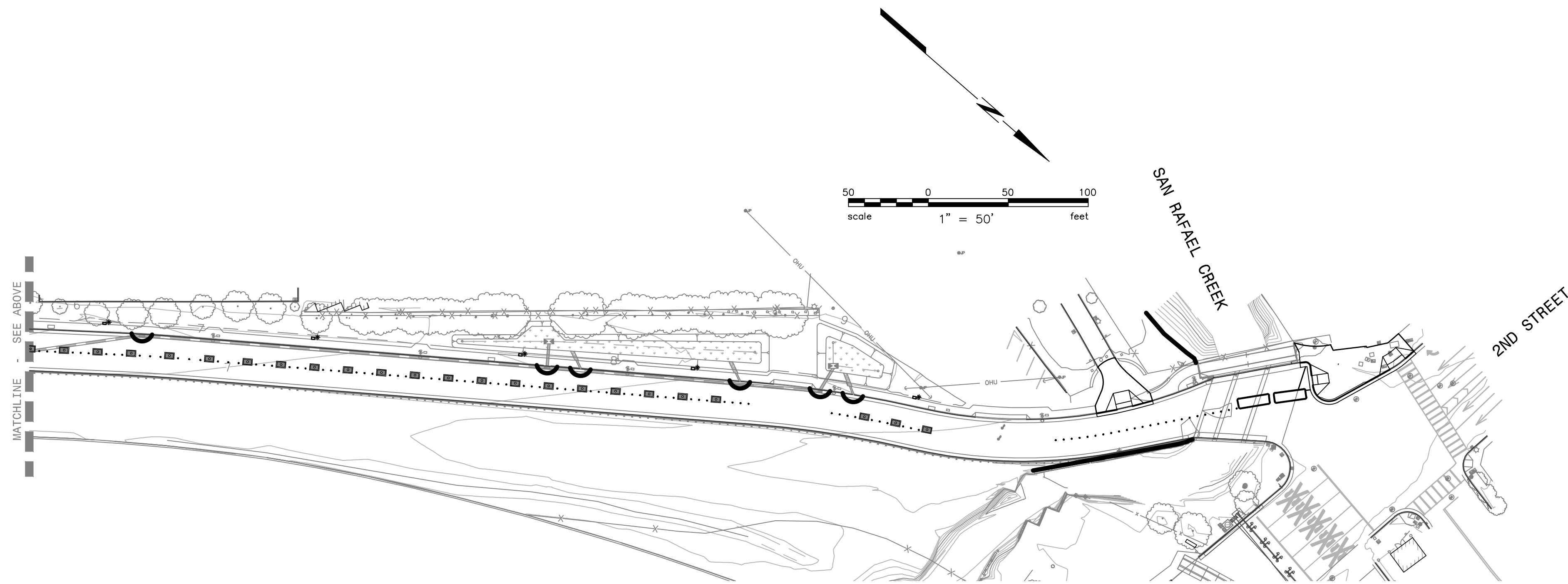
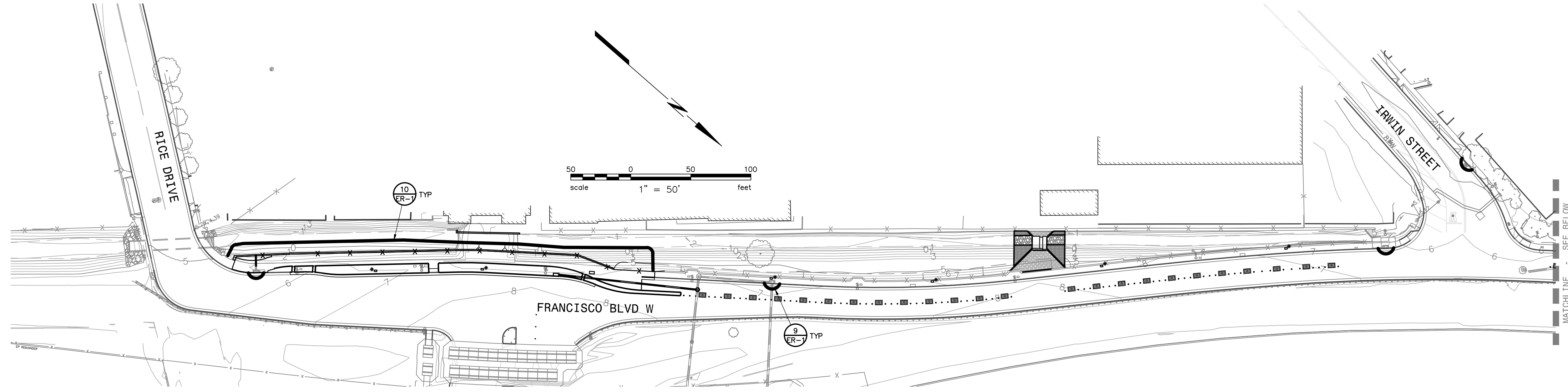
PROJECT NAME: IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET
DRAWING NAME: EROSION & SEDIMENT CONTROL NOTES AND DETAILS
SAN RAFAEL, CALIFORNIA COUNTY OF MARIN



CITY OF SAN RAFAEL
DEPARTMENT OF PUBLIC WORKS

SCALE: AS SHOWN
DATE: MAY 2020
BKF PROJECT NO.: 20169048-28
CITY PROJECT NO.: 11364
SHEET NO.: ER-1
DRAWING: 24 OF 38





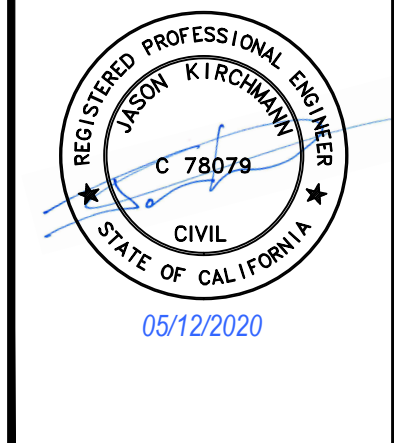
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SCALE: AS SHOWN
 DATE: MAY 2020
 BKF PROJECT NO.: 20169048-28
 CITY PROJECT NO.: 11364
 SHEET NO.: ER-2
 DRAWING: 25 OF 38

CITY OF SAN RAFAEL
 DEPARTMENT OF
 PUBLIC WORKS



PROJECT NAME
IMPROVEMENT DRAWINGS FOR FRANCISCO BOULEVARD WEST RICE DRIVE TO SECOND STREET


DRAWING NAME
EROSION & SEDIMENT CONTROL PLAN

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

| DESIGNED | BY | REVISION | NO. | DATE |
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| JAK | | | | |
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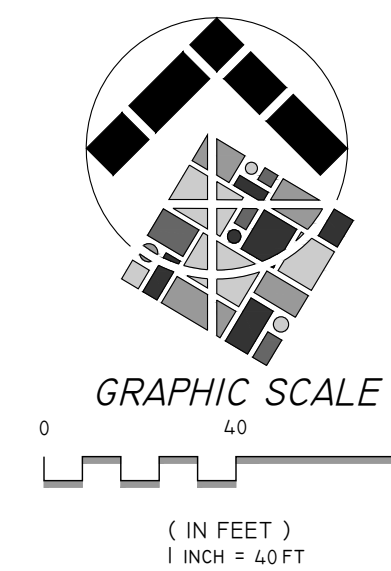
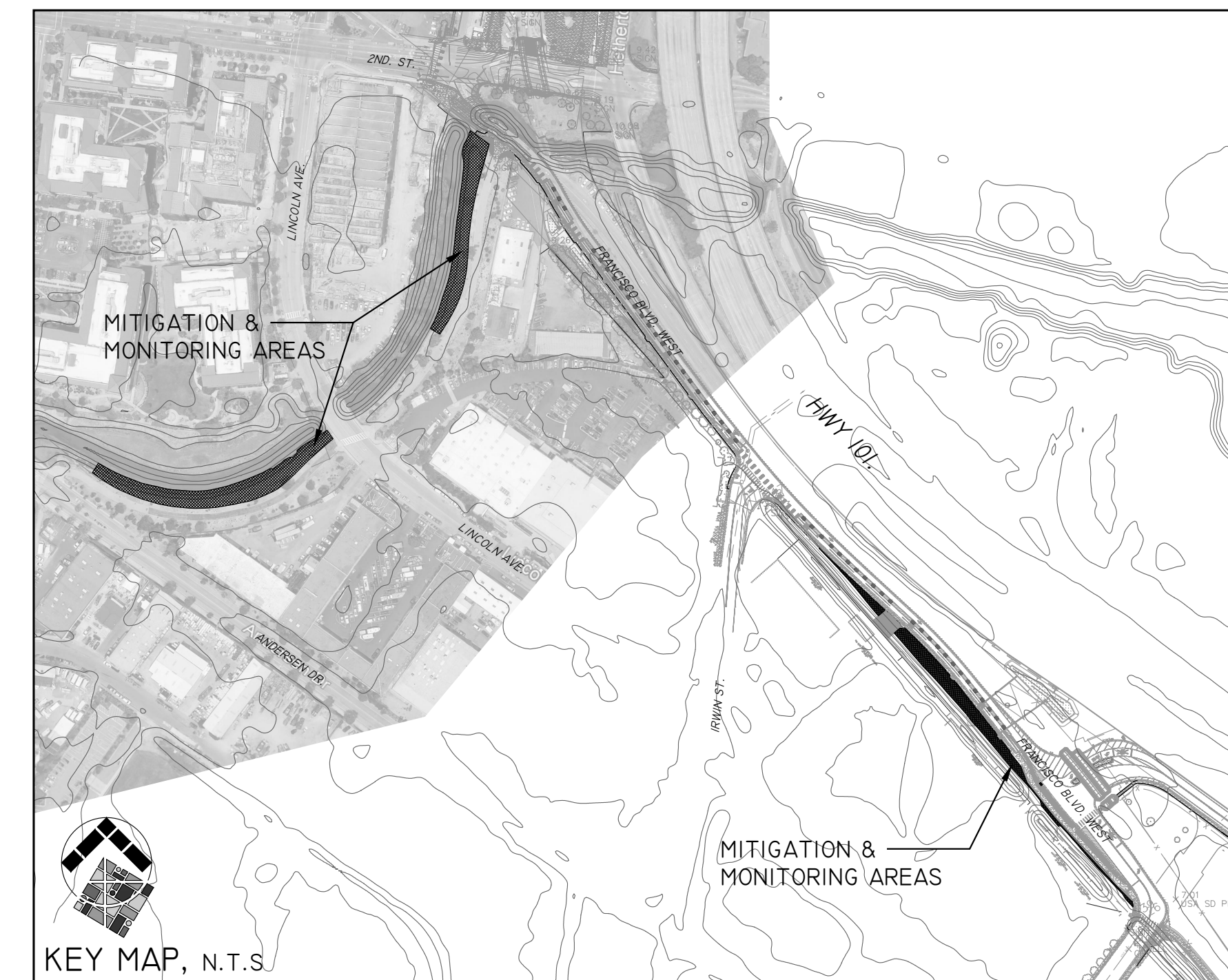


SITE LEGEND

 MANAGEMENT AND MAINTENANCE ACTIVITY AREAS TO INCLUDE INVASIVE SPECIES REMOVAL, WEED CONTROL, MITIGATION PLANTING AND IRRIGATION, MAINTENANCE OF PLANTS/IRRIGATION AND SUCCESS CRITERIA AS OUTLINED IN THE "MITIGATION AND MONITORING PLAN, FRANCISCO BOULEVARD WEST MULTI- USE PATHWAY, SECOND STREET TO ANDERSEN DRIVE" REPORT PREPARED BY LSA ASSOCIATES, INC. LSA PROJECT NO. ALT1701, DATED MAY 2018"

NOTES

1. CONTRACTOR SHALL REFER TO "MITIGATION AND MONITORING PLAN, FRANCISCO BOULEVARD WEST MULTI- USE PATHWAY SECOND STREET TO ANDERSEN DRIVE" REPORT PREPARED BY LSA ASSOCIATES, INC. LSA PROJECT NO. ALT1701, DATED MAY 2018" FOR ADDITIONAL MITIGATION AND MONITORING PROJECT REQUIREMENTS.
2. REFER SPECIFICATION SECTION 18-14 FOR FURTHER PROJECT REQUIREMENTS.
3. REFER TO SHEET L1.0 FOR MATERIAL SCHEDULE.



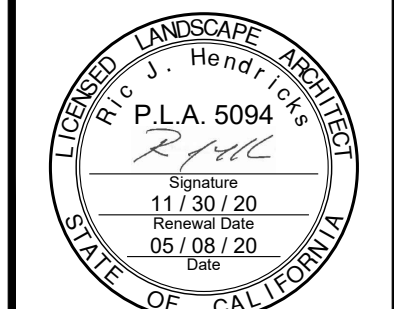
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| FM | | |
| CHECKED | APPROVED | DATE |
| RJH | | |
| APPROVED | DATE | |
| RJH | | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

DRAWING NAME
SITE PLAN

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

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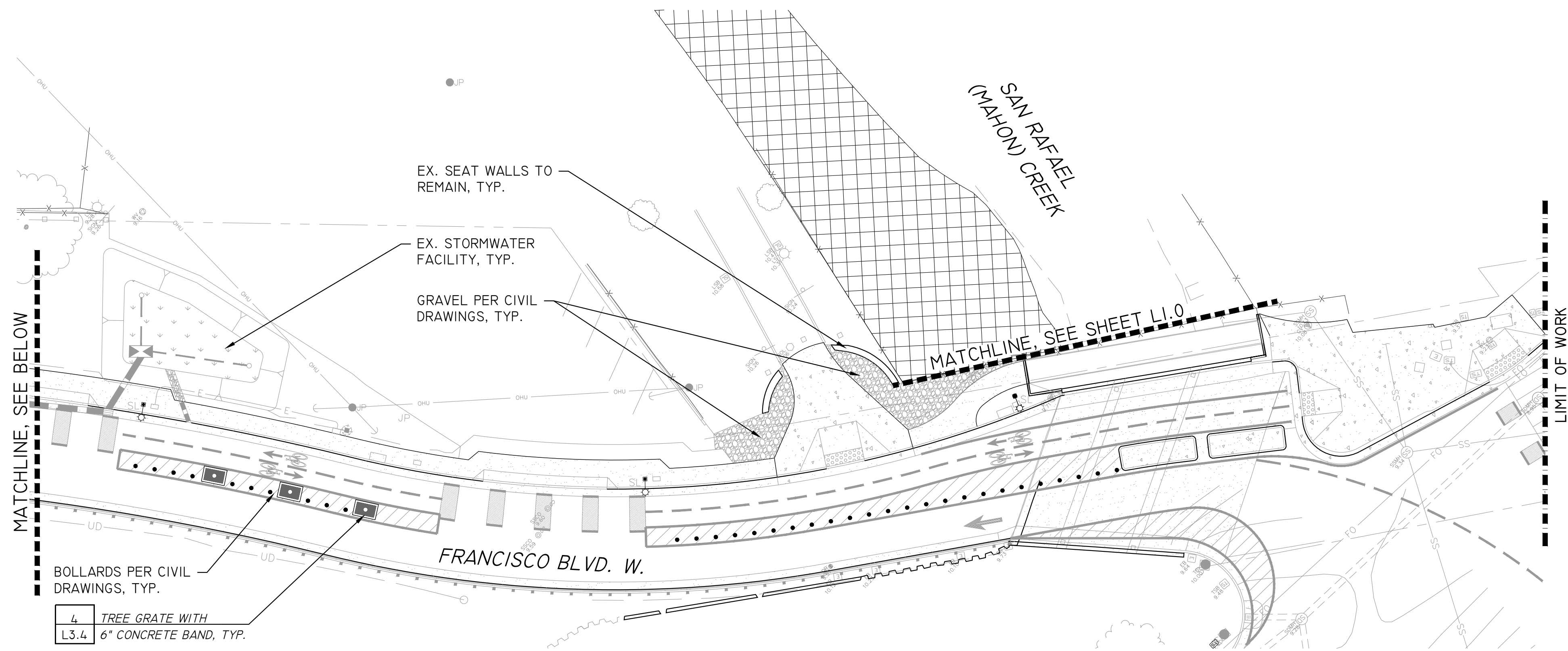


