

STRUCTURAL NOTES

GENERAL

- 1. THESE NOTES APPLY TO ALL DRAWINGS AND GOVERN UNLESS OTHERWISE NOTED OR SPECIFIED. ALL WORK SHALL BE IN CONFORMANCE WITH ALL APPLICABLE CODES AND ALL APPLICABLE LOCAL CODES AND ORDINANCES.
APPLICABLE CODES INCLUDE:
THE 2022 EDITION OF:
CALIFORNIA BUILDING CODE (CBC)
CALIFORNIA RESIDENTIAL CODE (CRC)
CALIFORNIA PLUMBING CODE (CPC)
CALIFORNIA ELECTRICAL CODE
CALIFORNIA MECHANICAL CODE (CMC)
CALIFORNIA GREEN BUILDING STANDARDS CODE
CALIFORNIA ENERGY CODE
CALIFORNIA FIRE CODE (CFC)
2. VERIFY ALL EXISTING CONDITIONS AND PROPOSED DIMENSIONS AT THE SUBJECT SITE. COMPARE STRUCTURAL DRAWINGS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS BEFORE COMMENCING WORK. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING ANY WORK. DO NOT PROCEED WITH CONSTRUCTION IF DISCREPANCIES ARE DETECTED UNTIL THEY ARE RESOLVED. DO NOT SCALE DRAWINGS.
3. UNLESS OTHERWISE SHOWN OR NOTED ALL TYPICAL DETAILS SHALL BE USED WHERE APPLICABLE. ALL DETAILS SHALL BE CONSIDERED TYPICAL AT SIMILAR CONDITIONS.
4. THE CONTRACTOR AND SPECIAL INSPECTOR ARE ENCOURAGED TO CONTACT THE ENGINEER REGARDING ANY QUESTIONS OF INTERPRETATION OF THESE SPECIFICATIONS AND DRAWINGS.
5. SAFETY MEASURES: AT ALL TIMES, THE CONTRACTOR SHALL WORK IN COMPLIANCE WITH CAL/OSHA-TITLE 8 SAFETY REGULATIONS AND SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF PEOPLE AND PROPERTY, AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS.
6. SHORING AND BRACING OF THE SOIL, AND THE EXISTING AND NEW STRUCTURES SHALL BE INSTALLED WHERE NECESSARY TO ADEQUATELY SUPPORT THE IMPOSED VERTICAL AND LATERAL LOADS, AND SHALL BE MAINTAINED UNTIL THE NEW STRUCTURE CAN SUPPORT THE ANTICIPATED LOADS. THE ENGINEER'S JOB SITE VISITS ARE NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE TEMPORARY SHORING AND/OR CONTRACTOR'S SAFETY MEASURES.
7. ANY OPENING, HOLES, CUTS OR DISCONTINUITIES NOT SHOWN ON THE STRUCTURAL DRAWINGS AND EXTENDING INTO OR THROUGH STRUCTURAL ELEMENTS REQUIRE THE PRIOR APPROVAL OF THE ENGINEER.
8. SURFACE GRADES ADJACENT TO THE FOUNDATION SHALL SLOPE AWAY FROM BUILDING AT A MIN OF 5% FOR PERVIOUS SURFACES OR 2% FOR IMPERVIOUS SURFACES FOR MIN 10 FEET.

SPECIAL INSPECTIONS AND CONSTRUCTION OBSERVATIONS

- 1. TESTS AND SPECIAL INSPECTIONS SHALL BE PROVIDED PER REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE CHAPTER 17.
2. THE FOLLOWING ITEMS SHALL BE INSPECTED AND/OR TESTED BY DAC ASSOCIATES INC. OR A TESTING LAB IN ACCORDANCE WITH CHAPTER 17 OF THE 2022 CALIFORNIA BUILDING CODE. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 72 HOURS PRIOR TO TIME OF INSPECTION.
a. FOR CONCRETE WITH STRENGTH EQUAL OR MORE THAN 3,000PSI, PLACEMENT, SAMPLING & TESTING FOR STRENGTH (EXCEPT FOR CONTINUOUS FOOTING & SLAB-ON-GRADE)
b. STRUCTURAL WELDING (ALL CONTINUOUS INSPECTION U.O.N.) (PERIODIC INSPECTION FOR SINGLE PASS FILLET WELD < 3/8", FLOOR AND ROOF DECK, AND WELDED STUDS IN STRUCTURAL DIAPHRAGMS)
3. THE FOLLOWING ITEMS SHALL BE OBSERVED BY THE ENGINEER OF RECORD (DAC ASSOCIATES, INC.). THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO TIME OF OBSERVATION.
a. FOUNDATION SUBGRADES
b. PLACEMENT OF REINFORCING STEEL AND CAST-IN-PLACE ANCHORAGES
c. ROUGH WOOD FRAMING AND FRAMING HARDWARE
d. STRUCTURAL STEEL FRAMING ELEMENTS AND CONNECTIONS
e. SOIL ENGINEER TO OBSERVE AND APPROVE IN WRITING PLACEMENT OF GEOTECHNICAL DRAINAGE
f. SOIL ENGINEER TO OBSERVE AND APPROVE IN WRITING BACKFILL OPERATIONS
4. DRILLED PIERS SUBGRADES SHALL BE OBSERVED AND APPROVED IN WRITING BY THE SOIL ENGINEER (DAC ASSOCIATES, INC.) PRIOR TO PLACEMENT OF FORMS OR REINFORCING STEEL. THE CONTRACTOR SHALL NOTIFY THE SOIL ENGINEER AT LEAST 72 HOURS BEFORE DRILLING IS SCHEDULED TO BEGIN.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AND ENSURING THAT ALL REQUIRED TESTING & INSPECTION IS PERFORMED TO THE SATISFACTION OF THE INSPECTOR.

DESIGN BASIS AND CRITERIA

- 1. DESIGN CONFORMS TO THE 2022 CBC AND ALL APPLICABLE LOCAL ORDINANCES.
2. DESIGN VERTICAL LOAD DL (PSF) LL (PSF)
a. DECK/BALCONY 15 60
3. DESIGN LATERAL LOAD
a. WIND: 92 MPH BASIC WIND SPEED, EXPOSURE C
b. SEISMIC RISK CATEGORY II, SEISMIC DESIGN CATEGORY D,
Ss = 1.64g S1 = 0.61g, Sp1=1.2g, Sp2=1.22g
R=6.5, I=1.0, Cs = Sp2/(R/I), BASE SHEAR, V = Cs*W
4. ALL STRUCTURES SHOWN ON THESE DRAWINGS ARE BASED UPON OUR FIELD MEASUREMENTS, AND THEY SHOULD BE VERIFIED BY THE CONTRACTOR DURING THE CONSTRUCTION.

CONCRETE

- 1. CONCRETE CEMENT SHALL CONFORM TO THE LATEST ASTM C-150 & C-595, AND SHALL BE TYPE II. TYPE I CEMENT MAY BE USED IN AREAS NOT IN CONTACT WITH EARTH. MINIMUM 6 SAKCS/CU.YD. OF CEMENT. FLY ASH SHALL NOT COMPOSE MORE THAN 25% OF THE CEMENTITIOUS MATERIAL. AGGREGATE SHALL BE FREE OF ALKALI REACTIVITY.
2. WATER/CEMENT RATIO SHALL NOT EXCEED 0.45. ACID SOLUBLE CHLORIDE-FREE ADMIXTURES AND PLASTICIZERS MAY BE USED IF APPROVED BY THE TESTING LABORATORY AND ENGINEER. BECAUSE EXCESS WATER REDUCES CONCRETE STRENGTH, ADDING WATER AT THE SITE IS DISCOURAGED AND SHALL NOT EXCEED ONE GALLON PER CUBIC YARD.
3. REINFORCE ALL STRUCTURAL CONCRETE. CONCRETE CONSTRUCTION TOLERANCES SHALL COMPLY WITH ACI 117. INSTALL ALL INSERTS, BOLTS, ANCHORS, AND REINFORCING BARS AND SECURELY TIE PRIOR TO PLACING CONCRETE.

Table with 4 columns: LOCATION, 28 DAYS STRENGTH, SLUMP, AGGREGATE (ASTM C33). Includes rows for DRILLED PIERS (3000 PSI, 6" SLUMP, 3/4" MAX HR) and CONCRETE DESIGN OF CONTINUOUS FOOTING AND SLAB-ON-GRADE.

- 5. CONCRETE SHALL BE PLACED IN A CONTINUOUS OPERATION BETWEEN PREDETERMINED AND PREAPPROVED CONSTRUCTION JOINTS.
6. CONCRETE SHALL BE CONTINUOUSLY CURED FOR 7 DAYS AFTER PLACEMENT IN ANY APPROVED MANNER. FOOTINGS ARE EXCEPTED FROM THIS REQUIREMENT.
7. CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL, DRAWINGS LOCATING AND DETAILING ALL PROPOSED CONSTRUCTION/CONTROL JOINTS IN CONCRETE PRIOR TO COMMENCING WORK. CONSTRUCTION JOINT SHALL BE ROUGHENED, EXPOSING CLEAN AGGREGATE TO 3/4" DEPTH SOLIDLY EMBEDDED IN MORTAR MATRIX, AND SHALL INCLUDE SHEAR KEYS AND DOWELS AS REQUIRED BY THE ENGINEER.
8. THE LOCATION AND PROTECTION OF EXISTING UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF UTILITY PIPES RUN THROUGH, OR WITHIN 24" BELOW, ANY NEW CONCRETE CONSTRUCTION. THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH DESIGN DETAILS UNDER SUCH CIRCUMSTANCES.
9. PATCHING OF CONCRETE: ALL INSERTS HOLES, AND OTHER IMPERFECTIONS ON THE SURFACE OF THE CONCRETE SHALL BE FILLED WITH GROUT, BRUSHED, AND SACKED TO A UNIFORM FINISH. ALL HOLES THROUGH TO THE OUTSIDE OF THE BUILDING MUST BE MADE WATER TIGHT.
10. CHAMFER ALL CORNERS 3/4", EXCEPT TOP EDGES OF SLABS AND BEAMS, UNLESS OTHERWISE NOTED.
11. ALL CONCRETE SHALL BE PLACED ON COMPETENT SUBGRADE, AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.
12. CONCRETE FLOOR SLAB-ON-GRADE SHALL HAVE A MINIMUM THICKNESS OF 4" UNLESS OTHERWISE NOTED.
13. ALL SLAB-ON-GRADE SHALL HAVE CONTROL JOINTS (WEAKENED PLANE JOINT) PER TYPICAL DETAIL TO CREATE APPROXIMATELY 20-FOOT SQUARES, UNLESS OTHERWISE NOTED ON PLANS.

REINFORCING STEEL

- 1. ALL REINFORCING STEEL BARS SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR DEFORMED BILLET-STEEL CONCRETE REINFORCEMENT ASTM A615 GRADE 60 KSI EXCEPT FOR GRADE 40 KSI FOR #3 STIRRUP/TIE, UNLESS OTHERWISE NOTED.
2. LAP SLICE ALL BARS A MINIMUM OF 36 BAR DIA OR 18" MIN, (UNLESS OTHERWISE NOTED) LAP HORIZ REBAR AT CORNERS AND INTERSECTIONS IN FOOTINGS AND WALLS WITH CORNER BARS OR OTHER METHODS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER.
3. WIRE MESH SHALL CONFORM WITH ASTM A185-64.
4. UNLESS OTHERWISE NOTED, MAINTAIN COVERAGE TO FACE OF REINFORCING BARS AS FOLLOWS:
LOCATION MINIMUM CLEAR COVER
CAST AGAINST EARTH: 3"
EXPOSED TO EARTH OR WEATHER: 2" (1 1/2" FOR #5 & SMALLER)
EXTERIOR SURFACES FOR BEAMS & COLUMN 1 1/2"

FOUNDATIONS AND RETAINING WALLS

- 1. STRUCTURAL DESIGN OF FOUNDATION IS BASED ON OUR VISUAL OBSERVATION OF SITE SUBSURFACE CONDITION AND THEY SHOULD BE VERIFIED AND/OR MODIFIED BY DAC ASSOCIATES, INC., DURING THE CONSTRUCTION.
2. DESIGN CRITERIA
a. ASSUMED DEPTH TO COMPETENT SUBGRADE = 2.0 FEET
b. ALLOWABLE BEARING PRESSURE (DL+LL) = 1500 PSF FOR FOOTING
c. SKIN FRICTION BETWEEN CONCRETE PIER AND COMPETENT BEDROCK = 800 PSF IN COMPRESSION, 600 PSF IN TENSION
d. COEFFICIENT OF FRICTION = 0.3
e. CREEP PRESSURE = 65 PCF FOR 2 FEET (EQUIVALENT FLUID PRESSURE)
f. ALLOWABLE PASSIVE PRESSURE IN COMPETENT SUBGRADE = 200 PCF (EQUIVALENT FLUID PRESSURE) APPLIED AGAINST 2 PIER DIAMETERS OR AGAINST VERTICAL FACE OF FOOTINGS
g. ACTIVE SOIL PRESSURE = 45 PCF FOR LEVEL BACKFILL (ADD 1 PCF FOR EVERY 2 DEGREES OF SLOPE)
3. ALL FOUNDATION AND RETAINING WALL WORK SHALL COMPLY WITH 2022 CBC CHAPTER 18.
4. WATERPROOF MEMBRANE SHALL BE 10MIL MIN THICK; 2" MIN OVERLAP & SECURED W/ TAPE AT ALL EDGES PER MANUFACTURER'S RECOMMENDATION.
5. CONTRACTOR SHALL USE APPROVED DEVICES AND/OR SERVICES TO SCAN FOR UNDERGROUND UTILITIES PRIOR TO START OF EXCAVATION OR GRADING.
6. CONTRACTOR SHALL AVOID EXCAVATION BELOW BOTTOM OF FOOTING AND REMOVING ANY SOIL WHICH MAY SERVE FOR LATERAL RESISTANCE FOR ADJACENT FOOTINGS, UNLESS OTHERWISE NOTED.
7. EXTERIOR FOOTINGS TO BE A MINIMUM OF 18" BELOW FINISHED GRADE (UNLESS OTHERWISE NOTED) BEARING ON NATIVE UNDISTURBED COMPETENT SOIL OR ENGINEERED COMPACTED FILLS WITH 95% RELATIVE COMPACTION (ASTM D1557), APPROVED BY SOIL ENGINEER IN WRITING.
8. DO NOT ALLOW WATER TO STAND IN EXCAVATED HOLES. IF BOTTOMS OF HOLE BECOME SOFTENED DUE TO RAIN OR OTHER WATER BEFORE CONCRETE IS CAST, EXCAVATE SOFTENED MATERIAL AND REPLACE WITH PROPERLY COMPACTED BACKFILL OR CONCRETE AT NO COST TO THE OWNER.

EQUIPMENT, PIPE, AND DUCT SUPPORT

- 1. THE CONTRACTOR IS RESPONSIBLE FOR THE VERTICAL AND LATERAL SUPPORT OF ALL HVAC AND OTHER EQUIPMENT. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE SUPPORT OF ALL HVAC EQUIPMENT OVER 400 POUNDS, STAMPED AND SIGNED BY A CALIFORNIA-LICENSED CIVIL OR STRUCTURAL ENGINEER. EQUIPMENT AND ANCHORAGE SHALL BE DESIGNED TO RESIST LATERAL SEISMIC FORCES PER 2022 CBC SECTION 1632.2. LATERAL SEISMIC DESIGN FORCES ON ALL LIFE SAFETY EQUIPMENT SHALL BE INCREASED BY A FACTOR OF 1.50.
2. CONDUITS, PIPES AND DUCTS SHALL BE BRACED TO RESIST SEISMIC HAZARD B PER THE CURRENT EDITION OF "SMACNA SEISMIC RESTRAINT MANUAL: GUIDELINES FOR MECHANICAL SYSTEMS" EXCEPT THAT THE COMPONENTS OF LIFE SAFETY SYSTEMS SHALL BE BRACED TO RESIST SEISMIC HAZARD LEVEL A.

ROUGH CARPENTRY

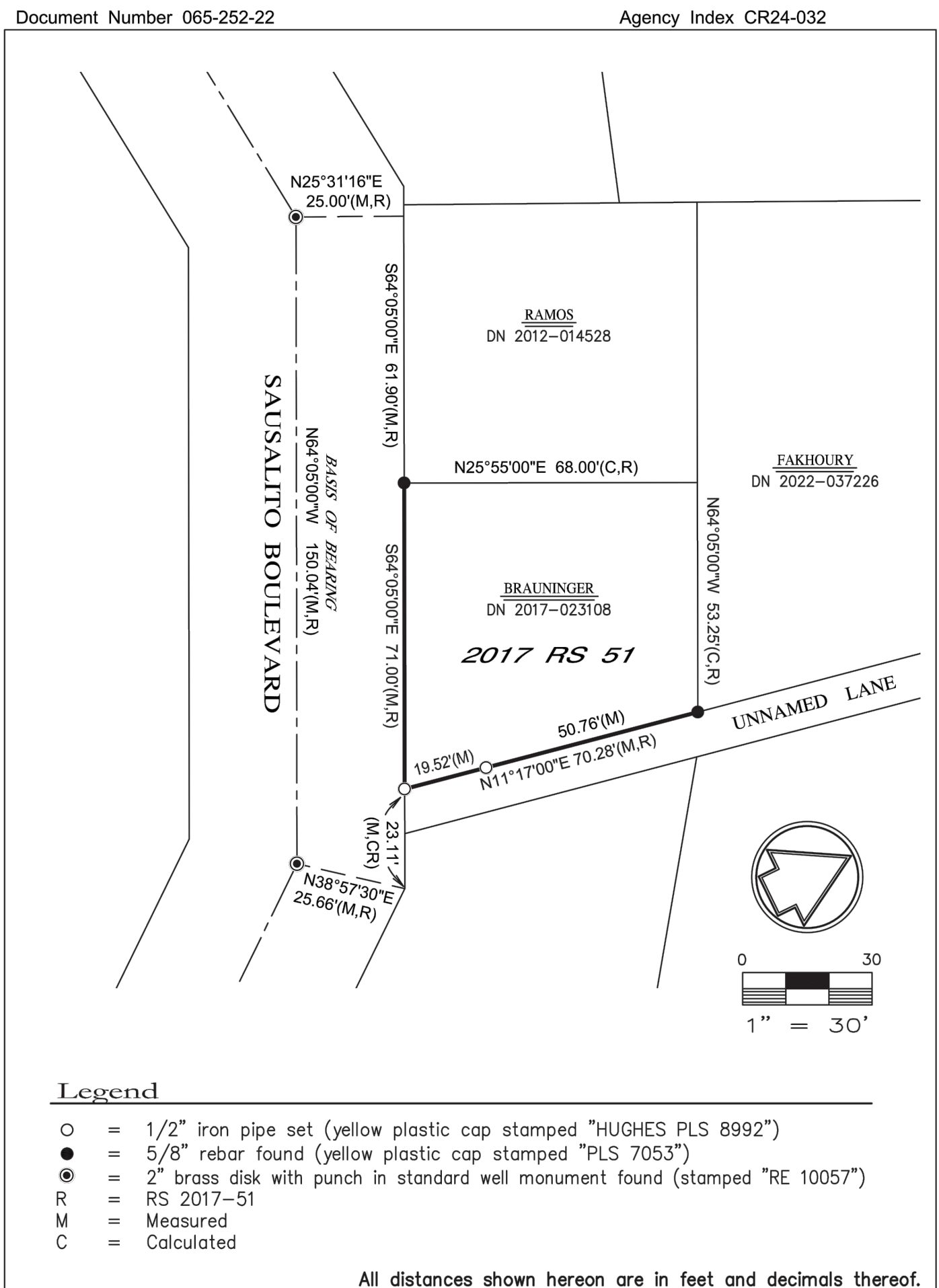
- 1. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, NAILING SHALL CONFORM TO THE 2022 CBC, TABLE 2306.9.1 UNLESS OTHERWISE NOTED ON THESE DRAWINGS, ALL NAILS SHALL BE COMMON NAILS (AS OPPOSED TO BOX, SINKER OR COOLER NAILS).
2. SILLS ON CONCRETE SHALL BE PRESSURE TREATED DOUGLAS FIR. SILLS SHALL BE FASTENED TO THE CONCRETE WITH A MINIMUM OF TWO FASTENERS PER PIECE, SPACED NOT MORE THAN 4 FEET APART AND A FASTENER LOCATED NOT MORE THAN 12 INCHES OR SEVEN BOLT DIAMETERS AND NOT LESS THAN 5 INCHES FROM EACH END OF PIECE. USE HOT-DIPPED GALVANIZED FASTENERS WITH PRESSURE TREATED WOOD.
3. FASTEN ALL SILL PLATES AT NON-STRUCTURAL WALLS TO NON-PRESTRESSED CONCRETE SLABS WITH 0.177" DIAMETER POWER DRIVEN FASTENERS AT 16" ON CENTERS WITH 1 1/2" MINIMUM CONCRETE EMBEDMENT, UNLESS OTHERWISE NOTED ON THE DRAWINGS. FASTEN ALL SILL PLATES AT NON-STRUCTURAL WALLS TO PRESTRESSED CONCRETE SLABS WITH 0.145" DIAMETER POWER EMBEDMENT DRIVEN FASTENERS AT 16" ON CENTERS, WITH 3/4" MINIMUM AND 1" MAXIMUM CONCRETE EMBEDMENT, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
4. ALL ANCHOR BOLTS (AB) SHALL BE ASTM A307. ALL ANCHOR BOLTS SHALL HAVE PLATE WASHERS, MINIMUM 3"x3" SQUARE BY 0.229" THICK. ANCHOR BOLTS MUST BE SECURELY WIRED IN PLACE AND ALIGNED IN A TRUE STRAIGHT LINE PRIOR TO THE CONCRETE PLACEMENT. ANCHOR BOLTS AND OTHER EMBEDDED STRUCTURAL CONNECTORS MAY NOT BE "WET SET".

