

TOWN OF FAIRFAX DEPARTMENT OF PUBLIC WORKS

142 BOLINAS ROAD
FAIRFAX, CALIFORNIA 94930
PHONE: (415) 453-0291

103 ROCCA DRIVE STABILIZATION AND RETAINING WALL PROJECT



VICINITY MAP
(NO SCALE)



LOCATION MAP
(NO SCALE)

SHEET INDEX

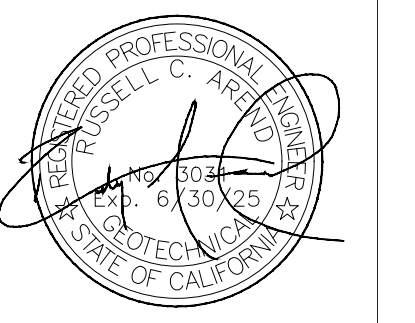
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TITLE SHEET
103 Rocca Drive Stabilization and Retaining Wall Project
Fairfax, California
Project No. 201.140



SHEET
1

GENERAL

1. ALL CONDITIONS AND DIMENSIONS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR. ANY DISCREPANCIES THAT REQUIRE CLARIFICATION OR REVISIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE STARTING WORK.
2. THE CONTRACTOR SHALL POSSES A CLASS "A" LICENSE.
3. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SAFETY, AND SEQUENCE.
4. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT PRIOR TO START OF ANY CONSTRUCTION. CONTRACTOR SHALL NOTIFY ALL PUBLIC OR PRIVATE UTILITY COMPANIES IN ACCORDANCE WITH ALL APPLICABLE LAWS PRIOR TO COMMENCEMENT OF WORK NEAR EXISTING UTILITY LINES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF ALL EXISTING UTILITIES IN THE FIELD. ANY UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
6. TOWN OF FAIRFAX ENCROACHMENT PERMIT IS REQUIRED FOR ALL WORK, INCLUDING STAGING OF MATERIALS AND EQUIPMENT IN THE TOWN'S RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN ENCROACHMENT PERMIT IN ACCORDANCE WITH THE PERMIT REQUIREMENTS.
7. THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO ESTABLISH THE RETAINING WALL, SOLDIER PILE AND TIEBACK LAYOUTS PRIOR TO DRILLING AND SOLDIER PILE AND TIEBACK INSTALLATION.
8. THE CONTRACTOR SHALL HAUL AWAY ALL UNUSED/EXCESS EXCAVATED MATERIAL OFF SITE FOR LEGAL DISPOSAL.
9. NO CONSTRUCTION MATERIALS, EQUIPMENT, DEBRIS OR WASTE SHALL BE PLACED OR STORED WHERE IT MAY BE SUBJECT TO WIND OR RAIN EROSION AND DISPERSION.
10. WORKMANSHIP TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS ALONG WITH 2018 CALTRANS STANDARD SPECIFICATIONS, MARIN COUNTY AND NORTH MARIN WATER DISTRICT STANDARDS AND GENERALLY ACCEPTED CONSTRUCTION PRACTICES.

SURVEY NOTES

1. TOPOGRAPHIC INFORMATION IS BASED UPON A FIELD SURVEY PERFORMED BY 1031 SURVEY, INC. IN AUGUST 2023 USING TERRESTRIAL LIDAR.
2. VERTICAL DATUM: ELEVATION IS BASED ON A SET MAGNAIL & SHINER LOCATED AT THE EAST END OF THE PROJECT ON ROCCA DRIVE, ELEVATION = 300.00, ASSUMED DATUM.
3. BOUNDARY IS BASED UPON THAT CERTAIN RECORD OF SURVEY FILED IN BOOK 2023 OF MAPS, AT PAGE 93, SCR.

SPECIAL INSPECTIONS

1. SPECIAL INSANCTION SHALL BE PERFORMED BY MILLER PACIFIC AND/OR A QUALIFIED TESTING AND INSPECTION AGENCY DURING CONSTRUCTION, INCLUDING THE FOLLOWING:
 - 1.1 **SOLDIER PILES:** INTERMITTENT OBSERVATION OF DRILLING. FINISHED SOLDIER PILE EXCAVATIONS SHALL BE OBSERVED PRIOR TO INSTALLING STEEL BEAM. STEEL BEAM SHALL BE OBSERVED PRIOR TO PLACEMENT IN DRILLED HOLE.
 - 1.2 **CONCRETE:** INTERMITTENT OBSERVATION DURING PLACEMENT. IF REQUESTED BY THE ENGINEER, CONCRETE SHALL BE SAMPLED AND CYLINDERS SHALL BE CAST FOR STRENGTH TESTING IN CONFORMANCE WITH ASTM C39. A MINIMUM OF 1 CYLINDER SHALL BE TESTED AT THREE 7 DAYS AND A MINIMUM OF 3 CYLINDERS SHALL BE TESTED AT 28 DAYS.
 - 1.3 **GROUT:** INTERMITTENT OBSERVATION DURING PLACEMENT. IF REQUESTED BY THE ENGINEER, GROUT SHALL BE SAMPLED AND CYLINDERS SHALL BE CAST FOR STRENGTH TESTING IN CONFORMANCE WITH ASTM C39. A MINIMUM OF 1 CYLINDER SHALL BE TESTED AT 3 DAYS AND A MINIMUM OF 3 CYLINDERS SHALL BE TESTED AT 28 DAYS
 - 1.4 **TIEBACKS:** INTERMITTENT OBSERVATION OF DRILLING. FINISHED EXCAVATIONS SHALL BE OBSERVED PRIOR TO INSTALLING THREADBAR. THREAD BAR SHALL BE OBSERVED PRIOR TO PLACEMENT IN DRILLED HOLE. LOAD TESTING SHALL BE PERFORMED AS SPECIFIED HEREIN AND OBSERVED BY THE ENGINEER.
 - 1.5 **DRAINAGE:** INTERMITTENT OBSERVATION OF DRAINAGE PANELS, PERMEABLE MATERIAL AND RELATED COMPONENTS INSTALLED FOR WALL DRAINAGE.
 - 1.6 **BACKFILL:** INTERMITTENT OBSERVATION AND FIELD DENSITY TESTING OF COMPACTED BACKFILL.

SOLDIER PILES

1. REFER TO TECHNICAL SPECIFICATION SECTION 2296 FOR ADDITIONAL REQUIREMENTS FOR SOLDIER PILE CONSTRUCTION.
2. STEEL BEAMS FOR SOLDIER PILES SHALL BE ASTM A572, GRADE 50 OR APPROVED EQUAL.
3. READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94.
4. CEMENT SHALL CONFORM TO ASTM C 150, TYPE II.
5. CONCRETE SHALL HAVE A MINMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.
6. STEEL BEAMS SHALL BE PAINTED WITH TWO COATS OF BLACK COAL TAR EPOXY, CARBOLINE BITUMASTIC NO. 300-M OR APPROVED EQUAL. COAL TAR EPOXY COATING SHALL EXTEND 12 IN BELOW THE TOP OF CONCRETE ENCASEMENT.

CONCRETE

1. ALL CONCRETE SHALL BE NORMAL WEIGHT AND READY-MIXED WITH A MAXIMUM WATER TO CEMENT RATIO OF 0.45 AND A MAXIMUM MEASURED SLUMP OF 4 INCHES.
2. ALL AGGREGATE USED IN CONCRETE PRODUCTION SHALL CONFORM TO ASTM C33.
3. ALL WATER USED IN CONCRETE PRODUCTION SHALL BE CLEAN POTABLE AND NOT DETRIMENTAL TO THE CONCRETE.
4. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI.

TIEBACKS & STEEL WALER

1. REFER TO TECHNICAL SPECIFICATION 2287 FOR TIEBACK & STEEL WALER REQUIREMENTS.
2. STEEL WALER SECTIONS SHALL BE ASTM A572, GRADE 50 OR APPROVED EQUAL.
3. TIEBACKS SHALL BE DYWIDAG STEEL THREAD BARS (OR APPROVED EQUIVALENT) AS DESIGNATED ON THE PLANS AND MANUFACTURED EXPRESSLY FOR USE AS TIEBACKS.
4. GRADE 75 THREADBAR SHALL CONFORM TO ASTM A615
GRADE 150 THREADBAR SHALL CONFORM TO ASTM 722
5. BEARING PLATES AND HARDWARE SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE ASTM STANDARDS.
6. CORROSION PROTECTION SHALL BE DOUBLE CORROSION PROTECTION AS RECOMMENDED BY THE MANUFACTURER AND AS SHOWN ON THE PLANS.
7. CEMENT GROUT SHALL BE MADE OF PORTLAND CEMENT CONFORMING TO ASTM C 150 WITH $f_c = 4,000$ PSI AND WATER CEMENT RATIO BETWEEN 0.4 AND 0.5.
8. LOAD TESTING SCHEDULE:
(DL = DESIGN LOAD, CTL = CREEP TEST LOAD)
- 7.1 PERFORM PROOF LOAD TESTING ON ALL TIEBACKS.
- 7.2 PROOF LOAD TEST:
AL (0.05 DL), 0.25 DL, 0.50 DL, 0.75 DL, 1.00 DL, 1.33 DL (CTL)
HOLD CTL FOR 10 MINUTES WITH DISPLACEMENT MEASUREMENTS AT 1, 2, 3, 4, 5, 6, AND 10 MINUTES. IF THE TOTAL MOVEMENT BETWEEN 1 AND 10 MINUTES EXCEEDS 0.04 IN, THE TEST LOAD SHALL BE HELD FOR AN ADDITIONAL 50 MINUTES WITH FURTHER DISPLACEMENT READINGS MADE AT 15, 20, 25, 30, 45, AND 60 MINUTES. THE TOTAL MOVEMENT WITHIN THE PERIOD OF 6 TO 60 MINUTES SHALL NOT EXCEED 0.08 IN.
- 7.4 THE TIEBACK DISPLACEMENT SHALL BE MEASURED WITH A DIAL GAUGE CAPABLE OF ACCURATELY MEASURING DISPLACEMENT TO THE NEAREST 0.001 IN.

WOOD

1. TIMBER LAGGING WOOD RAILING AND OTHER WOOD PRODUCTS SHALL BE DOUGLAS FIR NO. 1 OR BETTER. PRESERVATIVES AND TREATMENT SHALL COMPLY WITH AWPA STANDARD U1 FOR USE CATEGORY 4A.
2. WHERE CUTTING OF LAGGING IS REQUIRED, PAINT CUT ENDS WITH COMPLIANT PRESERVATIVE.

WALL DRAINAGE

1. PERMEABLE MATERIAL SHALL CONSIST OF CALTRANS CLASS 1 PERMEABLE MATERIAL. ENCASED IN FILTER FABRIC OR CLASS 2 PERMEABLE MATERIAL.
2. FILTER FABRIC SHALL CONSIST OF MIRAFI 140N OR APPROVED EQUAL.
3. DRAINAGE PIPE SHALL CONFORM TO ASTM D3034, SDR 35.