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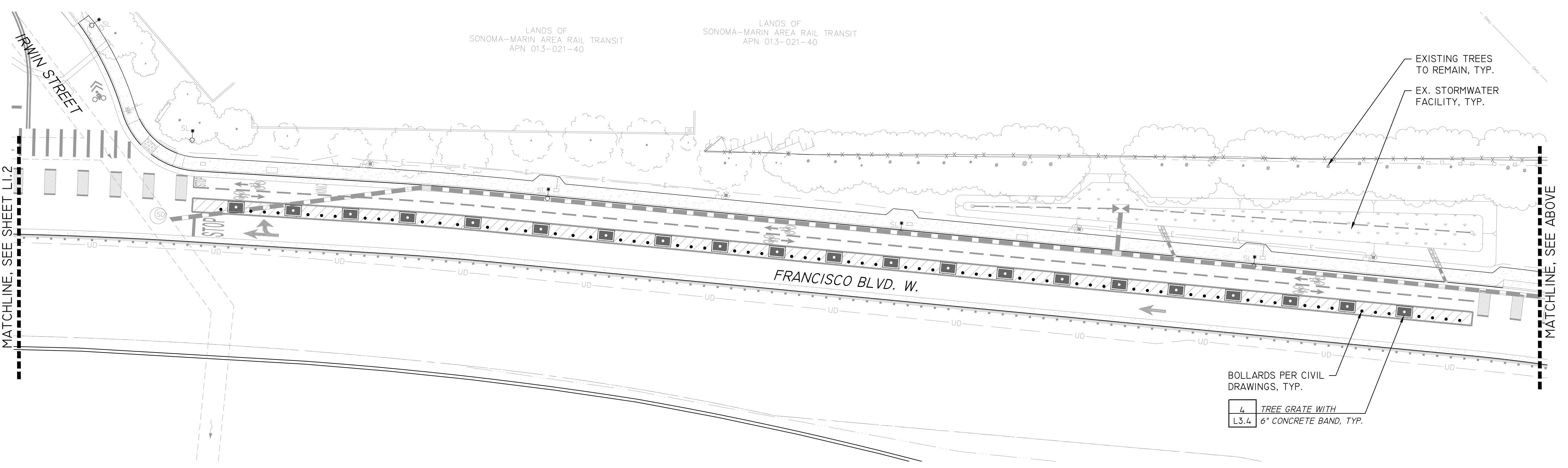


SCALE: AS SHOWN
DATE: MAY 08, 2020
BKF PROJECT NO.: 20169048-26
CITY PROJECT NO.: 11310
SHEET NO.: **L1.0**
DRAWING: 26 OF 38



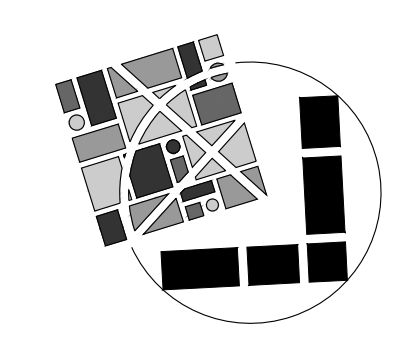
MATERIAL SCHEDULE

- 1 DECOMPOSED GRANITE - TO BE 'SONOMA GOLD FINES' WITH WEED SUPPRESSION OR APPROVED EQUIVALENT.
- 2 TREE GRATES - TO BE URBAN ACCESSORIES, 3' X 5' "KIVA" TREE GRATE AND FRAME OR APPROVED EQUIVALENT. TREE GRATES AND FRAMES TO BE VEHICLE RATE TO H20 AND DUCTILE IRON. FINISH TO BE RAW MATERIAL TO PATINA OVER TIME. (TYP. OF 48) AVAILABLE FROM SPRUCE & GANDER 877-650-7711.



NOTES

1. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
2. REFER TO SPECIFICATIONS FOR FURTHER PROJECT REQUIREMENTS.
3. REFER TO SHEET L1.1 FOR MATERIAL SCHEDULE.
4. REFER TO SHEET L3.4 FOR DETAILS.



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| CHECKED | RJH | SAN RAFAEL | CALIFORNIA |
| APPROVED | RJH | | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

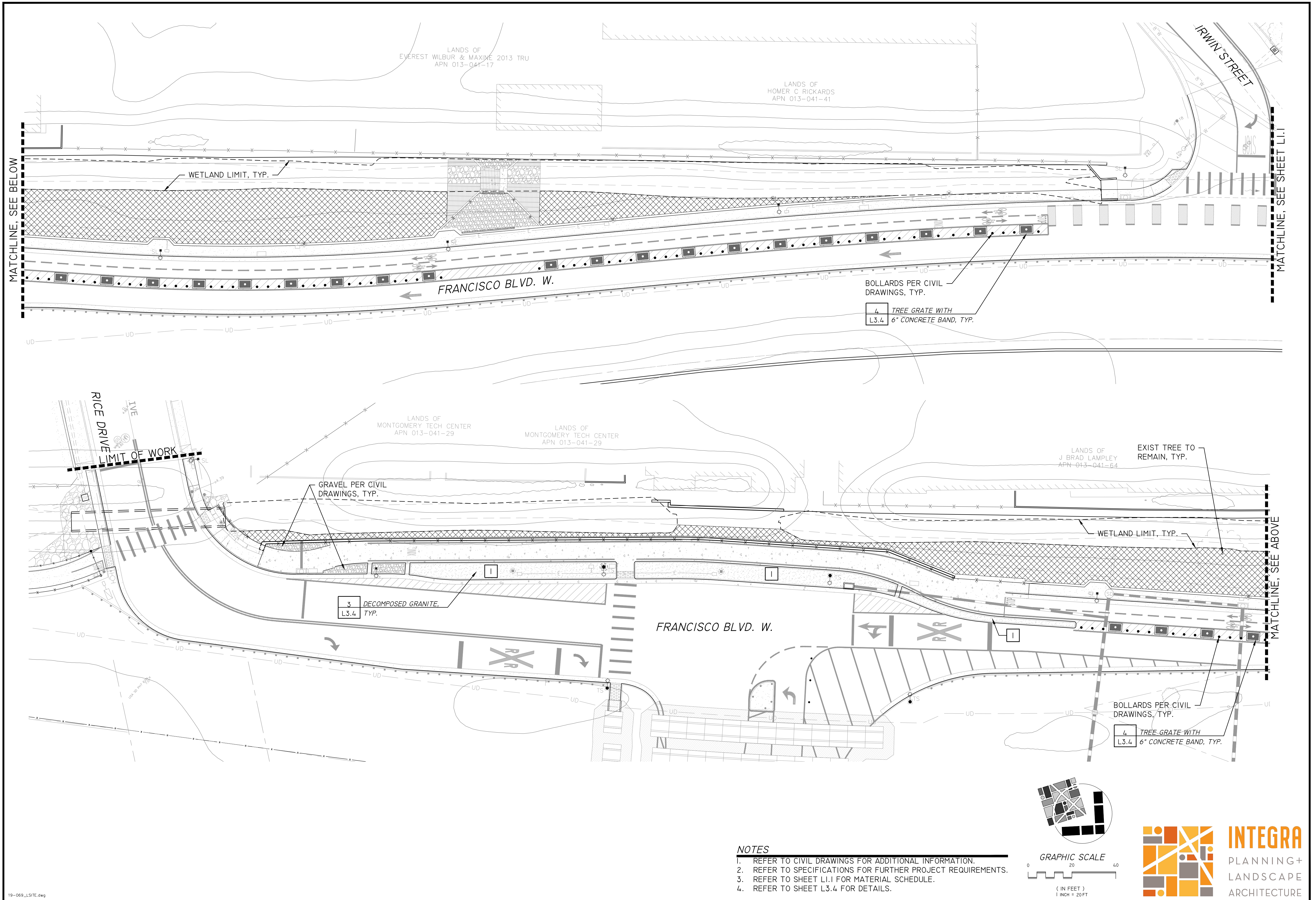
DRAWING NAME
SITE PLAN

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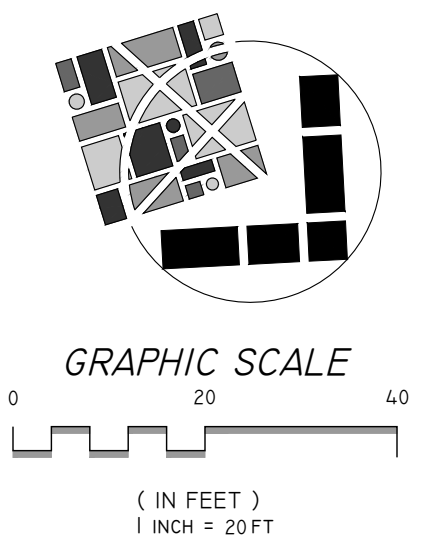
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CITY OF SAN RAFAEL
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| SCALE: | AS SHOWN |
| DATE: | MAY 08, 2020 |
| BKF PROJECT NO.: | 20169048-26 |
| CITY PROJECT NO.: | 11310 |
| SHEET NO.: | L1.1 |
| DRAWING: | 27 OF 38 |



- NOTES**
1. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
 2. REFER TO SPECIFICATIONS FOR FURTHER PROJECT REQUIREMENTS.
 3. REFER TO SHEET L1.1 FOR MATERIAL SCHEDULE.
 4. REFER TO SHEET L3.4 FOR DETAILS.



| NO. | REVISION | BY | DATE |
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PROJECT NAME
IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

DRAWING NAME
SITE PLAN

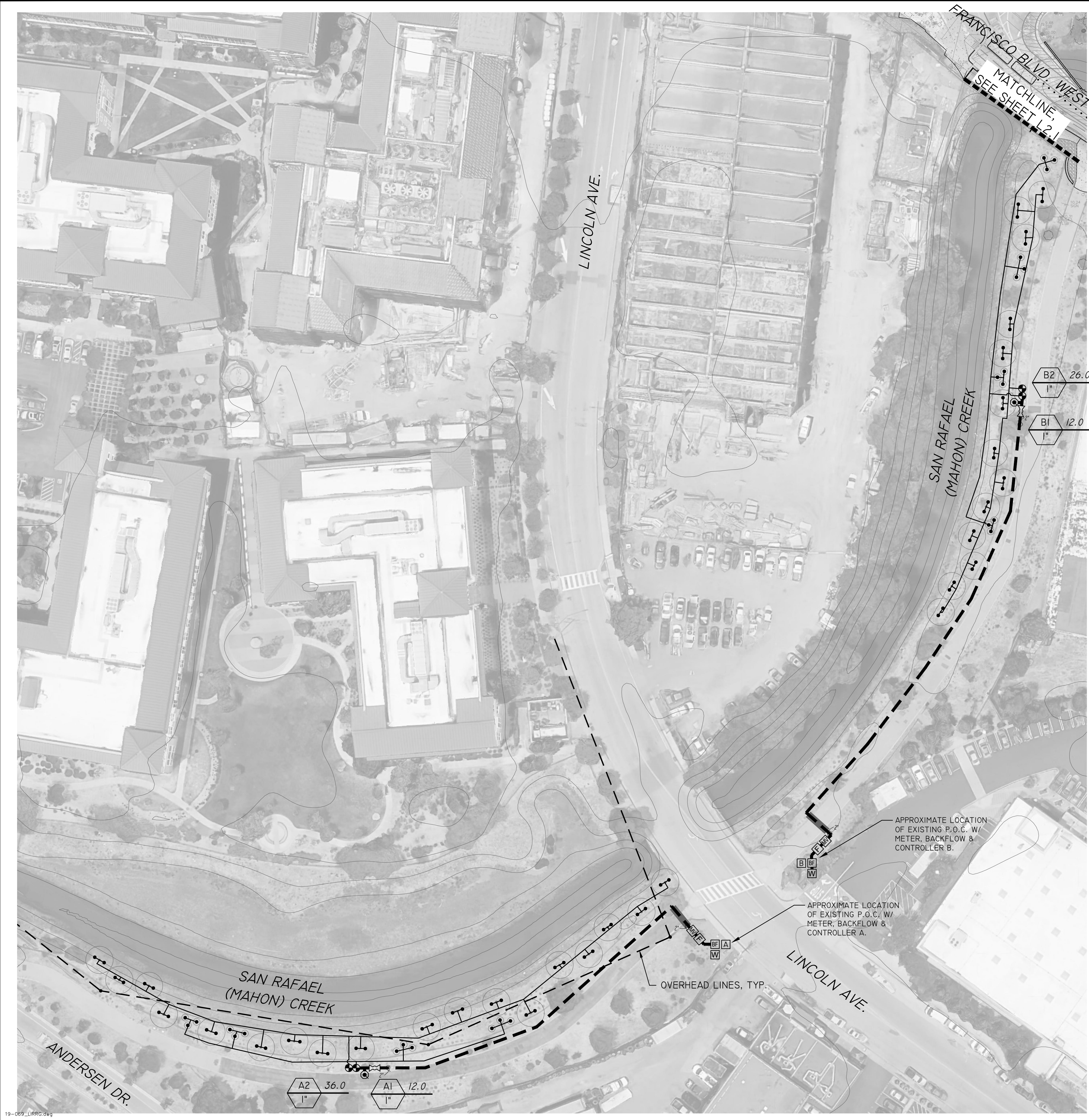
SAN RAFAEL COUNTY OF MARIN CALIFORNIA

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CITY OF SAN RAFAEL
 DEPARTMENT OF
 PUBLIC WORKS

SCALE: AS SHOWN
 DATE: MAY 08, 2020
 BKF PROJECT NO.: 20169048-26
 CITY PROJECT NO.: 11310
 SHEET NO.: **L1.2**
 DRAWING: 28 OF 38



IRRIGATION LEGEND

| SYMBOL | DESC. |
|--------|---|
| | WATER METER: EXISTING WATER METER |
| | BACKFLOW DEVICE: EXISTING BACKFLOW PREVENTION DEVICE |
| | PRESSURE REGULATOR: WATTS #USBGG, SYSTEM SET TO 50 PSI. |
| | MASTER VALVE: SUPERIOR 3100 1-1/2" NORMALLY OPEN. |
| | FLOW SENSOR: IRRITROL FS-B100. |
| | ELECTRICAL CONNECTION: EXISTING ELECTRICAL |
| | CONTROLLER A: REPLACE EXISTING CONTROLLER WITH RAIN MASTER SENTAR II, MODEL# RME-6SE-SPED-T-PMRKIT. |
| | CONTROLLER B: NEW RAIN MASTER SENTAR II WITH ENCLOSURE PEDESTAL, MODEL# RME-6SE-SPED-T-PMRKIT. |
| | GATE VALVE: NIBCO T-113IRR BRASS (LINE SIZE) |
| | REMOTE CONTROL VALVE: RAINBIRD PEB-PRS-D SERIES (SIZE AS SHOWN) |
| | DRIP REMOTE CONTROL VALVE: RAINBIRD XCZ-PRB-COM SERIES (SIZE AS SHOWN) |
| | QUICK COUPLER: RAINBIRD 1" 44-NP W/LOCKING COVER. |
| | MAINLINE: SCH. 80 PVC; ALL MAINLINES & FITTINGS TO BE 2" UNLESS OTHERWISE NOTED ON PLANS. |
| | LATERAL LINE: SCH. 40 PVC; ALL LATERALS & FITTINGS TO BE PER PIPE SIZE CHART UNLESS OTHERWISE NOTED ON PLANS. |
| | BUBBLER: RAINBIRD I404 (1 GPM) |
| | TREE BAG/DIAPER: TO BE TREE BAG OR TREE DIAPER. SIZE AND INSTALLATION PER MANUFACTURERS RECOMMENDATIONS |
| | SLEEVES: SCH. 40 PVC; TWICE THE SIZE AS PIPING. |

| SYMBOL | DESC. |
|--------|-----------------------------|
| | CONTROLLER/VALVE NUMBER |
| | GALLONS PER MINUTE (G.P.M.) |
| | VALVE SIZE |

LATERAL PIPE SIZE CHART

| |
|---------------------------------|
| UP TO 10 GPM = 3/4" SIZE PIPE |
| UP TO 20 GPM = 1" SIZE PIPE |
| UP TO 36 GPM = 1 1/4" SIZE PIPE |
| UP TO 48 GPM = 1 1/2" SIZE PIPE |
| UP TO 76 GPM = 2" SIZE PIPE |

- NOTES**
- CONTRACTOR SHALL REFER TO "MITIGATION AND MONITORING PLAN, FRANCISCO BOULEVARD WEST MULTI-USE PATHWAY SECOND STREET TO ANDERSEN DRIVE" REPORT PREPARED BY LSA ASSOCIATES, INC. LSA PROJECT NO. ALT1701, DATED MAY 2018 FOR ADDITIONAL MITIGATION AND MONITORING PROJECT REQUIREMENTS.
 - CONTRACTOR SHALL REFER TO AND IMPLEMENT MARIN MUNICIPAL WATER DISTRICT (MMWD) IRRIGATION REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK.
 - IRRIGATION IN MITIGATION AREAS IS TEMPORARY.
 - STREET TREES ALONG FRANCISCO BLVD. TO BE IRRIGATED FROM TREE WATERING BAGS OR DIAPER PER LEGEND.
 - FOR CONTROLLER A & B, CONTRACTOR SHALL USE EXISTING P.O.C. INCLUDING WATER METER & BACKFLOW DEVICE. CONTRACTOR IS RESPONSIBLE TO INSURE ALL EXISTING IRRIGATION EQUIPMENT IS IN WORKING CONDITION INCLUDING ANY VALVES AND QUICK COUPLERS THAT ARE CURRENTLY OPERATIONAL.
 - LOCATION OF MAINLINES, LATERALS AND VALVES AS SHOWN ARE FOR GRAPHIC PURPOSES ONLY; IRRIGATION LINES AND VALVES TO BE INSTALLED IN LANDSCAPE AREAS. VALVE BOXES THAT MUST BE LOCATED IN PAVED AREAS ARE TO BE VEHICLE RATED.
 - REFER TO SHEET L2.3 & L2.4 FOR IRRIGATION DETAILS.
 - REFER TO SHEETS SPECIFICATION SECTION 18-14 FOR FURTHER PROJECT REQUIREMENTS.