Residential Site Data Table

The following table must be placed on the cover sheet of the plan set for all residential projects. If something is inapplicable to your project, please indicate "Not Applicable" or "N/A".

Table with columns: Existing, Added Square Footage, Proposed, Total With Addition, Permitted by Zoning. Rows include ZONING (R-2-2.5), PARCEL SIZE (4224 SF), AVERAGE SLOPE (49%), NUMBER OF UNITS (2), FLOOR AREA (2152 SF), etc.

NO UTILITY IMPROVEMENTS PER SAUSALITO MUNICIPAL CODE SECTION 18.08.020.



"CORNER RECORD" PREPARED BY JOSEPH L. HUGHES ON APRIL 10, 2024

PROJECT DESCRIPTION

IN FRONT YARD OF AN (E) 2-FAMILY RESIDENCE, REMOVE (E) FAILING WOOD RETAINING WALL.
CONSTRUCT NEW SITE RETAINING WALL AND DRAINAGE. CONSTRUCT (N) EXTERIOR STAIRS. REPLACE (E) WINDOW WITH (N) DOOR TO (N) DECK.

PROJECT DIRECTORY

OWNER: WILLIAM PEARSON
390 SAUSALITO BLVD, SAUSALITO, CA
ENGINEER: DAC ASSOCIATES, INC.
7 MOUNT LASSEN DRIVE SUITE A-129 SAN RAFAEL, CA 94903
IN RESPONSIBLE CHARGE) DARIUS@DACASSOCIATES.NET 415-499-1919

SHEET INDEX

- S-1.0 STRUCTURAL GENERAL NOTES & COVER
S-1.1 STRUCTURAL TYPICAL DETAILS
S-2.0 RETAINING WALL PLAN AND STRUCTURAL DETAILS
S-2.1 GRADING PLAN & STRUCTURAL DETAILS
S-3.0 SITE PLAN
S-4.0 EROSION CONTROL & WINTERIZATION PLAN
S-5.0 DRAINAGE MAP & POLLUTION PREVENTION NOTES

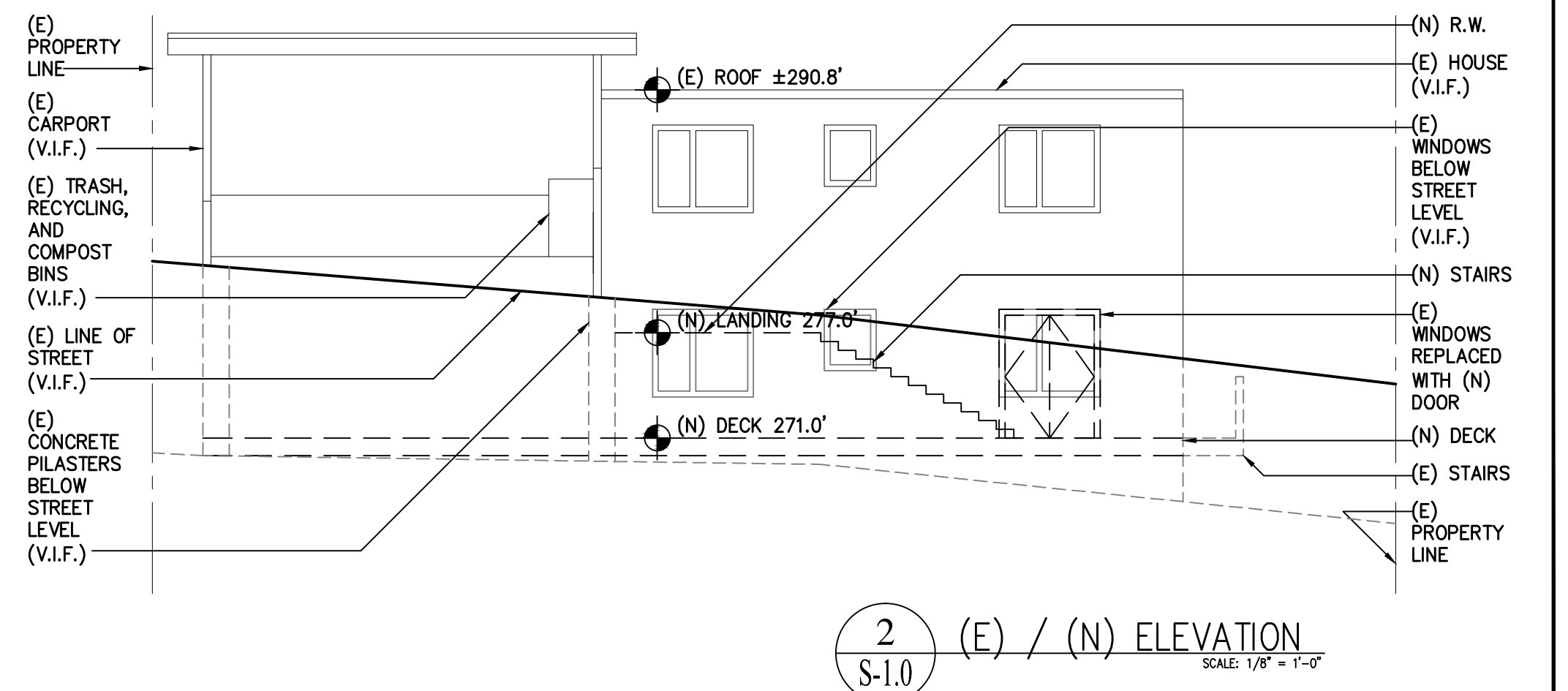
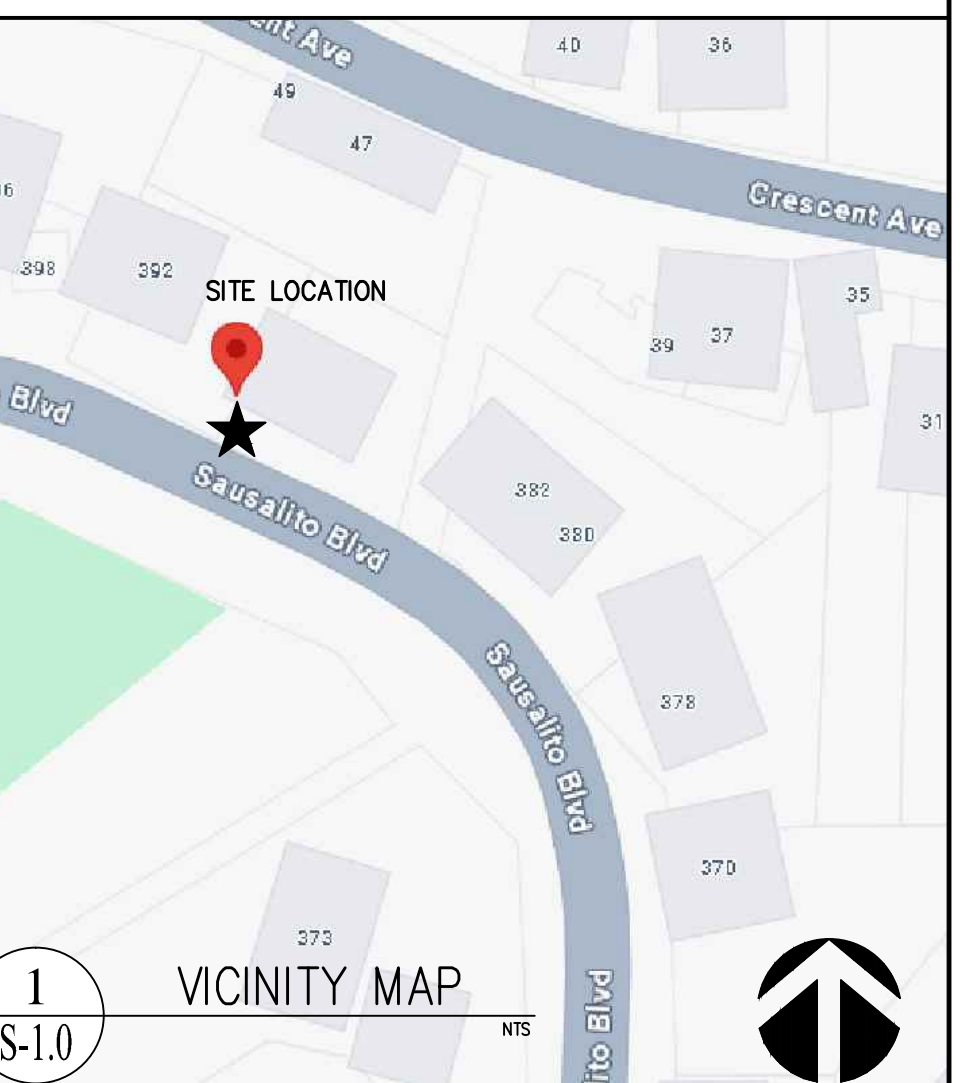


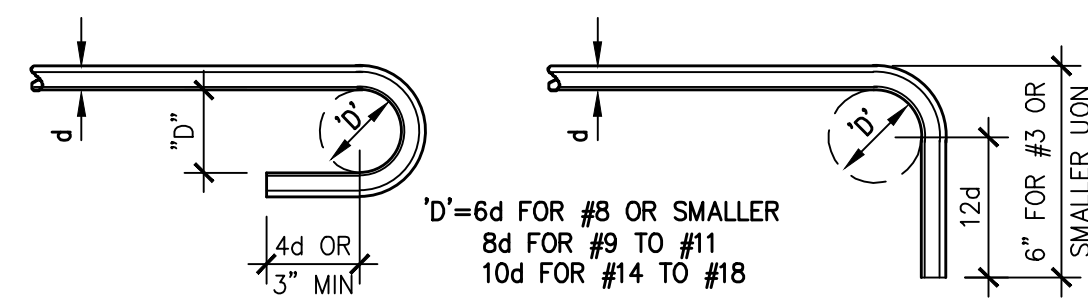
Table with columns: REVISIONS, BY. Includes a row for revision 1.

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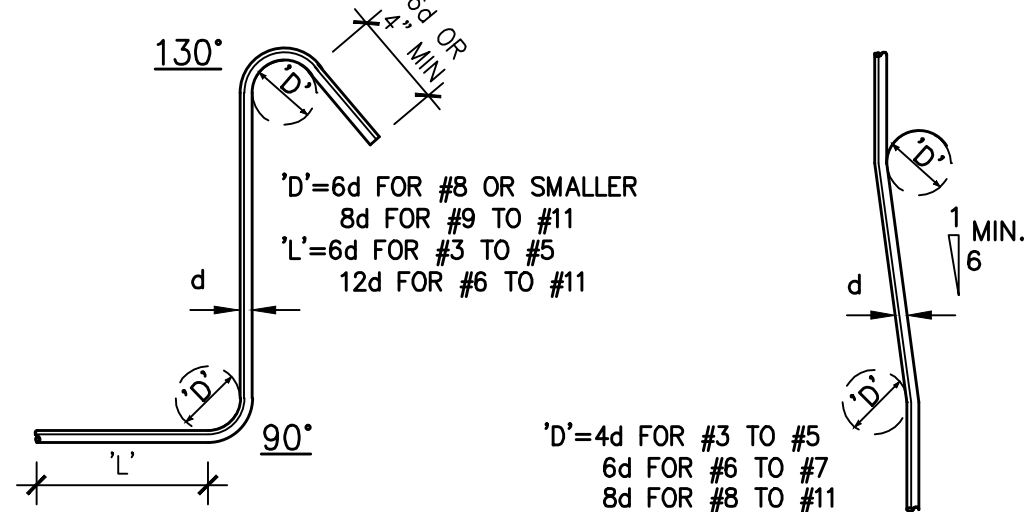
PEARSON RESIDENCE
SITE WORK
390 SAUSALITO BLVD
SAUSALITO, CA 94965
APN: 065-252-22

STRUCTURAL GENERAL NOTES
DATE: 2024-12-13
SCALE: AS SHOWN
DRAWN BY: WT
JOB NUMBER: 1566-31235
SHEET 1 OF 7 SHEET
S-1.0



STANDARD 180° HOOK

STANDARD 90° HOOK

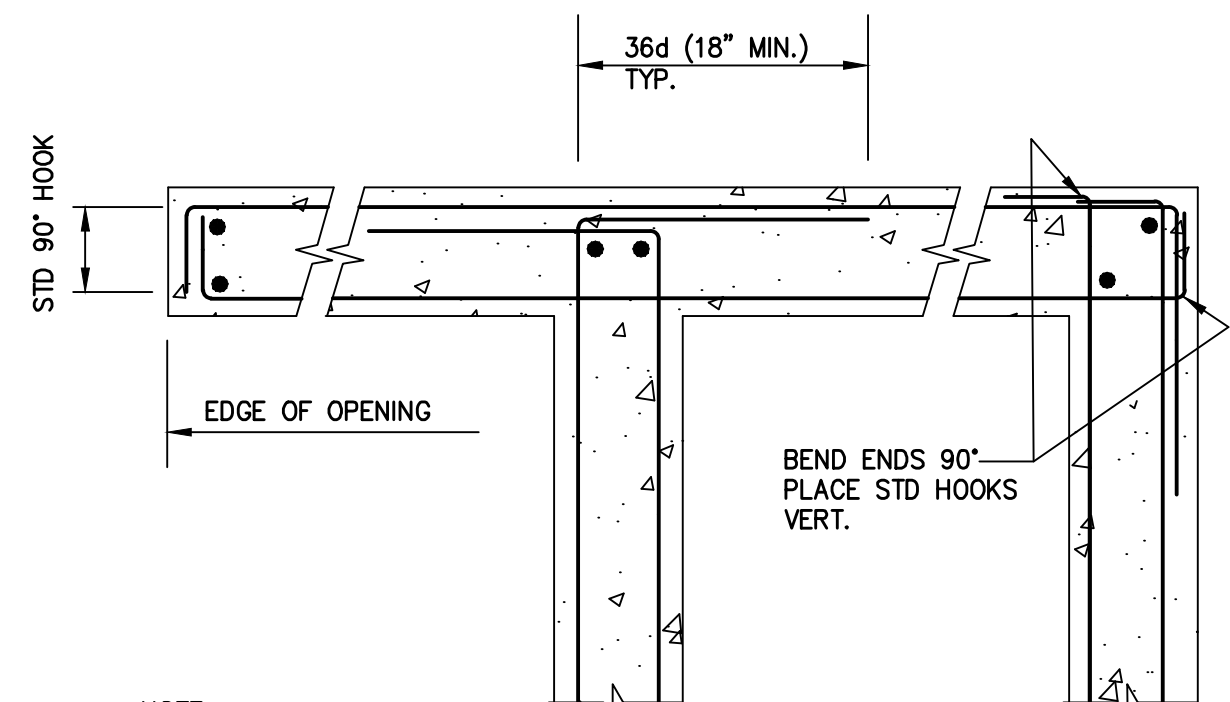


TIES AND STIRRUPS

OFFSET

- NOTE:
 1. ALL BENDS SHALL BE MADE COLD.
 2. #14 AND #18 BARS SHALL BE BEND TESTED LAB APPROVED PRIOR TO BENDING.
 3. DO NOT BEND BARS ALREADY CAST IN CONCRETE UNLESS OTHERWISE NOTED.

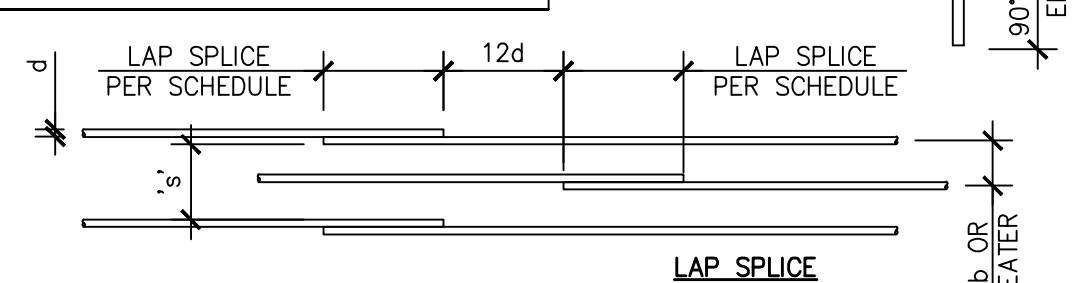
1 S-1.1 STANDARD REINFORCEMENT HOOKS & BENDS NTS



- NOTE:
 WHERE SINGLE LAYER OF REINFORCING OCCURS BEND STEEL AS SHOWN FOR OUTSIDE BARS.

2 S-1.1 (TYP) REIN. HORIZONTAL BEND NTS

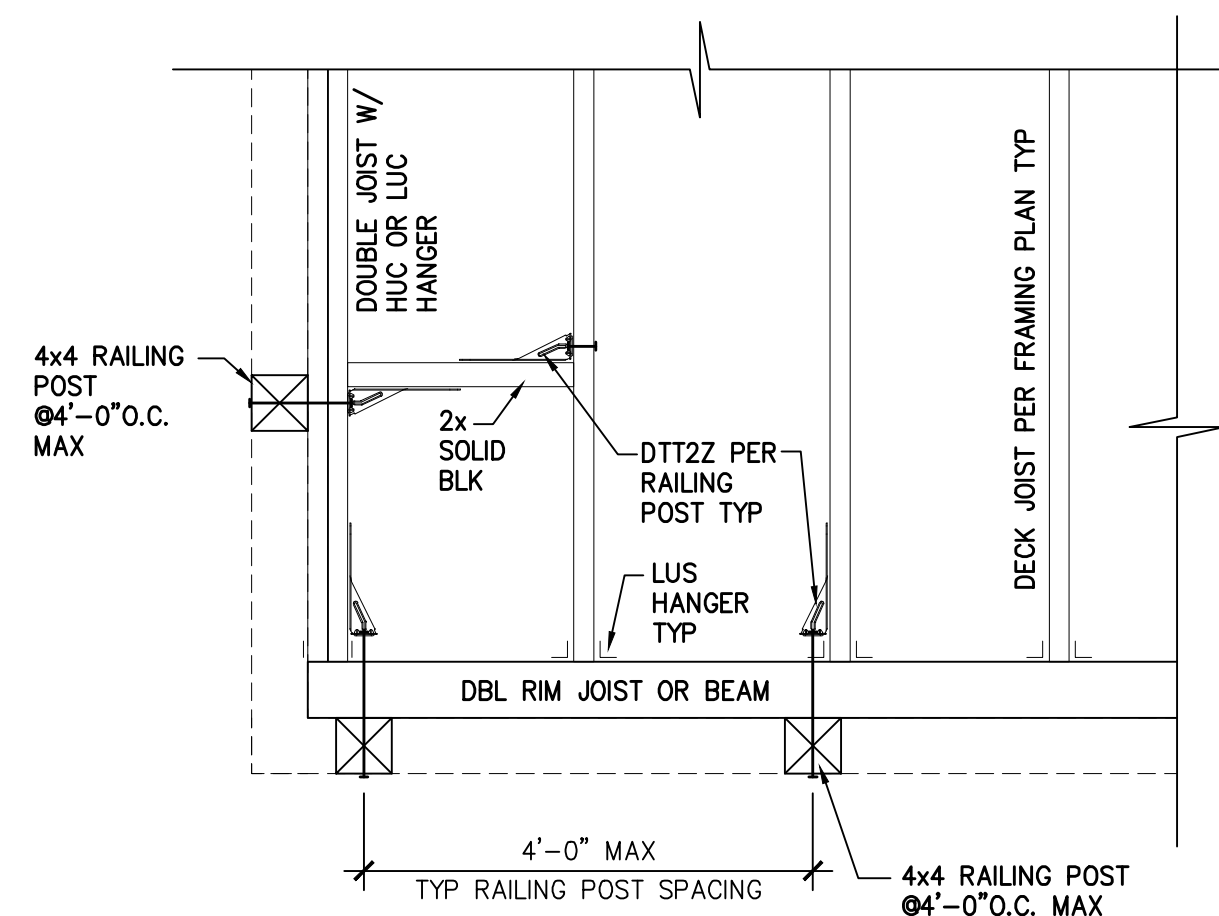
f _c CONCRETE STRENGTH	REBAR SIZE										
	GRADE 40					GRADE 60					
	#3	#4	#5	#6	#7	#8	#9	#10	#11		
3000	8	10	11	14	17	20	22	25	28	31	
	90° HOOK EMBED (INCHES)										
	LAP SPlice LENGTH (INCHES)										
3000	12	15	22	28	33	48	55	62	70	78	



REINFORCEMENT LAP SPlice NOTE:

1. STAGGERED LAPS BETWEEN ADJACENT BAR SPlice.
 2. MULTIPLY ALL LENGTH BY 1.5 IF EITHER OF THE FOLLOWING ARE TRUE:
 A. CLEAR COVER IS LESS THAN 1 BAR DIAMETER (d)
 B. CLEAR SPACING 's' OF BARS IS LESS THAN 2d
 3. NONCLEAR SPlice WITH MIN 3d SPACING SHALL BE USED FOR SHOTCRETE.