EROSION & SEDIMENT CONTROL

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL COMPLY WITH ALL REQUIREMENTS OUTLINED IN THE MARIN COUNTY STORMWATER POLLUTION PREVENTION PROGRAM (MCSTOPPP) MINIMUM CONTROL MEASURES FOR SMALL CONSTRUCTION PROJECTS AS OUTLINED IN THE MCSTOPPP CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN APPLICANT PACKAGE.
2. ANY AREAS IN WHICH GROUND SURFACE AND VEGETATIVE COVER HAS BEEN DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE COVERED WITH A PRE-APPROVED SEED MIX AND BIODEGRADABLE EROSION CONTROL MATS UPON COMPLETION OF CONSTRUCTION.
3. EROSION CONTROL MATS SHALL CONSIST OF TYPE SC150 BY NORTH AMERICAN GREEN (OR APPROVED EQUAL).

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Revisions

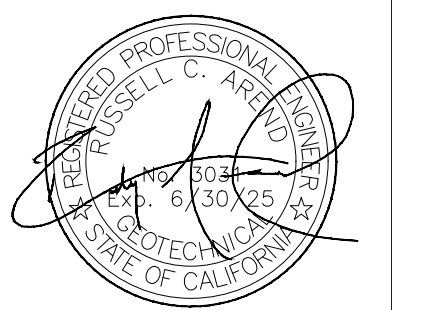
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NOTES

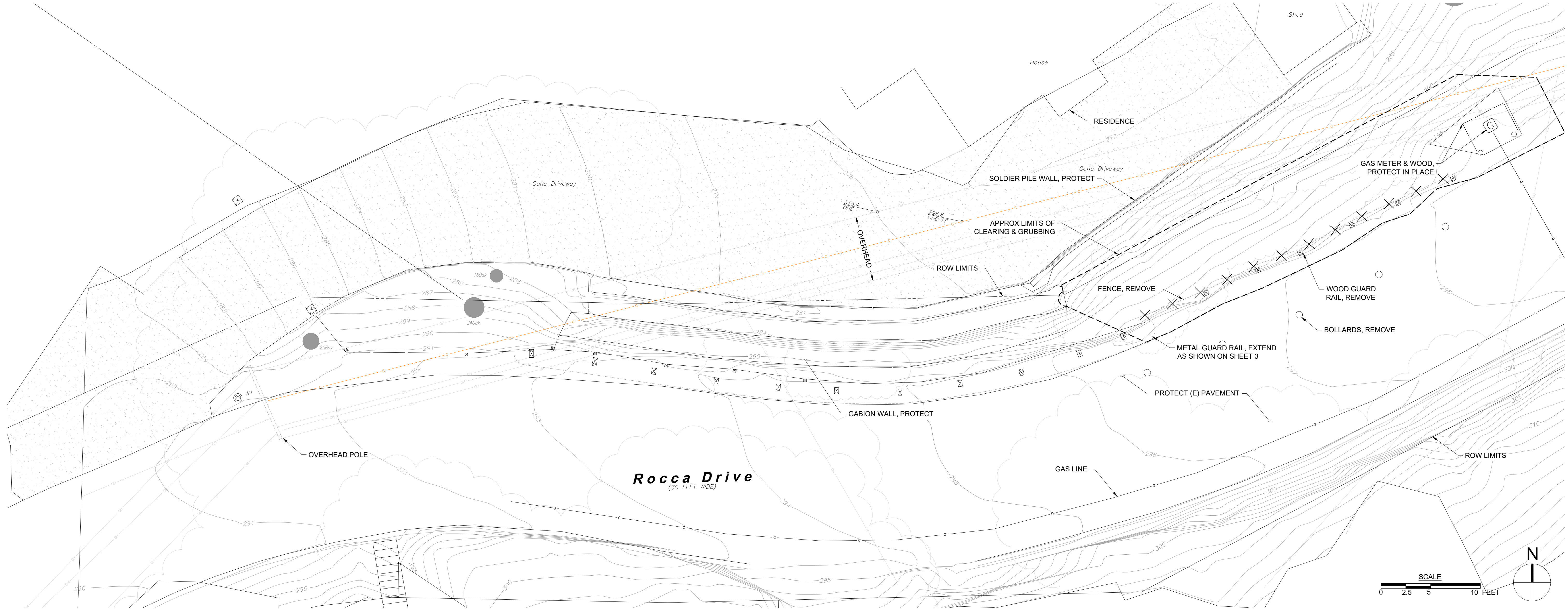
103 Rocca Drive Stabilization and Retaining Wall Project
Fairfax, California
Project No. 201-140

Designed	RCA
Drawn	RCA
Checked	SAS



SHEET

2



EXISTING CONDITIONS & DEMOLITION PLAN
(SCALE: 1" = 5'-0")



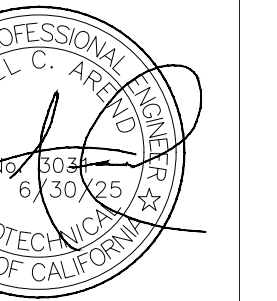
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EXISTING CONDITIONS & DEMOLITION PLAN

103 Rocca Drive Stabilization and
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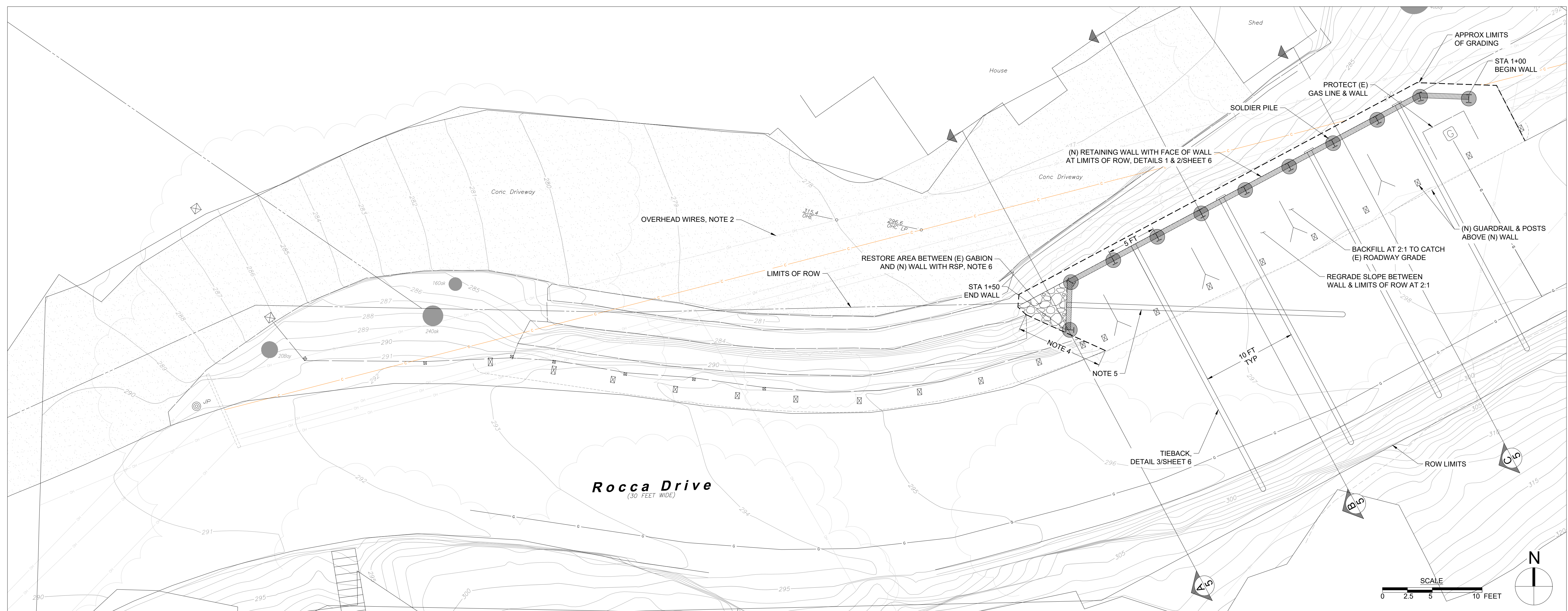
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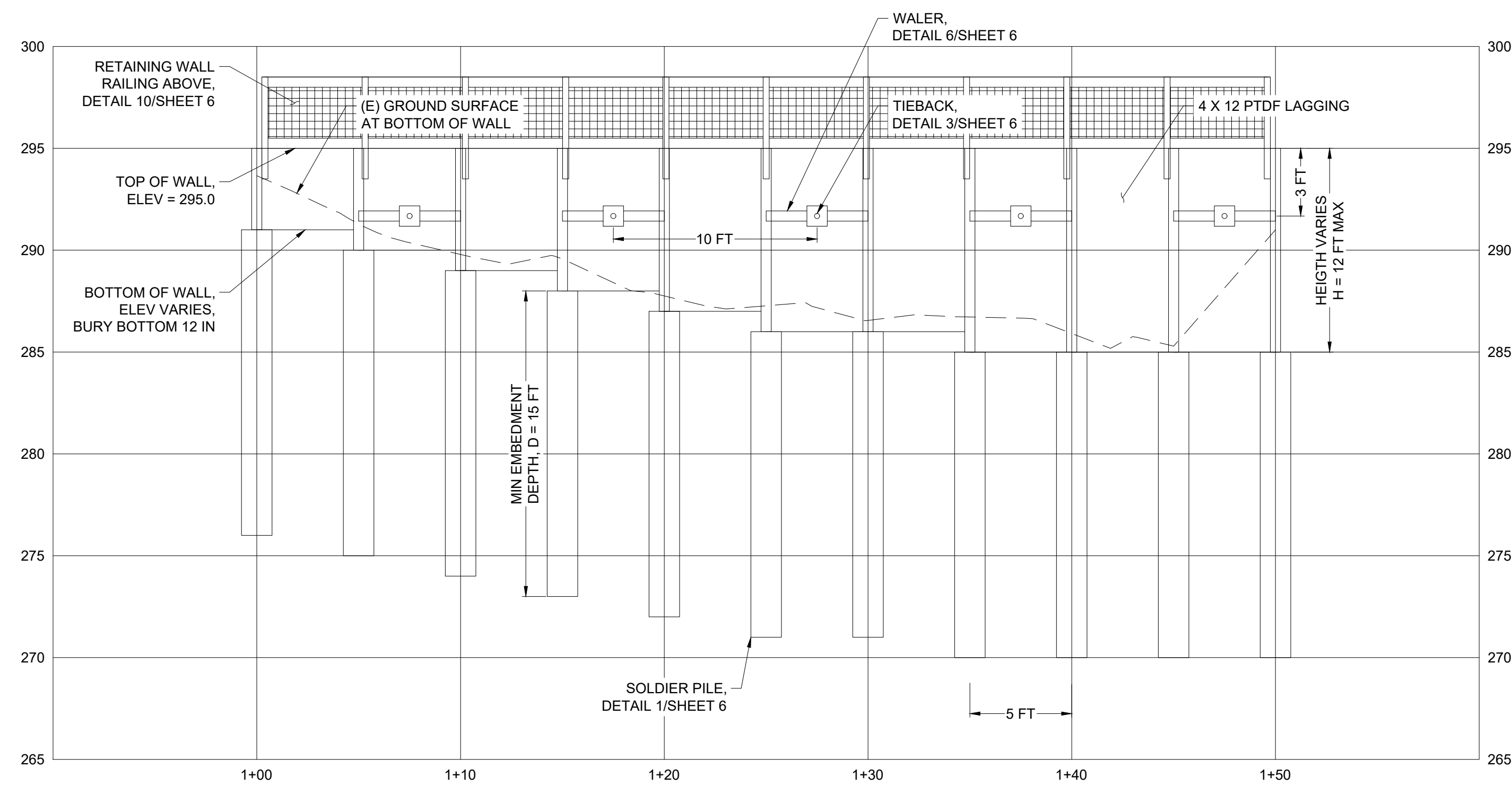
Revisions