| NO. | REVISION | BY | DATE |
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| DESIGNED | RJH | | |
| DRAWN | FM | | |
| CHECKED | RJH | | |
| APPROVED | | | |
| | RJH | | |

PROJECT NAME: IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

DRAWING NAME: IRRIGATION PLAN

COUNTY OF MARIN, CALIFORNIA

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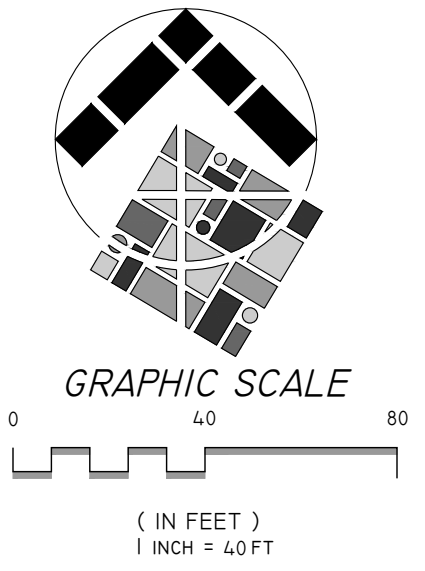
Ric J. Hendricks
PLA 5094 Exp. 11/30/2020

CITY OF SAN RAFAEL
DEPARTMENT OF PUBLIC WORKS

MWEO STATEMENT

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION PLAN

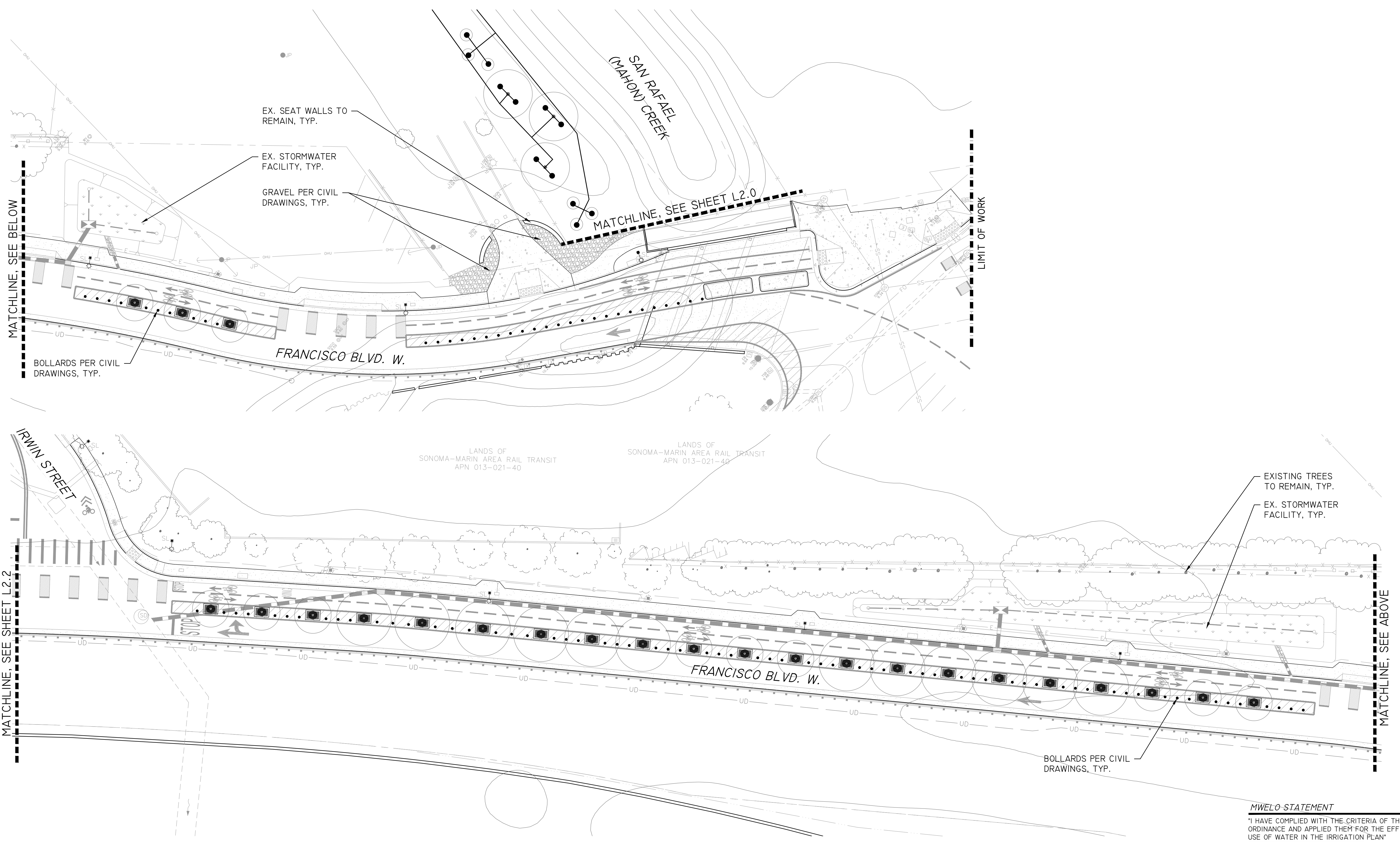
R J Hendricks
RIC J. HENDRICKS
REGISTERED LANDSCAPE ARCHITECT #5094
DATE: 05/08/2020



INTEGRA
PLANNING+
LANDSCAPE
ARCHITECTURE

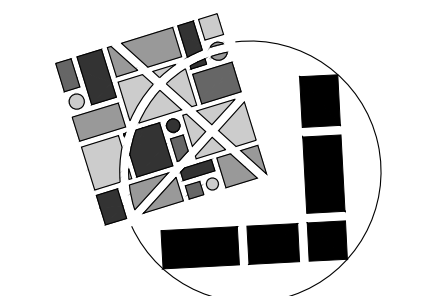
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| SCALE: AS SHOWN |
| DATE: MAY 08, 2020 |
| BKF PROJECT NO.: 20169048-26 |
| CITY PROJECT NO.: 11310 |
| SHEET NO.: L2.0 |
| DRAWING: 29 OF 38 |

Plot May 11, 2020 at 11:04am
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MWEO STATEMENT
 I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION PLAN

R J Hendricks
 RIC J. HENDRICKS
 REGISTERED LANDSCAPE ARCHITECT #5094
 DATE: 05/08/2020



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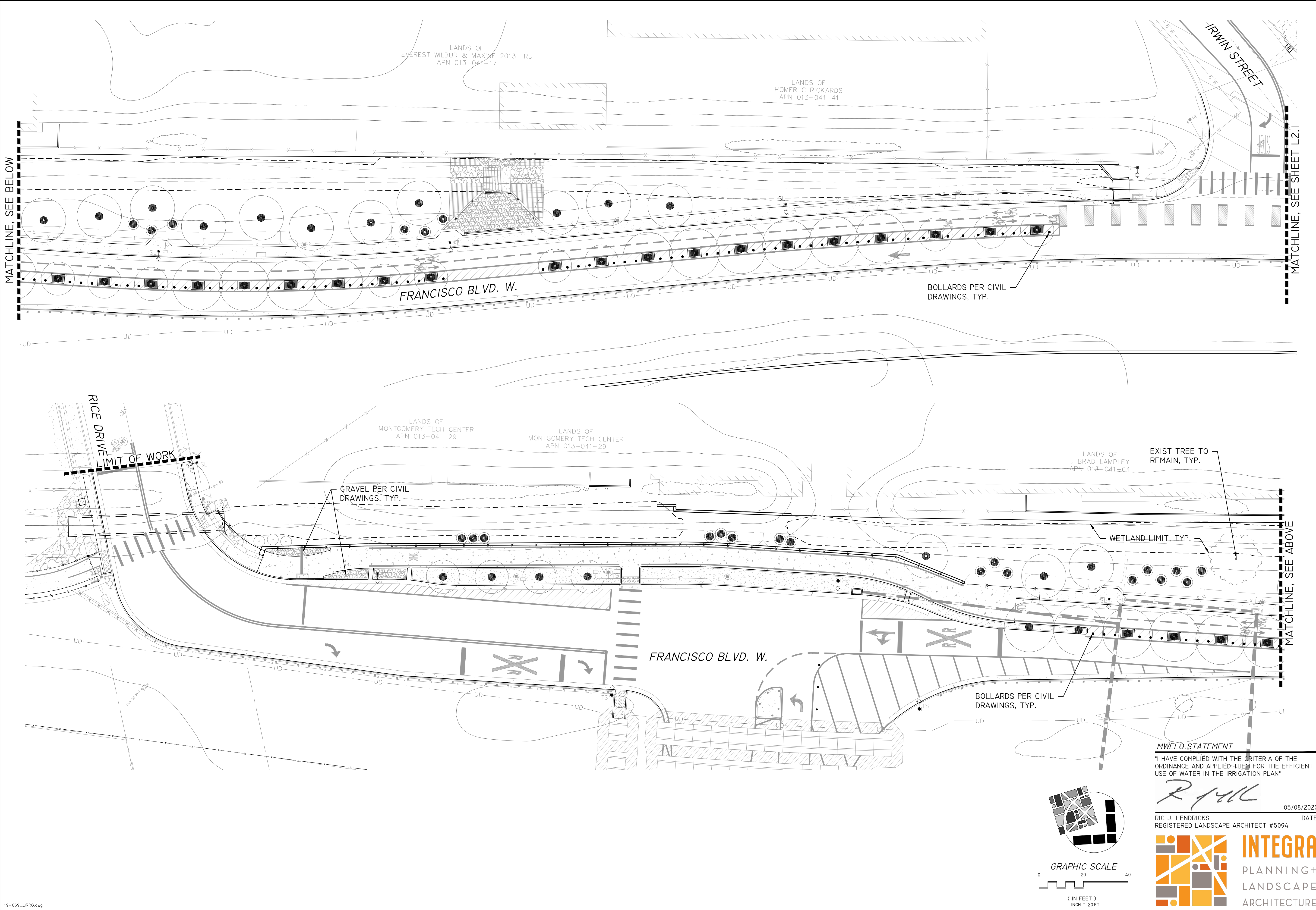
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| PROJECT NAME IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET | | | | CALIFORNIA |
| DRAWING NAME IRRIGATION PLAN | | | | COUNTY OF MARIN |
| SAN RAFAEL | | | | CALIFORNIA |

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| SCALE: AS SHOWN |
| DATE: MAY 08, 2020 |
| BKF PROJECT NO.: 20169048-26 |
| CITY PROJECT NO.: 11310 |
| SHEET NO.: L2.1 |
| DRAWING: 30 OF 38 |



MATCHLINE, SEE BELOW

MATCHLINE, SEE SHEET L2.1

MATCHLINE, SEE ABOVE

LANDS OF
EVEREST WILBUR & MAXINE 2013 TRU
APN 013-041-17

LANDS OF
HOMER C RICKARDS
APN 013-041-41

LANDS OF
MONTGOMERY TECH CENTER
APN 013-041-29

LANDS OF
MONTGOMERY TECH CENTER
APN 013-041-29

LANDS OF
J BRAD LAMPLEY
APN 013-041-64

FRANCISCO BLVD. W.

FRANCISCO BLVD. W.

IRWIN STREET

RICE DRIVE

LIMIT OF WORK

GRAVEL PER CIVIL
DRAWINGS, TYP.

BOLLARDS PER CIVIL
DRAWINGS, TYP.

EXIST TREE TO
REMAIN, TYP.

WETLAND LIMIT, TYP.

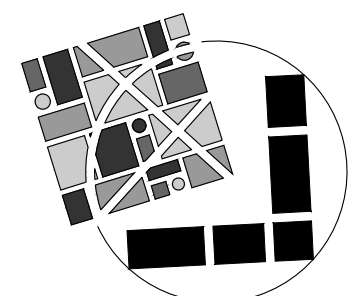
BOLLARDS PER CIVIL
DRAWINGS, TYP.

MWELo STATEMENT

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION PLAN

R J Hendricks

RIC J. HENDRICKS
REGISTERED LANDSCAPE ARCHITECT #5094
DATE: 05/08/2020



GRAPHIC SCALE
0 20 40
(IN FEET)
1 INCH = 20 FT

INTEGRA
PLANNING+
LANDSCAPE
ARCHITECTURE

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| DESIGNED | DRAWN | CHECKED | APPROVED |
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| RJH | FM | RJH | RJH |

PROJECT NAME
**IMPROVEMENT DRAWINGS FOR
MULTI-USE PATHWAY
RICE DRIVE TO SECOND STREET**

DRAWING NAME
**IRRIGATION
PLAN**

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

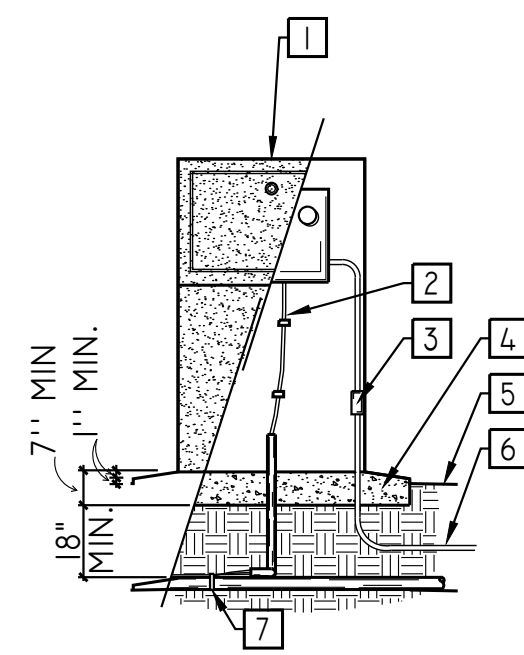
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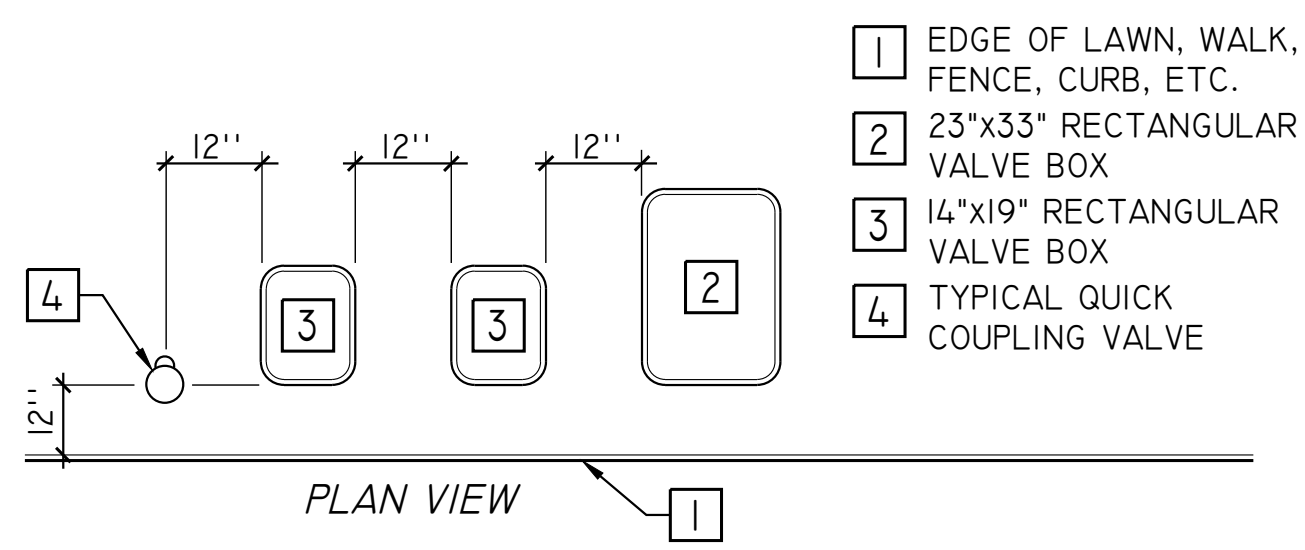
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| SCALE: AS SHOWN |
| DATE: MAY 08, 2020 |
| BKF PROJECT NO.: 20169048-26 |
| CITY PROJECT NO.: 11310 |
| SHEET NO.: L2.2 |
| DRAWING: 31 OF 38 |

- NOTES:
1. PILOT WIRES TO BE DIFFERENT COLOR FOR EACH VALVE. COMMON WIRES SHALL BE WHITE WITH DIFFERENT COLOR STRIPES FOR EACH AUTOMATIC CONTROLLER.
 2. CONTROL WIRING SEQUENCE CORRESPONDS TO OPERATING SEQUENCE OF REMOTE CONTROL VALVES & AUTOMATIC SPRINKLER CONTROL UNIT STATION CONNECTION SEQUENCE SHOWN ON DETAIL IS FOR REFERENCE ONLY. SEE IRRIGATION PLAN FOR CORRECT VALVE SEQUENCE.
 3. NO SPLICES SHALL BE MADE BETWEEN CONTROLLER & REMOTE CONTROL VALVE UNDER 500 LINEAL FEET.