3 S-1.1 (TYP) REINFORCEMENT LAP SPlice & HOOK EMBED NTS



8 S-1.1 (TYP) DECK JOIST AND RAILING POST PLAN NTS

ABBREVIATIONS

&	AND	HR	HARDROCK
L	ANGLE	HT	HEIGHT
⊙	AT	ID	INSIDE DIAMETER
ACI	AMERICAN CONCRETE INSTITUTE	INT	INTERIOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	JT	JOINT
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS	JST	JOIST
AWS	AMERICAN WELDING SOCIETY	LG	LONG
AB	ANCHOR BOLT	LS	LOW SHRINKAGE
ABV	ABOVE	MATL	MATERIAL
ADD'L	ADDITIONAL	MAX	MAXIMUM
AGGR	AGGREGATE	MB	MACHINE BOLT
ALT	ALTERNATE	MECH	MECHANICAL
APPROX	APPROXIMATE	MFR	MANUFACTURER
ARCH	ARCHITECT, ARCHITECTURAL	MIN	MINIMUM
ATR	ALL-THREAD ROD	MISC	MISCELLANEOUS
B.E.	BOTH ENDS	(N)	NEW
B.S.	BOTH SIDES	N/A	NOT APPLICABLE
B.W.	BOTH WAYS	NSG	NON-SHRINK GROUT
BETW	BETWEEN	NTS	NOT TO SCALE
BLD'G	BUILDING	NO.#	NUMBER
BLW	BELOW	O/	OVER
BM	BEAM	ON	ON CENTERS
BLK	BLOCKING	OD	OUTSIDE DIAMETER
BOT	BOTTOM	OPNG	OPENING
C.C.	CENTER TO CENTER	OPP	OPPOSITE
CBC	CALIFORNIA BUILDING CODE	PL	PLATE
CL	CENTERLINE	PLYWD	PLYWOOD
CLR	CLEAR	PT	PRESSURE TREATED
C-O-P	CAST-IN-PLACE		
CO	DRAINAGE CLEAN OUT	REF	REFERENCE/REFER
COL	COLUMN	REIN	REINFORCEMENT
CONC	CONCRETE	REQ	REQUIREMENTS
CONN	CONNECTION	REQ'D	REQUIRED
CONST	CONSTRUCTION	RM	ROOM
CONT	CONTINUOUS	RW	RETAINING WALL
		RO	ROUGH OPENING
DBL	DOUBLE	S.A.D.	SEE ARCHITECTURAL DRAWINGS
DBLR	DOUBLER		
DET	DETAIL	S-O-G	SLAB-ON-GRADE
DF	DOUGLAS FIR	SCHED	SCHEDULE
DN	DOWN	SHT	SHEET
DIA.Ø	DIAMETER	SIM	SIMILAR
DIAG	DIAGONAL	STAGG	STAGGER, STAGGERED
DIM	DIMENSION	STD	STANDARD
DL	DEVELOPMENT	STIFF	STIFFENER
DWG	DRAWING	STIRR	STIRRUP
(E)	EXISTING	STL	STEEL
EA	EACH	SW	SHEAR WALL
EF	EACH FACE	SWS	SHEAR WALL SCHEDULE
EL	END LENGTH		
EMBED	EMBEDMENT	T&B	TOP AND BOTTOM
EN	EDGE NAILING	THK	THICK, THICKNESS
ENGR	ENGINEER, ENGINEERED	THRD	THREAD, THREADED
EQ	EQUAL/EQUIVALENT	TYP	TYPICAL
EW	EACH WAY	U.O.N.	UNLESS OTHERWISE NOTED
EXT	EXTERIOR		
FDN	FOUNDATION	VB	VAPOR BARRIER
FLR	FLOOR	VERT	VERTICAL
FN	FIELD NAILING	V.I.F.	VERIFY IN FIELD
FTG	FOOTING		
GA	GAGE, GAUGE	W/	WITH
GALV	GALVANIZED	W/O	WITHOUT
GB	GRADE BEAM	WA	WEDGE ANCHOR
		WD	WOOD
HD	HOLDDOWN	WF	WIDE FLANGE
HGR	HANGER	WLD	WELDED
HORI	HORIZONTAL		

PLYWOOD

- EACH PLYWOOD SHEET OR WOOD STRUCTURAL PANEL SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE AND TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE U.S. PRODUCT STANDARD PS 1 OR PS 2. WOOD STRUCTURAL PANELS (SUCH AS ORIENTED STRAND BOARD) OF EQUAL THICKNESS AND RATING, AND MEETING THE REQUIREMENTS OF APA PS 2, MAY BE SUBSTITUTED FOR PLYWOOD.
- PLYWOOD SHEETS AT FLOORS AND ROOFS SHALL BE LAID WITH FACE GRAIN PERPENDICULAR TO JOISTS AND RAFTERS. BLOCK EDGES WHERE NOTED ON THE DRAWINGS. ALL CUT PANELS SHALL BE EQUAL OR GREATER THAN 24"x48". APPLY A CONTINUOUS BEAD OF GLUE TO ALL FLOOR JOISTS BEFORE SETTING FLOOR PLYWOOD.
- PLYWOOD SHEETS ON WALLS SHALL BE LAID WITH LONG DIMENSION VERTICAL. ALL CUT PANELS IN SHEAR WALLS SHALL BE EQUAL OR GREATER THAN 16" IN BOTH DIRECTIONS. BLOCK AND NAIL ALL EDGES. GLUE ADHESIVE SHALL NOT BE APPLIED BETWEEN STUDS AND WALL PLYWOOD.
- ROOF PLYWOOD SHALL BE MINIMUM 5/8", 2% EXPOSURE 1, PROVIDE PLYCLIPS BETWEEN RAFTERS WHERE EDGES ARE NOT BLOCKED. U.O.N.
- FLOOR PLYWOOD SHALL BE MINIMUM 3/4", 2% EXPOSURE 1. U.O.N.
- WALL PLYWOOD SHALL BE MINIMUM 5/8", 2% EXPOSURE 1. U.O.N.

STRUCTURAL STEEL AND MISCELLANEOUS IRON

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (AS REVISED BY THE PROJECT SPECIFICATIONS).
- STEEL MISCELLANEOUS STEEL SHALL CONFORM TO THE FOLLOWING:
 - WIDE FLANGES (W) - ASTM A992, GR 50
 - HOLLOW STRUCTURAL SECTIONS (HSS)
 - SQUARE OR RECTANGULAR - ASTM A500 GR B (F_y = 46 ksi)
 - ROUND - ASTM A500 GR B (F_y = 42 ksi)
 - *ASTM A1085 IS PREFERABLE
 - PLATES AND BARS - A36
 - *EXCEPT FOR MOMENT FRAME CONNECTIONS (I.E. CONTINUITY, DOUBLER, SPLICE, ETC) WHICH SHALL BE ASTM A572 GR 50
 - PIPE - ASTM A53 GR B
 - MISCELLANEOUS SHAPES (I.E. CHANNELS, ANGLES, ETC) - ASTM A36
- ALL BOLTS FOR STEEL TO STEEL CONNECTIONS SHALL CONFORM TO ASTM A325N-SC, UNLESS OTHERWISE NOTED. BOLTS SHALL BE FULLY PRE-TENSIONED TO SATISFY SLIP-CRITICAL REQUIREMENTS WITH A CLASS-A FAYING SURFACE. FULL PRE-TENSIONING SHALL BE ATTAINED BY "TURN-OFF-THE-NUT" OR OTHER METHOD APPROVED BY THE STRUCTURAL ENGINEER.
- ANCHOR RODS:
 - TYPICAL: ASTM F1554 GR 36 W/ ASTM A563 HEAVY HEX NUTS
 - WELDABLE: ASTM F1554 GR 55 S1 W/ ASTM A563 HEAVY HEX NUTS
 - HIGH STRENGTH: ASTM F1554 GR 105 W/ ASTM A563 OR DH HEAVY HEX NUTS
- NON-SHRINK GROUT:
 - 7500 PSI COMPRESSIVE STRENGTH, NON METALLIC CONFORMING TO ASTM 1107. MASTERFLOW 928 OR EQUAL.
- STEEL NOT RECEIVING FIRE PROOFING SHALL BE SHOP PRIMED OR EQUAL, EXCEPT SURFACES TO RECEIVE WELDS, SHEAR STUDS, FULLY PRE-TENSIONED BOLTS, CONCRETE ENCASUREMENT OR SPRAY FIREPROOFING. ALL STEEL OR STEEL FASTENERS EXPOSED TO WEATHER SHALL BE HOT-DIP ZINC GALVANIZED, OR PAINTED WITH TWO COATS OF BITUMINOUS/COAL TAR EPOXY OR WEATHERPROOFED BY AN APPROVED EQUAL U.O.N.
- WELDING TO CONFORM TO THE LATEST EDITION OF THE AWS SPECIFICATIONS SHALL BE PERFORMED BY CERTIFIED WELDERS. BUTT WELDS ARE TO BE COMPLETE PENETRATION JOINT (CPJ), U.O.N. ALL FILLET WELDS SHOWN ARE MINIMUM REQUIRED BY STRESS, INCREASE WELDS TO AISC MINIMUM SIZES BASED ON THICKNESS OF MATERIAL JOINED U.O.N.
- ALL ELECTRODES SHALL BE E70XX (70 KSI), U.O.N. ELECTRODES AND FLUXES SHALL BE KEPT CLEAN AND DRY PER AWS D1.1 AND THE FOLLOWING ADDITIONAL REQUIREMENTS: FCAW (MIG) ELECTRODES SHALL BE CONSUMED WITHIN TWO WEEKS OF OPENING THEIR ORIGINAL PACKAGING. RUSTED ELECTRODES SHALL BE DISCARDED. SMAW (STICK) ELECTRODES SHALL BE LOW HYDROGEN TYPE, SHALL HAVE MOISTURE-RESISTANT COATINGS, AND SHALL BE USED WITHIN 8 HOURS OF OPENING THEIR HERMETICALLY-SEALED CONTAINERS, OR SHALL BE REDRIED PER AWS D1.1, SECTION 4.5.2. SAW FLUX SHALL BE KEPT CLEAN AND DRY PER AWS D1.1, SECTION 4.8.3. SAW FLUX OPEN TO AIR FOR MORE THAN TWO DAYS SHALL BE RE-DRIED FOR AT LEAST TWO HOURS AT BETWEEN 500 AND 900 DEGREES FAHRENHEIT. WET FLUX SHALL BE DISCARDED.
- SHOP AND ERECTION DRAWINGS CONFORMING WITH AISC SPEC, AWS D1.1 AND RCSC SPEC SHALL BE PROVIDED BY THE STEEL FABRICATOR, AND REVIEWED AND APPROVED BY THE ENGINEER.
- STEEL MEMBER CONNECTING TO WOOD FRAMING SHALL HAVE WOOD NAILER WITH MIN 3/8" NELSON STUD OR THREADED STUDS AT 24" O.C. WITH MIN 3/8" FILLET WELDED ALL AROUND TO THE STEEL MEMBER, UNLESS OTHERWISE NOTED.

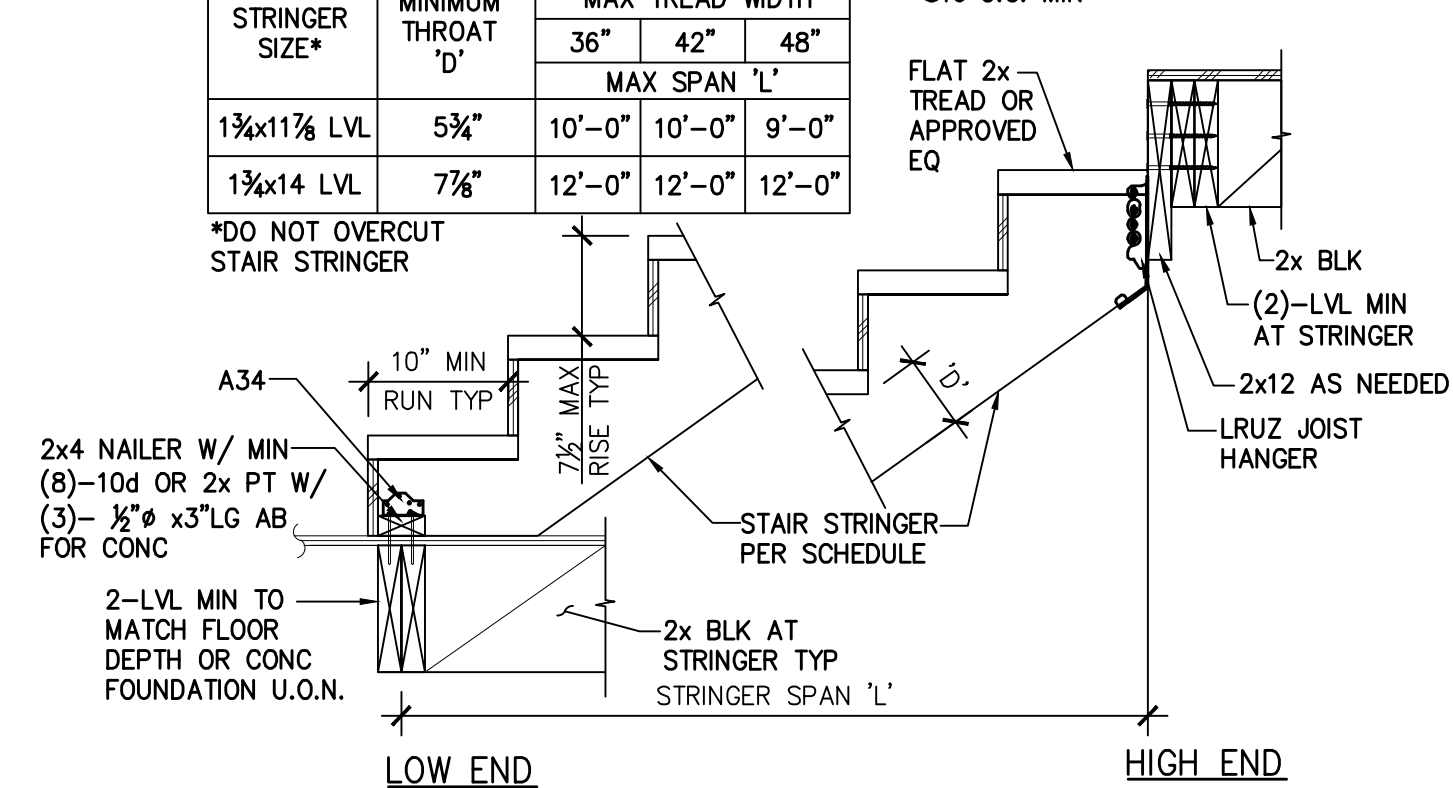
ADHESIVE ANCHOR

- INSTALLATION OF ADHESIVE, ANCHORS AND DOWELS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND THESE NOTES. WHERE REQUIREMENTS OF THE MANUFACTURER OR THESE NOTES CONFLICT THE MORE RESTRICTIVE PROVISIONS GOVERN.
- ADHESIVE SYSTEMS
 - THE FOLLOWING ADHESIVE ANCHOR SYSTEMS ARE ACCEPTABLE FOR USE IN CONCRETE:
 - SIMPSON STRONG-TIE CO. INC.: SET-3G
 - HILTI, INC.: HILTI HIT HY-200
- ADHESIVE CONNECTIONS SHALL HAVE SPECIAL INSPECTION PER CBC SECTION 1704 UNLESS OTHERWISE NOTED.

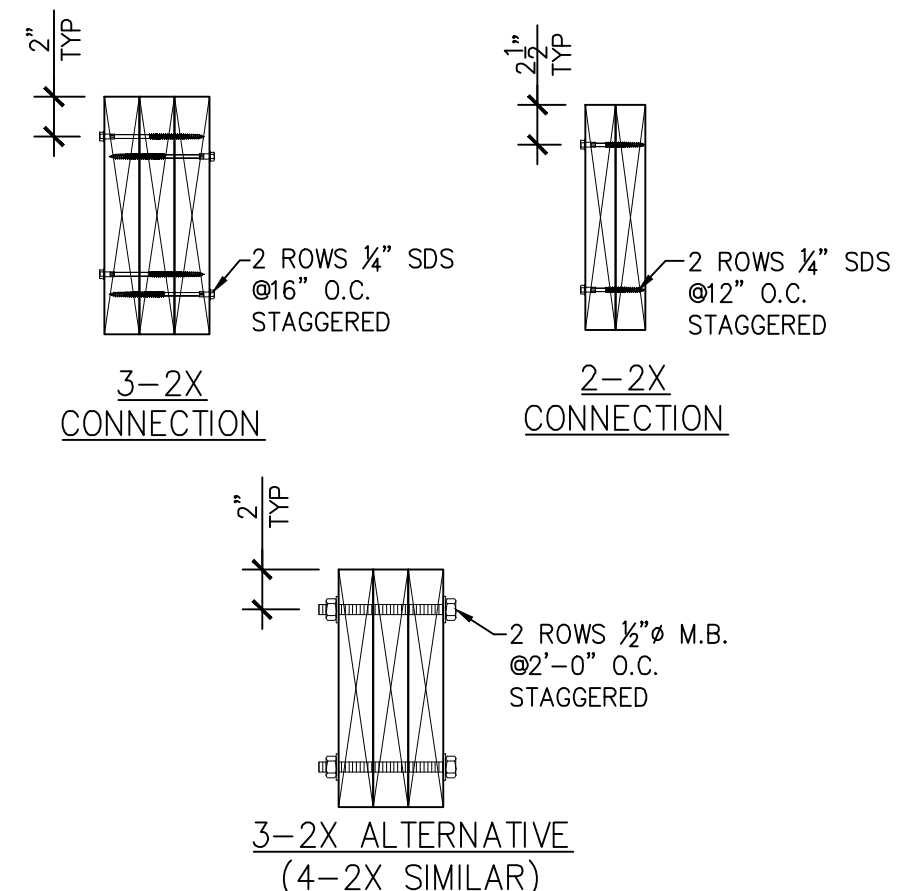
STRINGER SIZE*	MINIMUM THROAT 'D'	MAX TREAD WIDTH		
		36"	42"	48"
1 1/2 x 1 1/2 LVL	5 3/4"	10'-0"	10'-0"	9'-0"
1 1/2 x 14 LVL	7 7/8"	12'-0"	12'-0"	12'-0"

*DO NOT OVERCUT STAIR STRINGER

ALTERNATIVE:
 INSTEAD OF LOW END AND HIGH END CONNECTIONS, STRINGER COULD BE CONNECTED TO WALLS W/ (2) 1/2"x1/2" SDS PER STUDS @16" O.C. MIN



11 S-1.1 (TYP) INTERIOR STAIR FRAMING NTS



12 S-1.1 (TYP) BUILT-UP BEAM/JOIST CONNECTION NTS

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DAC REGISTERED PROFESSIONAL ENGINEER
 DARIUS ABOLHASSANI
 No. 58778
 CIVIL
 STATE OF CALIFORNIA

PEARSON RESIDENCE
 SITE WORK
 390 SAUSALITO BLVD
 SAUSALITO, CA 94965
 APN: 065-252-22

STRUCTURAL TYPICAL DETAILS

DATE: 2024-12-13

SCALE: AS SHOWN

DRAWN BY: WT

JOB NUMBER: 1566-31235

SHEET 2
 S-1.1
 OF 7 SHEET

LEGEND

CLEAN OUT. SEE DETAIL 4 ON SHEET S-2.0

4" DIAMETER PERFORATED BACK-DRAIN PIPE

GRASS SWALE

NEW DRAIN/DROP INLET, 6" WITH LEAF STRAINER

4" DIAMETER SOLID PIPE

GUARDRAIL ABOVE. SEE TYPICAL DETAIL

(E) DRIVEWAY (ABOVE)

(N) TOW 277.0' BOW 269.5'

(N) PT. WOOD STAIRS. SEE SIM. DETAIL

(N) TOW 277.0' BOW 269.5'