RETAINING WALL PLAN
(SCALE: 1" = 5'-0")

NOTES:

- (1) THE CONTRACTOR SHALL COORDINATE WITH ENGINEER TO ESTABLISH THE RETAINING WALL, SOLDIER PILE AND TIEBACK LAYOUTS PRIOR TO DRILLING AND SOLDIER PILE AND TIEBACK INSTALLATION.
- (2) OVERALL SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN PROPER CLEARANCES FROM EXISTING OVERHEAD WIRES. CONTRACTOR MAY NEED TO USE LOW OVERHEAD EQUIPMENT, SPLICING OF STEEL BEAMS, COORDINATE WITH UTILITY OWNER TO WRAP LINES OR OTHER MEANS TO FACILITATE WALL CONSTRUCTION.
- (3) ALL SLOPING/BENCHING AND SHORING SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER AND SUBMITTED TO THE TOWN FOR REVIEW AND ACCEPTANCE.
- (4) THIS LINE REPRESENTS THE APPROXIMATE EASTERN BOUNDARY OF THE EXISTING GABION STRUCTURE. CONTRACTOR SHALL POTHOLE AS REQUIRED TO EXPOSE THE ACTUAL LIMITS OF THE GABION DURING CONSTRUCTION.
- (5) STEEPEN VERTICAL BATTER OF TIEBACKS UP TO 25 DEGREES TO AVOID CONFLICTS WITH OTHER TIEBACKS OR (E) UTILITIES.
- (6) PLACE CALTRANS CLASS III AND IV RSP AT 1:1 OR FLATTER USING METHOD A PLACEMENT AS REQUIRED TO BUTTRESS ANY UNSUPPORTED EXCAVATIONS THAT REMAIN BETWEEN (E) GABION AND (N) RETAINING WALL. LINE THE SURFACE WITH CALTRANS CLASS 8 RSP FABRIC PRIOR TO RSP PLACEMENT. GROUT RSP ONCE IN PLACE.



RETAINING WALL PROFILE
(SCALE: 1" = 5'-0")

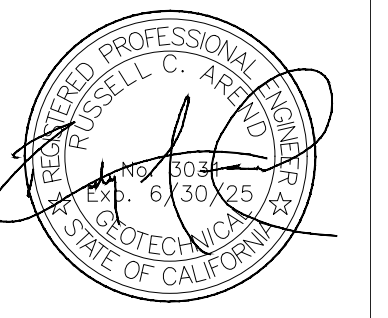
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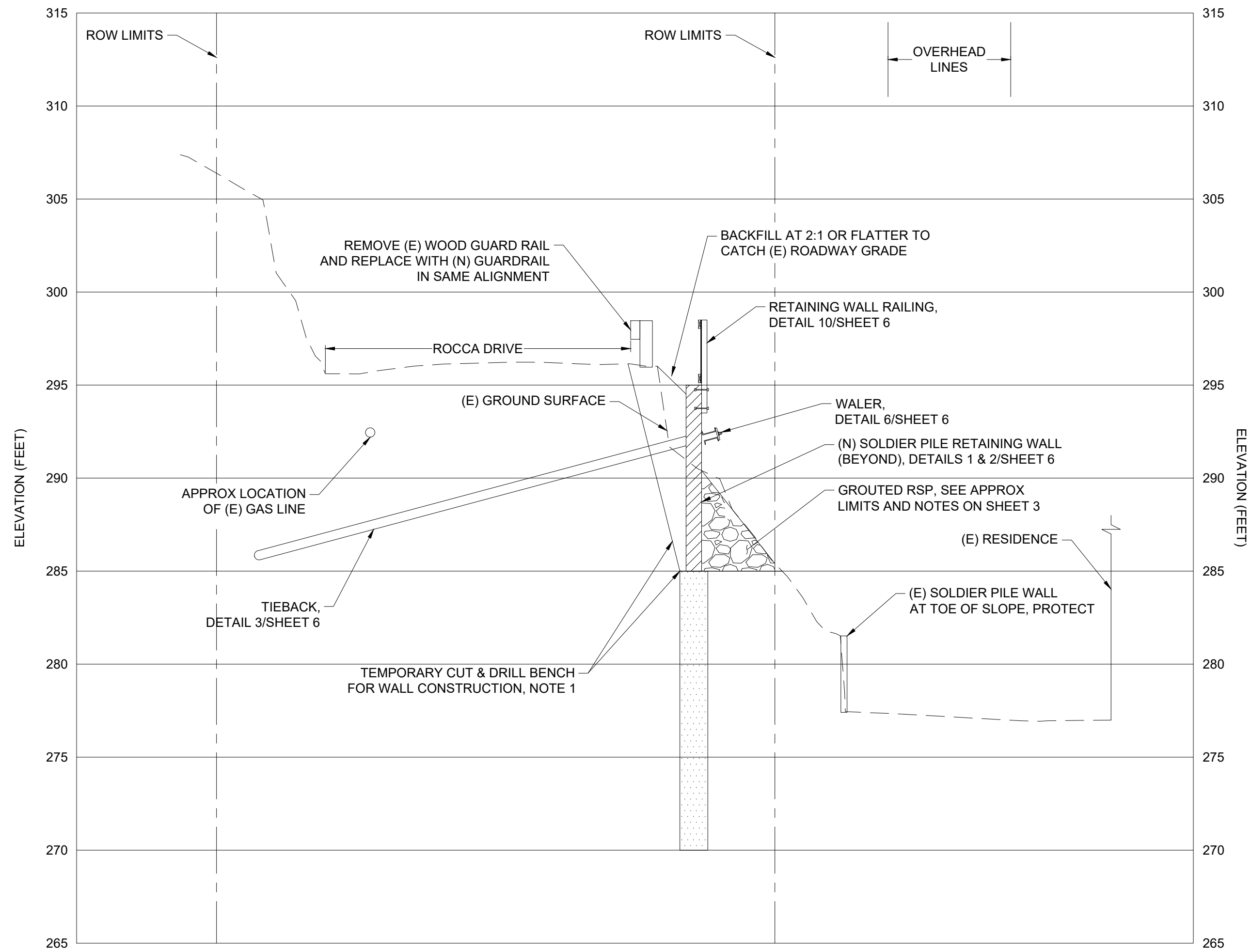
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RETAINING WALL PLAN & PROFILE
103 Rocca Drive Stabilization and Retaining Wall Project
Fairfax, California
Project No. 201-140

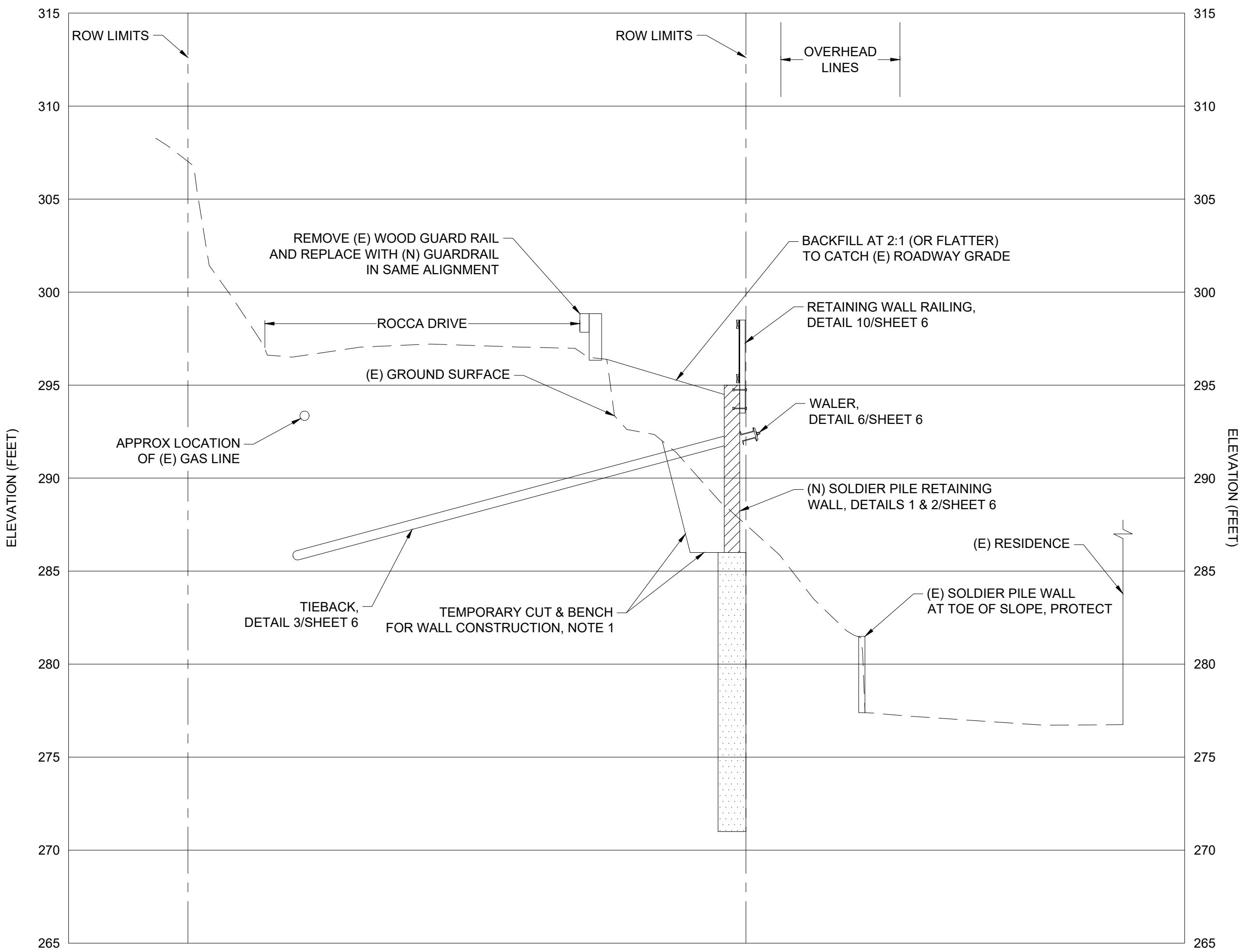
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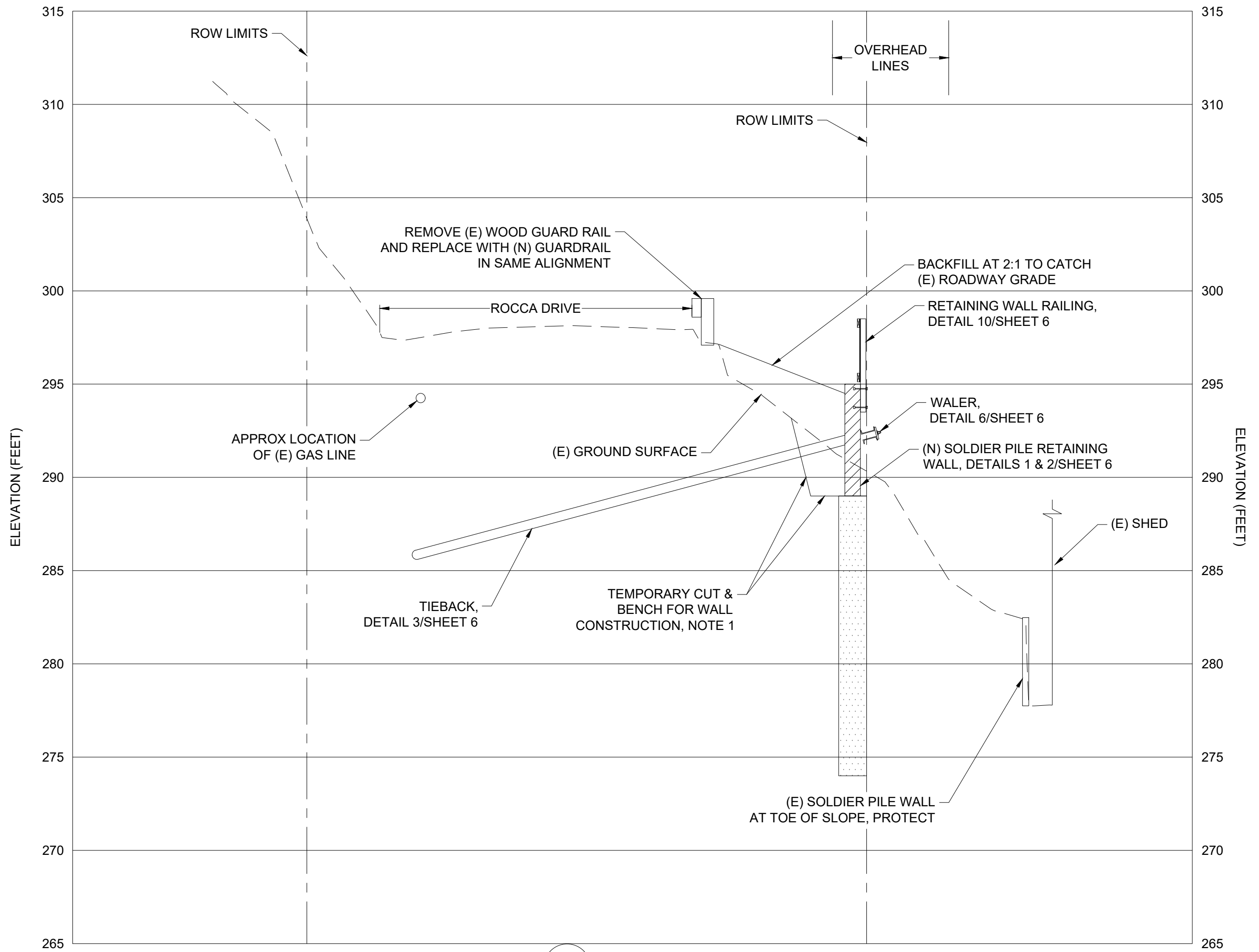
SHEET
4