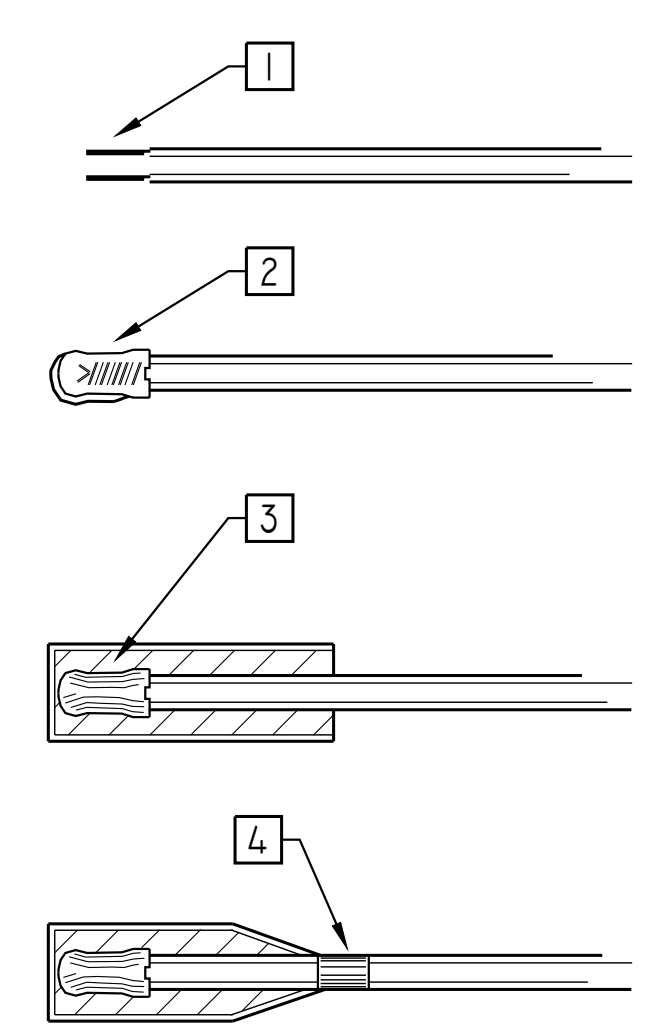
- 1 AUTOMATIC SPRINKLER CONTROL UNIT SECURED WITHIN WEATHERTIGHT ENCLOSURE
- 2 COMMON WIRE SHALL BE TIED INSIDE HOUSING WHEN REQUIRED
- 3 ON/OFF SWITCH AND 110 VOLT EXTERIOR OUTLET TO BE PROVIDED BY CONTRACTOR WITHIN ENCLOSURE
- 4 CONCRETE FOOTING -INSTALL A MIN. OF 3" ABOVE GRADE & SLOPE TOP TO DRAIN AT A MIN. OF 2%
- 5 FINISHED GRADE
- 6 ELECTRICAL CONDUIT TO SOURCE- (CONTROL UNIT ELECTRICAL REQUIREMENTS: 117 VOLTS, 60HZ, 2AMPS MAX.)
- 7 ELECTRICAL TAPE - TAPE WIRING AT INTERVALS OF 10' O.C. (1) COMMON WIRE TO ALL RCV'S (1) CONTROL WIRE TO EACH RCV CONTROL WIRING SECURE TO CONTROL UNIT UNLESS OTHERWISE NOTED. PROVIDE PVC SLEEVE FOR WIRES.

5 PEDESTAL MOUNTED CONTROLLER
N.T.S.



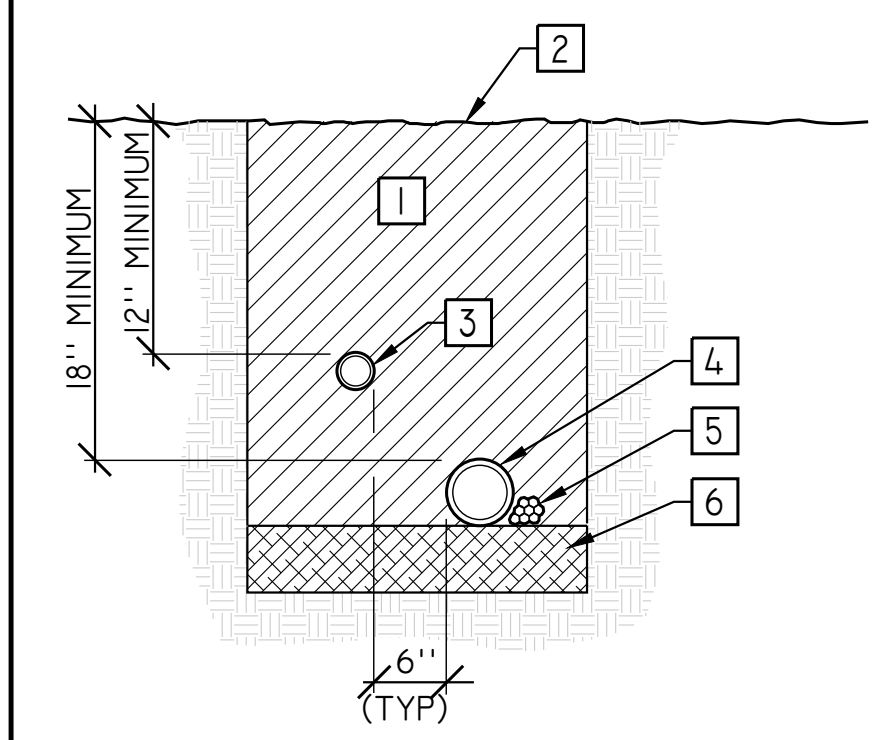
- NOTES:
1. CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
 2. SET BOXES 1" ABOVE FINISH GRADE OR MULCH COVER IN GROUND-COVER/SHRUB AREA AND FLUSH WITH FINISH GRADE IN TURF AREA.
 3. SET RVC AND VALVE BOX ASSEMBLY IN GROUNDCOVER/SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN ONLY IF GROUNDCOVER DOES NOT EXIST ADJACENT TO LAWN.
 4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
 5. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOX SIDES.
 6. IDENTIFY VALVE BOX WITH CONTROLLER LETTER AND VALVE NUMBER USING 1 1/2" - 2" LETTERING.

4 VALVE BOX INSTALLATION
N.T.S.



- 1 STRIP WIRES APPROXIMATELY 5/8" FROM END
- 2 TWIST CONNECTOR UNTIL WIRE ENDS REACH BOTTOM
- 3 AFTER MIXING CONTENTS OF PACK AS PER INSTRUCTIONS, CUT 1/2" OFF END OF PACK AND INSERT CONNECTOR TO OPPOSITE END
- 4 WRAP OPEN END OF PACK WITH TAPE AND LEAVE IN RAISED POSITION UNTIL RESIN JELLS. (APPROX. 8 MIN. AT 72°F.)

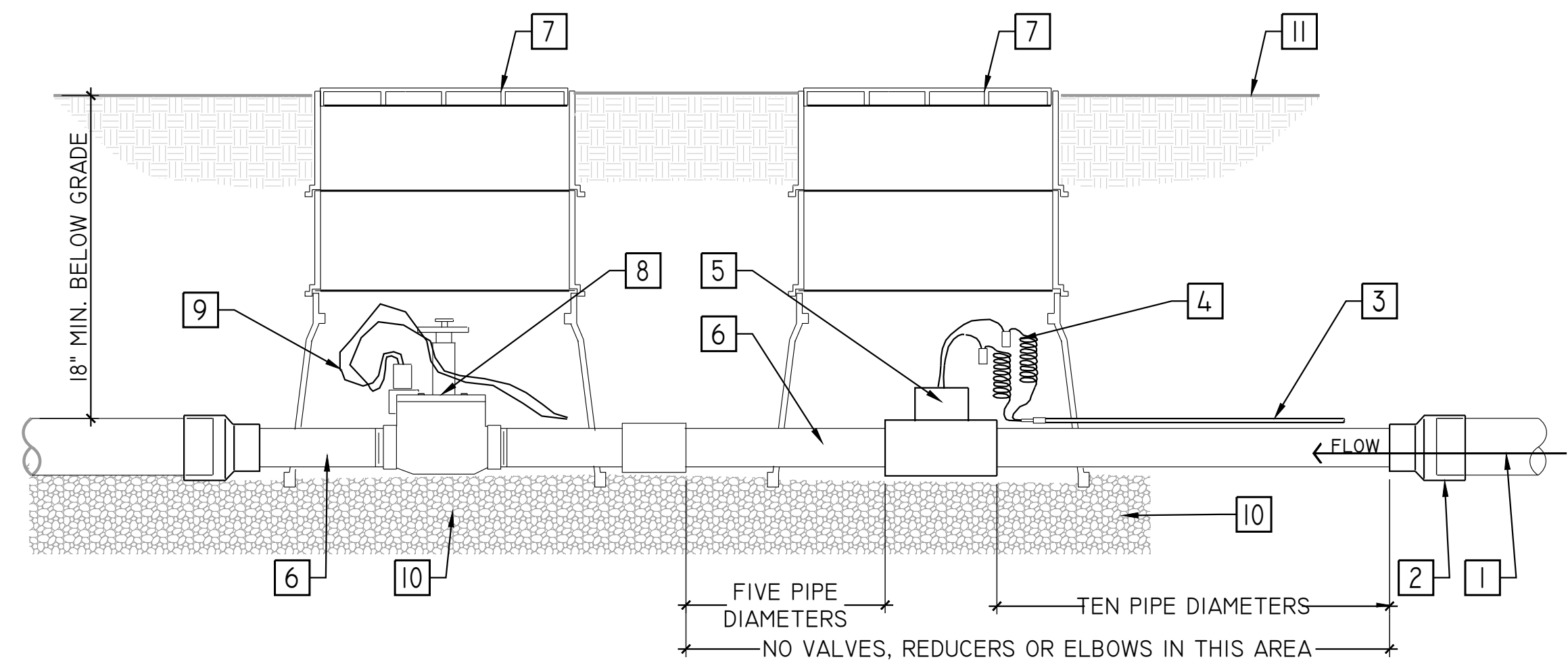
3 TYPICAL WIRE CONNECTIONS
N.T.S.



- 1 CLEAN BACKFILL- 90% COMPACTION REQUIRED
- 2 FINISH GRADE
- 3 NON-PRESSURE LATERAL LINE SNAKE PIPE IN TRENCH
- 4 PRESSURE SUPPLY LINE SNAKE PIPE IN TRENCH
- 5 CONTROL WIRES- BUNDLE AND TAPE AT 10' O.C. AND INSTALL ADJACENT TO PRESSURE SUPPLY LINE
- 6 PROVIDE 2" MIN. OF CLEAN BACKFILL

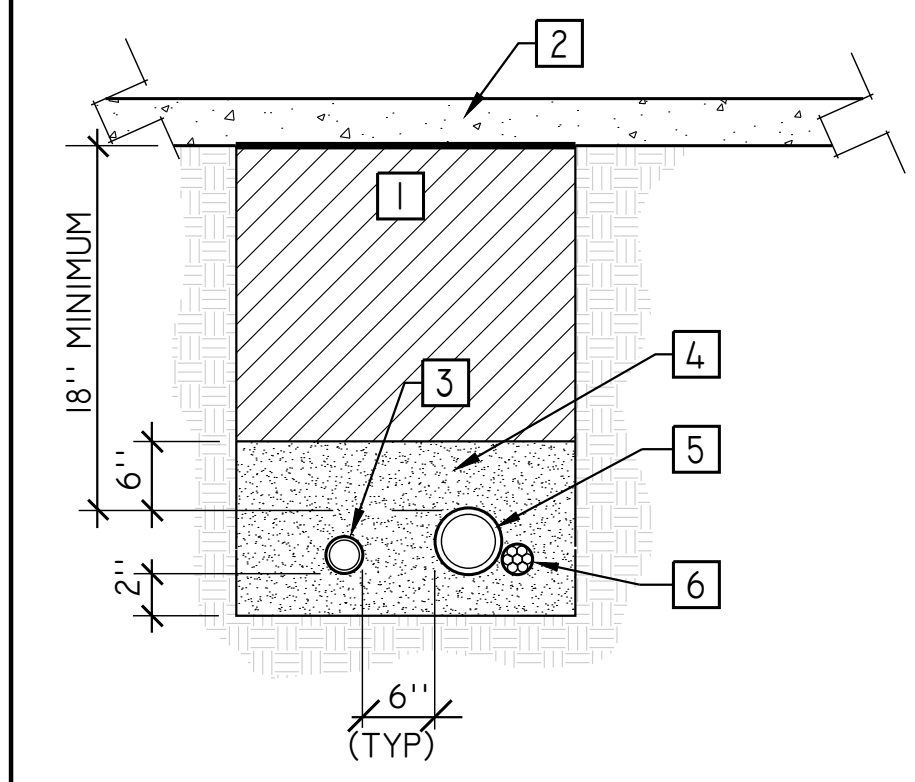
- NOTES:
1. PIGTAIL AND LOOP CONTROL WIRE AT ALL 90° CHANGES IN DIRECTION.
 2. PROVIDE A MINIMUM 10 FEET SEPARATION BETWEEN POTABLE AND RECLAIMED MAINLINE PIPING.
 3. 24" MINIMUM COVER ON 3" MAINLINE AND LARGER.

1 TYPICAL TRENCHING
N.T.S.



- 1 PVC MAIN LINE TO BACKFLOW DEVICE
- 2 REDUCER AS REQUIRED
- 3 CABLE TO CONTROLLER SENSOR TERMINAL BARD, AS MFG. RECOMMEND
- 4 WATERPROOF WIRE CONNECTORS ON 18" LOOPED WIRES
- 5 FLOW SENSOR AS SPECIFIED
- 6 SCHEDULE 80 NIPPLES, VALVE INLET SIZE
- 7 10X15 RECTANGULAR BOXES WITH 6" EXTENSIONS AS INDICATED
- 8 MASTER CONTROL VALVE AS SPECIFIED
- 9 WATERPROOF WIRE CONNECTORS, ON 30" LOOPED WIRES
- 10 3" MINIMUM DEPTH, 3/4" WASHED GRAVEL
- 11 FINISHED GRADE

6 MASTER CONTROL VALVE & FLOW SENSOR
SCALE: 1 1/2"=1'-0"



- 1 CLEAN BACKFILL- 90% COMPACTION REQUIRED
- 2 HARDSCAPE/PAVING
- 3 NON-PRESSURE LATERAL LINE SLEEVE SIZE TWICE DIAMETER OF NON-PRESSURE LATERAL LINE
- 4 SAND
- 5 PRESSURE SUPPLY LINE SLEEVE- SIZE TWICE DIA. OF PRESSURE SUPPLY LINE
- 6 CONTROL WIRE SLEEVE- SIZE PER PLAN. INSTALL ADJACENT TO PRESSURE SUPPLY LINE

- NOTES:
1. ALL SLEEVES TO BE SCHEDULE 40 PVC.
 2. EXTEND ALL SLEEVES 12" BEYOND EDGE OF HARDSCAPING AT BOTH ENDS.
 3. 24" MINIMUM COVER ON MAINLINE 3" AND LARGER

2 TYPICAL SLEEVING
N.T.S.

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| DESIGNED | RJH | DATE |
| DRAWN | FM | BY |
| CHECKED | RJH | REVISION |
| APPROVED | | NO. |
| | | DATE |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