(N) 2x10 PT DF

(N) 2x10 PT DF

(N) 2x10 PT DF

(N) 2x10 PT DF

(N) 2x10 PT DF

(N) 2x10 PT DF

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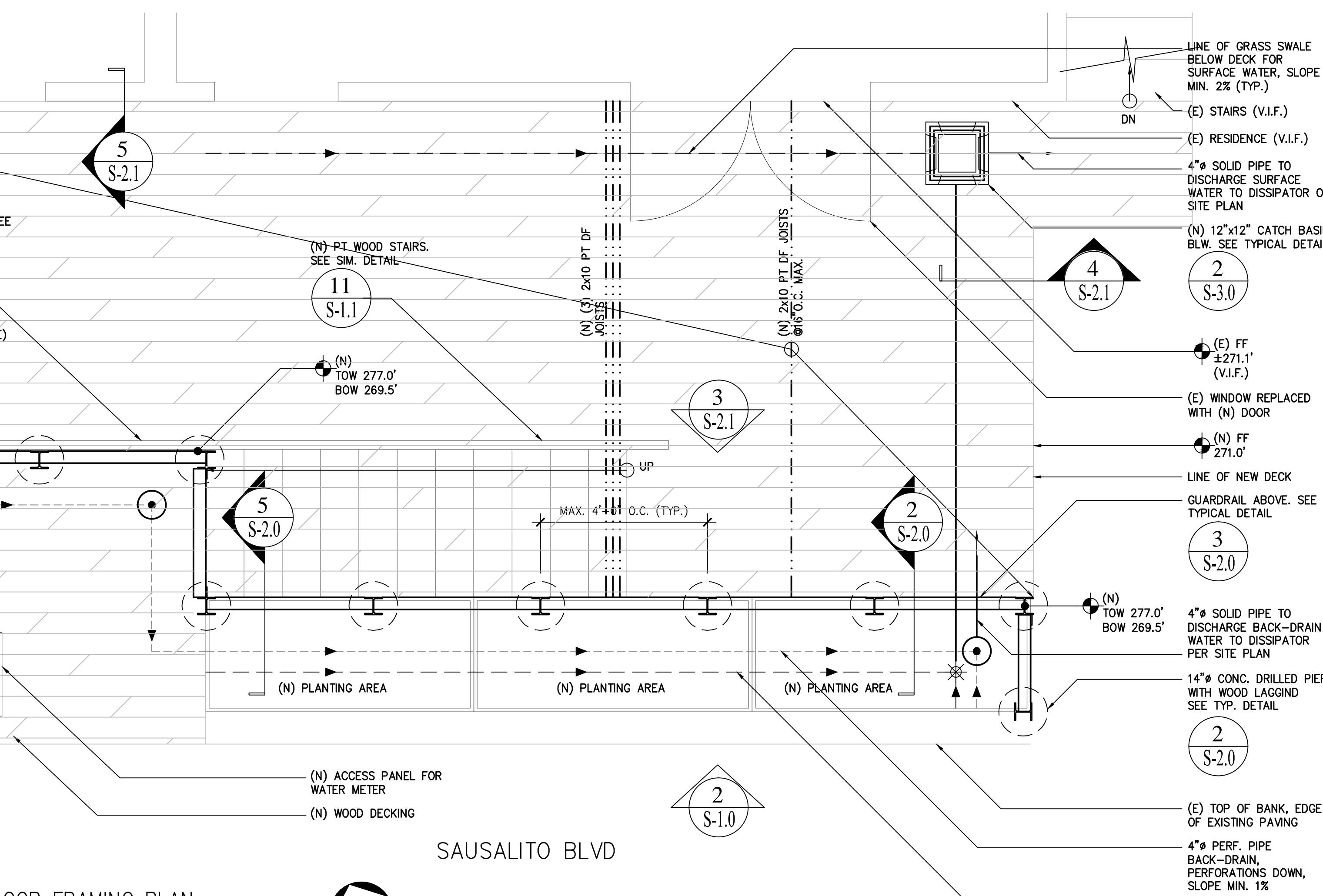
(N) 2x10 PT DF

(N) 2x10 PT DF

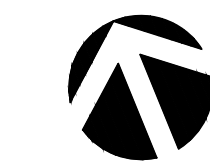
(N) 2x10 PT DF

(N) 2x10 PT DF

(N) 2x10 PT DF



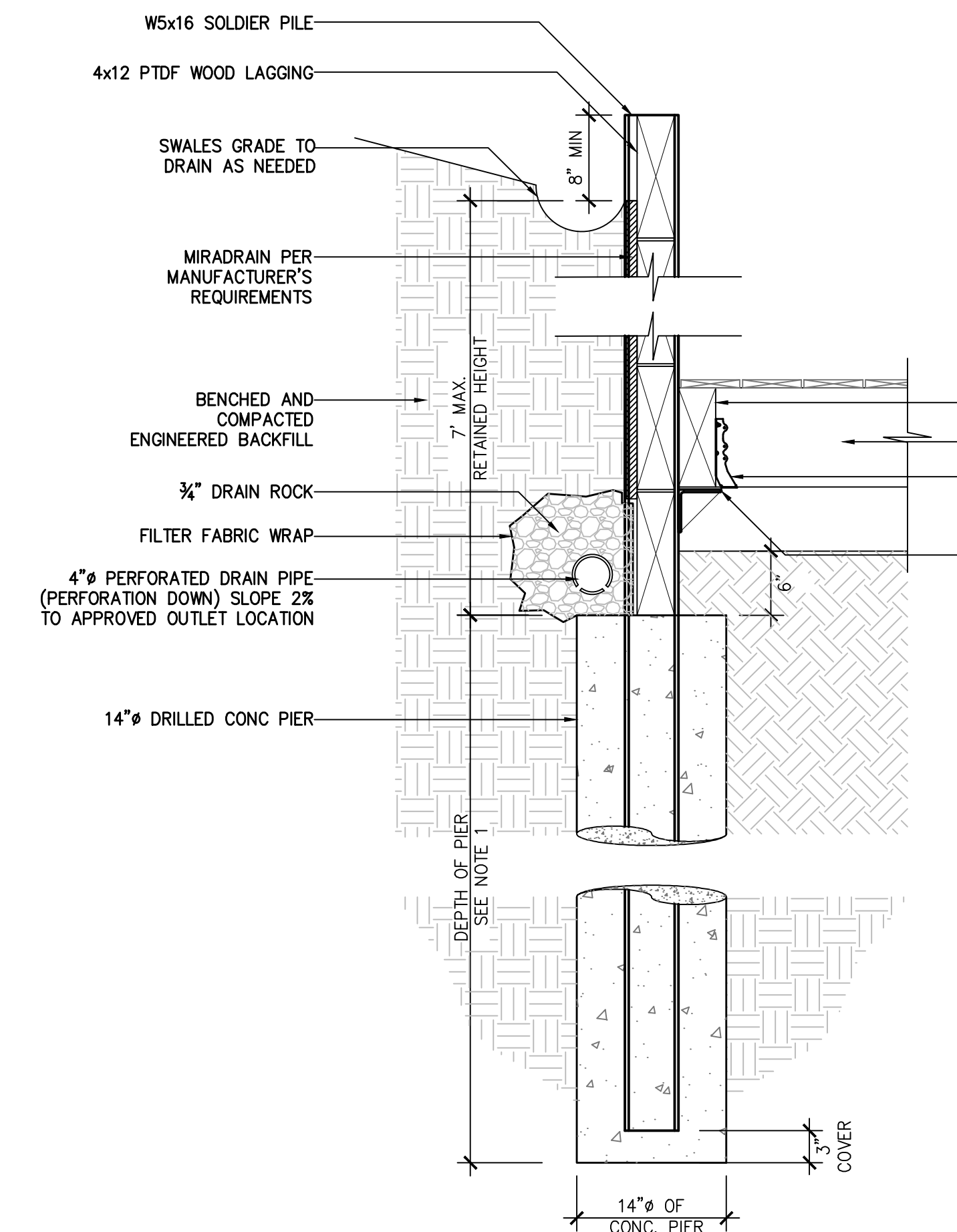
1 FOUNDATION AND FIRST FLOOR FRAMING PLAN SCALE: 1/2" = 1'-0"



SAUSALITO BLVD

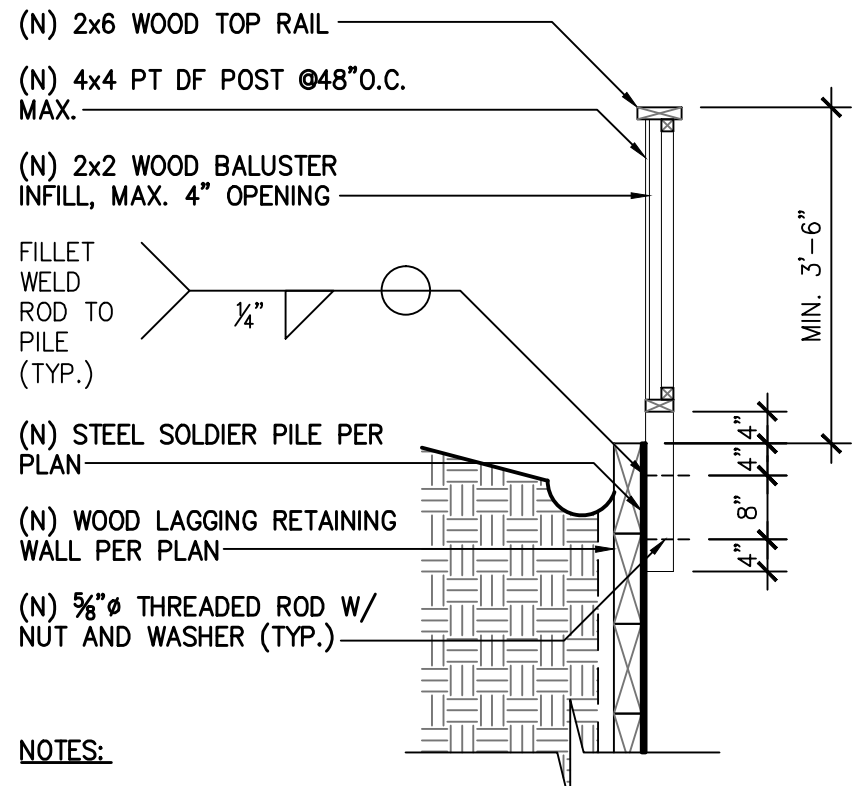
ABBREVIATIONS

BOW	BOTTOM OF WALL
TOW	TOP OF WALL
TS	TOP OF SLAB
FF	FINISHED FLOOR
FG	FINISHED GRADE
EG	EXISTING GRADE (V.I.F.)

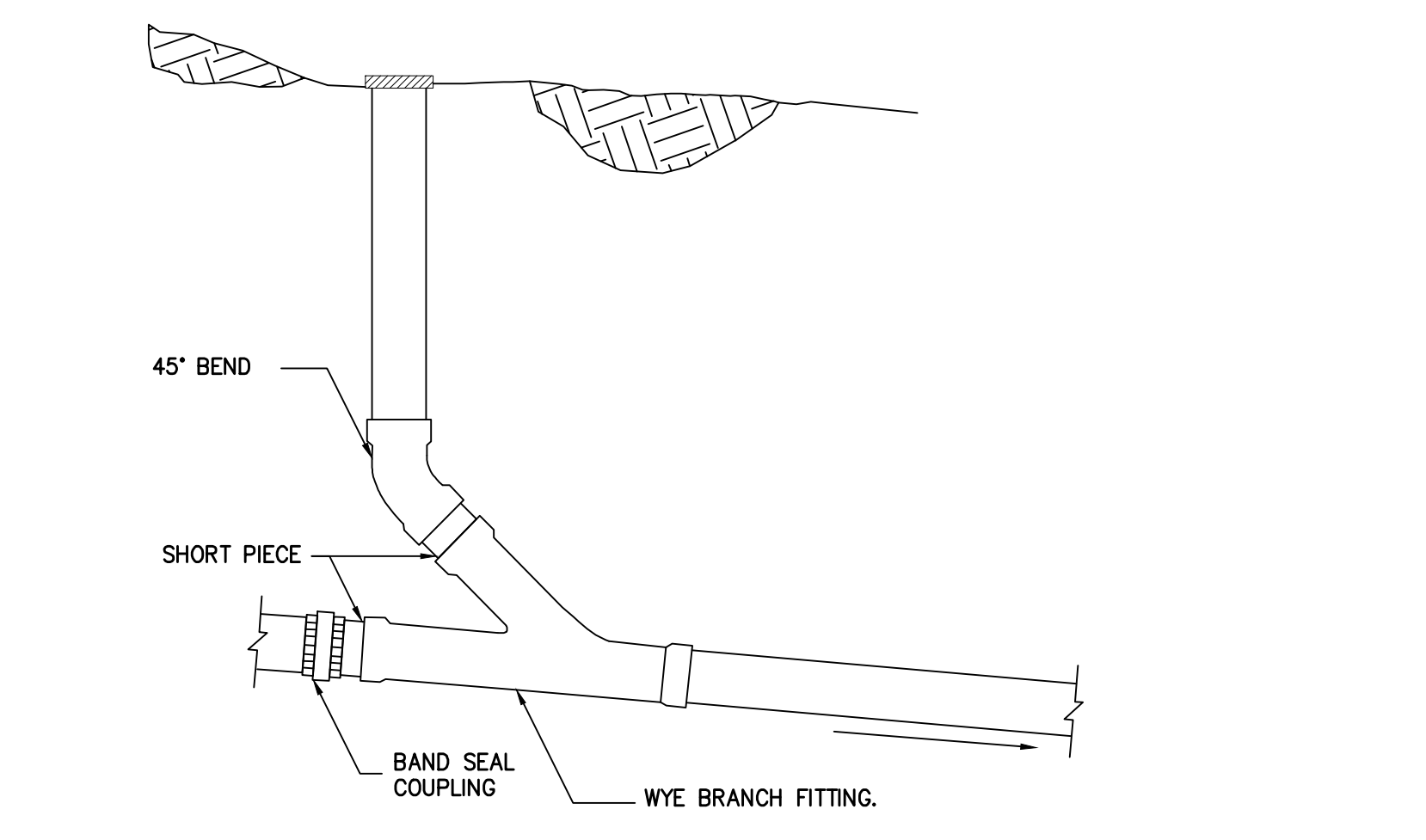


2 SOLDIER PILE AND WOOD LAGGING RETAINING WALL SCALE: 1" = 1'-0"

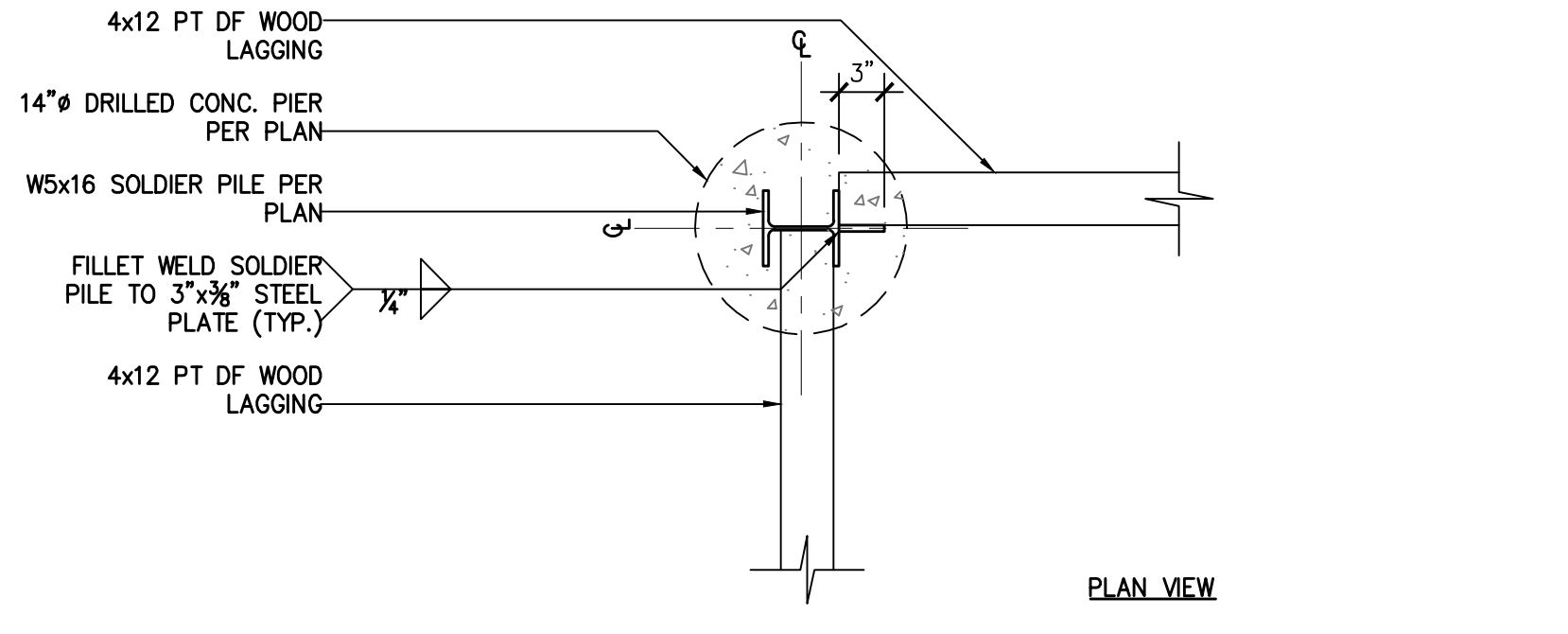
- NOTES:
- DEPTH OF PIER VARIES DEPENDING ON THE DEPTH OF BEDROCK. 6'-0" MINIMUM INTO COMPETENT BEDROCK.
 - DRILLED PIER SHALL BE OBSERVED AND APPROVED BY ENGINEER DURING CONSTRUCTION. PLEASE CONTACT US 72 HOURS PRIOR TO START OF DRILLING.
 - MAX 4'-0" BETWEEN PIER
 - CONCRETE MINIMUM COMPRESSIVE STRENGTH FC=3000 PSI AT 28 DAYS.
 - WATER NEEDS TO BE COLLECTED BY 4" DIA. PERFORATED PIPE OR MIRADRRAIN



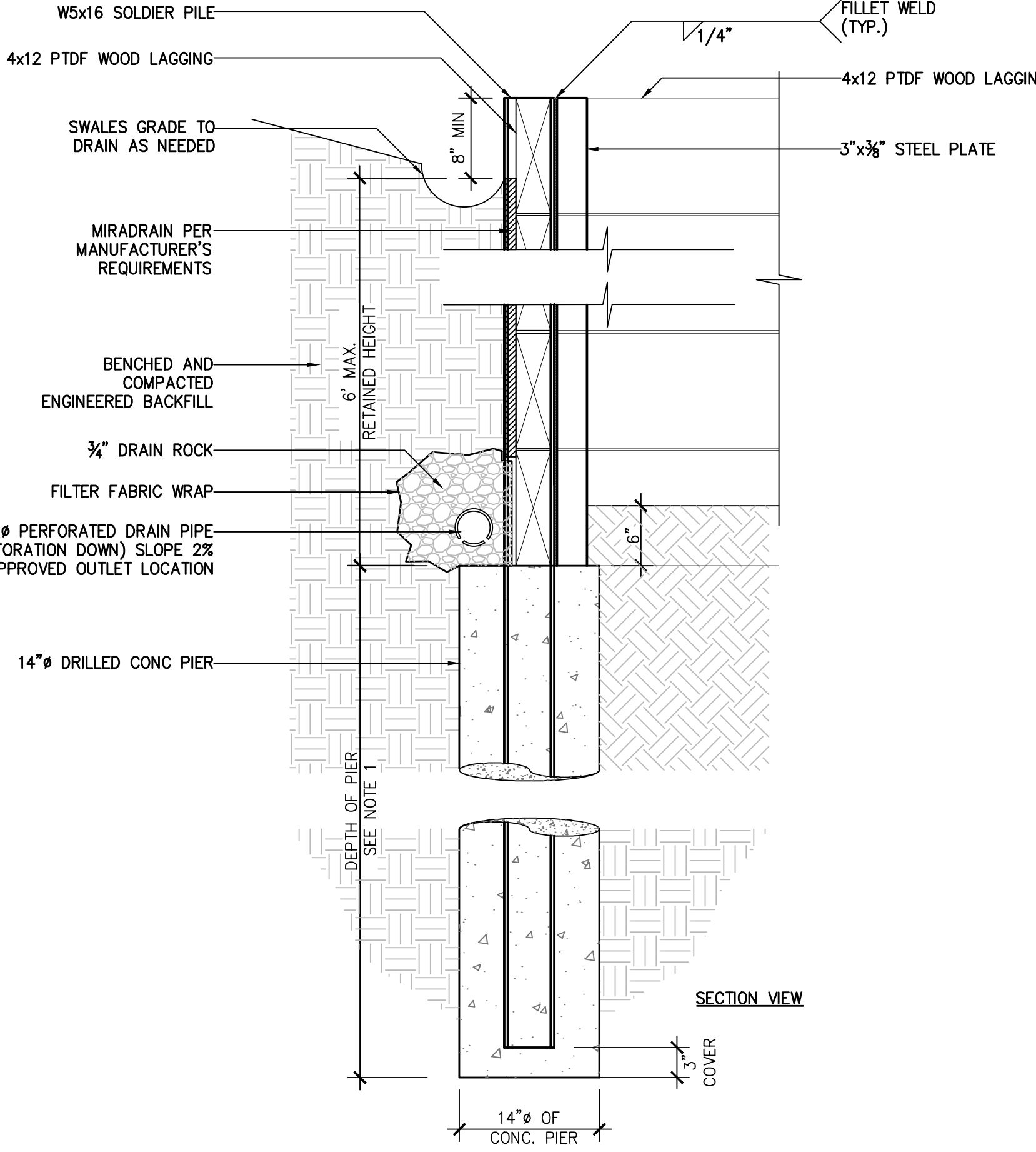
3 TYP. GUARDRAIL DETAIL SCALE: 1/2" = 1'-0"