A SECTION
(SCALE: 1" = 5'-0")



B SECTION
(SCALE: 1" = 5'-0")



C SECTION
(SCALE: 1" = 5'-0")

NOTES:
(1) SCHEMATIC REPRESENTATION OF TEMPORARY BENCH FOR WALL CONSTRUCTION. ACTUAL BENCHING SHALL BE PERFORMED PER CONTRACTORS EXCAVATION AND SHORING PLAN.

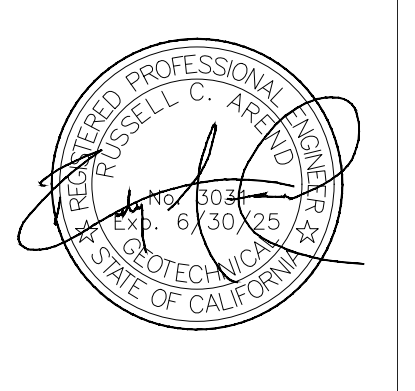
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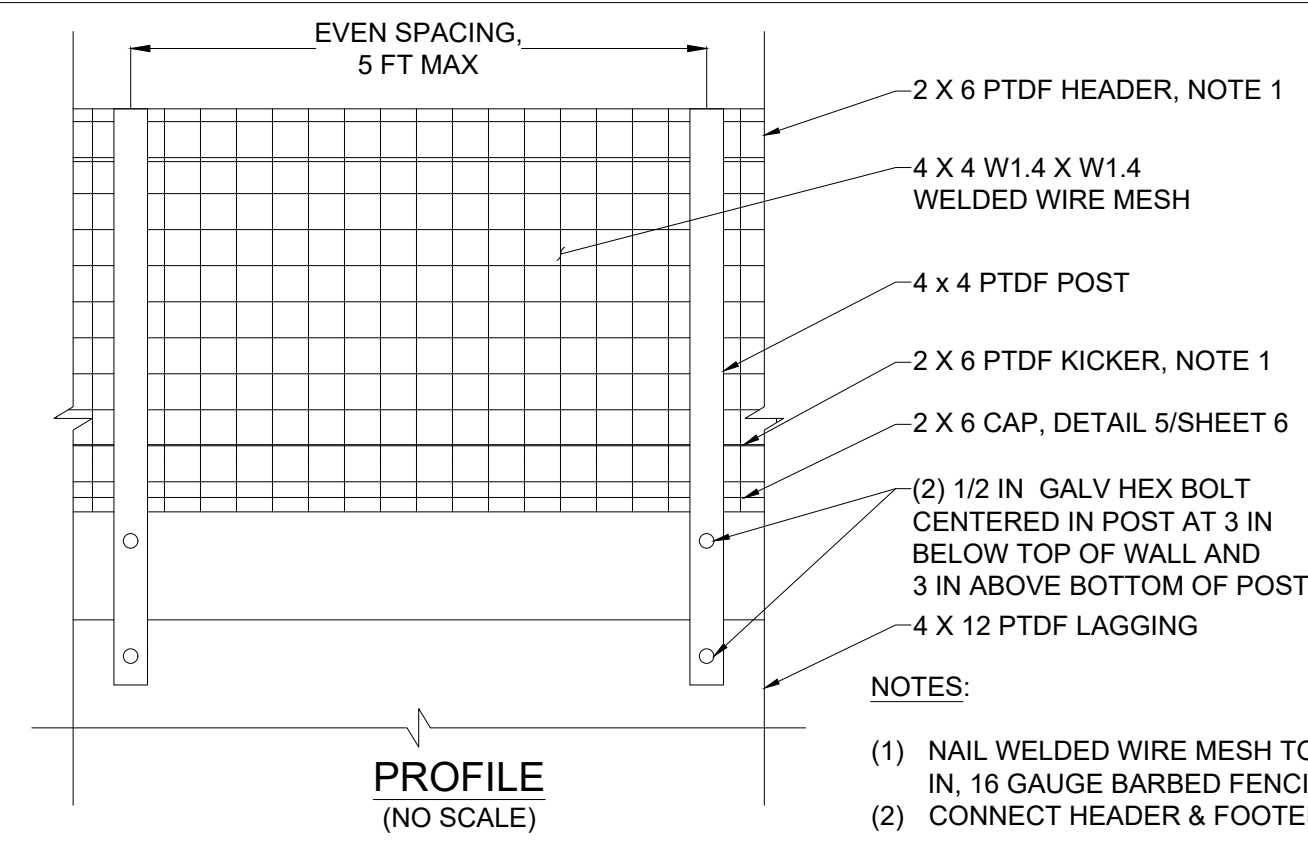
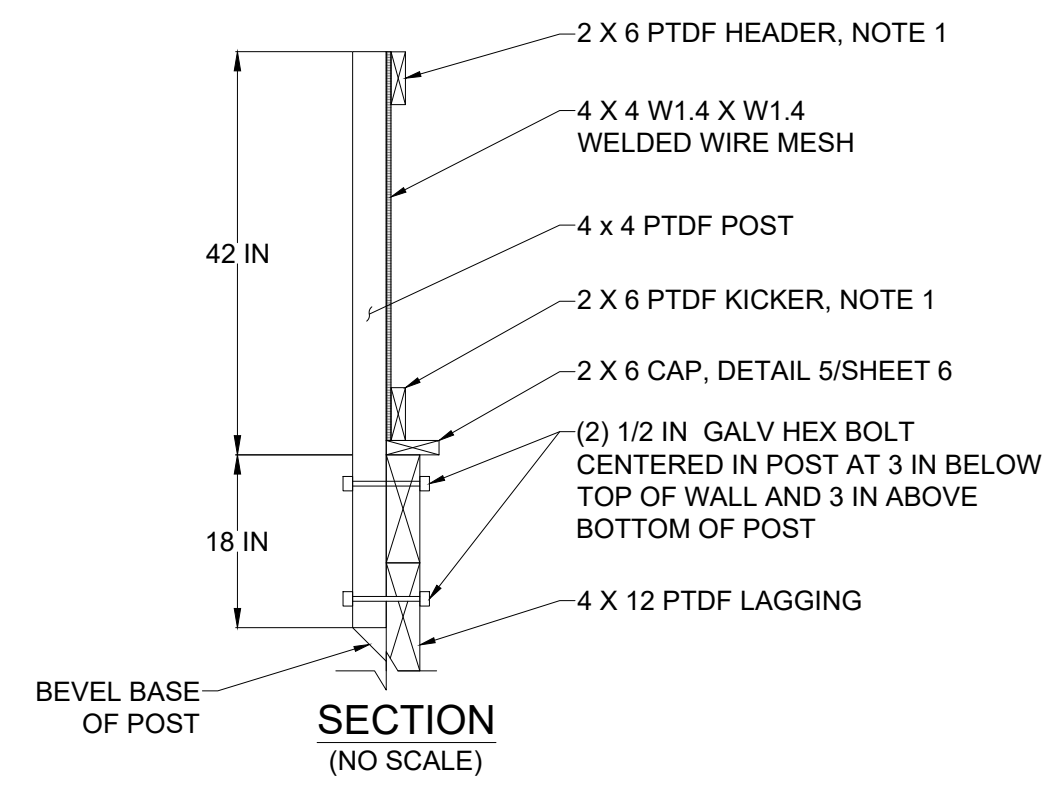
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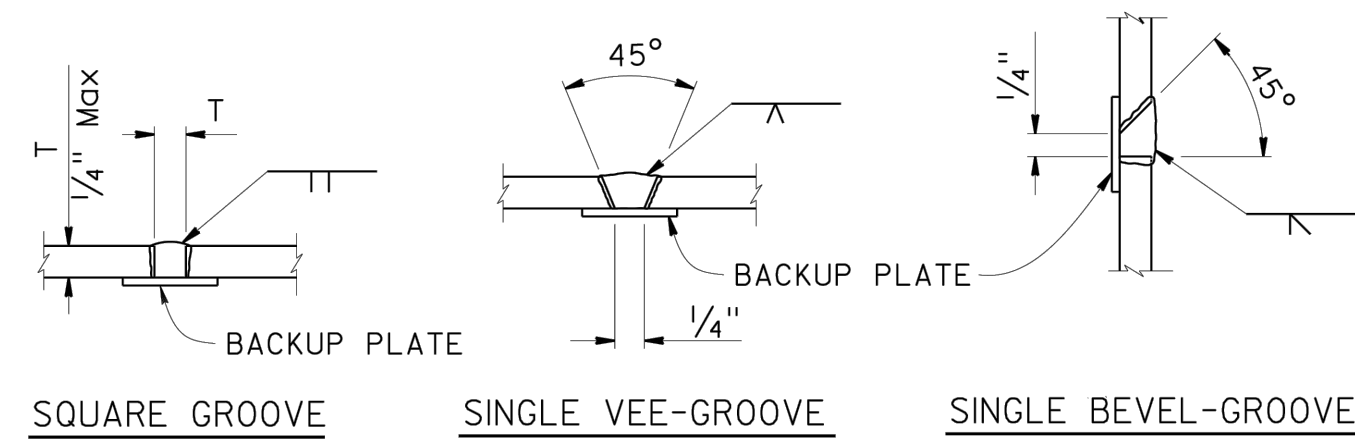
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103 Rocca Drive Stabilization and Retaining Wall Project Fairfax, California	RCA	RCA	SAS