DRAWING NAME
IRRIGATION DETAILS

COUNTY OF MARIN
SAN RAFAEL
CALIFORNIA

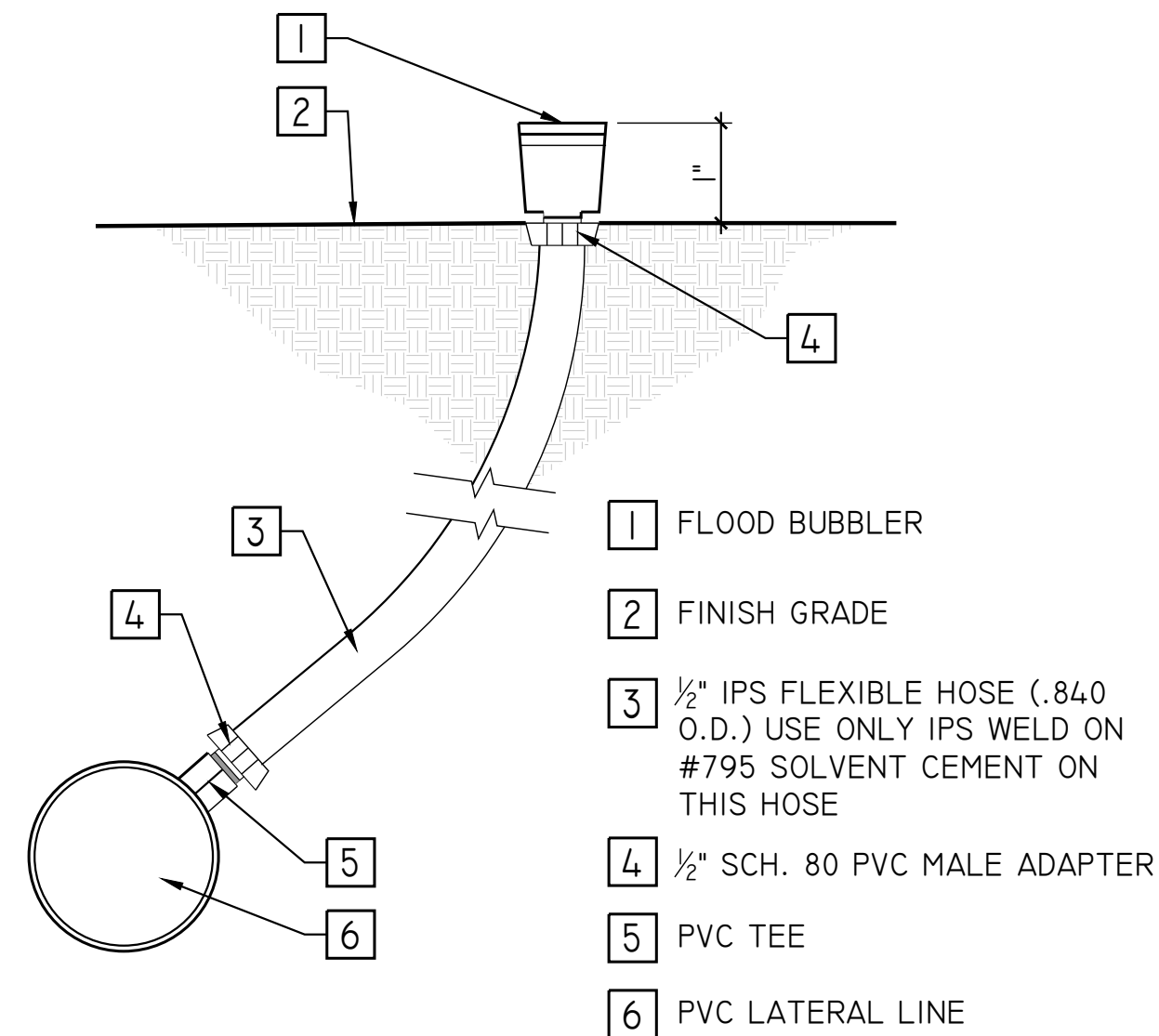
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PLA 5094 Exp. 11/30/2020

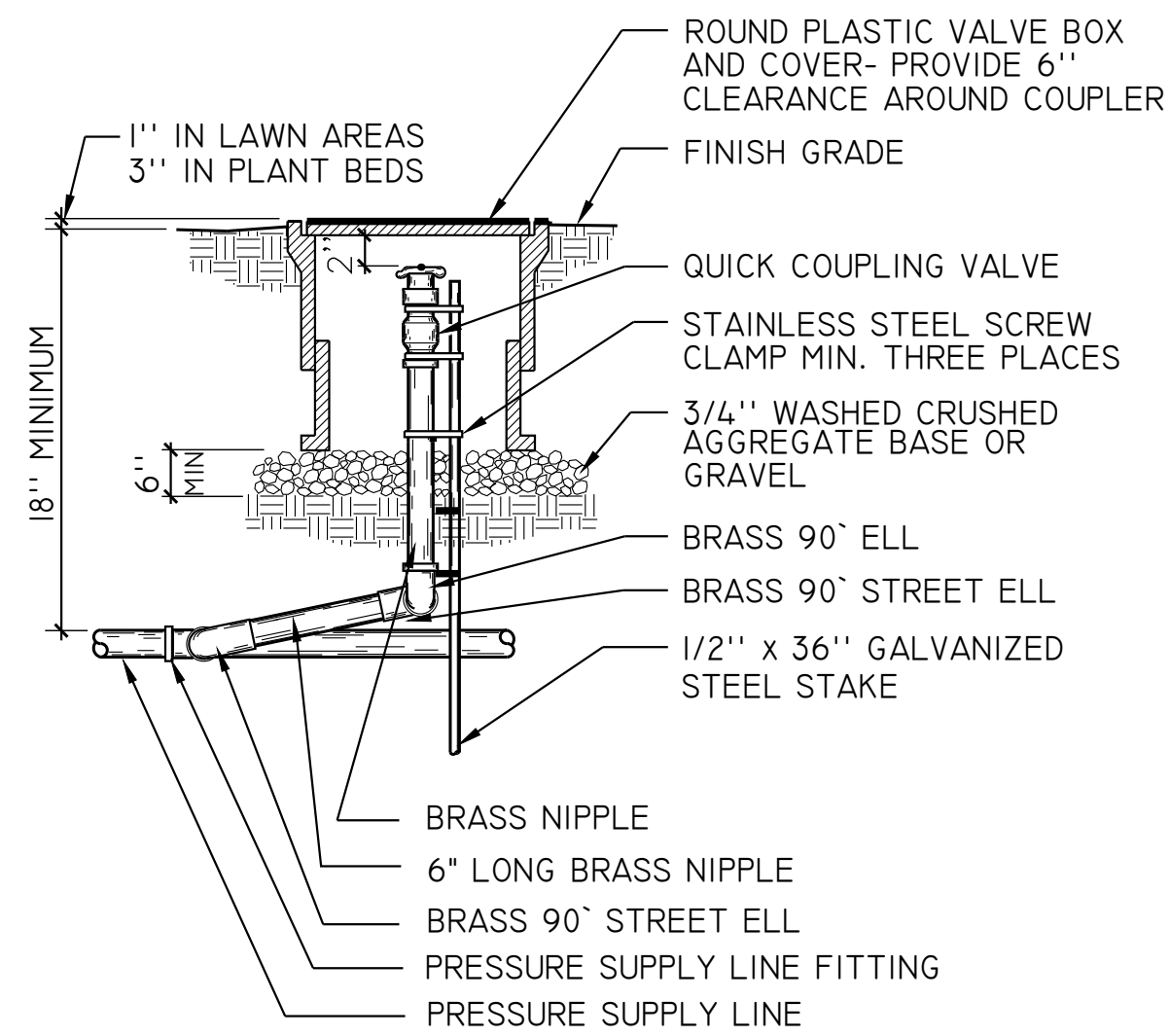
CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

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|------------------------------|
| SCALE: AS SHOWN |
| DATE: MAY 08, 2020 |
| BKF PROJECT NO.: 20169048-26 |
| CITY PROJECT NO.: 11310 |
| SHEET NO.: L2.3 |
| DRAWING: 32 OF 38 |



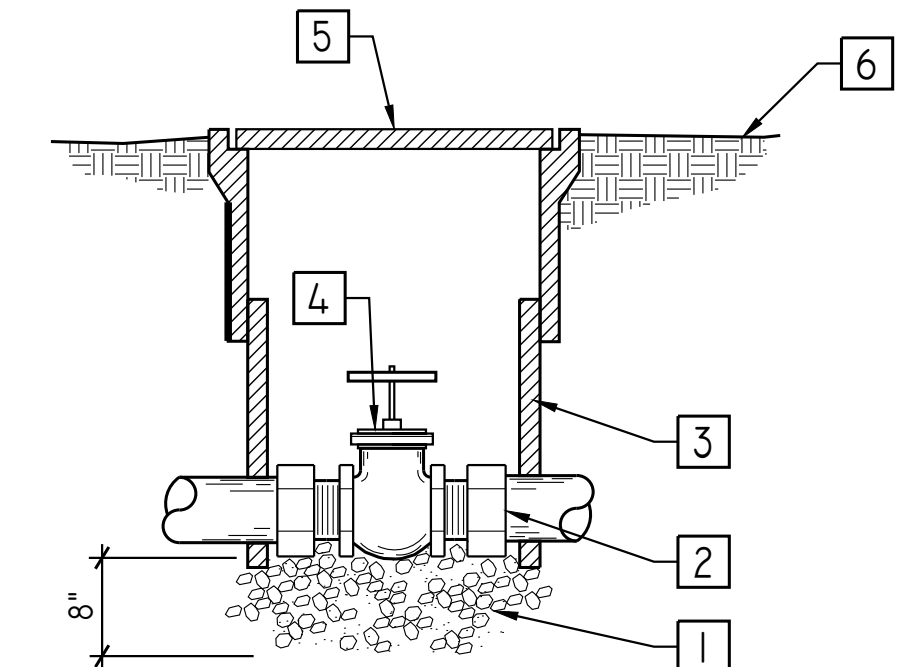


5 MITIGATION TREE & SHRUB BUBBLER DETAIL
 SCALE: N.T.S.



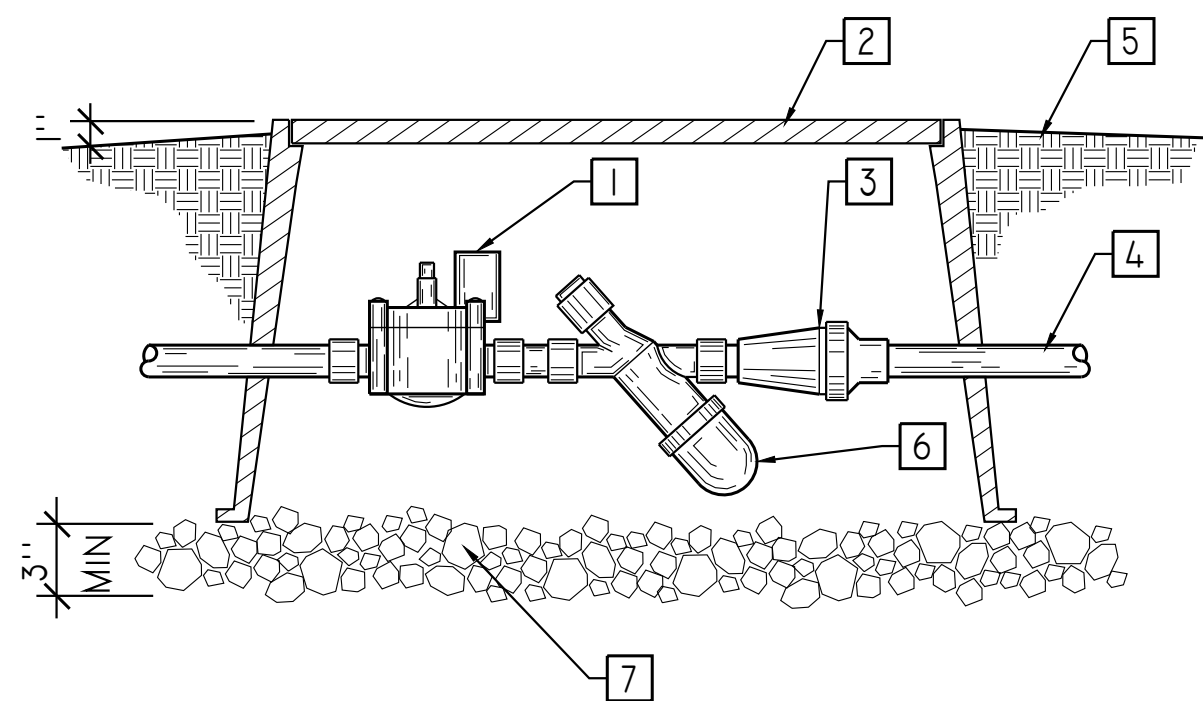
3 QUICK COUPLING VALVE ASSEMBLY
 N.T.S.

- 1 3/4" WASHED CRUSHED AGGREGATE BASE OR PEA GRAVEL
- 2 PVC MALE ADAPTER
- 3 EXTENSION LENGTH AS REQUIRED
- 4 GATE VALVE MANUFACTURER AND MODEL AS INDICATED IN LEGEND, OR APPROVED EQUAL
- 5 ROUND VALVE BOX - VEHICLE RATED WHEN IN PAVEMENT
- 6 FINISHED GRADE

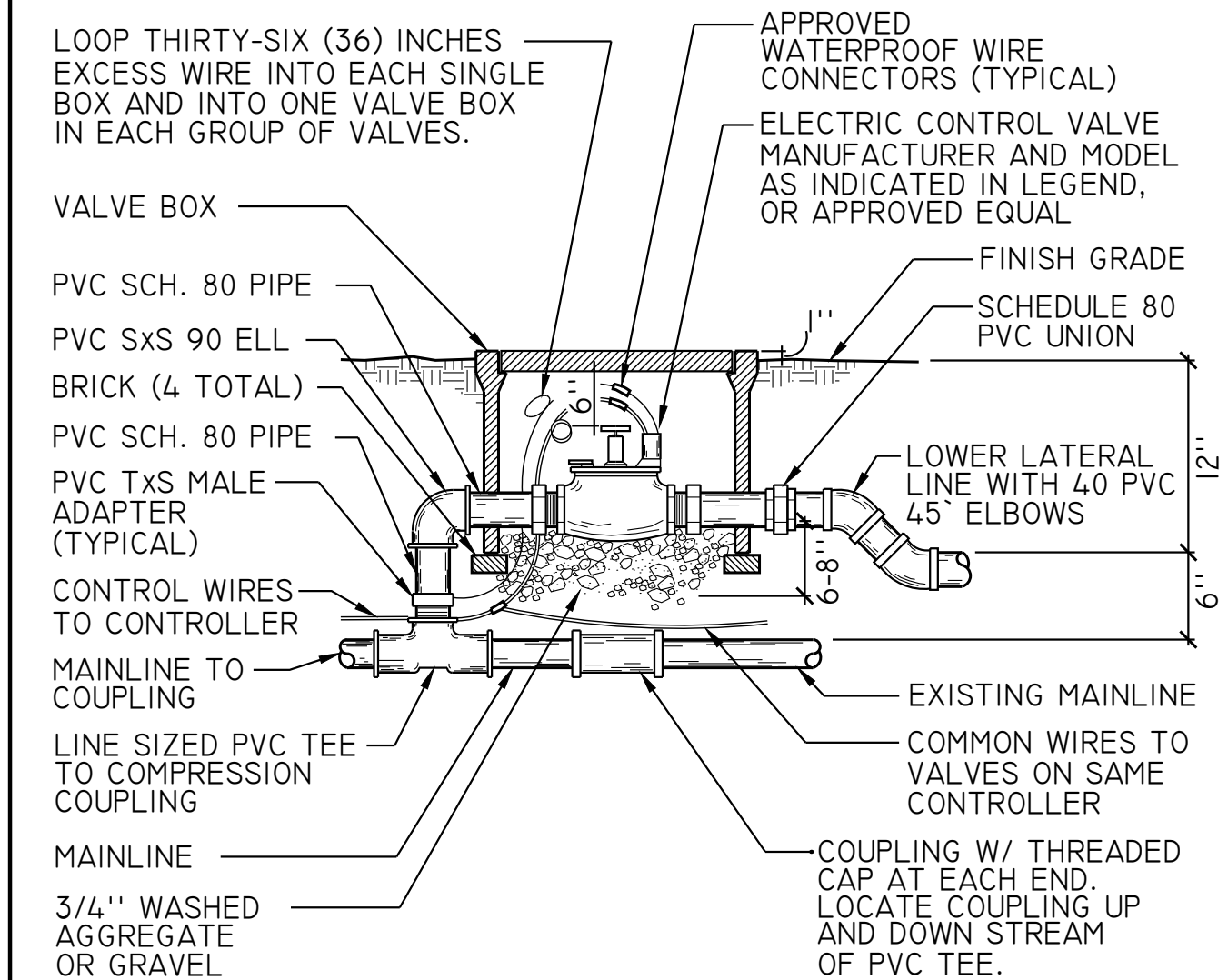


1 GATE VALVE
 N.T.S.

- 1 ELECTRIC VALVE MANUFACTURER & MODEL AS INDICATED IN LEGEND, OR APPROVED EQUAL
- 2 VALVE BOX MANUFACTURER & MODEL AS INDICATED IN LEGEND, OR APPROVED EQUAL
- 3 PRESSURE REGULATOR
- 4 TO EMITTER BOX
- 5 FINISH GRADE
- 6 "Y" STRAINER
- 7 3/4" WASHED AGGREGATE OR GRAVEL



4 DRIP IRRIGATION VALVE
 N.T.S.



2 REMOTE CONTROL VALVE ASSEMBLY
 N.T.S.

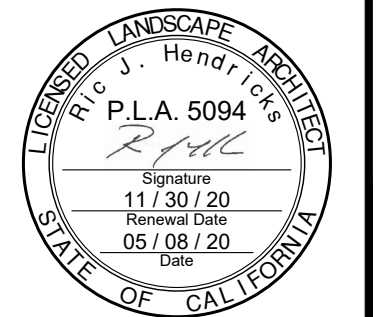
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DESIGNED: **RJH**
 DRAWN: **FM**
 CHECKED: **RJH**
 APPROVED: **RJH**