4 TYP. CLEAN-OUT DETAIL SCALE: 1" = 1'-0"



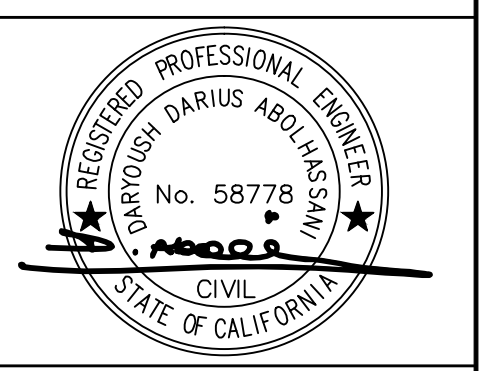
5 SOLDIER PILE AND WOOD LAGGING RETAINING WALL SCALE: 1" = 1'-0"



5 SOLDIER PILE AND WOOD LAGGING RETAINING WALL SCALE: 1" = 1'-0"

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RETAINING WALL PLAN AND STRUCTURAL DETAILS

DATE: 2024-12-13

SCALE: AS SHOWN

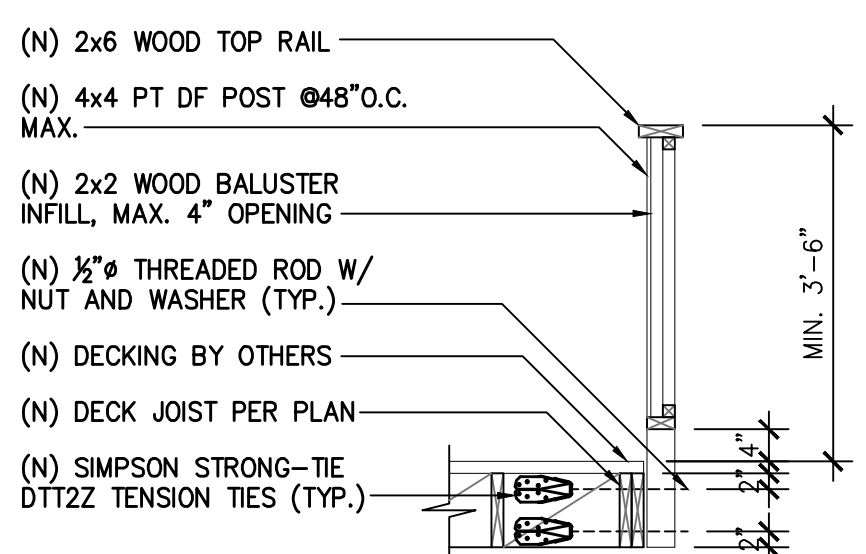
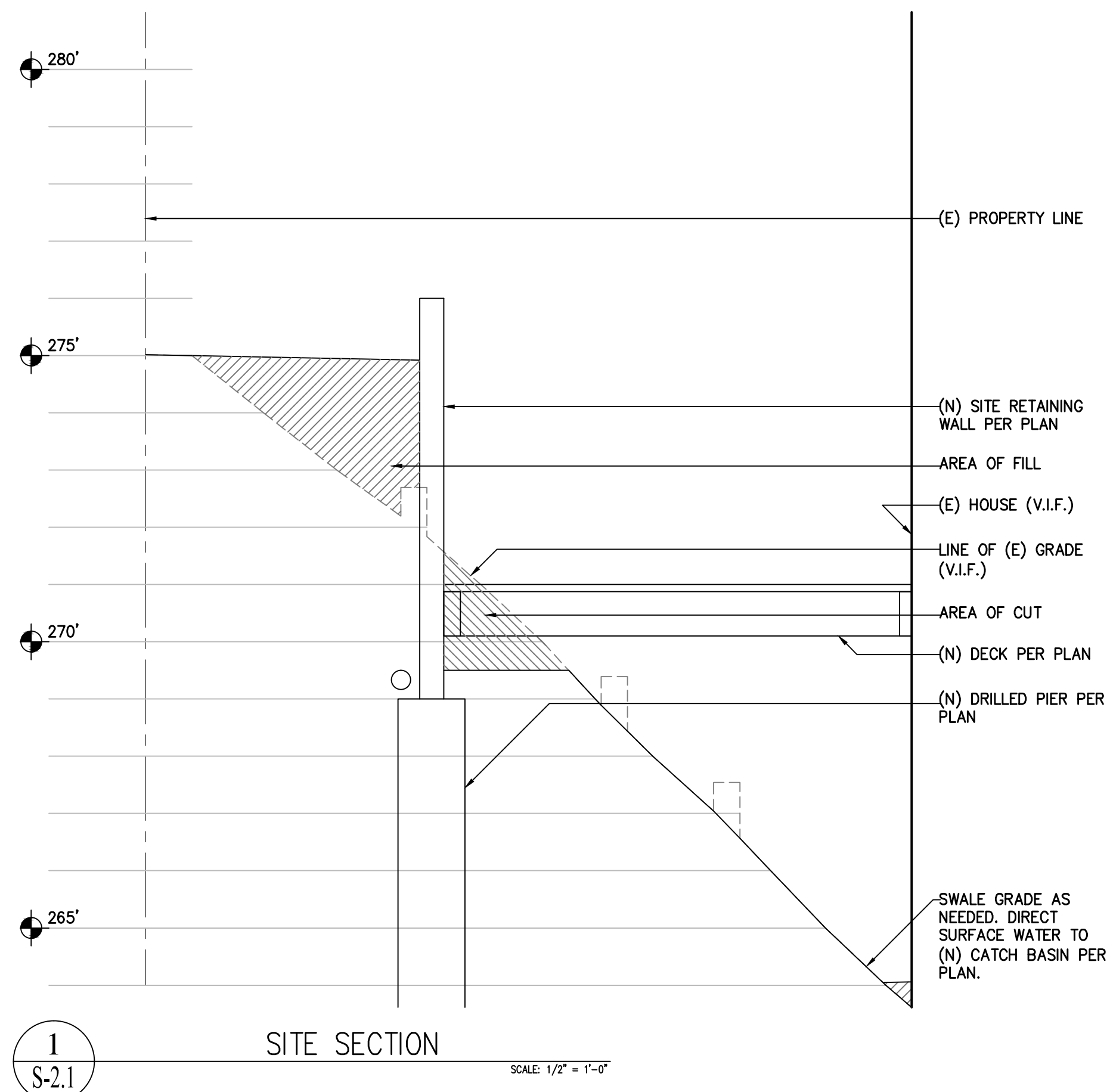
DRAWN BY: WT

JOB NUMBER: 1566-31235

SHEET 3

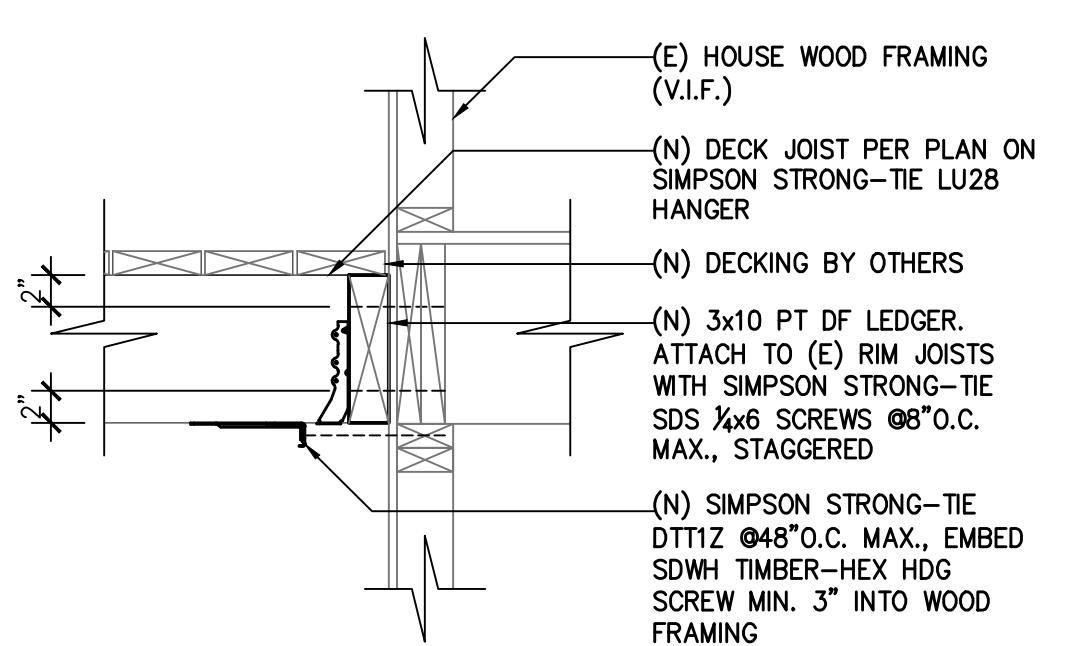
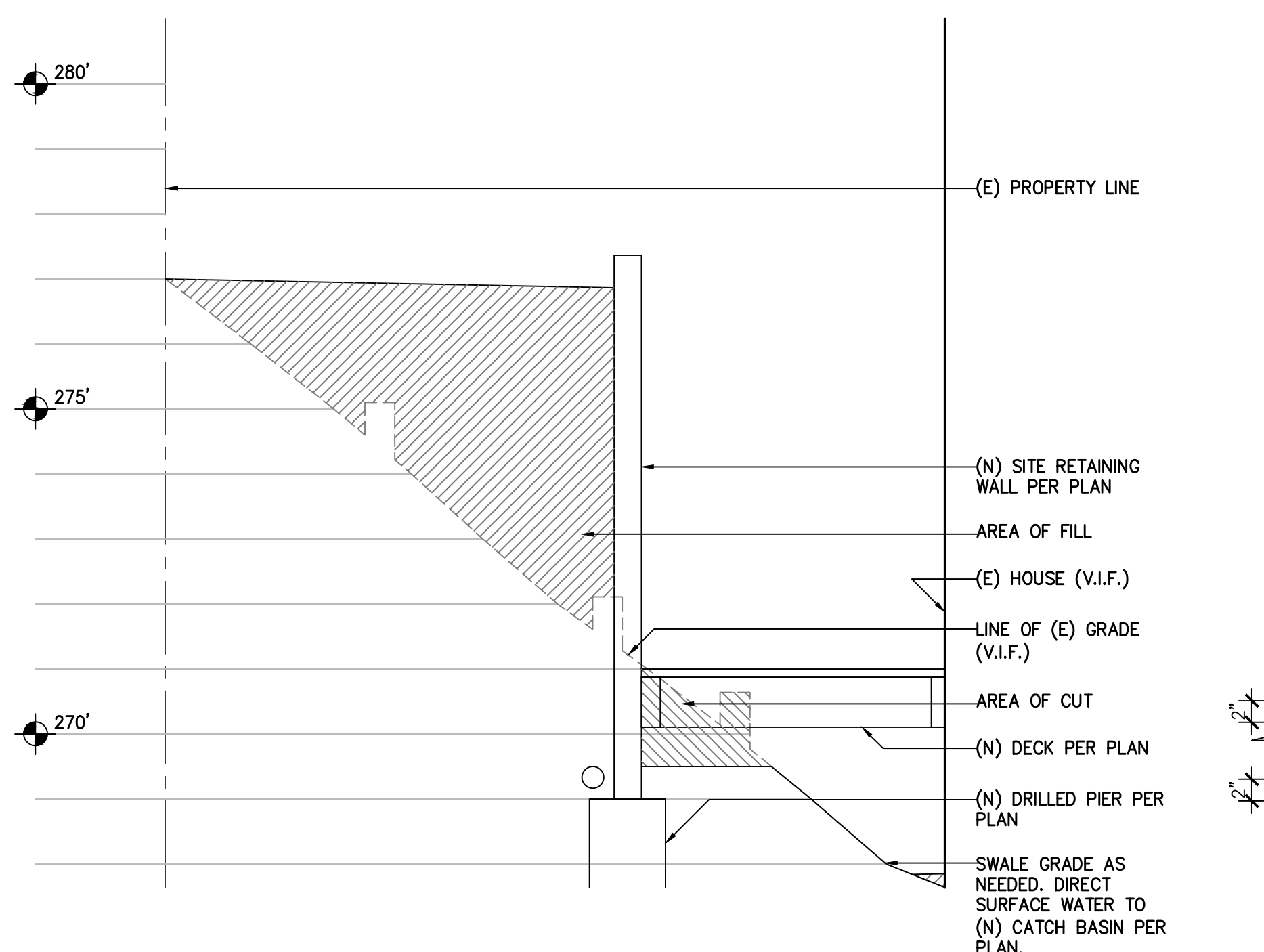
S-2.0

OF 7 SHEET

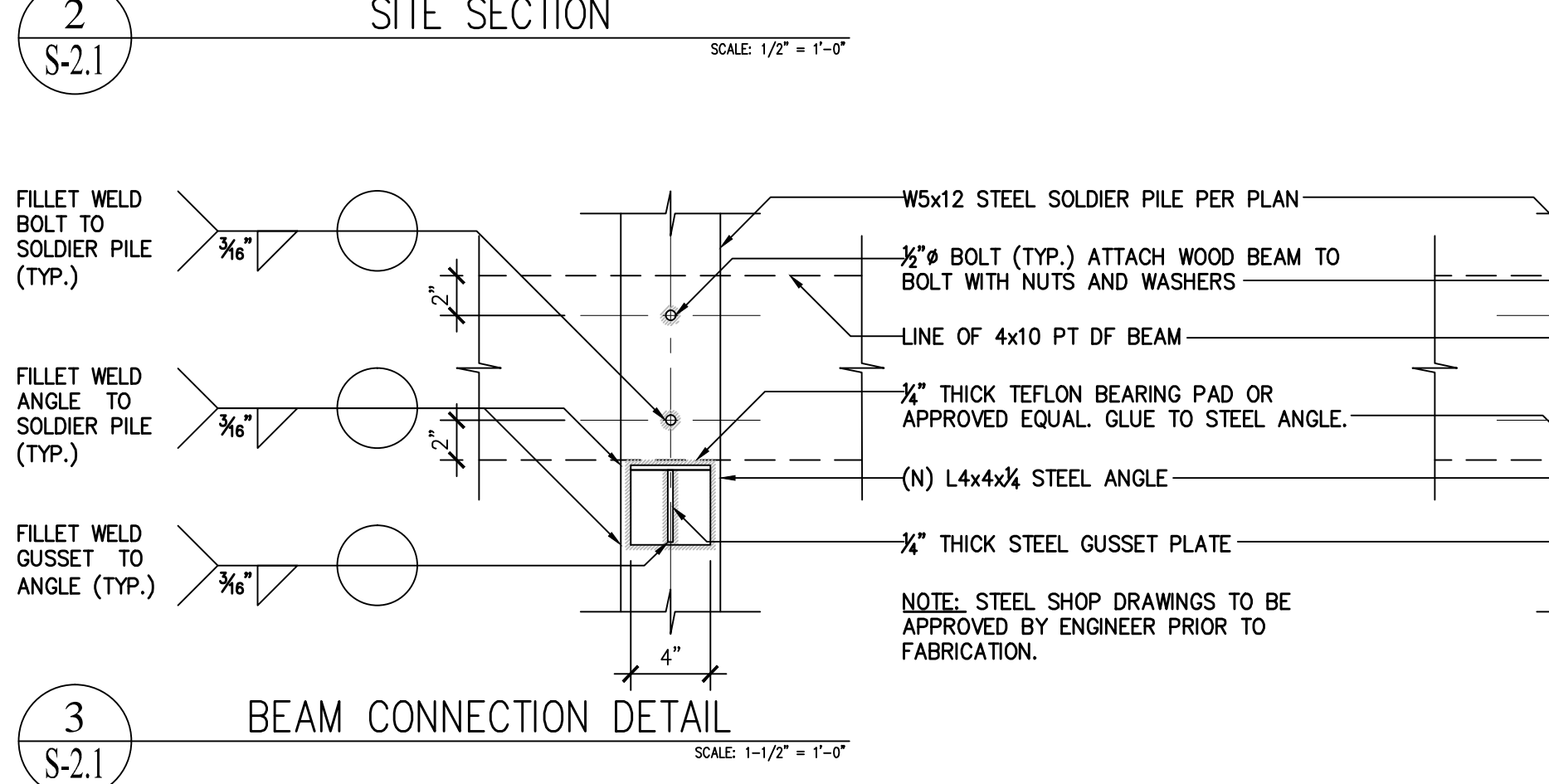


NOTES:
4" DIAMETER SPHERE MUST NOT BE ABLE TO PASS BETWEEN ANY GUARD OPENING.
PER CALIFORNIA RESIDENTIAL CODE (CRC) TABLE R301.5, GUARDRAIL MUST BE ABLE TO BEAR MIN. 200 LBS./SQ. FT. LIVE LOAD.
GUARDRAIL INFILL TO BEAR MIN. 50 LBS./SQ. FT. PER CRC TABLE R301.5.
PT DF MAY BE SUBSTITUTED WITH CEDAR #1.

4 S-2.1 GUARDRAIL DETAIL SCALE: 1/2" = 1'-0"

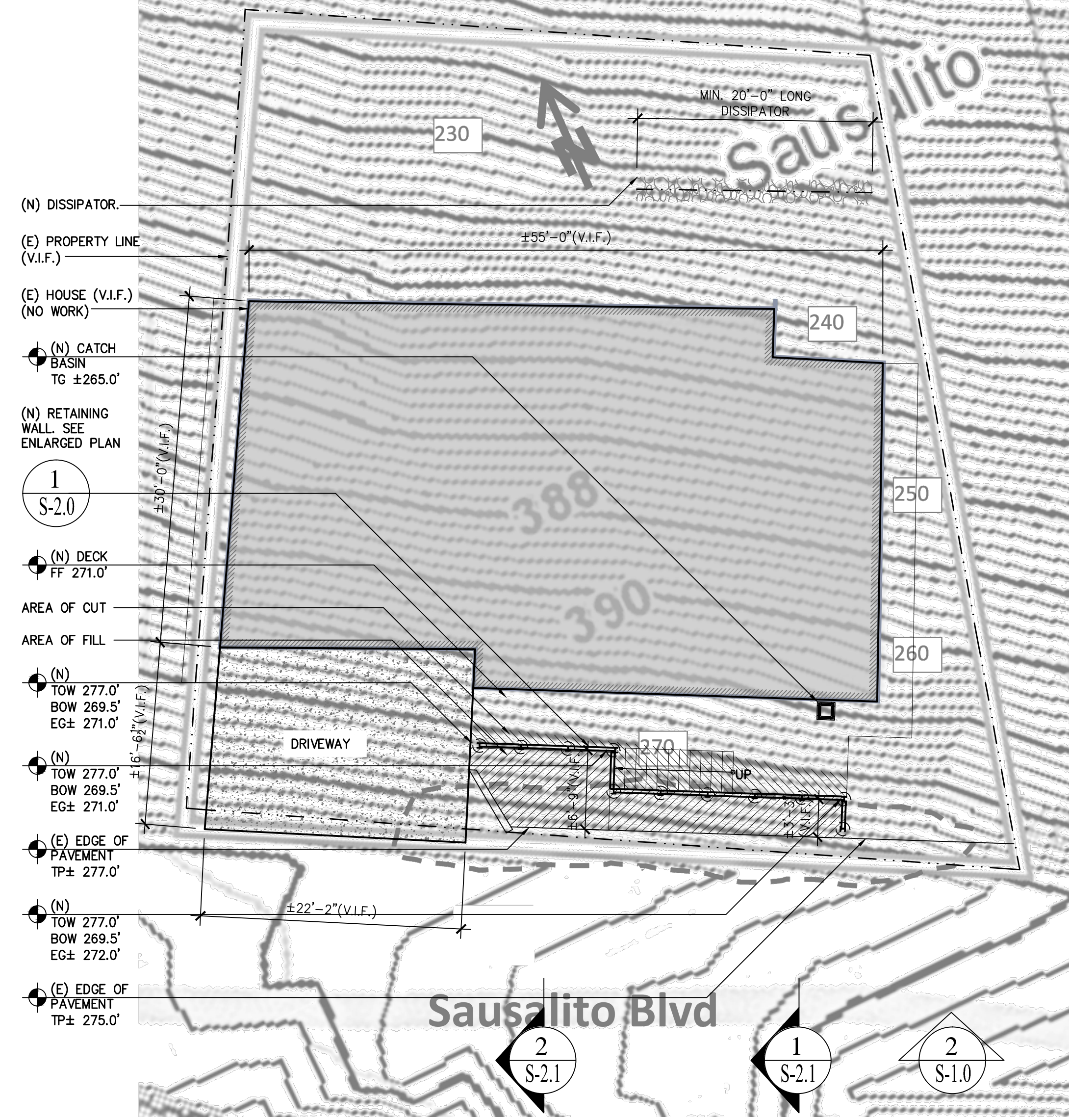


5 S-2.1 GUARDRAIL DETAIL SCALE: 1/2" = 1'-0"



3 S-2.1 BEAM CONNECTION DETAIL SCALE: 1-1/2" = 1'-0"

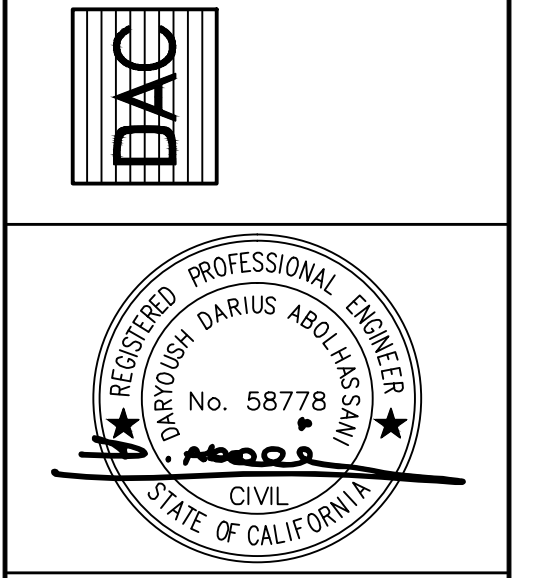
- ABBREVIATIONS**
BOW BOTTOM OF WALL
EG EXISTING GRADE (V.I.F.)
FF FINISHED FLOOR
FG FINISHED GRADE
TG TOP OF GRATE
TOW TOP OF WALL
TP TOP OF PAVEMENT
TS TOP OF SLAB



