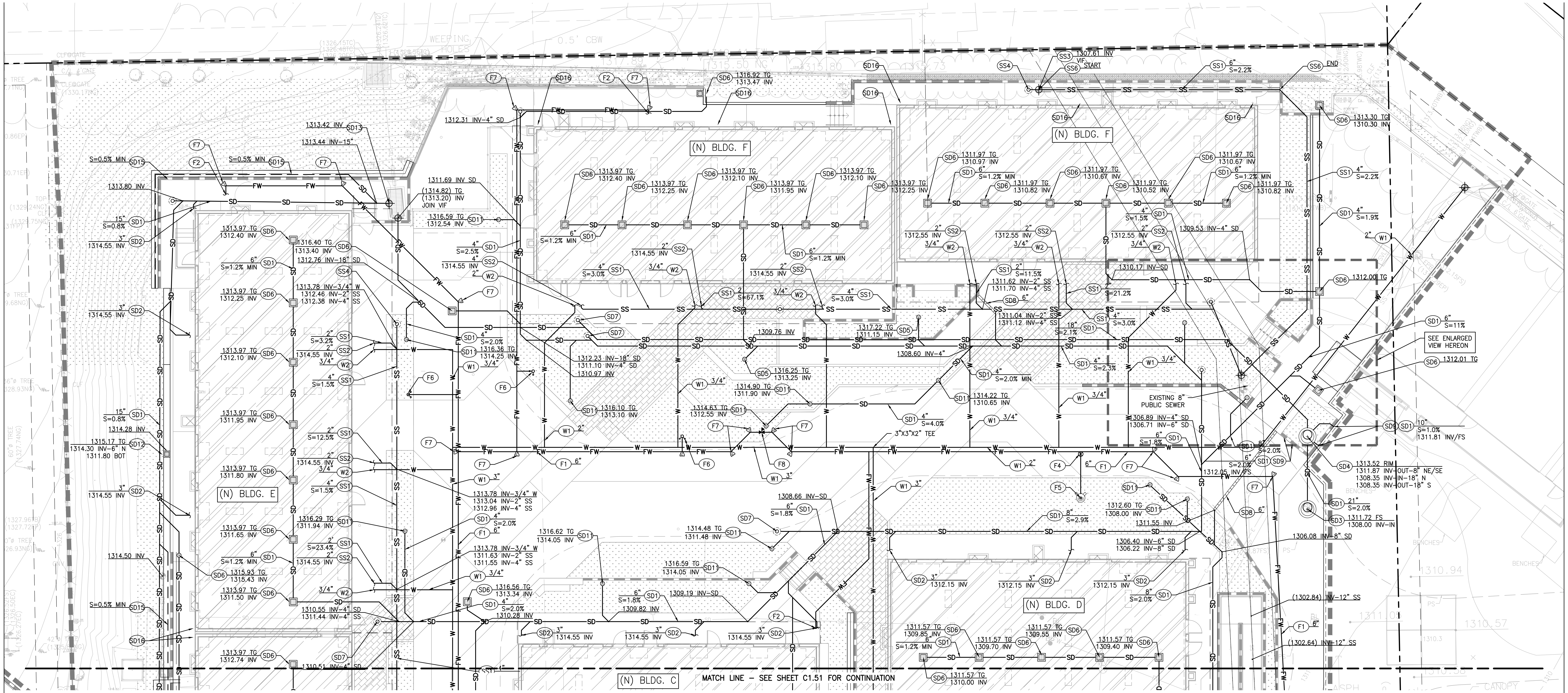

(N) BLDG. F
(N) BLDG. F
(N) BLDG. E
(N) BLDG. D
(N) BLDG. C
MATCH LINE – SEE SHEET C1.51 FOR CONTINUATION
SEE ENLARGED VIEW HEREON
EXISTING 8" PUBLIC SEWER
3"X3"X2" TEE
1307.61 INV VIF START
END
1312.31 INV–4" SD
1311.69 INV SD (1314.82) TG (1313.20) INV JOIN VIF
1313.52 RIM 1311.87 INV–OUT–8" NE/SE 1308.35 INV–IN–18" N 1308.35 INV–OUT–18" S
1306.08 INV–8" SD
(1302.84) INV–12" SS
(1302.64) INV–12" SS
1312.01 TG
1313.30 TG 1310.30 INV

UTILITY CONSTRUCTION NOTES:

STORM DRAIN

SD1	PVC SDR–35 STORM DRAIN PIPE PER DETAIL 5, SHEET 5C5.00. SIZE AND SLOPE PER PLAN.
SD2	POINT OF CONNECTION WITH BUILDING LATERAL PIPE. SEE PLUMBING DRAWINGS FOR CONTINUATION.
SD3	MAXWELL IV DRYWELL. PER DETAIL 8, SHEET 5C5.02.
SD4	CONTECH CDS PRETREATMENT UNIT. PER DETAIL 1, SHEET 5C5.03
SD5	AREA DRAIN PER DETAIL 6, SHEET 5C5.00.
SD6	JENSEN 12"X12" PRECAST CATCH BASIN.
SD7	CLEANOUT PER DETAIL 8, SHEET 5C5.00.
SD8	ACO K100 PRECAST HEAVY DUTY TRENCH DRAIN OR APPROVED EQUIVALENT.
SD9	STORM DRAIN OVERFLOW OUTLET.
SD10	TURF AREA PERFORATED PIPE PER DETAIL 10, SHEET 5C5.01.
SD11	PLANTER DRAIN PER DETAIL 9, SHEET 5C5.01.
SD12	CONTECH CDS PRETREATMENT UNIT, PER DETAIL 4, SHEET 5C5.03.
SD13	CONNECT TO EXISTING STORM DRAIN. VERIFY INVERT IN FIELD.
SD14	BACK WATER VALVE & BOX.
SD15	PERFORATED PIPE PER DETAIL 7, SHEET 5C5.02 AND THE GEOTECHNICAL REPORT BLDG C D E & F FOR MORE DETAILS.
SD16	ABOVEGROUND DOWNSPOUT TO SPILL TO GRADE. SEE PLUMBING FOR CONTINUATION.

SANITARY SEWER

SS1	PVC SDR–35 SANITARY SEWER PIPE PER DETAIL 5, SHEET 5C5.00. SIZE AND SLOPE PER PLAN.
SS2	POINT OF CONNECTION WITH BUILDING LATERAL PIPE. SEE PLUMBING DRAWINGS AND AMS POINT OF CONNECTION PLAN FOR CONTINUATION.
SS3	CONNECT TO EXISTING CAMPUS SEWER LINE. CONTRACTOR TO VERIFY POINT OF CONNECTION INVERT ELEVATION IN FIELD.
SS4	CLEANOUT PER DETAIL 8, SHEET 5C5.00.
SS5	RELOCATE EXISTING PUBLIC SEWER LINE.
SS6	PIPE ENCASEMENT PER DETAIL 3, SHEET 5C5.03.

DOMESTIC WATER

W1	PVC SCHEDULE 40 DOMESTIC WATER PIPE PER DETAIL 5, SHEET 5C5.00. SIZE PER PLAN.
W2	POINT OF CONNECTION WITH BUILDING LATERAL PIPE. SEE PLUMBING DRAWINGS AND AMS POINT OF CONNECTION PLAN FOR CONTINUATION.
W3	CONNECT TO EXISTING CAMPUS WATER LINE.
W4	RELOCATED BACKFLOW PREVENTOR.