PROJECT NAME: **IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET**
 DRAWING NAME: **IRRIGATION DETAILS**

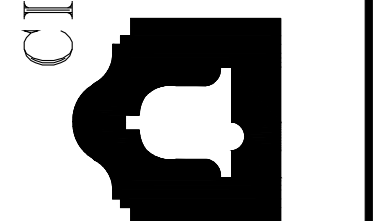
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CITY OF SAN RAFAEL
 DEPARTMENT OF PUBLIC WORKS



SCALE: AS SHOWN
 DATE: MAY 08, 2020
 BKF PROJECT NO.: 20169048-26
 CITY PROJECT NO.: 11310
 SHEET NO.: **L2.4**
 DRAWING: 33 OF 38

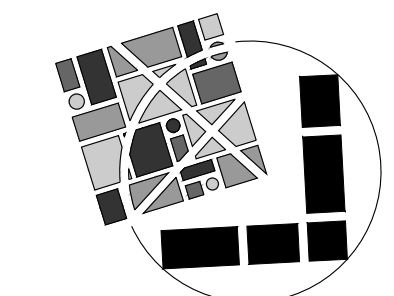
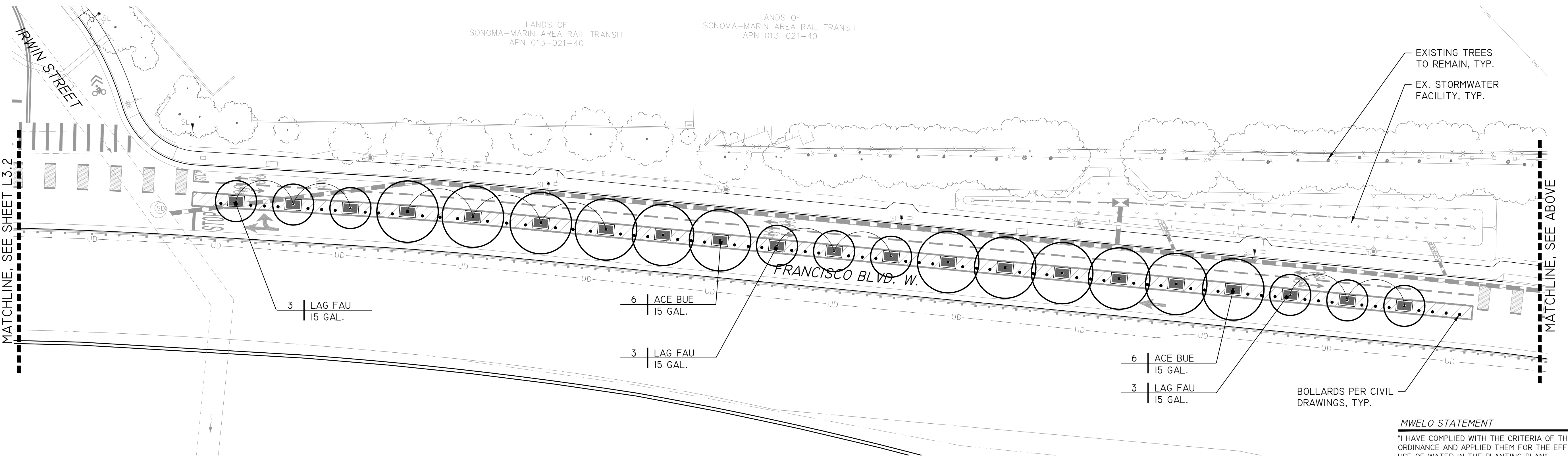
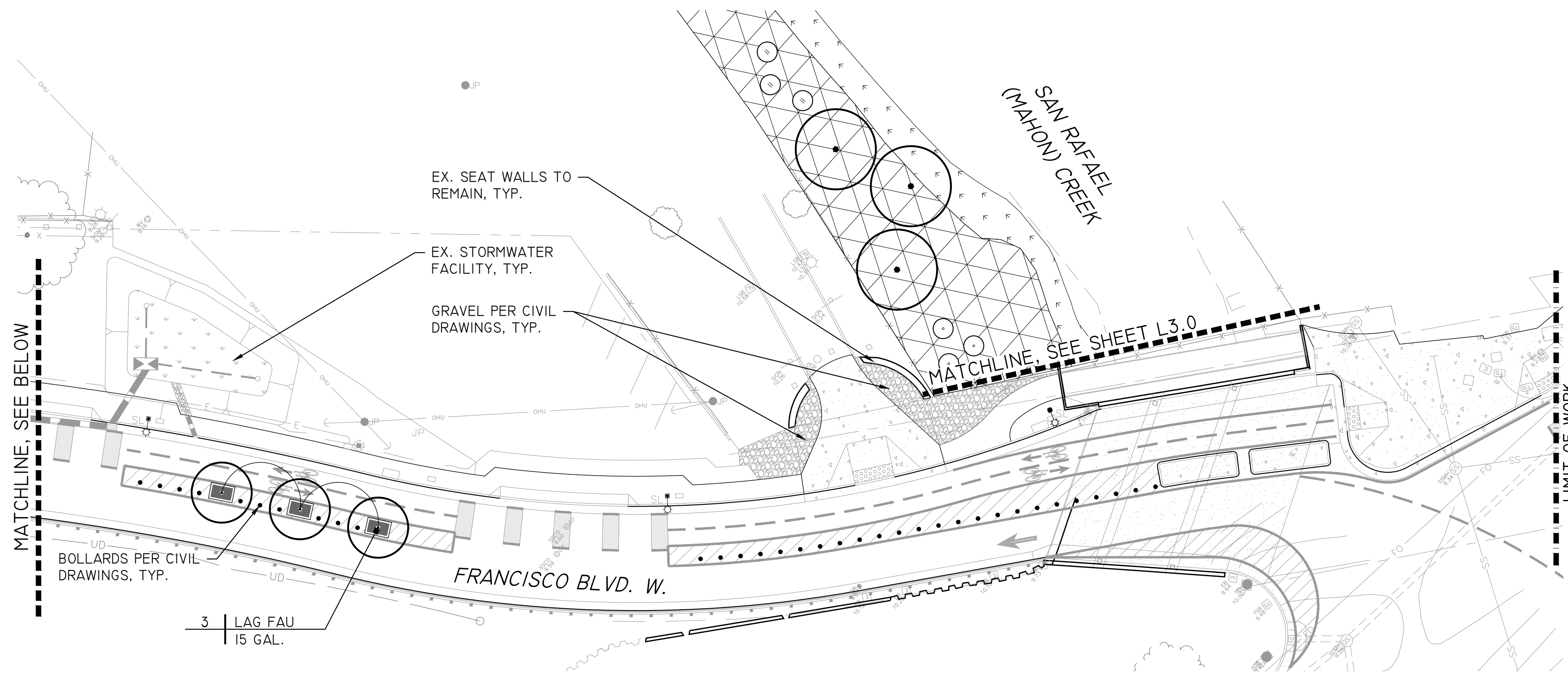


STREETSCAPE PLANTING LEGEND

| ABBREV. | BOTANICAL NAME | COMMON NAME | WOCULS | SIZE | QTY | REMARKS/SPACING |
|---------|----------------------------|---------------|--------|---------|-----|-----------------|
| TREES | | | | | | |
| ACE BUE | ACER BUERGERANUM | TRIDENT MAPLE | M | 15 GAL. | 28 | SINGLE TRUNK |
| LAG FAU | LAGERSTROEMIA F. 'NATCHEZ' | CRAPE MYRTLE | L | 15 GAL. | 26 | SINGLE TRUNK |

NOTES

- REFER TO SHEET L3.3 & L3.4 FOR PLANTING DETAILS.
- REFER TO SPECIFICATION SECTION FOR FURTHER PROJECT REQUIREMENTS.



MWEO STATEMENT

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE PLANTING PLAN

R J Hendricks

RIC J. HENDRICKS
REGISTERED LANDSCAPE ARCHITECT #5094
DATE: 05/08/2020

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ARCHITECTURE

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PROJECT NAME
IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

DRAWING NAME
PLANTING PLAN

DESIGNED: **RJH**
DRAWN: **FM**
CHECKED: **RJH**
APPROVED: **RJH**

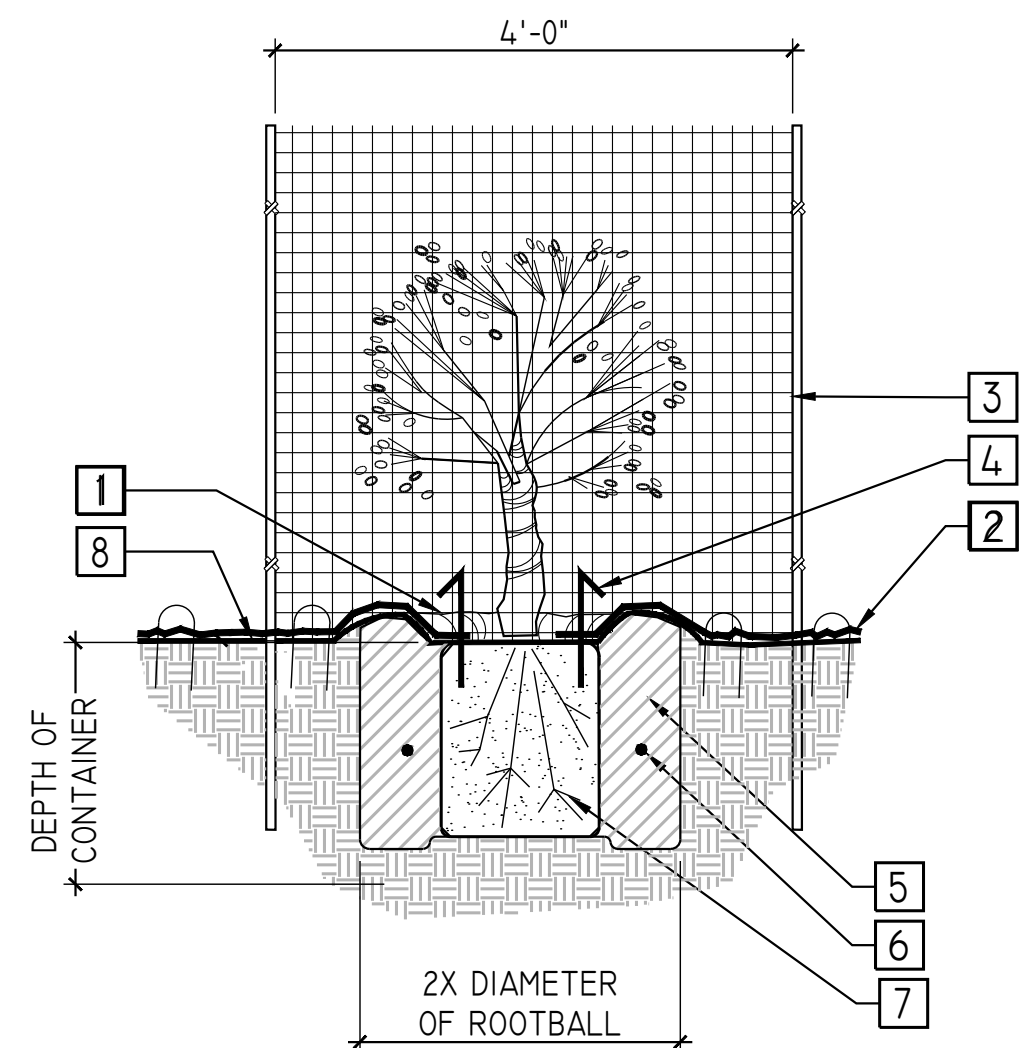
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CITY OF SAN RAFAEL
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SCALE: AS SHOWN
DATE: MAY 08, 2020
BKf PROJECT NO.: 20169048-26
CITY PROJECT NO.: 11310
SHEET NO.: **L3.1**
DRAWING: 35 OF 38



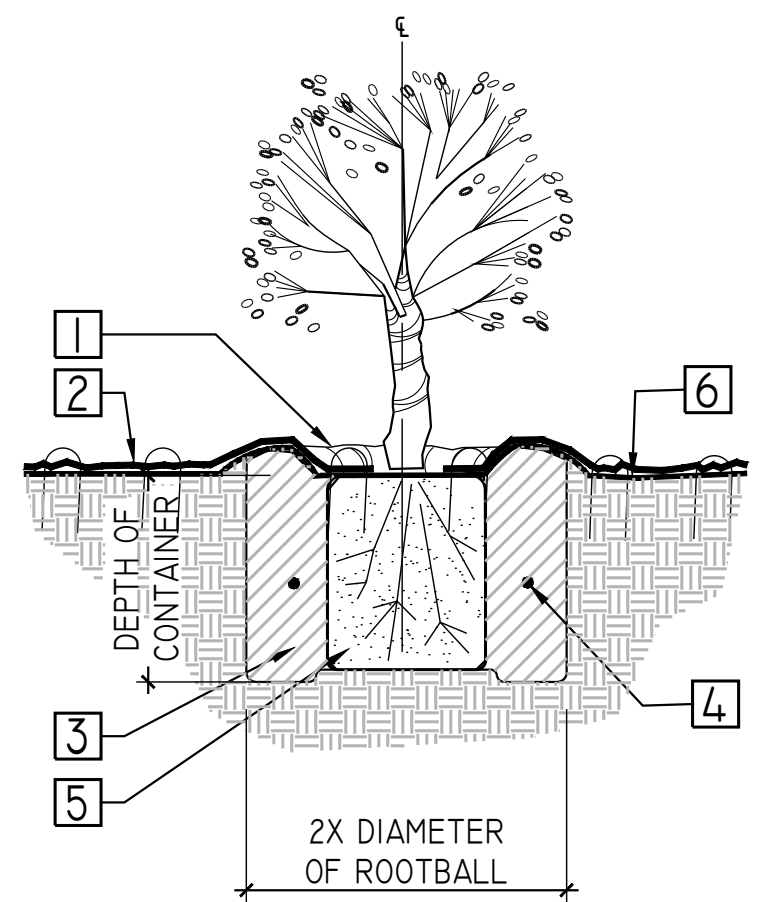
4 DEER BROWSE PROTECTION DEVICE

SCALE: NOT TO SCALE

- NOTES:
1. CROWN OF ROOTBALL TO BE 1/2"-1" ABOVE FINISH GRADE WITH ALL ROOTS COVERED WITH BACKFILL.
 2. BROWSE CONTROL DEVICE TO BE INSTALLED AS REQUIRED BY PROJECT BIOLOGIST.
 3. FOR ADDITIONAL INFORMATION REFER TO PLANTING SPECIFICATIONS.

- 1 A 36" DIA. BY 2" DEEP BASIN SHALL BE FORMED AROUND ROOTBALL BELOW FINISH GRADE.
- 2 6' X 6' BIODEGRADABLE MOISTURE BARRIER/WEED CONTROL FABRIC PER DETAIL C/SHEET L18 OR EROSION CONTROL BLANKET PER ENGO'S IMPROVEMENT PLANS.
- 3 #6 REBAR 5' LONG, DRIVE 1' MIN. INTO SOIL, MIN. 3 STAKES. PROTECT PLANT WITH 4'x4' GRID WELDED WIRE SECURED TO STAKES.
- 4 SMALL RODENT BROWSE PROTECTION DEVICE (SEE DETAIL C/SHEET L7)
- 5 BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- 6 FERTILIZER TABLET PER SPECIFICATIONS
- 7 ROOT BALL
- 8 FINISH GRADE

- NOTES:
1. CROWN OF ROOTBALL TO BE 1/2"-1" ABOVE FINISH GRADE WITH ALL ROOTS COVERED WITH BACKFILL.
 2. FOR ADDITIONAL INFORMATION REFER TO PLANTING SPECIFICATIONS