6 S-2.1 GRADING PLAN SCALE: 1/8" = 1'-0"

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GRADING PLAN AND STRUCTURAL DETAILS

DATE: 2024-12-13
SCALE: AS SHOWN
DRAWN BY: WT
JOB NUMBER: 1566-31235
SHEET 4
S-2.1
OF 7 SHEET

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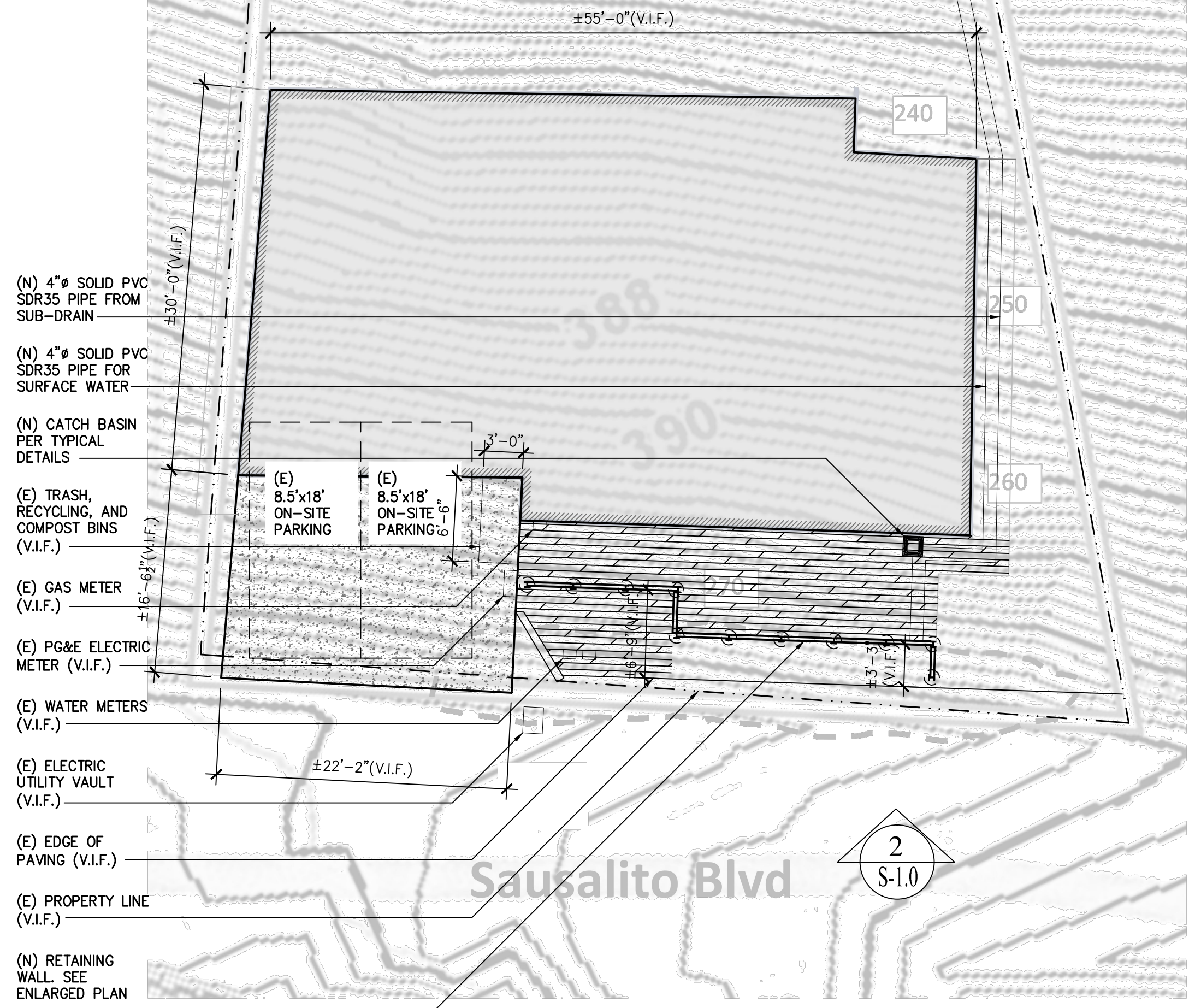
PEARSON RESIDENCE
SITE WORK
 390 SAUSALITO BLVD
 SAUSALITO, CA 94965
 APN: 065-252-22

SITE PLAN

DATE: 2024-12-13
 SCALE: AS SHOWN
 DRAWN BY: WT
 JOB NUMBER: 1566-31235
 SHEET 5
S-3.0
 OF 7 SHEET

CONNECT SOLID PIPES FOR SURFACE AND GROUND WATER TO (N) DISSIPATOR. SEE DETAIL

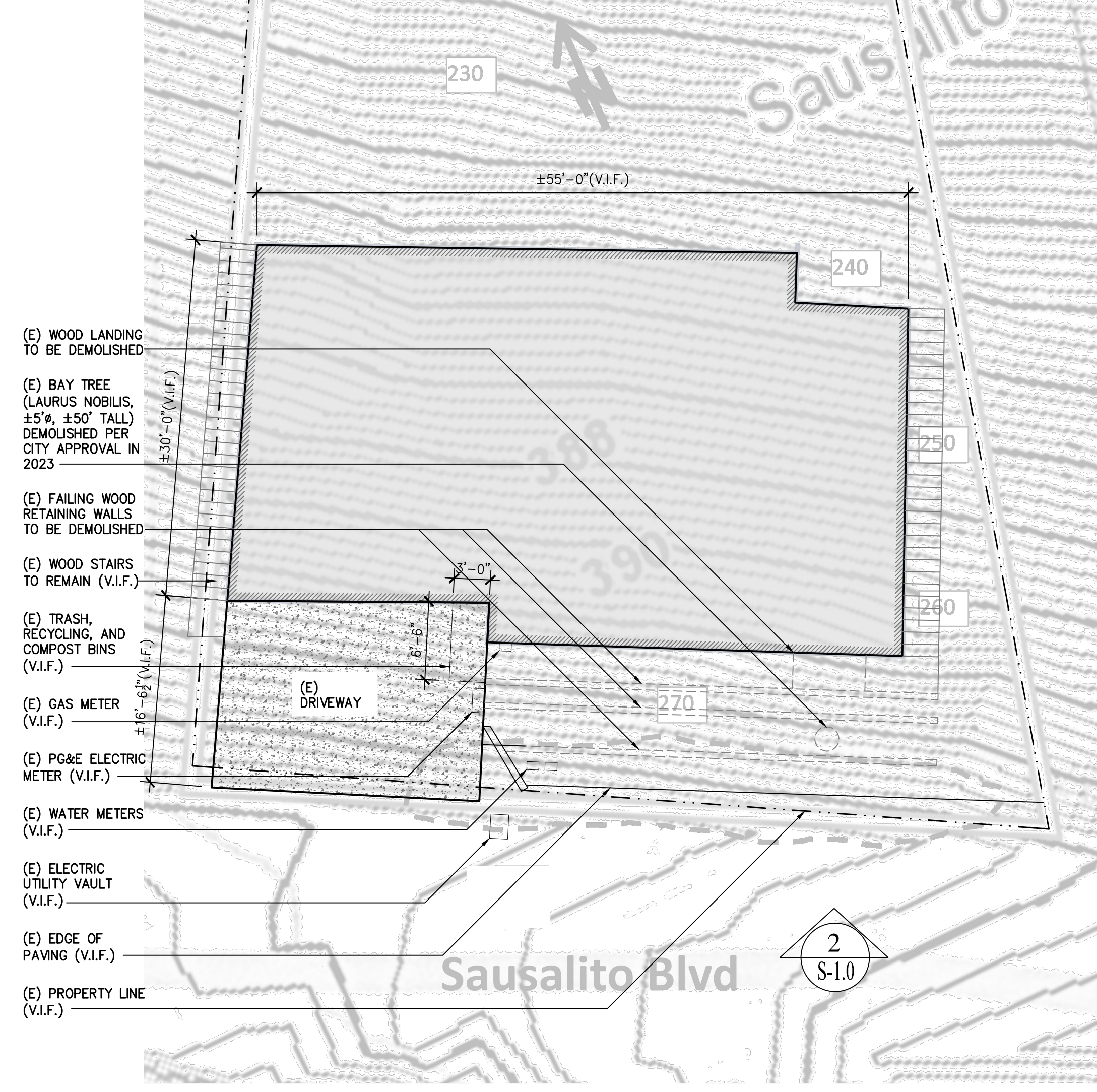
4
S-3.0



1
S-2.0

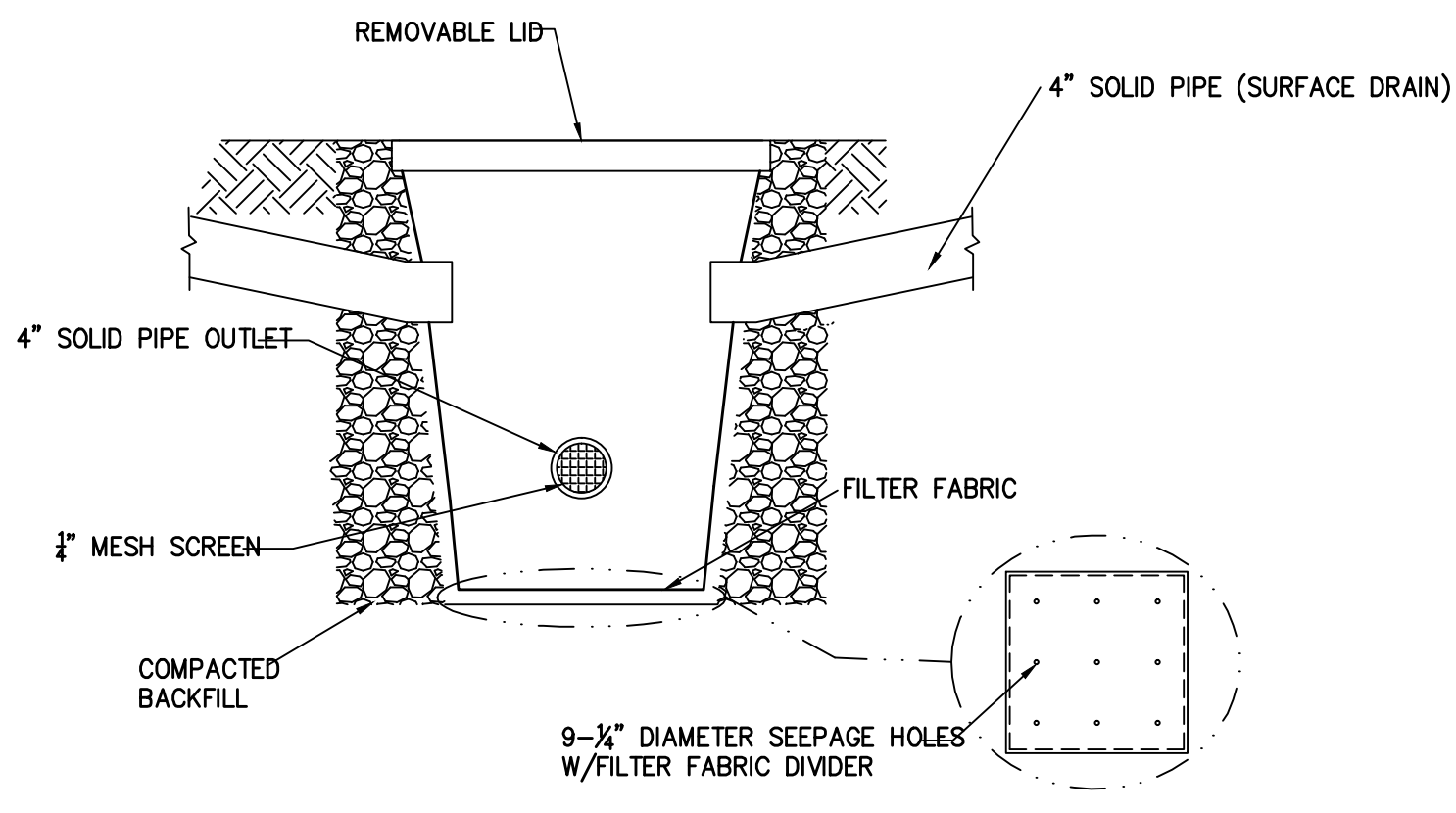
1A PROPOSED SITE PLAN SCALE: N.T.S.

NOTE:
NO CHANGE TO (E) UTILITIES

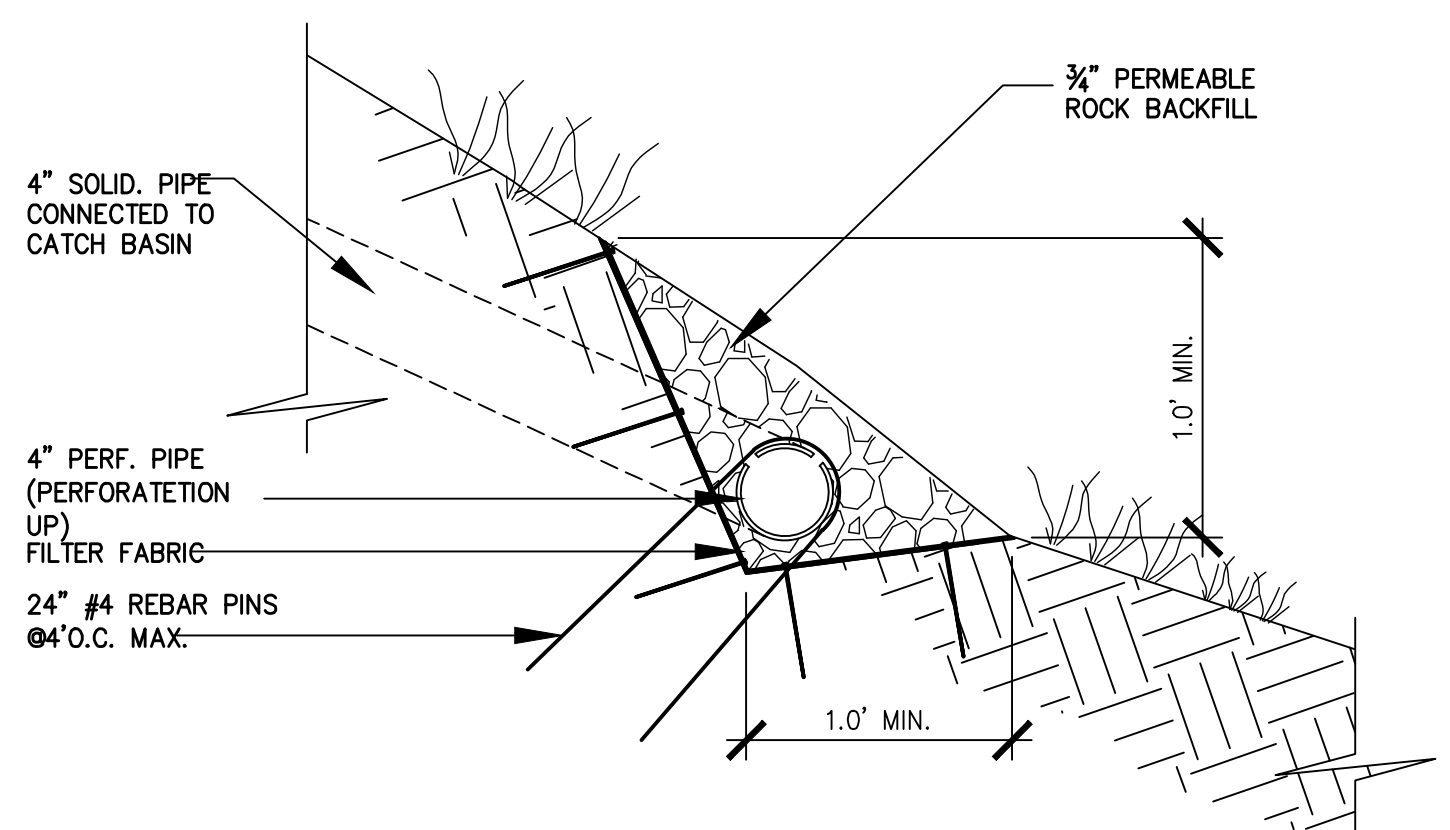


1B
S-3.0

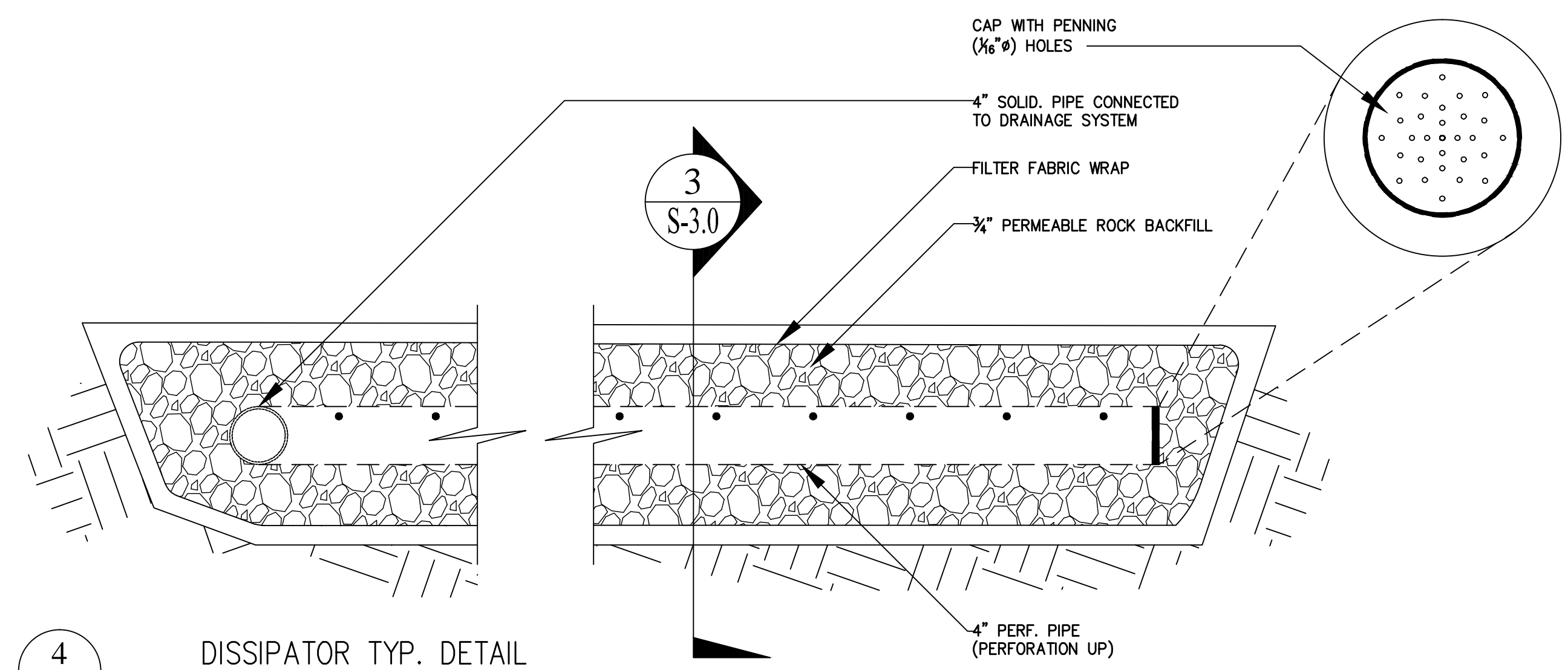
1B EXISTING SITE PLAN SCALE: N.T.S.