Project No. 201.140



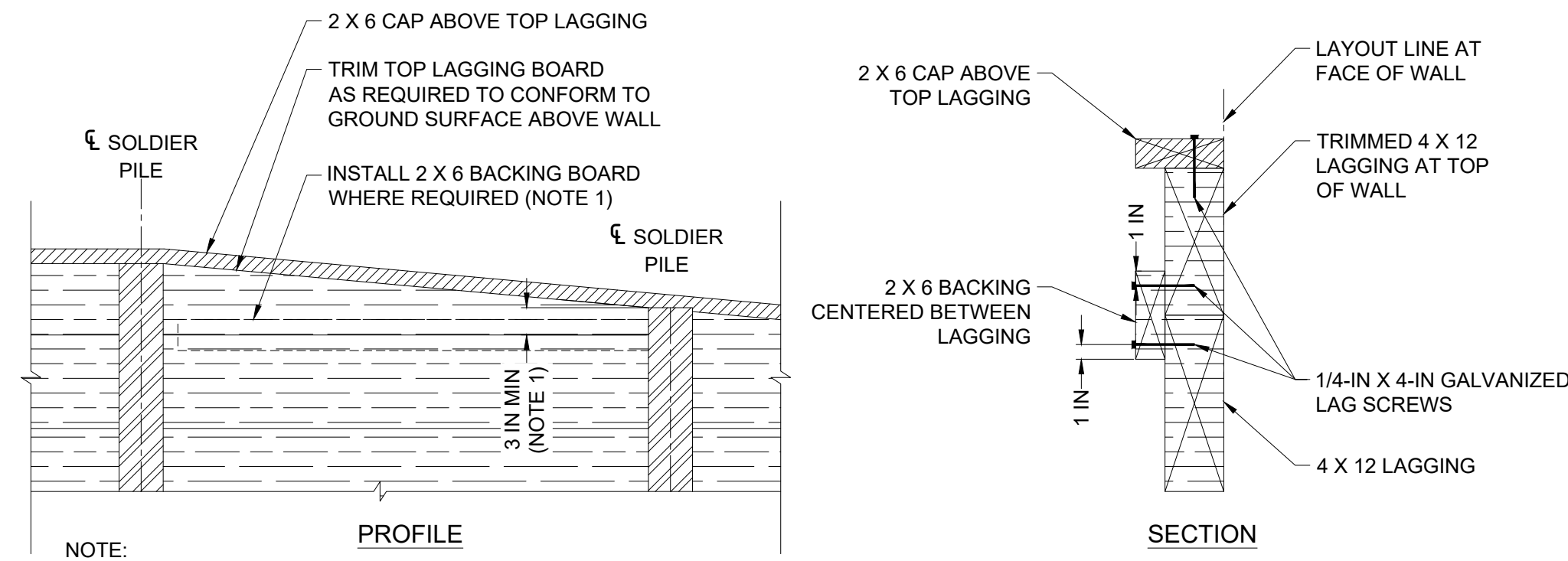


10 RETAINING WALL RAILING (NO SCALE)

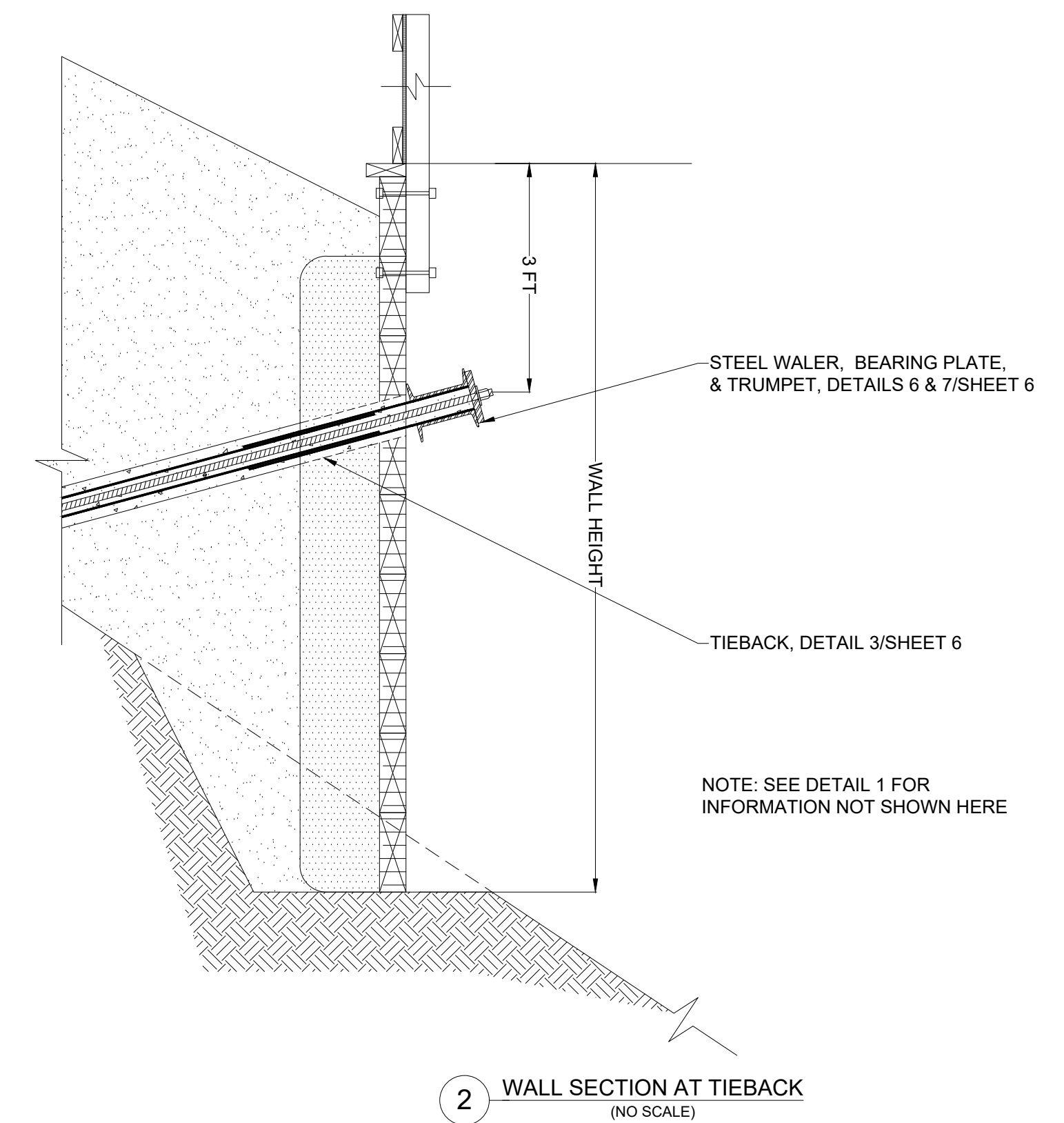


PILE WELDING DETAIL-BUTT JOINTS (NO SCALE)

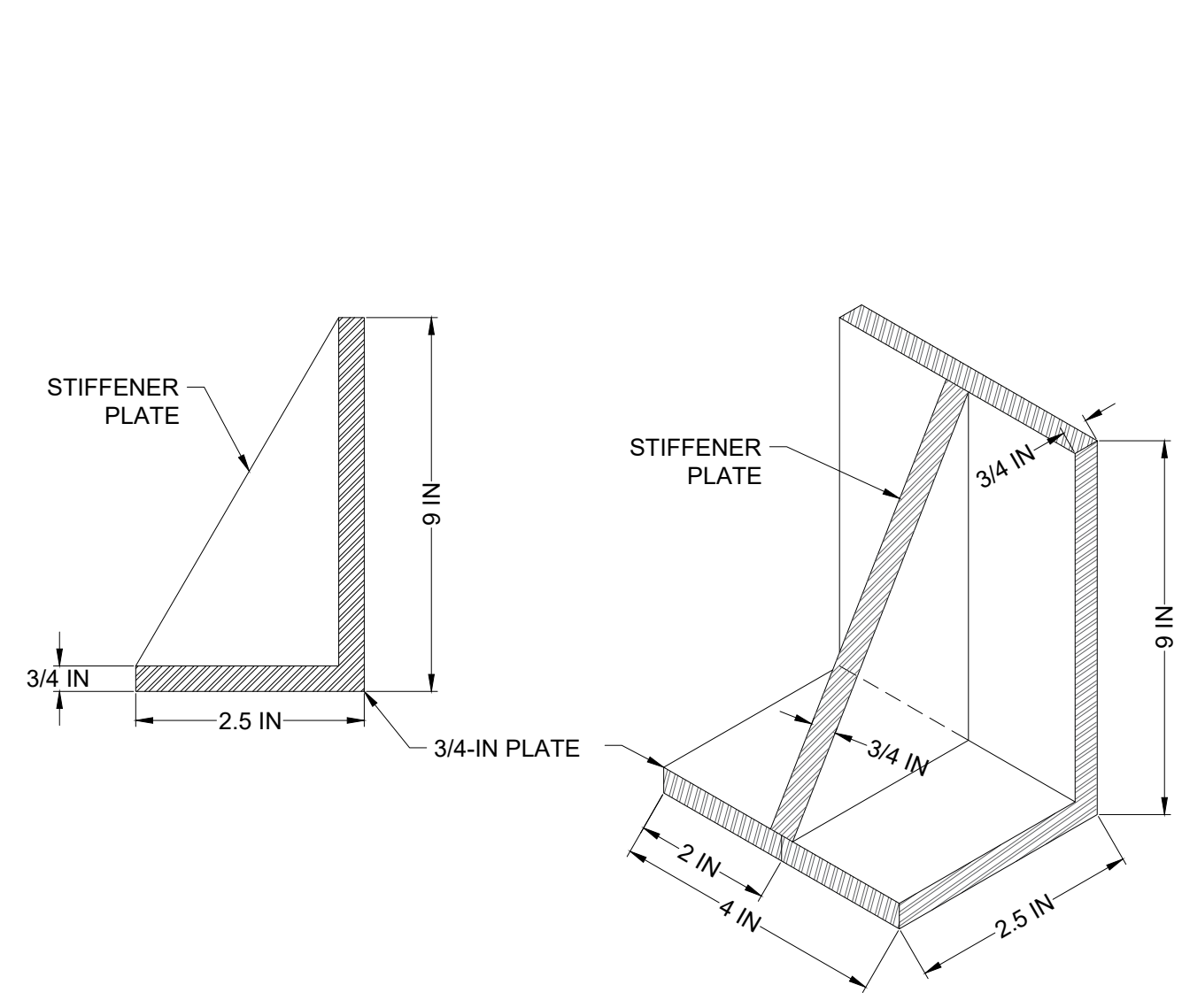
9 SOLDIER PILE SPLICE (NO SCALE)