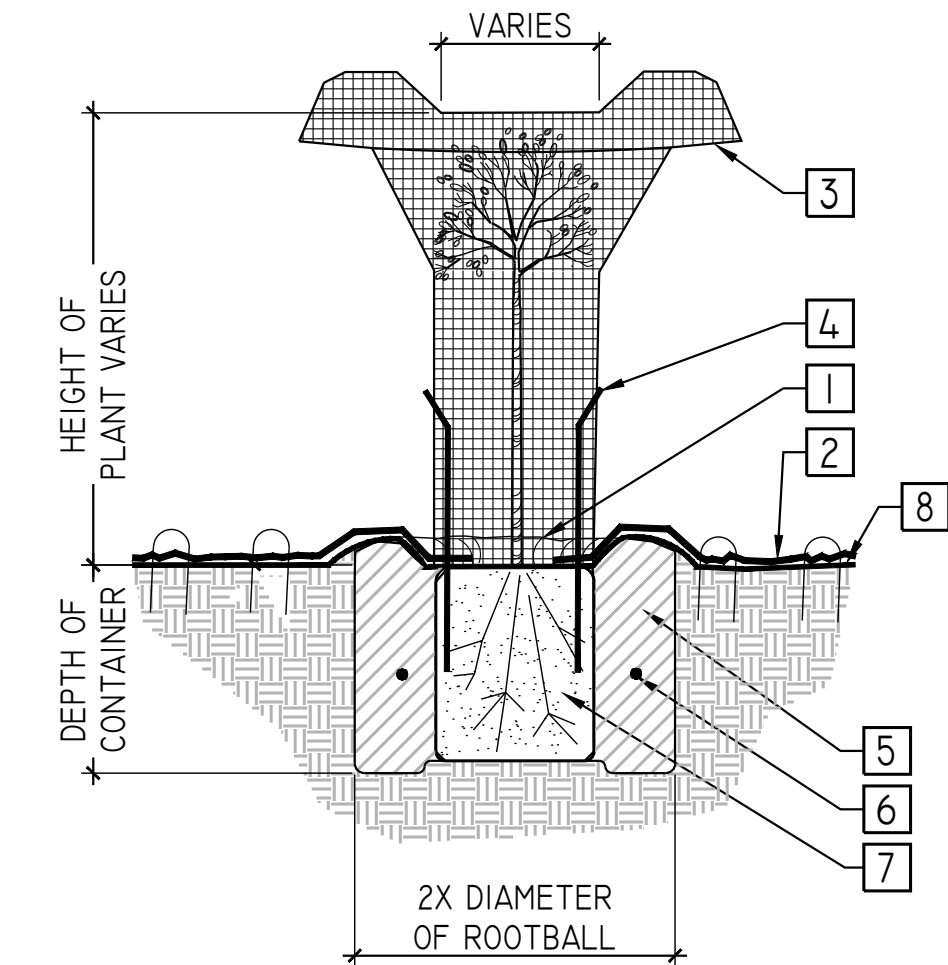
2 TREE AND SHRUB PLANTING

SCALE: NOT TO SCALE

- 1 A 36" WIDE BY 2" DEEP BASIN SHALL BE FORMED AROUND ROOTBALL BELOW FINISH GRADE
- 2 6' X 6' BIODEGRADABLE MOISTURE BARRIER/WEED CONTROL FABRIC PER DETAIL C/SHEET L18 OR EROSION CONTROL BLANKET PER ENGO'S IMPROVEMENT PLANS.
- 3 BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- 4 FERTILIZER TABLETS PER SPECIFICATIONS
- 5 ROOTBALL
- 6 FINISH GRADE

PLANTING NOTES

1. CONTRACTOR SHALL BID AND INSTALL PLANTING MATERIALS PER THESE PLANS AND SPECIFICATIONS, UNLESS GIVEN FURTHER WRITTEN INSTRUCTIONS BY THE CITY OF SAN RAFAEL REPRESENTATIVE. WORK INCLUDES, BUT IS NOT LIMITED TO ALL LABOR, GENERAL LIABILITY INSURANCE, WORKMAN'S COMPENSATION, EQUIPMENT, AND MATERIALS NECESSARY TO FURNISH, INSTALL AND GUARANTEE PLANTING, AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.
2. ALL WORK SHALL CONFORM TO THE LATEST APPLICABLE MARINA COUNTY WATER AGENCY ORDINANCES RELATING TO PLANTING AND IRRIGATION. THE PLANT MATERIALS SHALL CONFORM TO THE PLANT LEGEND SPECIFICATION FOR SIZE & LATEST EDITION OF THE AMERICAN NURSERYMAN STANDARDS.
3. ALL PLANT LOCATIONS TO BE CONFIRMED IN THE FIELD BY THE CITY OF SAN RAFAEL REPRESENTATIVE. CONTRACTOR IS TO COORDINATE ALL PLANTING WITH UTILITY LOCATIONS NOT SHOWN ON THIS PLAN. ANY CONFLICTS BETWEEN LOCATIONS OF PROPOSED PLANTING AND SITE UTILITIES OR LIGHTING TO BE CALLED TO THE ATTENTION OF THE CITY OF SAN RAFAEL AND LANDSCAPE ARCHITECT.
4. LAYOUT OF PLANTINGS IS DIAGRAMMATIC AND MAY NEED FIELD ADJUSTMENT FOR EXISTING SITE CONDITIONS NOT SHOWN ON PLANS, OR AS DIRECTED BY THE CITY OF SAN RAFAEL REPRESENTATIVE. ADJUSTMENTS WILL BE MADE FOR VIEWS, ACCESS, ETC. ALL PLANTINGS SHALL BE FIELD ADJUSTED TO MEET THE MINIMUM STATE REGULATIONS FOR PLANTING AND MAINTAINING A FIRE DEFENSIBLE SPACE, DEPT. OF FORESTRY. PLANT QUANTITIES ARE FOR INFORMATIONAL USE ONLY. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF SAN RAFAEL REPRESENTATIVE AND LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PLANTS AS SHOWN ON THE DRAWINGS.
5. ALL TREES ARE TO BE STAKED AND TREES AND SHRUBS ARE TO HAVE WATERING BASINS. ALL TREES CLOSER THAN 8'-0" TO BUILDINGS, WALKS, PAVING, CURBS OR FOOTINGS SHALL BE INSTALLED WITH A DEEP ROOT BARRIER. USE DEEP ROOT BARRIER, TYPE LB 24-2 PER MANUFACTURER'S RECOMMENDATIONS.
6. AFTER PLANTING, WATER NEW PLANTINGS DEEPLY AND THOROUGHLY.
7. A MINIMUM 3" LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT IN TURF AREAS, CREEPING OR ROOTING GROUNDCOVERS OR DIRECT SEEDING APPLICATIONS. MULCH SHALL BE "WOOD CHIPS" FROM SEQUOIA LANDSCAPE MATERIALS (707-527-5512), NATURAL COLOR OR APPROVED EQUIVALENT.
8. PLANTING DETAILS ON SHEET L3.3 ARE FOR MITIGATION PLANTING AREAS AND PLANTING DETAILS ON SHEET L3.4 ARE FOR STREETSCAPE PLANTING AREAS.



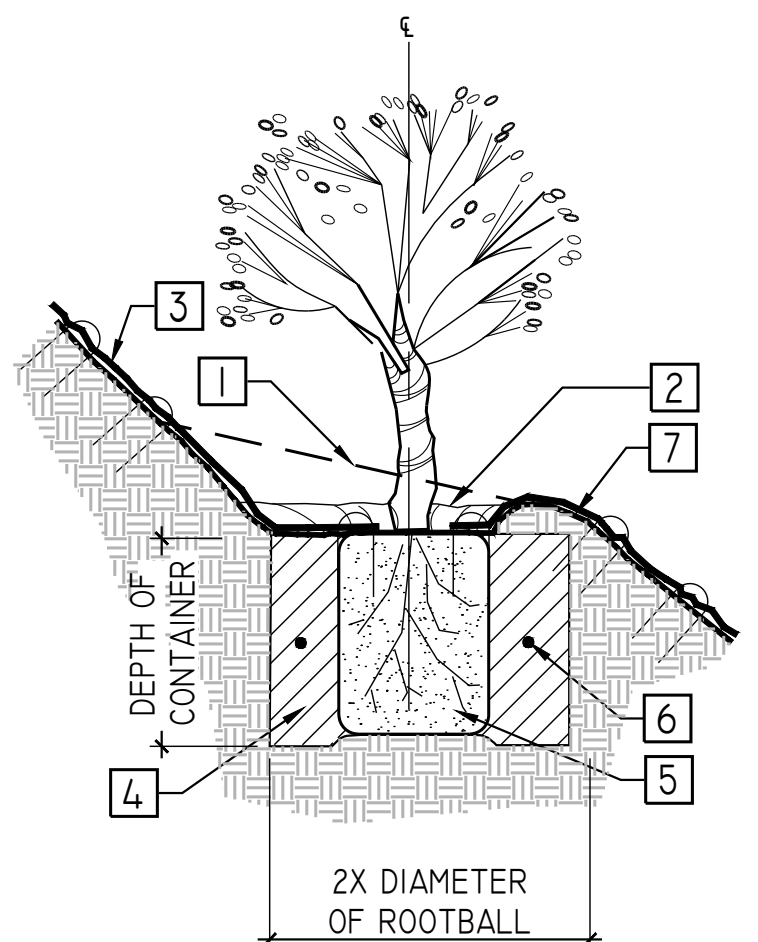
5 RODENT BROWSE PROTECTION

SCALE: NOT TO SCALE

- NOTES:
1. CROWN OF ROOTBALL TO BE 1/2"-1" ABOVE FINISH GRADE WITH ALL ROOTS COVERED WITH BACKFILL.
 2. BROWSE CONTROL DEVICE TO BE INSTALLED AS REQUIRED BY PROJECT BIOLOGIST.
 3. FOR ADDITIONAL INFORMATION REFER TO PLANTING SPECIFICATIONS.

- 1 A 36" BY DIA. 2" DEEP BASIN SHALL BE FORMED AROUND ROOTBALL BELOW FINISH GRADE.
- 2 6' X 6' BIODEGRADABLE MOISTURE BARRIER/WEED CONTROL FABRIC PER DETAIL C/SHEET L18 OR EROSION CONTROL BLANKET PER ENGO'S IMPROVEMENT PLANS.
- 3 1/2" x 1/2" WIRE CLOTH: FOLD OUTWARD TO DISCOURAGE PREDATION
- 4 1"x2" WOOD STAKE (2)
- 5 BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- 6 FERTILIZER TABLETS PER SPECIFICATIONS
- 7 ROOT BALL
- 8 FINISH GRADE

- NOTES:
1. CROWN OF ROOTBALL TO BE 1/2"-1" ABOVE FINISH GRADE WITH ALL ROOTS COVERED WITH BACKFILL.
 2. FOR ADDITIONAL INFORMATION REFER TO PLANTING SPECIFICATIONS.



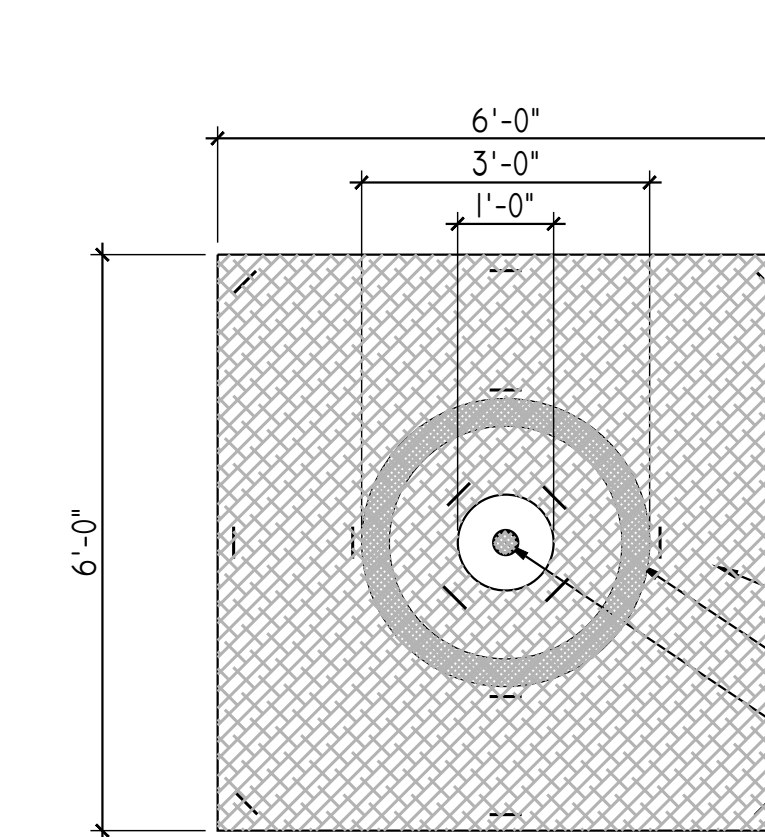
3 TYPICAL SLOPE PLANTING

SCALE: NOT TO SCALE

- 1 EDGE OF SLOPE BEYOND
- 2 A 36" WIDE BY 2" DEEP BASIN SHALL BE FORMED AROUND ROOTBALL BELOW FINISH GRADE ON DOWNWARD SIDE
- 3 6' X 6' BIODEGRADABLE MOISTURE BARRIER/WEED CONTROL FABRIC PER DETAIL C/SHEET L18 OR EROSION CONTROL BLANKET PER ENGO'S IMPROVEMENT PLANS.
- 4 BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- 5 ROOT BALL
- 6 FERTILIZER TABLETS PER SPECIFICATIONS
- 7 FINISH GRADE

NOTES:

1. MOISTURE BARRIER/WEED CONTROL FABRIC TO BE INSTALLED AS REQUIRED BY PROJECT BIOLOGIST.
- 1 PLANT MATERIAL
- 2 A 36" WID BY 2" DEEP BASIN SHALL BE FORMED AROUND ROOBALL BELOW FINISH GRADE (SEE TREE AND SHRUB PLANTING DETAIL)



1 MOISTURE BARRIER / WEED CONTROL PLAN

SCALE: 1/2" = 1'-0"

| NO. | REVISION | BY | DATE |
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| DESIGNED | RJH | DRAWN | FM | CHECKED | RJH | APPROVED | RJH |
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PROJECT NAME
IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

DRAWING NAME
PLANTING DETAILS

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

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LANDSCAPE ARCHITECT
P.L.A. 5094
Signature: Ric J. Hendricks
11/30/20
Renewed Date: 05/08/20
STATE OF CALIFORNIA

Ric J. Hendricks
PLA 5094 Exp. 11/30/2020

CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

SCALE: AS SHOWN

DATE: MAY 08, 2020

BKF PROJECT NO.: 20169048-26

CITY PROJECT NO.: 11310

SHEET NO.: **L3.3**

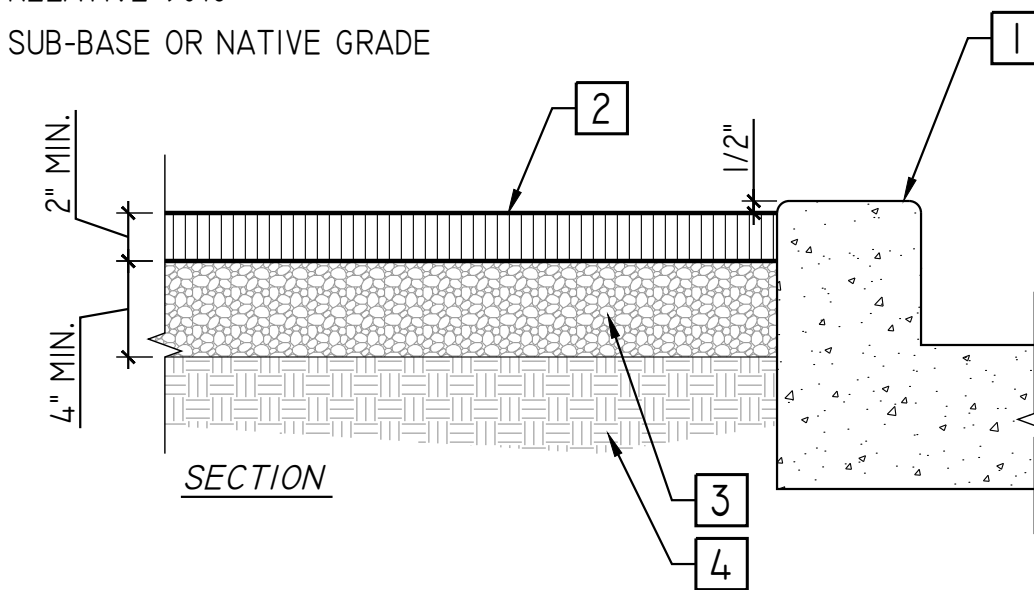
DRAWING: 37 OF 38

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NOTES:

- REFER TO MATERIAL SCHEDULE FOR INFORMATION RELATIVE TO COLOR, TYPE AND FINISH.
- UNLESS OTHERWISE NOTED, NEW FINISH SURFACE SHALL BE FLUSH WITH ADJACENT EXISTING SURFACES.
- FOR ADDITIONAL INFORMATION REFER TO SPECIFICATIONS.
- PROJECT GEOTECHNICAL REPORT OR RECOMMENDATIONS BY A STRUCTURAL ENGINEER SHALL TAKE PRECEDENCE FOR ALL SOIL CONDITIONS, MATERIALS, REINFORCEMENT, DIMENSIONS, AND SUBBASE.