FIRE WATER

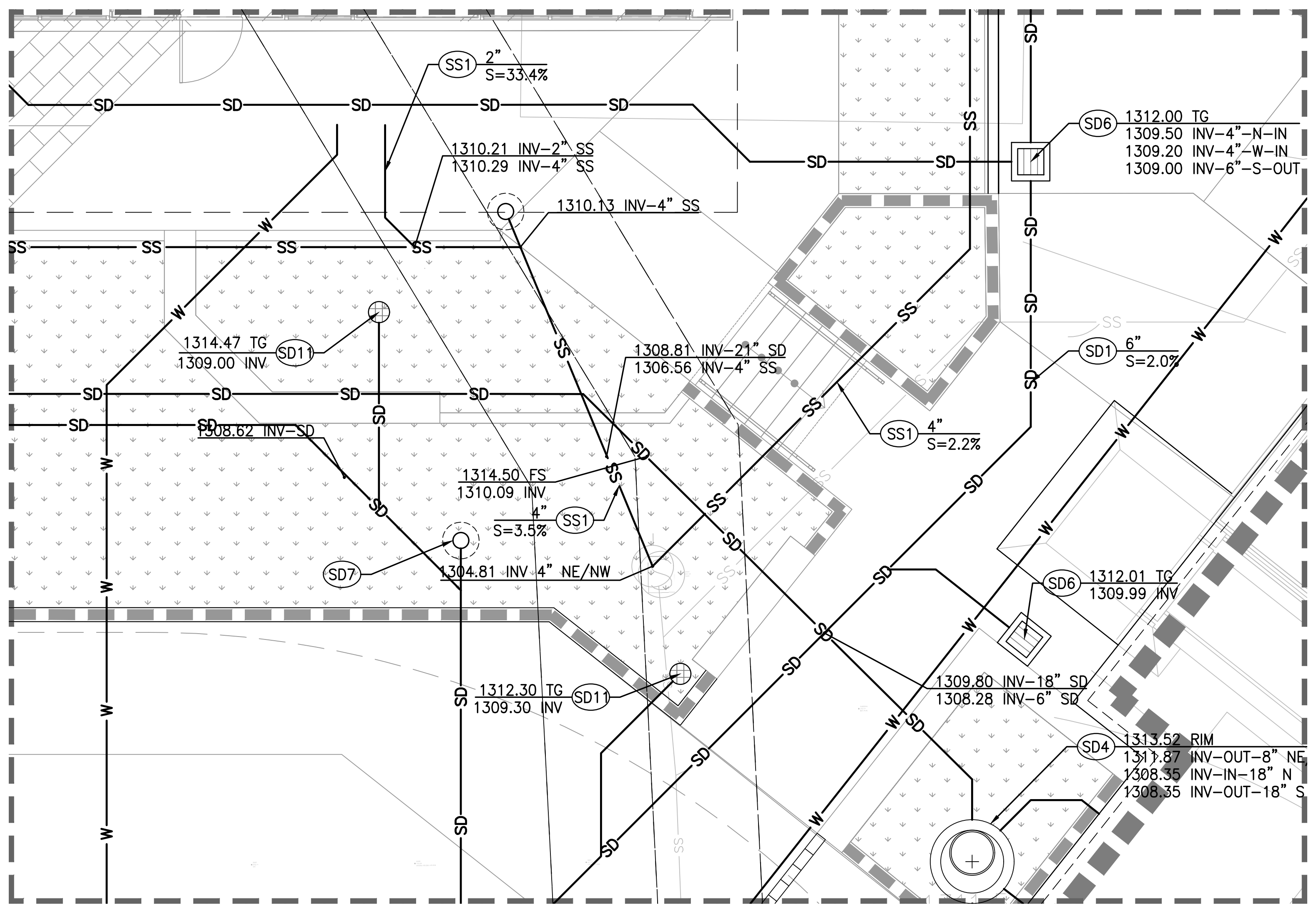
F1	PVC C–900 FIRE WATER PIPE PER DETAIL 5, SHEET 5C5.00. SIZE AND MATERIAL PER PLAN.
F2	POINT OF CONNECTION TO FIRE RISER. SITE CONTRACTOR TO ROUTE FROM SITE POC TO FIRE RISER.
F3	CONNECT TO EXISTING SITE FIRE WATER LINE.
F4	GATE VALVE IN VALVE BOX PER DETAIL 2, SHEET 5C5.03.
F5	FIRE HYDRANT. INSTALLATION BY VALLEY WATER COMPANY. SHOWN FOR COORDINATION PURPOSES ONLY. SEE DETAIL 7, SHEET 5C5.00.
F6	FIRE DEPARTMENT CONNECTION PER DETAIL 6, SHEET 5C5.01.
F7	THRUST BLOCK PER DETAIL 7, SHEET 5C5.01 OR SELF RESTRAINING MECHANICAL JOINT.
F8	POST INDICATOR VALVE PER DETAIL 1, SHEET 5C5.01.
F9	NOT USED.