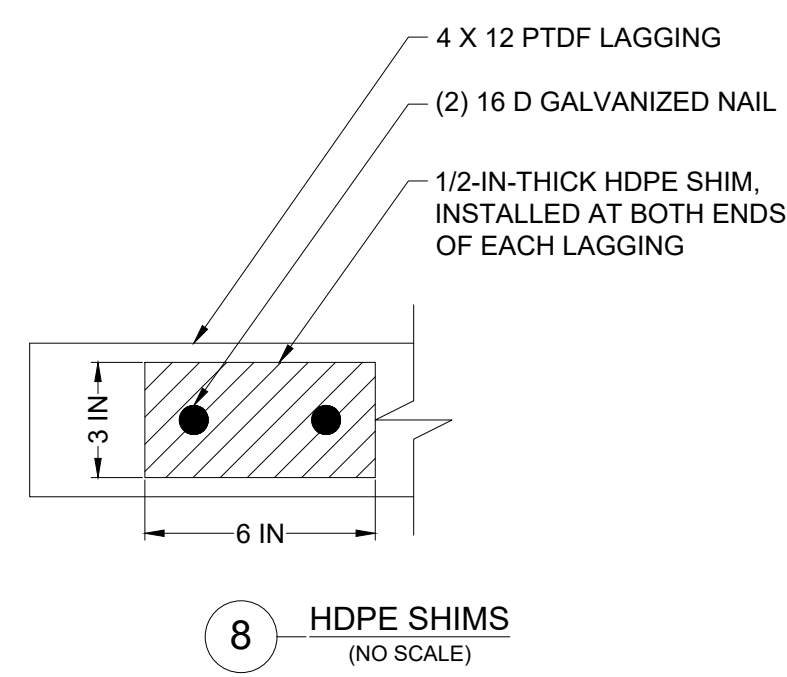
5 RETAINING WALL CAP (NO SCALE)



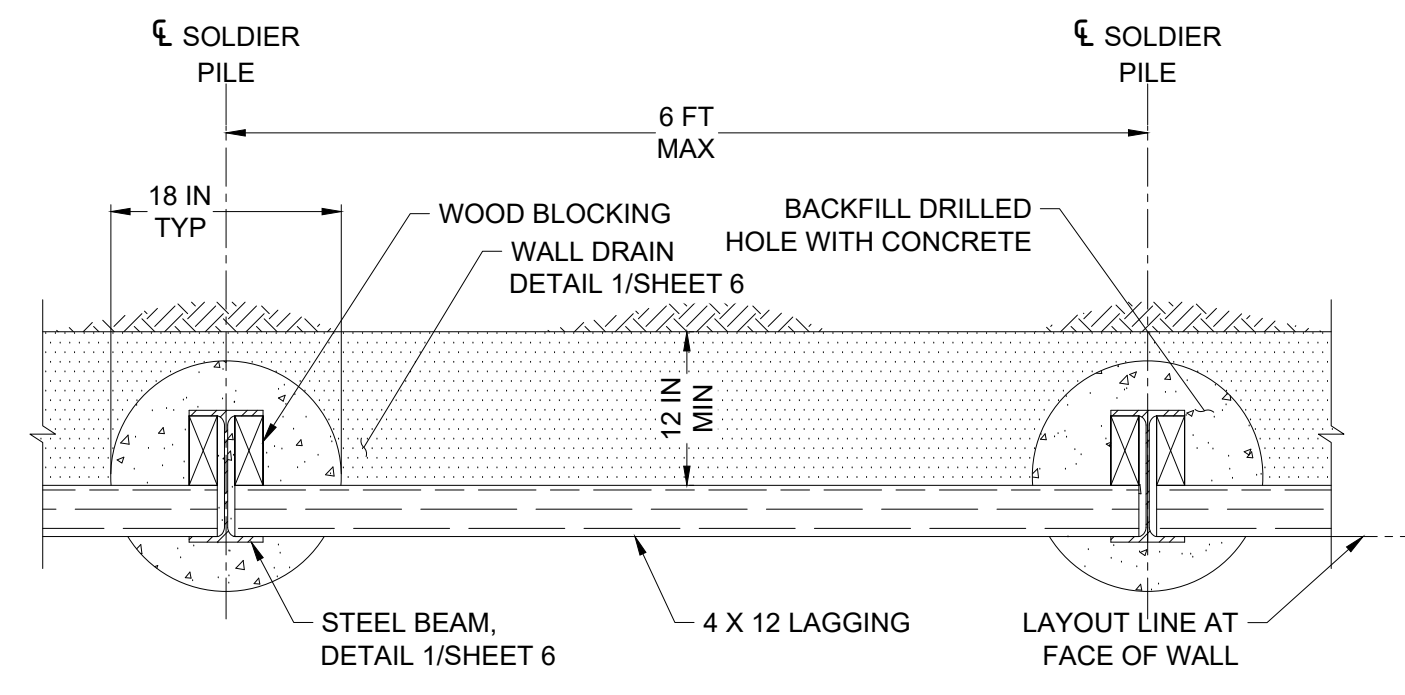
2 WALL SECTION AT TIEBACK (NO SCALE)



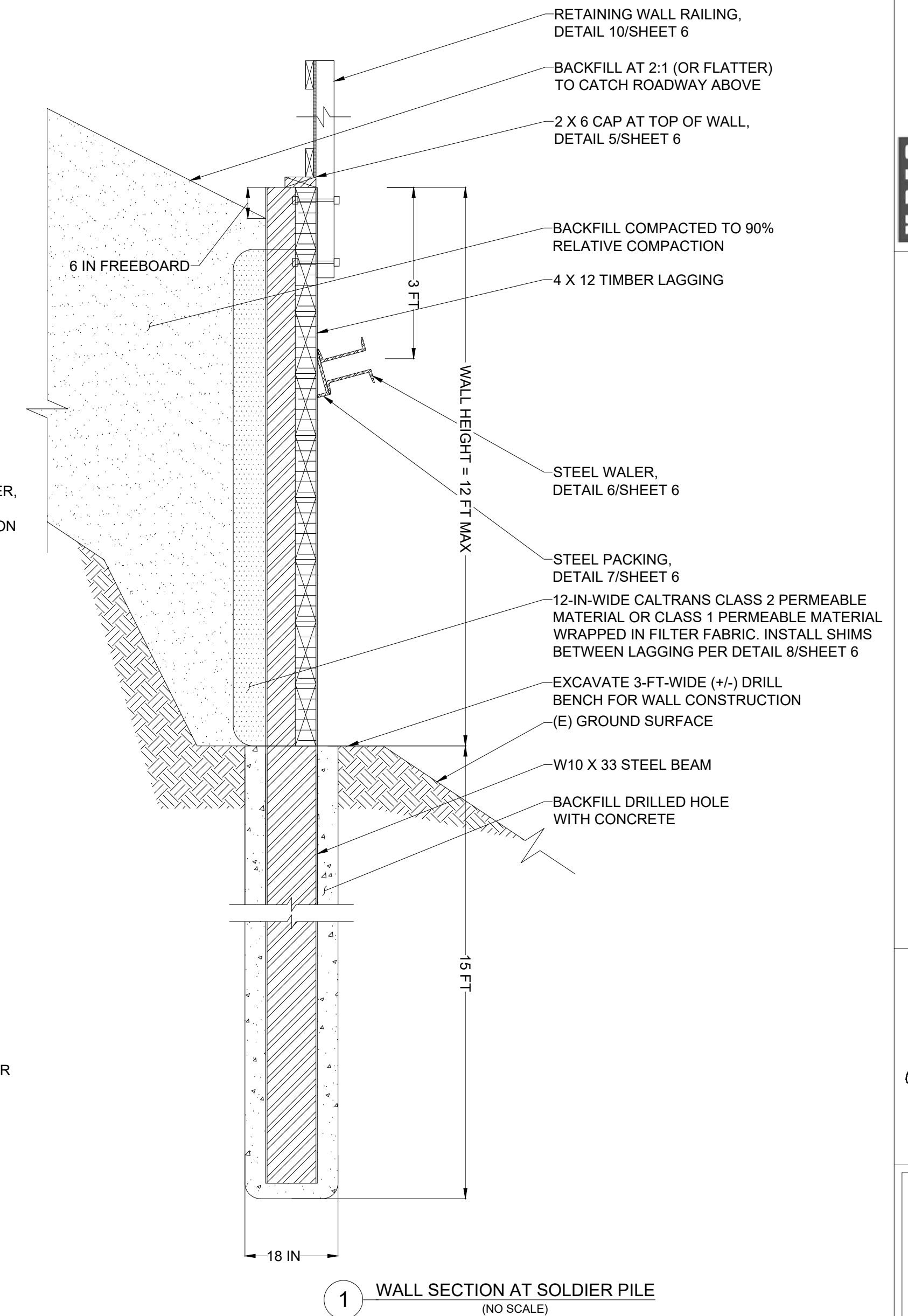
7 STEEL PACKING (NO SCALE)