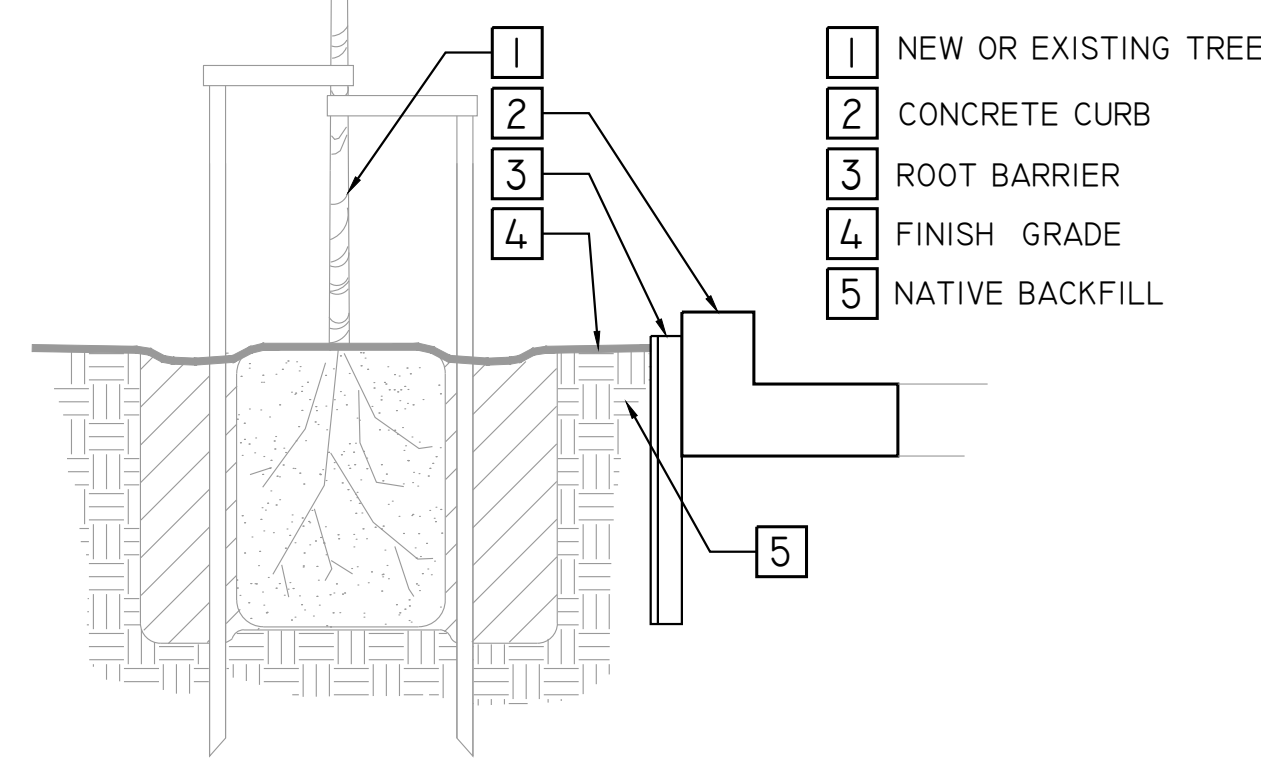
- 1 CONCRETE CURB PER CIVIL DRAWINGS
- 2 DECOMPOSED GRANITE
- 3 CLASS II AB, COMPACT TO RELATIVE 90%
- 4 SUB-BASE OR NATIVE GRADE



3 DECOMPOSED GRANITE
SCALE: 1/2" = 1'-0"

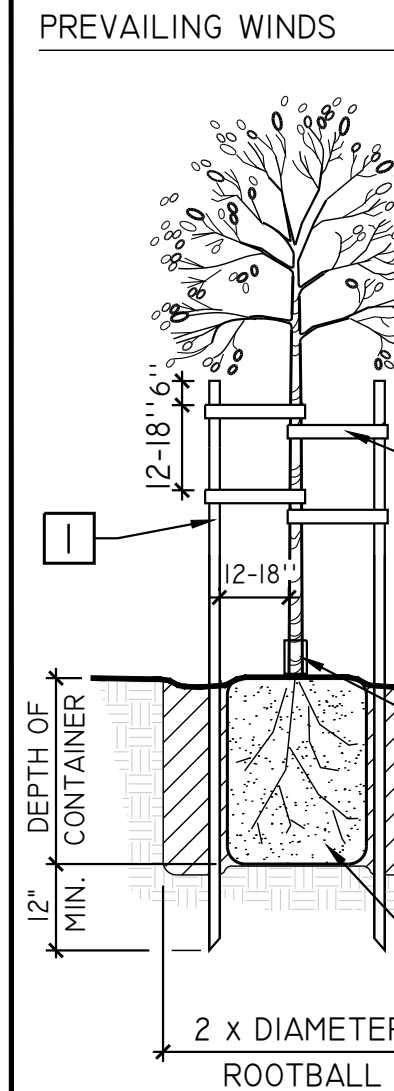
NOTES:

- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- THE TOP OF THE BARRIER PANELS MUST BE SLIGHTLY ABOVE GRADE (NEVER BELOW GRADE)
- POSITION BARRIER PANELS VERTICALLY WITH TOP AGAINST THE STRUCTURE TO BE PROTECTED
- ALL TREES WITHIN 8' OF PAVING, WALLS OR BUILDINGD SHALL RECEIVE ROOT BARRIER.



2 LINEAR ROOT BARRIER
SCALE: N.T.S.

PREVAILING WINDS



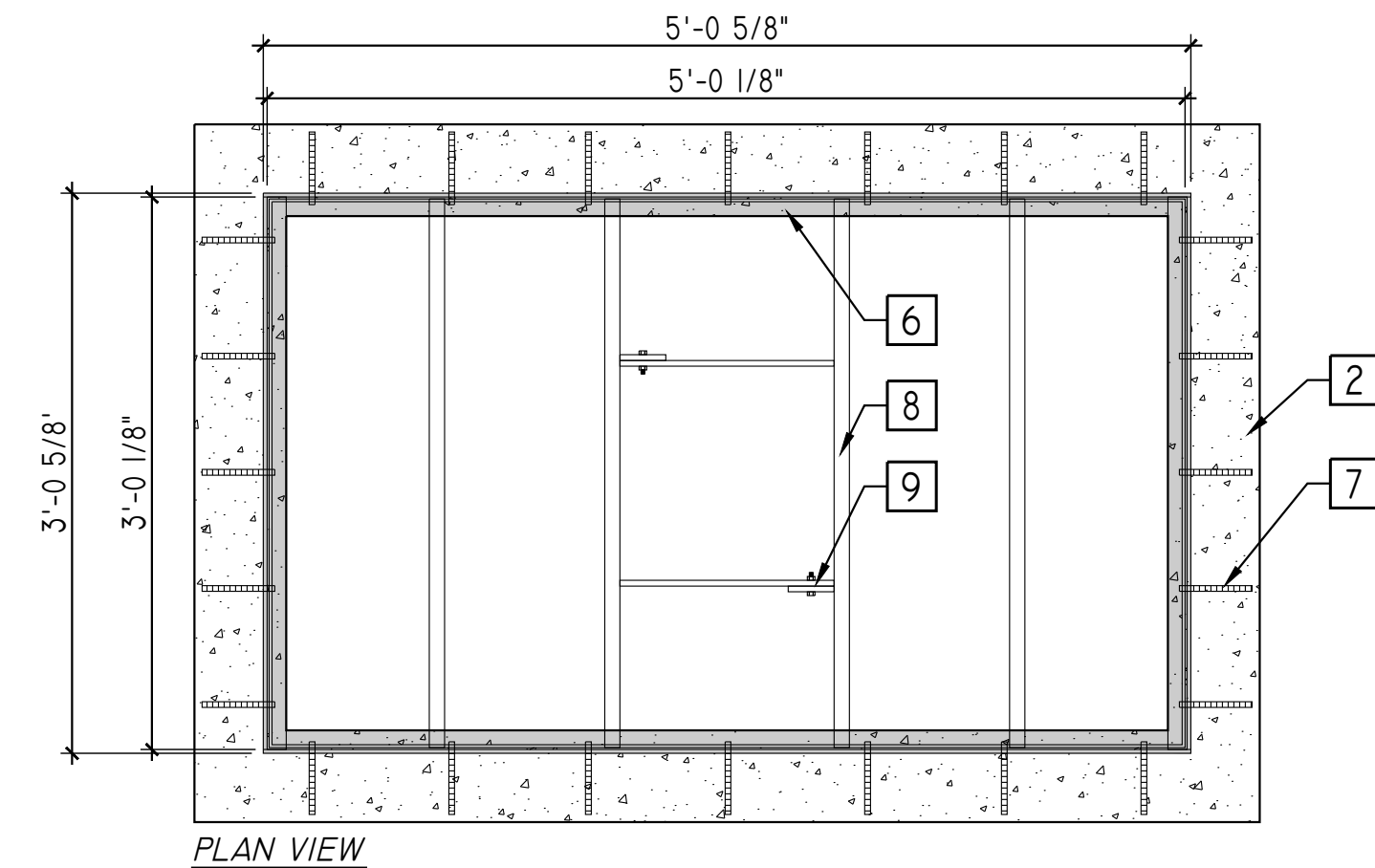
NOTES:

- CROWN OF ROOTBALL TO BE 1" ABOVE FINISH GRADE.
- FOR ADDITIONAL INFORMATION REFER TO PLANTING NOTES AND SPECIFICATIONS.
- 10' LODGE POLE STAKE BOTH SIDES EXCEPT TREE IN TREE GRATES TO GET ONE. 'TOMAHAWK TREE STABILIZER SYSTEM' (800) 845-3343, OR APPROVED EQUAL
- CINCH TIE, ARBOR TIE, OR APPROVED EQUAL
- A SHALLOW BASIN 2" DEEP SHALL BE FORMED AROUND BALL BELOW FINISH GRADE. TREES PLANTED IN TURF AREAS SHALL NOT HAVE BASINS.
- FINISH GRADE
- TREES INSTALLED WITHIN TURF AREAS SHALL BE INSTALLED WITH 'ARBOR-GARD' OR APPROVED EQUAL AT BASE OF TRUNK.
- BACKFILL IN ACCORDANCE WITH PROJECT AGRICULTURAL SUITABILITY SOILS REPORT
- ROOTBALL

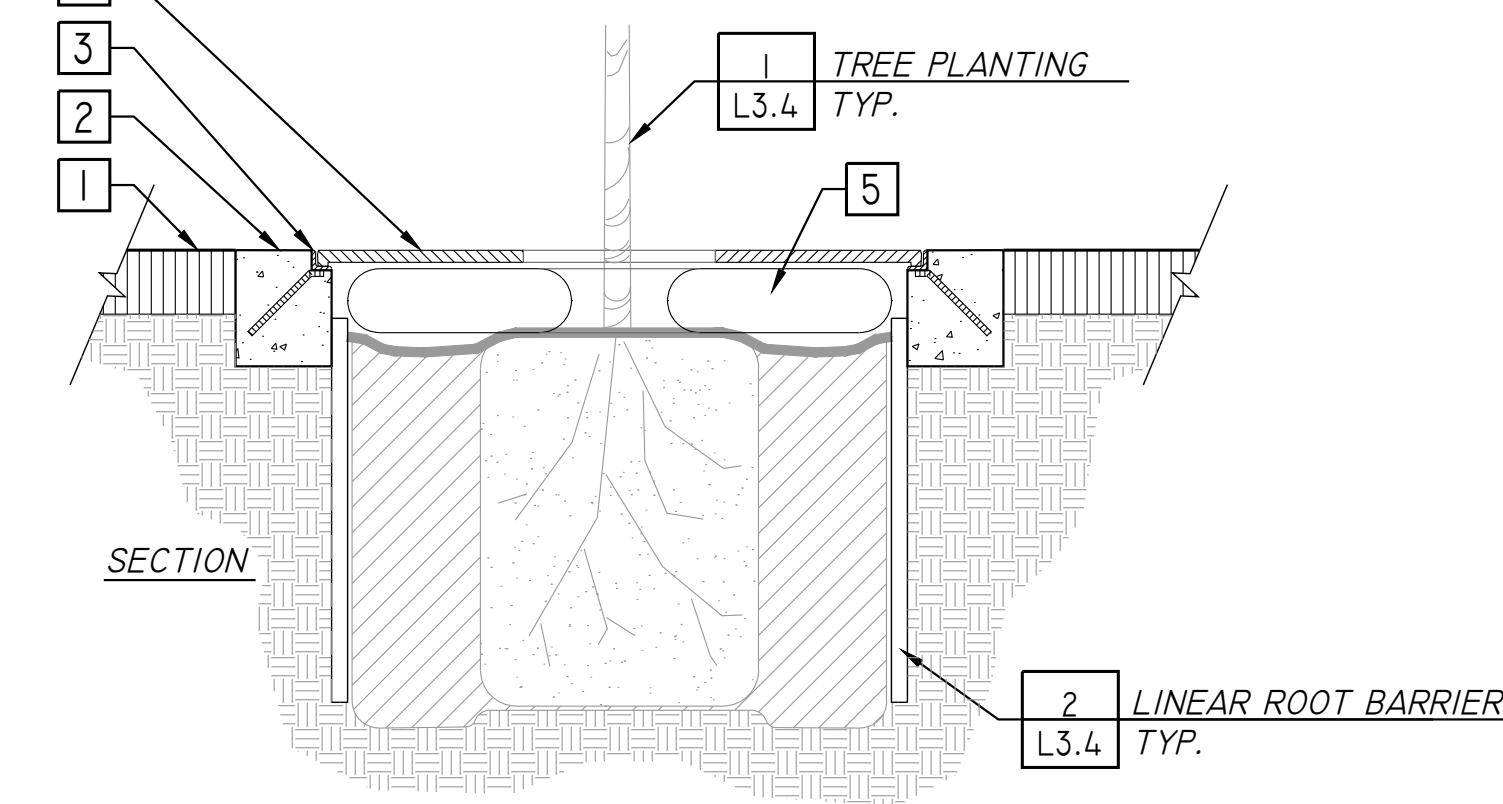
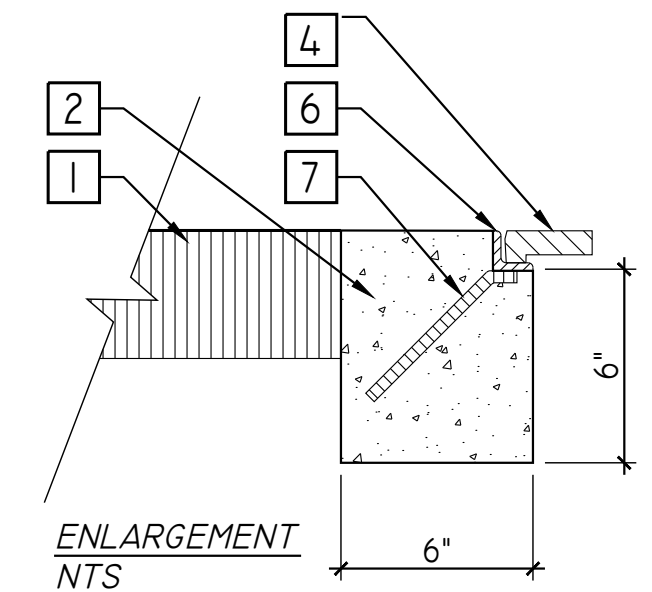
1 TREE PLANTING (15 GAL. & 24" BOX)
SCALE: N.T.S.

NOTES:

- REFER TO MATERIAL SCHEDULE FOR INFORMATION RELATIVE TO COLOR, TYPE AND FINISH.
- UNLESS OTHERWISE NOTED, NEW FINISH SURFACE SHALL BE FLUSH WITH ADJACENT EXISTING SURFACES.
- FOR ADDITIONAL INFORMATION REFER TO SPECIFICATIONS.
- PROJECT GEOTECHNICAL REPORT OR RECOMMENDATIONS BY A STRUCTURAL ENGINEER SHALL TAKE PRECEDENCE FOR ALL SOIL CONDITIONS, MATERIALS, REINFORCEMENT, DIMENSIONS, AND SUBBASE.



4 TREE GRATE W/ 6" CONCRETE BAND
SCALE: 1" = 1'-0"



- 1 ASPHALTIC CONCRETE PER CIVIL DRAWINGS
- 2 CONCRETE BAND
- 3 HEAVY-DUTY TREE GRATE FRAME, SEE ENLARGEMENT
- 4 TREE GRATE
- 5 TREE WATERING BAG/DIAPER
- 6 ANGLE STOCK PERIMETER FRAME, SIZED TO COORDINATE WITH GRATE THICKNESS
- 7 TYP. #3 REBAR EMBEDMENT ANDANCHOR 6" TYP. OVERALL LENGHT. SPACING BASED ON MANUFACTURES RECOMMENDATIONS FOR VEHICLE LOAD H20 MIN.
- 8 C4 x 7.25" REMOVABLE CROSS SUPPORT. MOUNTED TO FRAME PER MANUFACTURES RECOMMENDATIONS
- 9 3/8" x 3" FLAT BAR SUPPORT. MOUNTED TO FRAME PER MANUFACTURES RECOMMENDATIONS

| | |
|----------|-----|
| DATE | |
| BY | |
| REVISION | |
| NO. | |
| DESIGNED | RJH |
| DRAWN | FM |
| CHECKED | RJH |
| APPROVED | RJH |
| DATE | |

PROJECT NAME
IMPROVEMENT DRAWINGS FOR MULTI-USE PATHWAY RICE DRIVE TO SECOND STREET

DRAWING NAME
PLANTING DETAILS

SAN RAFAEL COUNTY OF MARIN CALIFORNIA

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Ric J. Hendricks
PLA 5094 Exp. 11/30/2020

CITY OF SAN RAFAEL
DEPARTMENT OF
PUBLIC WORKS

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|------------------------------|
| SCALE: AS SHOWN |
| DATE: MAY 08, 2020 |
| BKF PROJECT NO.: 20169048-26 |
| CITY PROJECT NO.: 11310 |
| SHEET NO.: L3.4 |
| DRAWING: 38 OF 38 |



Plot May 11, 2020 at 11:05am
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