OTHER UTILITIES

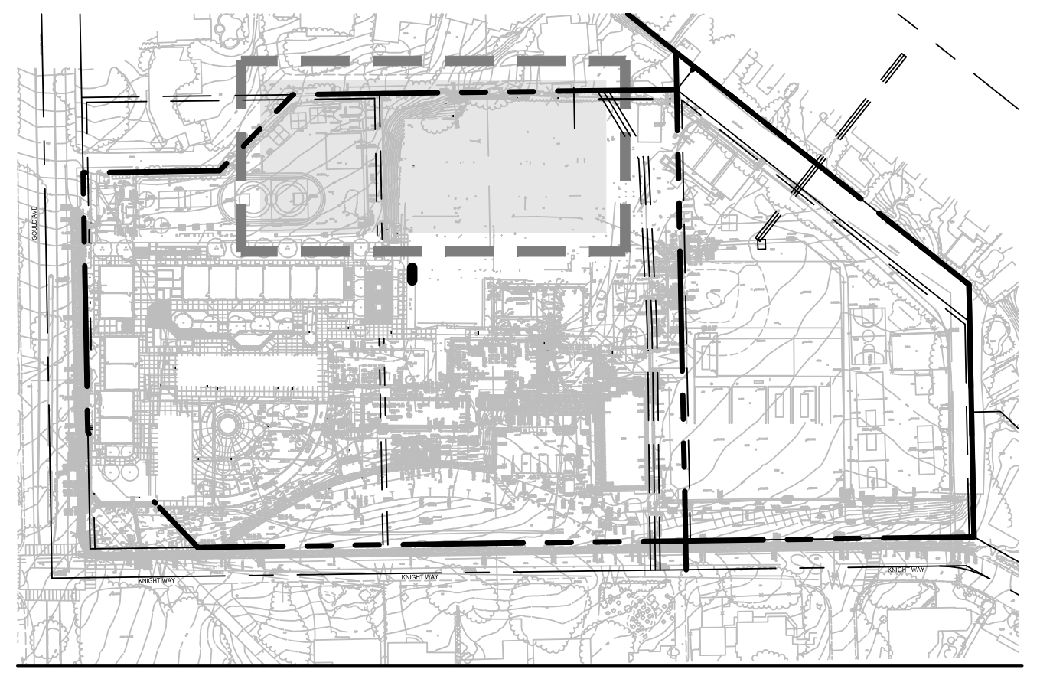
U1	ELECTRICAL CONDUIT. SEE ELECTRICAL DRAWINGS FOR DETAILS AND SPECIFICATIONS. SHOWN FOR COORDINATION PURPOSES ONLY.
U2	GAS LINE. MATCH EXISTING SIZE AND MATERIAL. PIPE TO MAINTAIN MINIMUM 24" COVER. SHOWN FOR COORDINATION PURPOSES ONLY.
U3	GAS LINE POINT OF CONNECTION TO THE EXISTING CAMPUS GAS LINE. VERIFY INVERT IN THE FIELD.
U4	ELECTRICAL CONDUIT POINT OF CONNECTION TO EXISTING CAMPUS ELECTRICAL LINE. SEE ELECTRICAL DRAWINGS FOR DETAILS AND SPECIFICATIONS. VERIFY INVERT IN FIELD.

LEGEND:

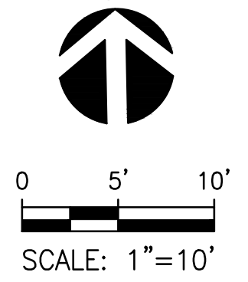
▬ ▬ ▬ ▬	LIMIT OF WORK
—— – – ——	PROPERTY LINE
▬▭▬▭▬	SEE STRUCTURAL DRAWINGS FOR DETAILS. SEE DETAIL 7, SHEET 5C5.02 AND THE GEOTECHNICAL REPORT BLDG C D E & F FOR MORE DETAILS.
—— SS ——	SANITARY SEWER
—— W ——	WATER
—— DW ——	DOMESTIC WATER
—— FW ——	FIRE WATER
—— SD ——	STORM DRAIN
—— G ——	GAS
—— E ——	ELECTRIC
—— T ——	TELEPHONE
– – – – –	PERFORATED PIPE
⌖	POINT OF CONNECTION
——ʃ	COORDINATION POINT
——]	CAP OR PLUG
◉	UTILITY MANHOLE
◌	UTILITY CLEANOUT
▥	STORM DRAIN INLET
⊕	AREA DRAIN/PLANTER DRAIN
▭	TRENCH DRAIN
⊙	FIRE HYDRANT
◁	THRUST BLOCK
Y	FIRE DEPARTMENT CONNECTION (FDC)
⧓	POST INDICATOR VALVE (PIV)
⊗	WATER VALVE
⊣⊢	BACKFLOW ASSEMBLY
▨	UTILITY METER VAULT


SS1 2" S=33.4%
1310.21 INV–2" SS
1310.29 INV–4" SS
1310.13 INV–4" SS
SD6 1312.00 TG 1309.50 INV–4"–N–IN 1309.20 INV–4"–W–IN 1309.00 INV–6"–S–OUT
1314.47 TG 1309.00 INV
1308.81 INV–2" SD 1306.56 INV–4" SS
SD1 6" S=2.0%
1308.62 INV–SD
SS1 4" S=2.2%
1314.50 FS 1310.09 INV
4" S=3.5% SS1
SD7 1304.81 INV 4" NE/NW
SD6 1312.01 TG 1309.99 INV
1312.30 TG 1309.30 INV SD1
1309.80 INV–18" SD 1308.28 INV–6" SD
SD4 1313.52 RIM 1311.87 INV–OUT–8" NE 1308.35 INV–IN–18" N 1308.35 INV–OUT–18" S