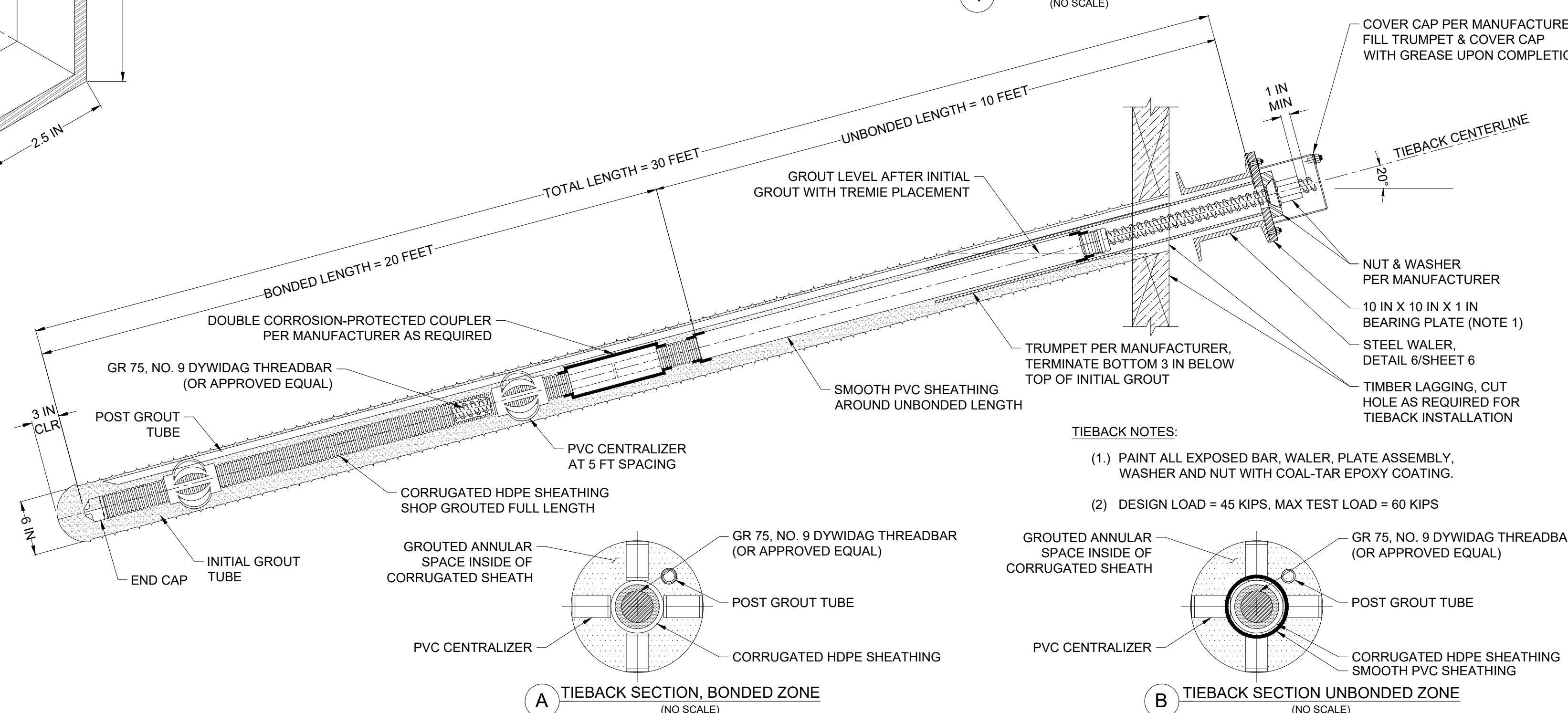
8 HDPE SHIMS (NO SCALE)



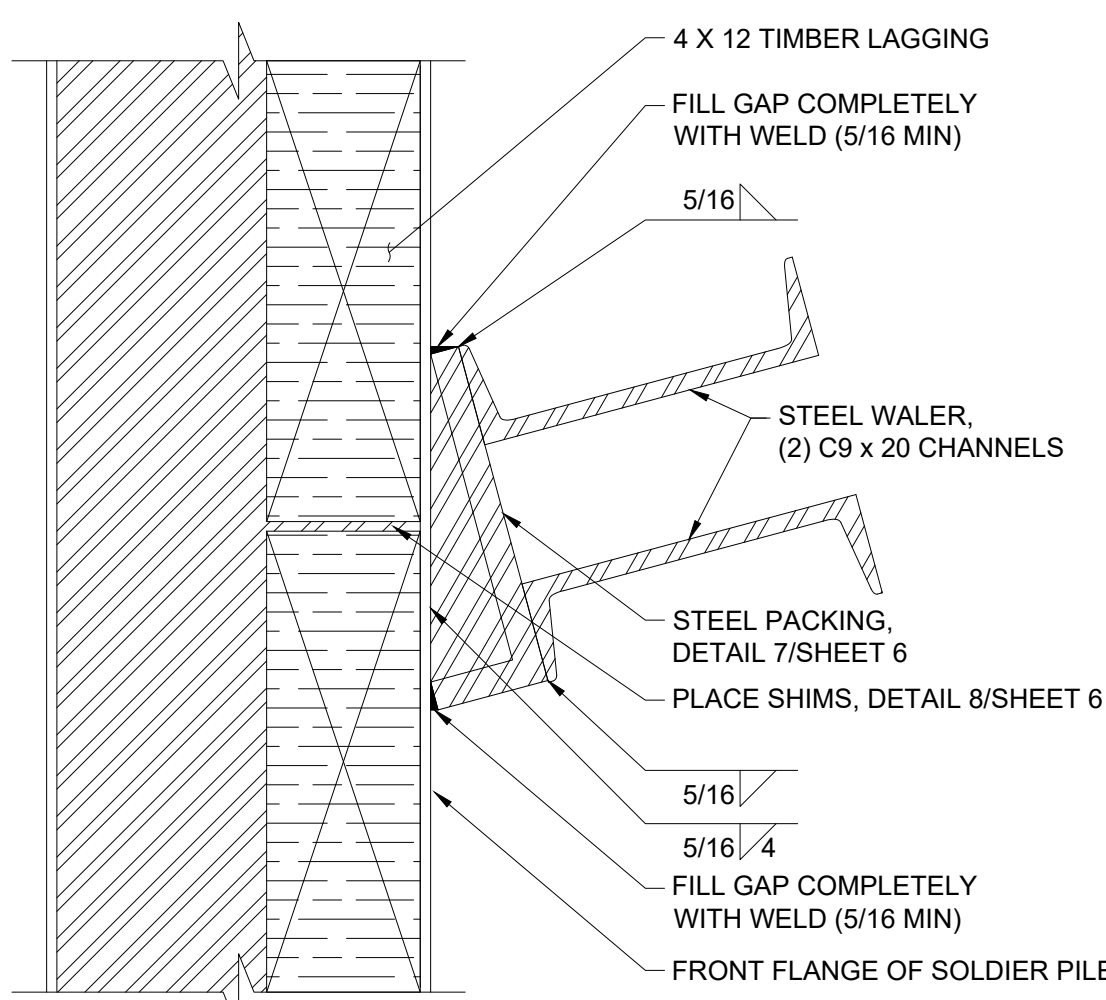
4 SOLDIER PILE PLAN (NO SCALE)



1 WALL SECTION AT SOLDIER PILE (NO SCALE)



3 GROUTED TIEBACK (NO SCALE)

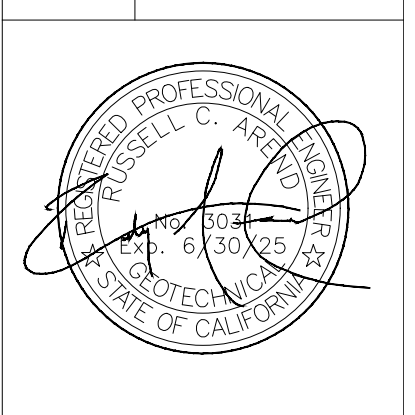


6 STEEL WALER (NO SCALE)

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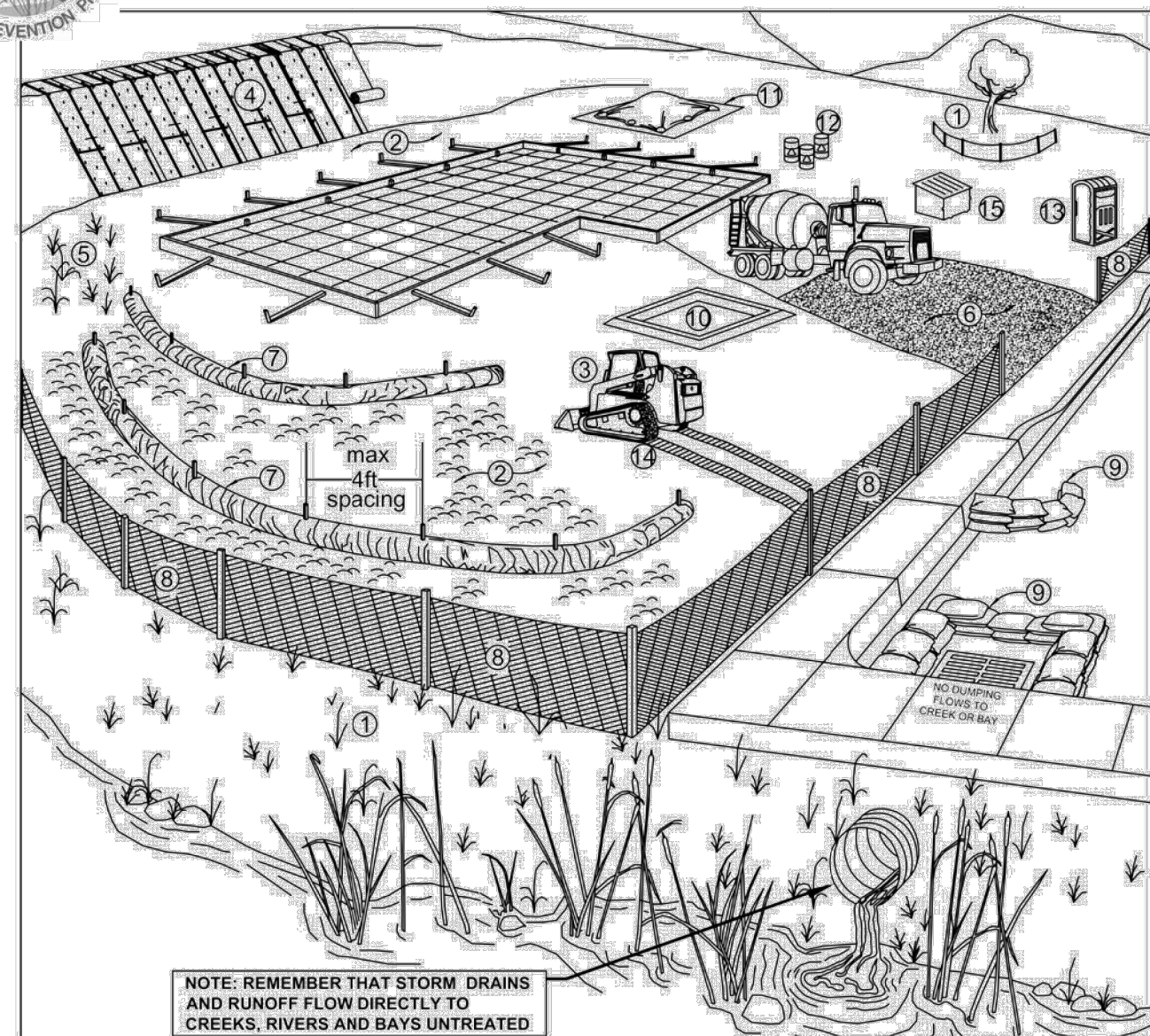
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DETAILS
 103 Rocca Drive Stabilization and Retaining Wall Project
 Fairfax, California
 Project No. 201.140