2 CATCH BASIN TYP. DETAIL SCALE: N.T.S.



3 DISSIPATOR TYP. DETAIL SCALE: N.T.S.



4 DISSIPATOR TYP. DETAIL SCALE: N.T.S.

REVISIONS	BY

- SWPPP NOTES**
1. SITE PLAN IS BASED UPON PLANS PREPARED BY THE PROJECT ARCHITECT.
 2. ANY SILT THAT BUILDS UP BEHIND THE SILT FENCE SHALL BE REMOVED. REGULARLY MONITOR THE EROSION CONTROL FACILITIES.
 3. MINIMIZE THE AMOUNT OF EARTHWORK EXPOSED AT ANY ONE TIME.
 4. ALL MODIFICATIONS AND ALL EROSION CONTROL REPAIRS SHALL BE NOTED ON THIS PLAN AND KEPT UPDATED BY THE CONTRACTOR IN THE FIELD DURING CONSTRUCTION.
 5. ALL EROSION CONTROL FEATURES SHALL BE REGULARLY MONITORED AND REPLACED IF NECESSARY.
 6. AFTER STORM EVENTS, ALL EROSION CONTROL MEASURES SHALL BE CHECKED AND THEIR OPERATION VERIFIED.
 7. ANY EXCAVATED MATERIAL STOCKPILED ON SITE SHALL BE COVERED WITH 15 MIL PLASTIC (TARP) AND THE ENDS HELD DOWN WITH SAND BAGS. ALTERNATIVELY, OTHER CONTROL MEASURES SUCH AS BIOSOCK SHALL BE UTILIZED.
 8. ANY MATERIAL OR DEBRIS STOCKPILED ON SITE SHALL BE CONTAINED BY WATTLES (OR EQUIVALENT).
 9. MINIMIZE THE AMOUNT OF MATERIAL STOCKPILED ON SITE.
 10. ADDITIONAL SANDBAGS, WATTLES, AND OTHER EROSION CONTROL MATERIAL SHALL BE STORED ON SITE TO ALLOW FOR IMMEDIATE REPAIR OF PROPOSED FACILITY.
 11. REMOVE SEDIMENT BEFORE ACCUMULATION REACHES ¼ OF THE BARRIER HEIGHT.
 12. THE ACTUAL AMOUNT AND TYPES OF EROSION CONTROL DEVICES WILL VARY BASED ON CONSTRUCTION METHODOLOGIES AND STAGING. THIS PLAN SHOWS A MINIMUM REQUIREMENT AND SHALL BE SUPPLEMENTED AS NEEDED.
 13. WATTLE DIKES OR EQUIVALENT SYSTEMS SHALL BE INSTALLED AT LOCATIONS WHERE SLOPE RUNOFF ARE LEADING TO STORMWATER INLET FACILITIES.
 14. HYDROSEED ALL EXPOSED AREAS OF EARTH PRIOR TO START OF RAINY SEASON. IF RAIN IS IMMINENT OR GRASS IS NOT MATURE PRIOR TO OCTOBER 15TH, COVER EXPOSED EARTH WITH STRAW AND TACKIFIER.
 15. IN DRY WEATHER CONDITION, MINIMIZE DUST PRODUCTION BY FREQUENTLY SPRAYING WATER IN THE AREAS WHERE EXCAVATION/GRADING OPERATIONS ARE BEING PERFORMED.
 16. BEFORE A REQUEST FOR A FINAL INSPECTION, ANY AREA WHERE SOIL IS DISTURBED MUST BE RE-VEGETATED WITH A GROUND COVER ACCEPTABLE TO THE CITY OF SAUSALITO, OR A PERMANENT EROSION CONTROL SYSTEM SUCH AS AN EROSION CONTROL BLANKET OR MULCH COVERED WITH A TACKIFIER. THERE ARE NO EXCEPTIONS TO THIS REQUIREMENT AND TEMPORARY PLANTING MAY BE REQUIRED TO COMPLY. FOR INFORMATION AND DETAILS ON PERMANENT EROSION CONTROL METHODS, REFER TO MCSTOPP.ORG. TREATMENT FOR STABILIZING ANY BARE SOIL MUST BE CLEARLY DESCRIBED ON THE DRAWINGS.

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 SAUSALITO, CA 94965
 APN: 065-252-22

EROSION CONTROL & WINTERIZATION PLAN

DATE: 2024-12-13
 SCALE: AS SHOWN
 DRAWN BY: WT
 JOB NUMBER: 1566-31235
 SHEET 6
S-4.0
 OF 7 SHEET



1 EROSION CONTROL & WINTERIZATION PLAN
 SCALE: 1/8" = 1'-0"

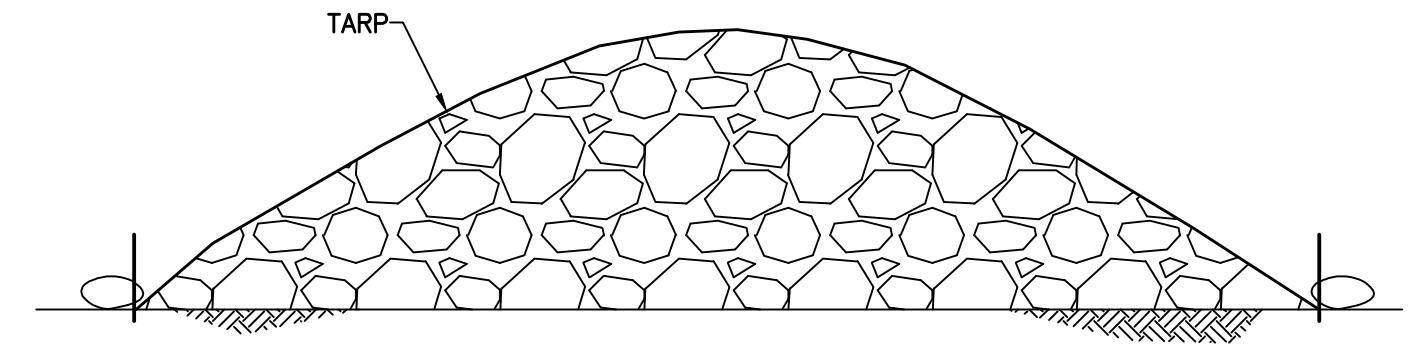
4 SILT FENCE (TYP.) SEE DETAIL
 S-4.0

PROJECT BOUNDARY

2 AREA OF MATERIAL STOCKPILE. SEE DETAIL
 S-4.0

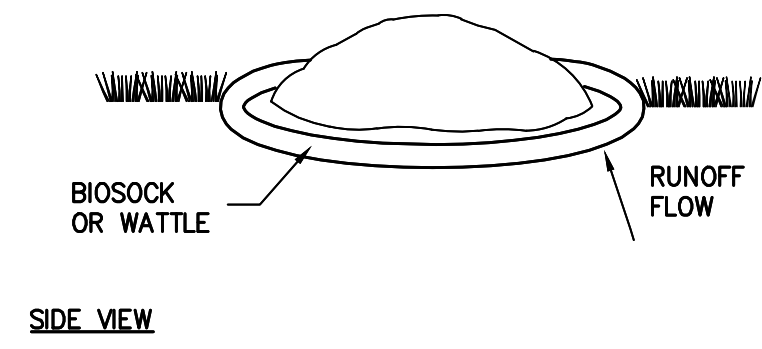
6 BIOSOCK OR WATTLE (TYP.) SEE DETAIL
 S-4.0

7 PROTECT EXCAVATIONS WITH TARP AND WATTLES (TYP.) SEE DETAIL
 S-4.0

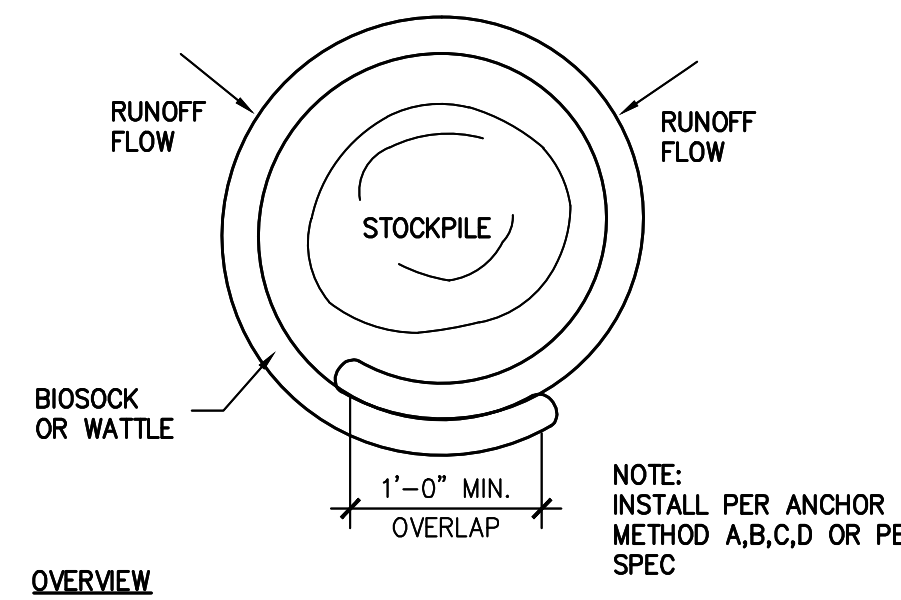


NOTE: STOCKPILE SLOPE NOT STEEPER THAN 5:1 (HORIZONTAL:VERTICAL)

2 MATERIAL STOCKPILE
 S-4.0

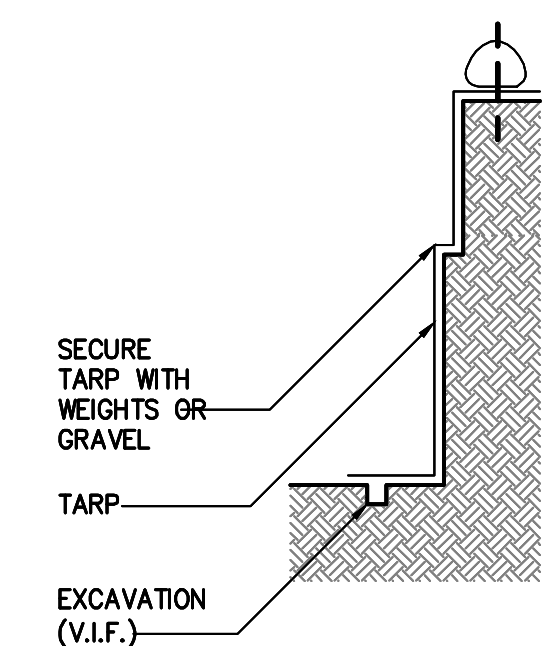


SIDE VIEW



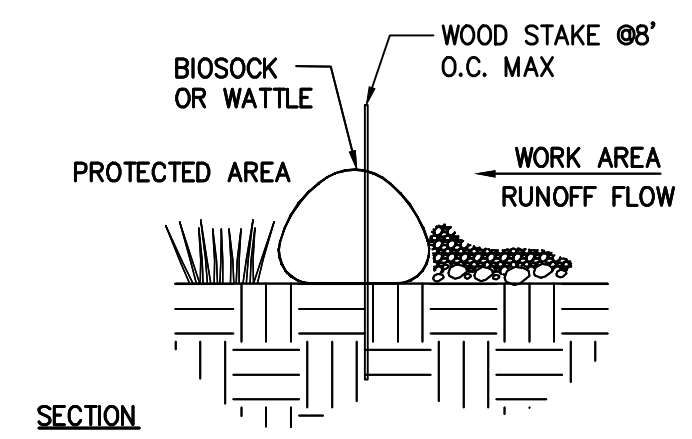
OVERVIEW

3 MATERIAL STOCKPILE CONTAINMENT
 S-4.0

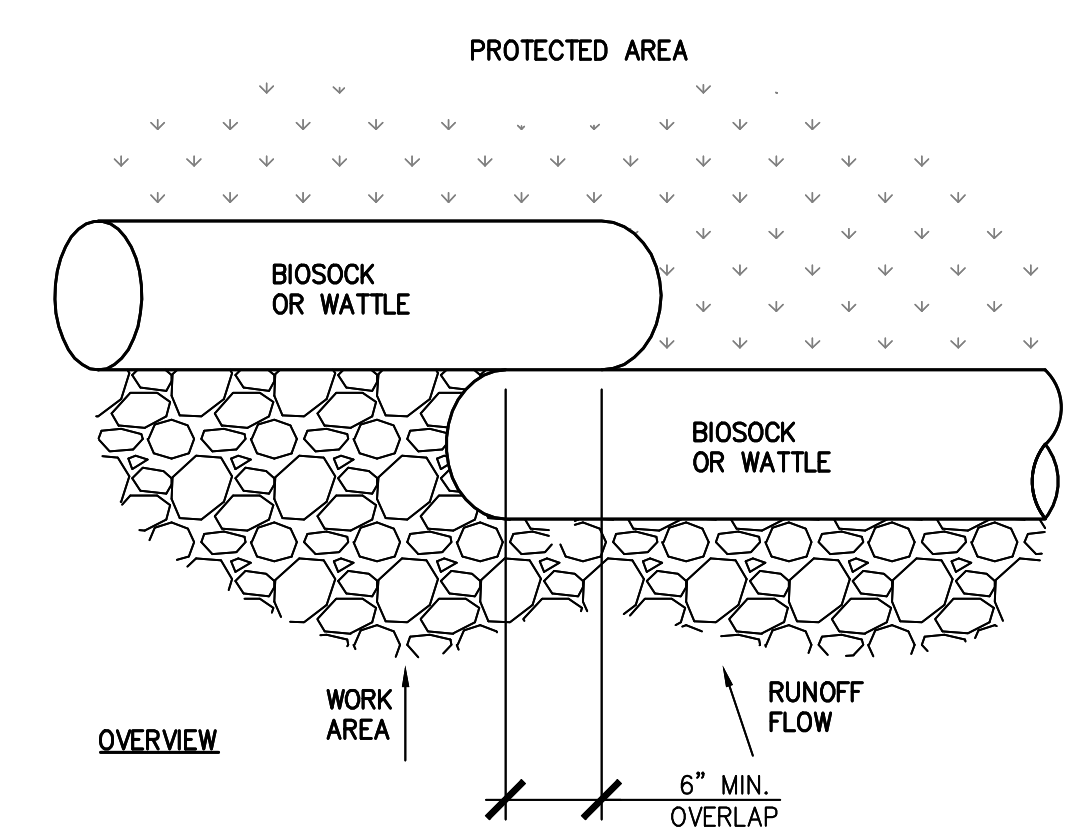


SECURE TARP WITH WEIGHTS OR GRAVEL
 TARP
 EXCAVATION (V.I.F.)

7 WINTERIZATION SECTION
 SCALE N.T.S.

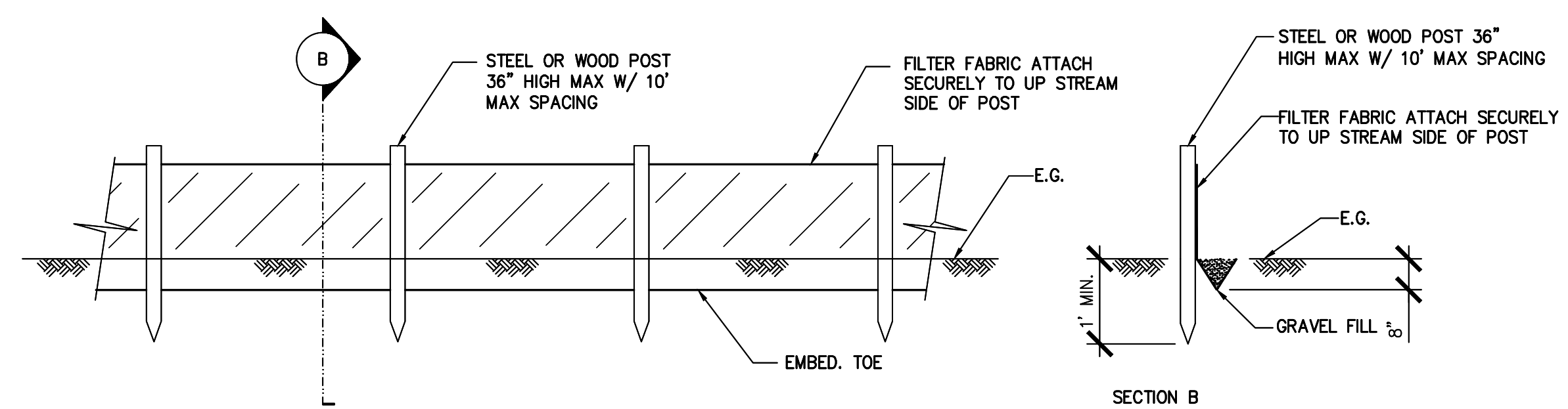


SECTION

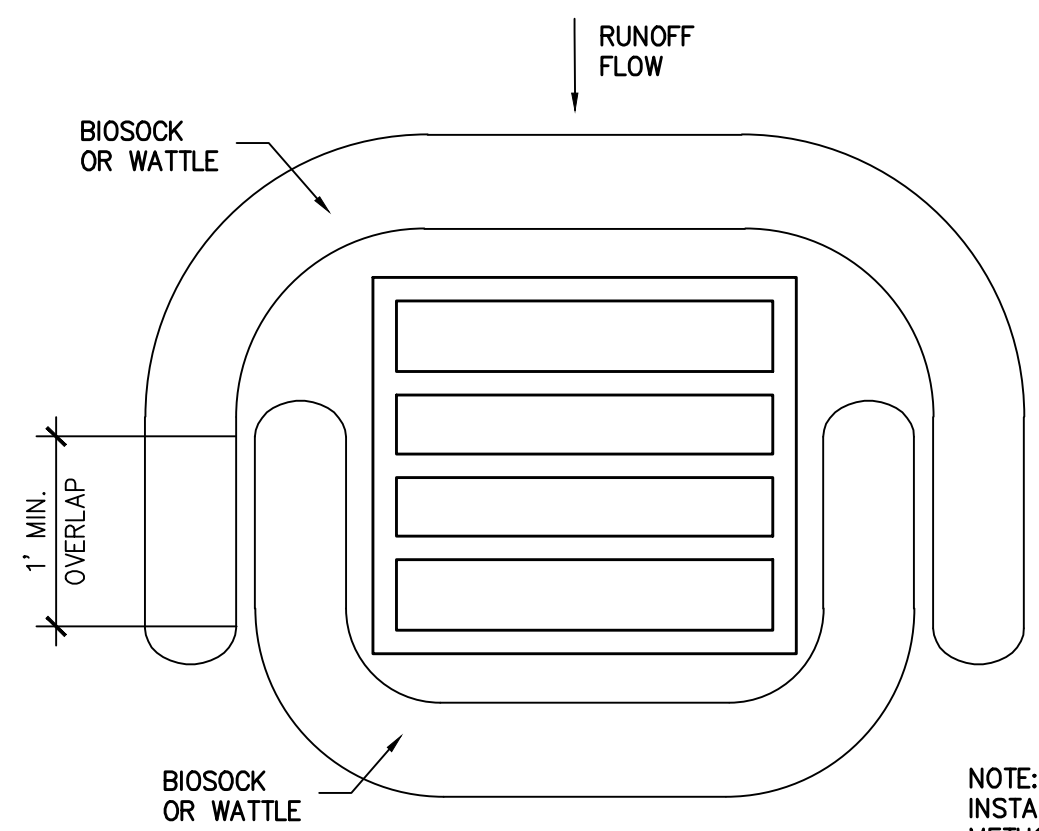


OVERVIEW

6 BIOSOCK INSTALLATION
 S-4.0

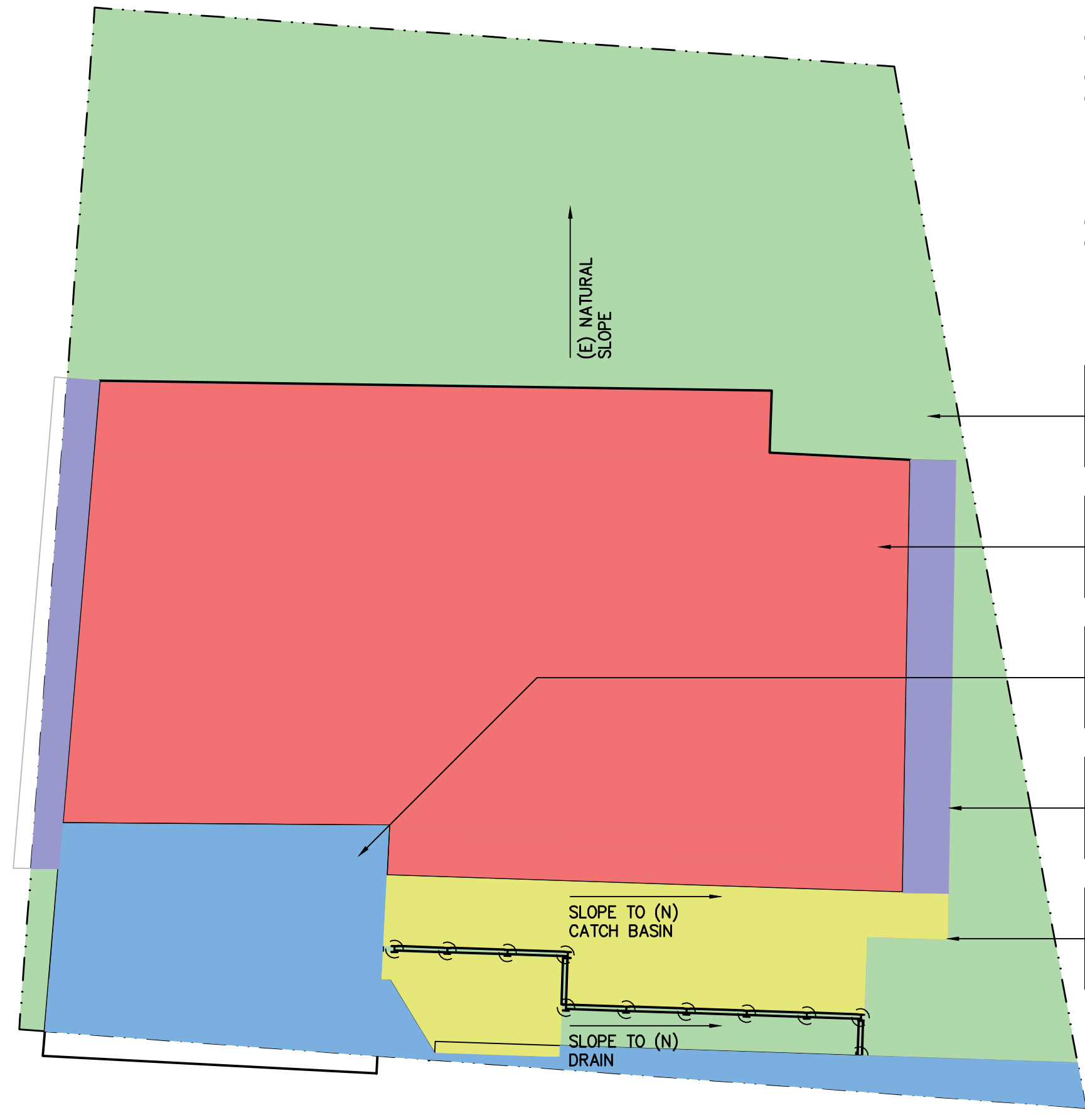


4 SILT FENCE
 S-4.0



5 INLET PROTECTION
 S-4.0

NOTE: INSTALL PER ANCHOR METHOD A,B,C,D OR PE SPEC



(E) PARCEL	4224 SQ FT	100%
(E) PERMEABLE SURFACE	1931 SQ FT	46%
(E) IMPERMEABLE SURFACE	2293 SQ FT	54%
(E) HOUSE	1692 SQ FT	
(E) DRIVEWAY	414 SQ FT	
(E) WOOD LANDING	36 SQ FT	
(E) WOOD STAIRS	151 SQ FT	
(N) PERMEABLE SURFACE	1663 SQ FT	39%
(N) IMPERMEABLE SURFACE	2561 SQ FT	61%
(N) HOUSE	1692 SQ FT	
(N) DRIVEWAY	414 SQ FT	
(N) WOOD STAIRS	151 SQ FT	
(N) WOOD DECK	304 SQ FT	

- AREA A: LANDSCAPE PERMEABLE 1663 SF
- AREA B: (E) HOUSE IMPERMEABLE 1692 SF
- AREA C: (E) DRIVEWAY IMPERMEABLE 414 SF
- AREA D: (E) STAIRS IMPERMEABLE 151 SF
- AREA E: (N) DECK IMPERMEABLE 304 SF

POLLUTION PREVENTION IT'S PART OF THE PLAN

MAKE SURE YOUR CREWS AND SUBS DO THE JOB RIGHT!
 Runoff from streets and other paved areas is a major source of pollution in our local waterways and the San Francisco Bay. Construction activities can directly affect the health of our waterways unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines will ensure your compliance with local ordinance requirements. Storm drain polluters may be liable for fines! For more information, contact your local stormwater coordinator (see reverse side).