**Marin County Stormwater Pollution Prevention Program
Minimum Control Measures
For Small Construction Projects**



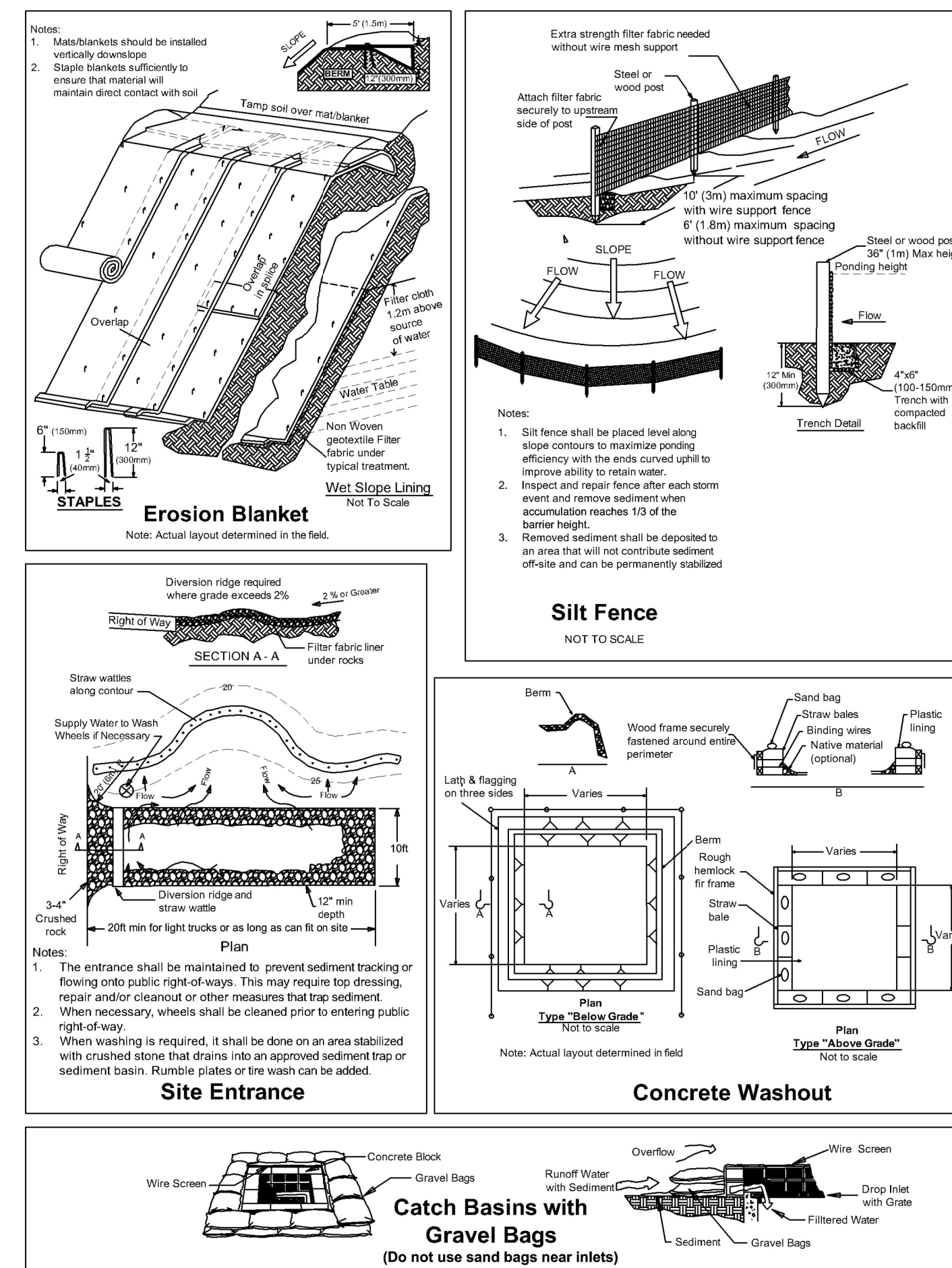
NOTE: REMEMBER THAT STORM DRAINS AND RUNOFF FLOW DIRECTLY TO CREEKS, RIVERS AND BAYS UNTREATED

Erosion Controls	Sediment Controls	Good Housekeeping
NS Scheduling	6. Tracking Controls	10. Concrete Washout
1. Preserve Vegetation & Creek Set Backs	7. Fiber Rolls	11. Stockpile Management
2. Soil Cover	8. Silt Fence	12. Hazardous Material Management
3. Soil Preparation/ Roughening	9. Drain Inlet Protection	13. Sanitary Waste Management
4. Erosion Control Blankets	NS Trench Dewatering	14. Equipment and Vehicle Maintenance
5. Revegetation	15. Litter and Waste Management	

NS=not shown on graphic
Note: Select an effective combination of control measures from each category, Erosion Control, Sediment Control, and Good Housekeeping. Control measures shall be continually implemented and maintained throughout the project until activities are complete, disturbed areas are stabilized with permanent erosion controls, and the local agency has signed off on permits that may have been required for the project. Inspect and maintain the control measures before and after rain events, and as required by the local agency or state permit. More detailed information on the BMPs can be found in the related California Stormwater Quality Association (CASQA) and California Department of Transportation (Caltrans) BMP Factsheets. CASQA factsheets are available by subscription in the California Best Management Practices Handbook Portal: Construction at <http://www.casqa.org>. Caltrans factsheets are available in the Construction Site BMP Manual March 2003 at <http://www.dot.ca.gov/hq/construct/stormwater/manuals.htm>. Visit www.mstopp.org for more information on construction site management and Erosion and Sediment Control Plans.

If you require materials in alternative formats, please contact:
415-473-4381 voice/TTY or disabilityaccess@co.marin.ca.us

Control Measure	General Description
Erosion Control Best Management Practices	
N/A Scheduling	Plan the project and develop a schedule showing each phase of construction. Schedule construction activities to reduce erosion potential, such as scheduling ground disturbing activities during the summer and phasing projects to minimize the amount of area disturbed. For more info see the following factsheets: CASQA: EC-1; or Caltrans: SS-1.
1 Preserve Existing Vegetation and Creek Setbacks	Preserve existing vegetation to the extent possible, especially along creek buffers. Show creek buffers on maps and identify areas to be preserved in the field with temporary fencing. Check with the local Planning and Public Works Departments for specific creek set back requirements. For more info see the following factsheets: CASQA: EC-2; or Caltrans: SS-2.
2 Soil Cover	Cover exposed soil with straw mulch and tackifier (or equivalent). For more info see the following factsheets: CASQA: EC-3, EC-5, EC-6, EC-7, EC-8, EC-14, EC-16; or Caltrans: SS-4, SS-5, SS-6, SS-7, SS-8.
3 Soil Preparation/ Roughening	Soil preparation is essential to vegetation establishment and BMP installation. It includes soil testing and amendments to promote vegetation growth as well as roughening surface soils by mechanical methods (decompacting, scarifying, stair stepping, etc.). For more info see the following factsheets: CASQA: EC-15.
4 Erosion Control Blankets	Install erosion control blankets (or equivalent) on disturbed sites with 3:1 slopes or steeper. Use wildlife-friendly blankets made of biodegradable natural materials. Avoid using blankets made with plastic netting or fixed aperture netting. See: http://www.coastal.ca.gov/nps/Wildlife-Friendly_Products.pdf . For more info see the following factsheets: CASQA: EC-7; or Caltrans: SS-7.
5 Revegetation	Re-vegetate areas of disturbed soil or vegetation as soon as practical. For more info see the following factsheets: CASQA: EC-4; or Caltrans: SS-4.
Sediment Control Best Management Practices	
6 Tracking Controls	Stabilize site entrance to prevent tracking soil offsite. Inspect streets daily and sweep street as needed. Require vehicles and workers to use stabilized entrance. Place crushed rock 12-inches deep over a geotextile, using angular rock between 4 and 6-in. Make the entrance as long as can be accommodated on the site, ideally long enough for 2 revolutions of the maximum tire size (16-20 feet long for most light trucks). Make the entrance wide enough to accommodate the largest vehicle that will access the site, ideally 10 feet wide with sufficient radii for turning in and out of the site. Rumble pads or rumble racks can be used in lieu of or in conjunction with rock entrances. Wheel washes may be needed where space is limited or where the site entrance and sweeping is not effective. For more info see the following factsheets: CASQA: TC-1, TC-3; or Caltrans: TC-2.
7 Fiber Rolls	Use fiber rolls as a perimeter control measure, along contours of slopes, and around soil stockpiles. On slopes space rolls 10 to 20 feet apart (using closer spacing on steeper slopes). Install parallel to contour. If more than one roll is used in a row overlap roll do not abut. J-hook end of roll upslope. Install rolls per either Type 1 (stake rolls into shallow trenches) or Type 2 (stake in front and behind roll and lash with rope). Use wildlife-friendly fiber rolls made of biodegradable natural materials. Avoid using fiber rolls made with plastic netting or fixed aperture netting. See: http://www.coastal.ca.gov/nps/Wildlife-Friendly_Products.pdf . Manufactured linear sediment control or compost socks can be used in lieu of fiber rolls. For more info see the following factsheets: CASQA: SE-5 (Type 1), SE-12, SE-13; or Caltrans: SC-5 (Type 1 and Type 2).
8 Silt Fence	Use silt fence as a perimeter control measure, and around soil stockpiles. Install silt fence along contours. Key silt fence into the soil and stake. Do not use silt fence for concentrated water flows. Install fence at least 3 feet back from the slope to allow for sediment storage. Wire backed fence can be used for extra strength. Avoid installing silt fence on slopes because they are hard to maintain. Manufactured linear sediment control can be used in lieu of silt fences. For more info see the following factsheets: CASQA: SE-1; SE-12; or Caltrans: SC-1.
9 Drain Inlet Protection	Use gravel bags, (or similar product) around drain inlets located both onsite and in gutter as a last line of defense. Bags should be made of a woven fabric resistant to photo-degradation filled with 0.5-1-in washed crushed rock. Do not use sand bags or silt fence fabric for drain inlet protection. For more info see the following factsheets: CASQA: SE-10; or Caltrans: SC-10.
N/A Trench Dewatering	Follow MCSTOPP BMPs for trench dewatering. http://www.marincounty.org/depts/pw/divisions/mcstopp/development/-media/Files/Departments/PW/mcstopp/development/TrenchingSWReo/MCSTOPPPFinal6_03.pdf . For more info see the following factsheets: CASQA: SE-2; or Caltrans: NS-2.
Good Housekeeping Best Management Practices	
10 Concrete Washout	Construct a lined concrete washout site away from storm drains, waterbodies, or other drainages. Ideally, place adjacent to stabilized entrance. Clean as needed and remove at end of project. For more info see the following factsheets: CASQA: WM-5; or Caltrans: WM-8.
11 Stockpile Management	Cover all stockpiles and landscape material and berm properly with fiber rolls or sand bags. Keep behind the site perimeter control and away from waterbodies. For more info see the following factsheets: CASQA: WM-3 or Caltrans: WM-3.
12 Hazardous Material Management	Hazardous materials must be kept in closed containers that are covered and within secondary containment; do not place containers directly on soil. For more info see the following factsheets: CASQA: WM-6; or Caltrans: WM-6.
13 Sanitary Waste Management	Place portable toilets near stabilized site entrance, behind the curb and away from gutters, storm drain inlets, and waterbodies. Tie or stake portable toilets to prevent tipping and equip units with overflow pan/tray (most vendors provide these). For more info see the following factsheets: CASQA: NS-4; or Caltrans: WM-9.
14 Equipment and Vehicle Maintenance	Prevent equipment fluid leaks onto ground by placing drip pans or plastic tarps under equipment. Immediately clean up any spills or drips. For more info see the following factsheets: CASQA: NS-8, NS-9, and NS-10; or Caltrans: NS-8, NS-9, and NS-10.
15 Litter and Waste Management	Designate waste collection areas on site. Use watertight dumpsters and trash cans; inspect for leaks. Cover at the end of each work day and when it is raining or windy. Arrange for regular waste collection. Pick up site litter daily. For more info see the following factsheets: CASQA: WM-5; or Caltrans: WM-5.



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