EARTHWORK & CONTAMINATED SOILS

- ▶ Avoid scheduling earth disturbing activities during the rainy season. If grading activities during wet weather are allowed in your permit, be sure to implement all measures necessary to prevent erosion and sediment runoff.
- ▶ Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- ▶ If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fast-growing grasses as soon as possible. Place a silt barrier downslope until soil is secure.
- ▶ Keep excavated soil securely covered and bermed on the site where it is least likely to receive run-on. Transfer to dump trucks should occur on the site, not in the street.
- ▶ Use straw wattles, silt fences, gravel bags, check dams, or other control measures to prevent the flow of silt from the site and into storm drains or creeks.

PAVING/ASPHALT WORK

- ▶ Do not pave or conduct other concrete/asphalt work during wet weather or when rain is forecast.
- ▶ Always seal off storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, etc.
- ▶ Do not sweep or wash down excess materials into storm drains, ditches, or creeks. Collect these materials and return them to stockpiles, or dispose of properly.
- ▶ Do not use water to wash down fresh asphalt or concrete pavement.

DEWATERING OPERATIONS

- ▶ Reuse uncontaminated water for dust control, irrigation, or another on-site purpose to the greatest extent possible.
- ▶ Be sure to call the local Stormwater Coordinator before discharging water to a street, storm drain, or creek. Only clean groundwater can be discharged to a storm drain. Settling, filtration, treatment, or removal may be required.

MATERIALS STORAGE & WASTE DISPOSAL

- ▶ Sweep streets and other paved areas daily. Never wash down streets or work areas with water!
- ▶ Be sure to store any stockpiles of dirt, sand, asphalt, concrete, grout, mortar, etc. under cover and away from drainage areas. These materials must never reach a storm drain, creek, or other watercourse. Stockpiles must be kept onsite, not in the street.
- ▶ Collect and retain all concrete washout water and solids in leak proof containers so that none of the caustic material reaches the soil surface where it can migrate to surface waters or into the groundwater.
- ▶ All water from washing exposed aggregate concrete must also be diverted and captured into leak proof containers where it will not come in contact with the soil.
- ▶ All collected wash water and solids must be properly recycled or removed off site for appropriate disposal.

HAZARDOUS MATERIALS MANAGEMENT

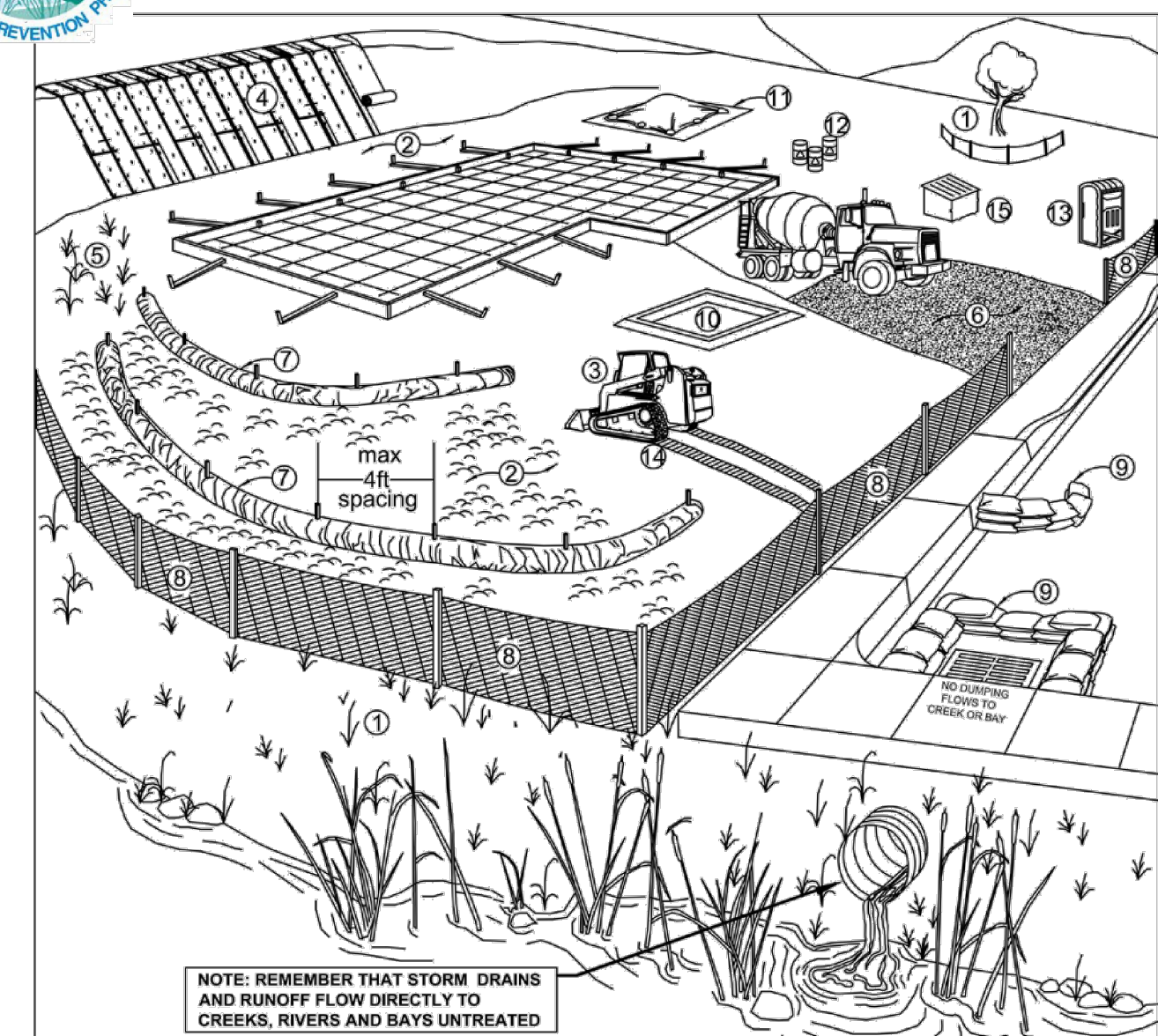
- ▶ Label all hazardous materials/wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, state, and federal regulations.
- ▶ Store hazardous materials and wastes in secondary containment and cover them during wet weather.
- ▶ Follow manufacturer's application instructions for hazardous materials. Be careful not to use more than necessary.
- ▶ Do not apply pesticides, herbicides, or other chemicals outdoors when rain is forecast within 48 hours.
- ▶ Dispose of hazardous materials/waste at the Hazardous Waste Collection Facility. For more information:
 - Novato businesses call - 800-243-0291
 - All other businesses in Marin call - 415-485-6806

CONTINUED ON BACK

MARIN COUNTY STORMWATER POLLUTION PREVENTION PROGRAM
415.473.6528 January 2019 www.mcstopp.org



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



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

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 at <https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/manuals-and-handbooks>. Visit www.mcstopp.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

PAINTING

- ▶ Never rinse paint brushes or materials onto the ground, into a storm drain or backyard drain, or on the street!
- ▶ Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink with a drain that goes to sanitary sewer.
- ▶ Paint out excess oil-based paint before cleaning brushes in paint thinner or solvent in a proper container.
- ▶ Filter paint thinners and solvents for reuse whenever possible. Dispose of all leftover paints, oil-based paint sludge, and unusable thinner at the hazardous waste collection facility. (See reverse for Hazardous Materials Management.)

LANDSCAPING

- ▶ Schedule grading and excavation projects for dry weather.
- ▶ Disturb the least amount of soil and existing vegetation as possible to complete the work.
- ▶ Protect stockpiles and landscaping materials from wind and rain by storing them under secured tarps or plastic sheeting and berm as needed to prevent run-on.
- ▶ Protect storm drain inlets with gravel bag berms, filter mats or other inlet protection measures.
- ▶ Use temporary check dams, wattles, silt fences, and other sediment control devices to keep your dirt onsite.
- ▶ Revegetate the area. It's an excellent form of erosion control for any site.
- ▶ Store pesticides, fertilizers, and other chemicals indoors or in a locked shed or storage cabinet with secondary containment. Clean up all spills immediately.
- ▶ Make sure all products are properly labeled and check inventory before buying additional products.
- ▶ Properly rinse and dispose of containers according to the manufacturer's label recommendations.
- ▶ Take all unwanted products to the haz-waste facility. (See reverse for Hazardous Materials Management.)
- ▶ Collect lawn and garden clippings, pruning waste and tree trimmings. Chip, if necessary, and compost.
- ▶ Do not place yard waste in gutters. In communities with curbside yard waste recycling, leave clippings and pruning waste for pick-up in approved bags or containers or, take to a landfill that composts yard waste.
- ▶ Do not blow, sweep, or rake leaves and other yard waste into the street, storm drain, or creek.

POOL/SPA MAINTENANCE

- ▶ Never discharge swimming pool, fountain, or spa water (and/or backwash water) to a street, storm drain, or creek. Call MCSTOPPP at 415-473-6528 to request a free brochure - or go to www.mcstopp.org and look under Community Resources -> Businesses Resources.

VEHICLE & EQUIPMENT MAINTENANCE

- ▶ Frequently inspect vehicles and equipment for leaks. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ▶ Do not clean vehicles or equipment on site using soaps, solvents, degreasers, steam cleaning equipment, etc.
- ▶ Do not conduct fueling or maintenance for vehicles or equipment on site unless absolutely necessary. If fueling or maintenance must be done, put down tarps or plastic in a bermed area and use drip pans large enough to contain any spills. Collect and dispose of any hazardous materials properly.

SAW CUTTING

- ▶ Always completely seal or barricade storm drain inlets when saw cutting. Use sand bags, barrier dikes, adhesive mats, or similar to keep all slurry, water, and fines out of the storm drain system. If saw-cut slurry materials enter a storm drain, clean up with dry methods or vector the storm drain immediately.
- ▶ Shovel, absorb, and/or vacuum up saw-cut slurry, water and fines as you're cutting. Remove all waste in sealed, transportable containers as soon as you are finished.

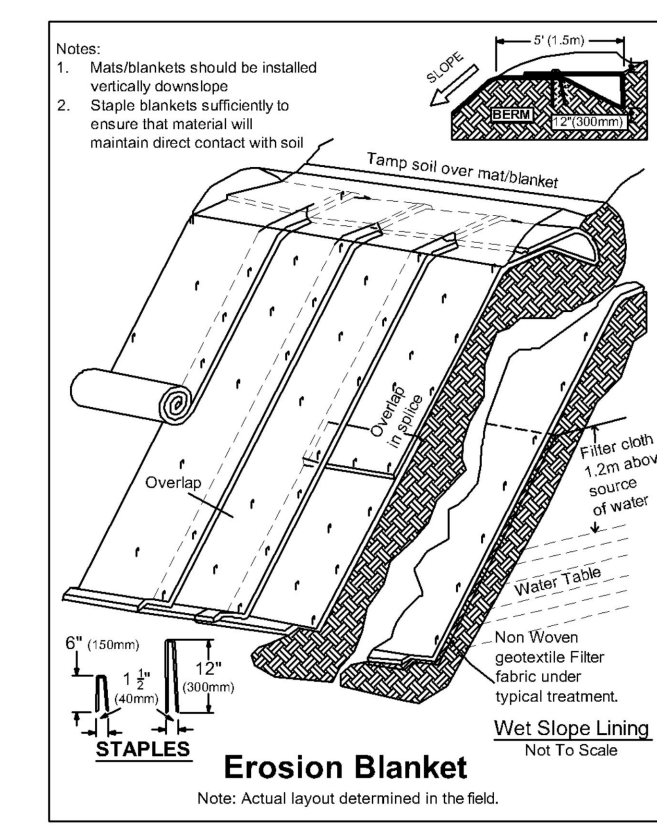
STORMWATER COORDINATORS (Call During Normal Business Hours)

Town of San Anselmo 415-258-4616	City of Sausalito 415-289-4100
Town of Corte Madera 415-927-5057	City of San Rafael 415-485-3355
City of Belvedere 415-435-3838	County Unincorporated 415-473-6528
Town of Ross 415-453-1453	Town of Tiburon 415-435-7354
Town of Fairfax 415-458-2370	City of Larkspur 415-927-5017
City of Novato 415-897-4361	City of Mill Valley 415-388-4033

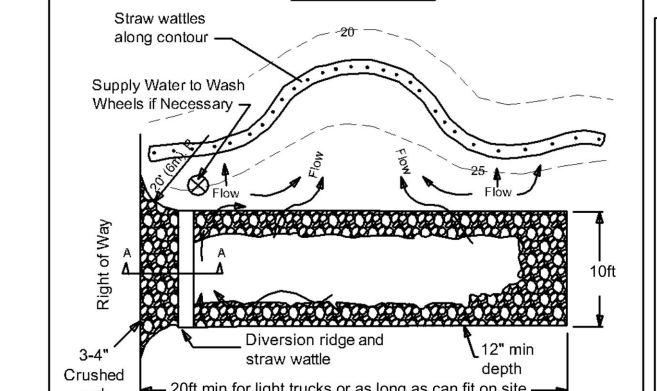
To report illegal discharges to storm drains or local waterways occurring after normal business hours, call 911 or your local fire department.

To report oil and chemical spills occurring in "open waters" or "on land" call 1-800-OIL5911

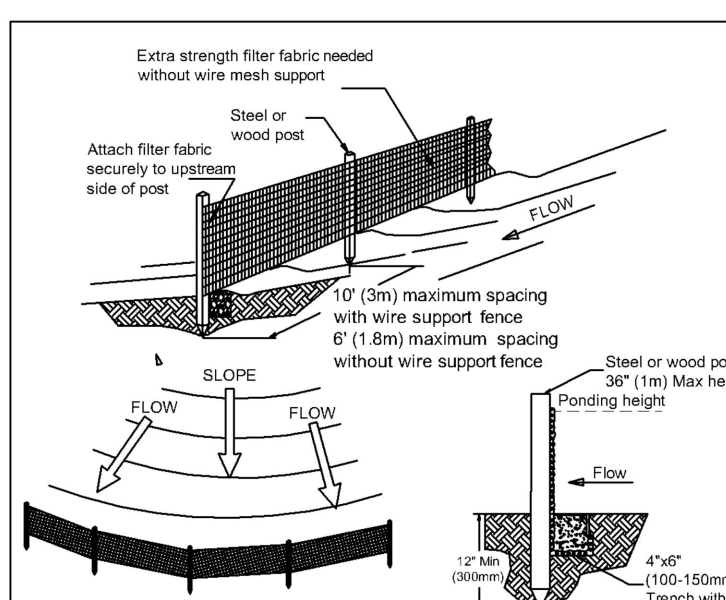
To report habitat destruction, fish kills, or poaching, call the California Department of Fish and Wildlife at 888-334-2258.



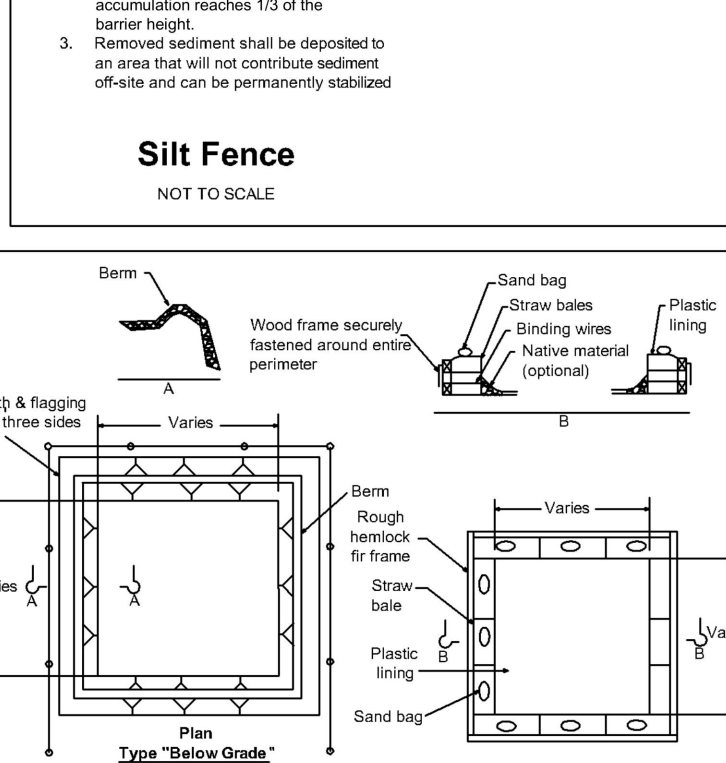
Erosion Blanket
 Note: Actual layout determined in the field.



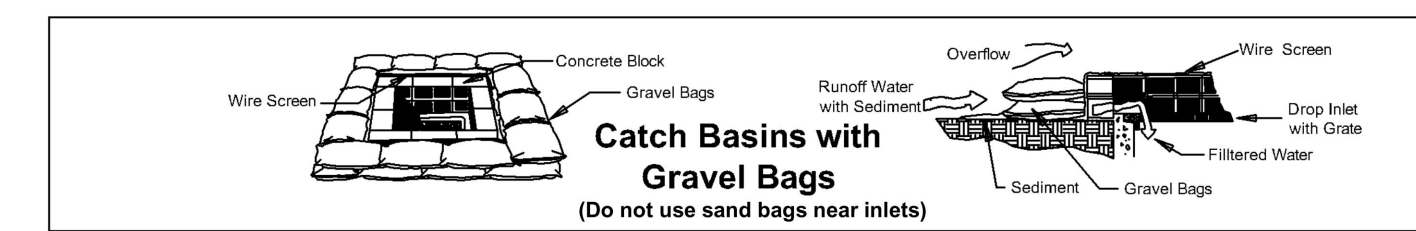
Site Entrance
 Note: Actual layout determined in field.



Silt Fence
 NOT TO SCALE



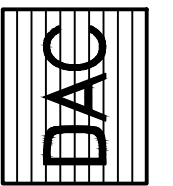
Concrete Washout
 Note: Actual layout determined in field.



Catch Basins with Gravel Bags
 (Do not use sand bags near inlets)

REVISIONS BY

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PEARSON RESIDENCE
SITE WORK
 390 SAUSALITO BLVD
 SAUSALITO, CA 94965
 APN: 065-252-22

DRAINAGE MAP & POLLUTION PREVENTION NOTES

DATE: 2024-12-13

SCALE: AS SHOWN

DRAWN BY: WT

JOB NUMBER: 1566-3123S

SHEET 7

S-5.0

OF 7 SHEET

1
S-5.0

DRAINAGE MAP

SCALE: 1/8" = 1'-0"