ENLARGED PLAN VIEW
SCALE: 1" = 5'
SEE SHEET C1.30 FOR OVERALL PLAN



KEY MAP SCALE: 1"=200'


N
0
5'
10'
SCALE: 1"=10'

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APP: 03-125476 INC:
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DATE: 05/07/2026

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Exp. 6/30/27
CIVIL

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

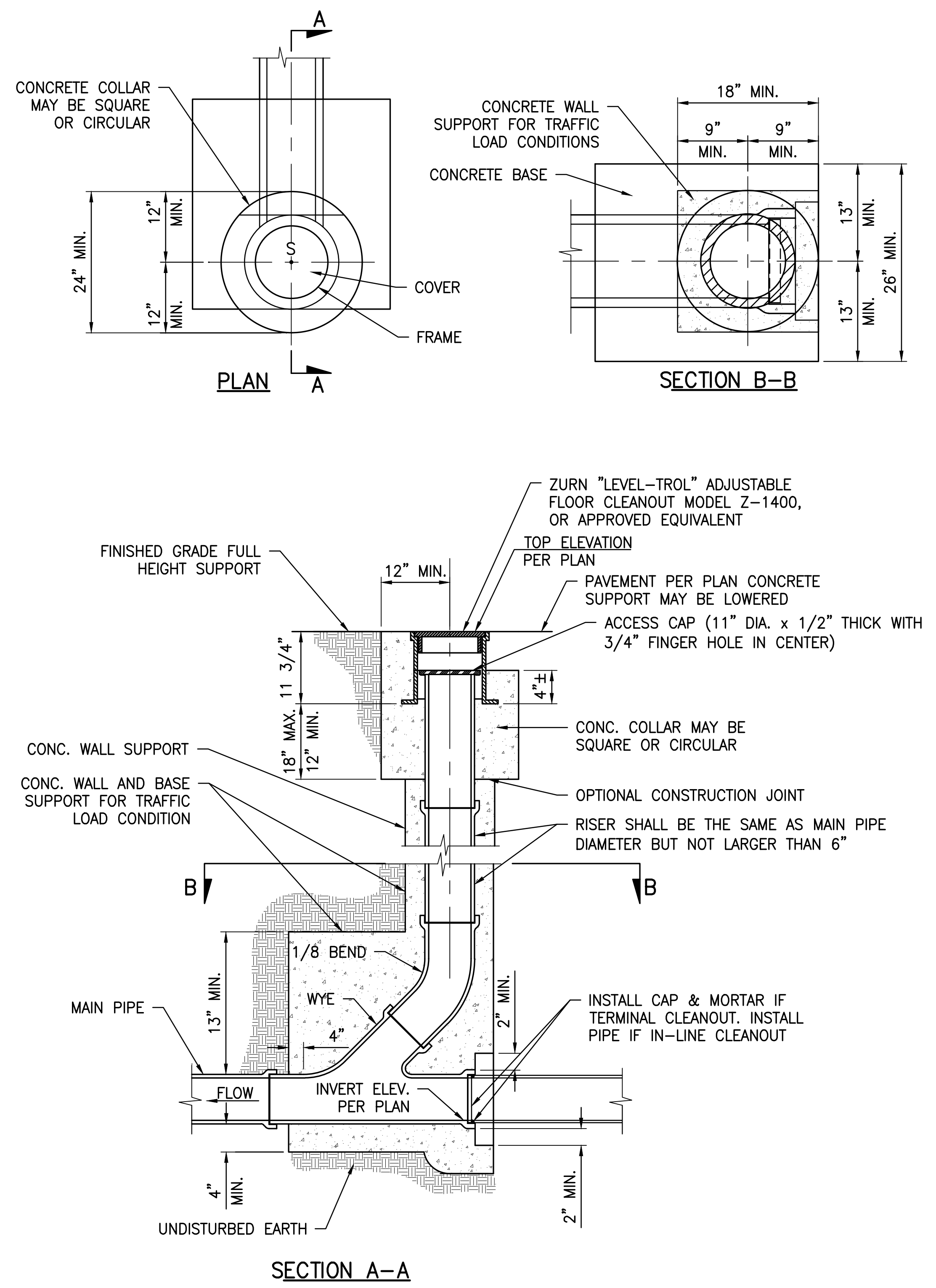
UTILITY PLAN

5C1.52

SCALE: AS INDICATED

P:\2020\200742 Paradise Canyon ES Modernization\5 CAD\Sheets\New North Buildings\200742-C-1.52UT.dwg, Mar 18, 2026 - 1:48pm

If this sheet is smaller than 30" high by 42" wide then it has been reduced.

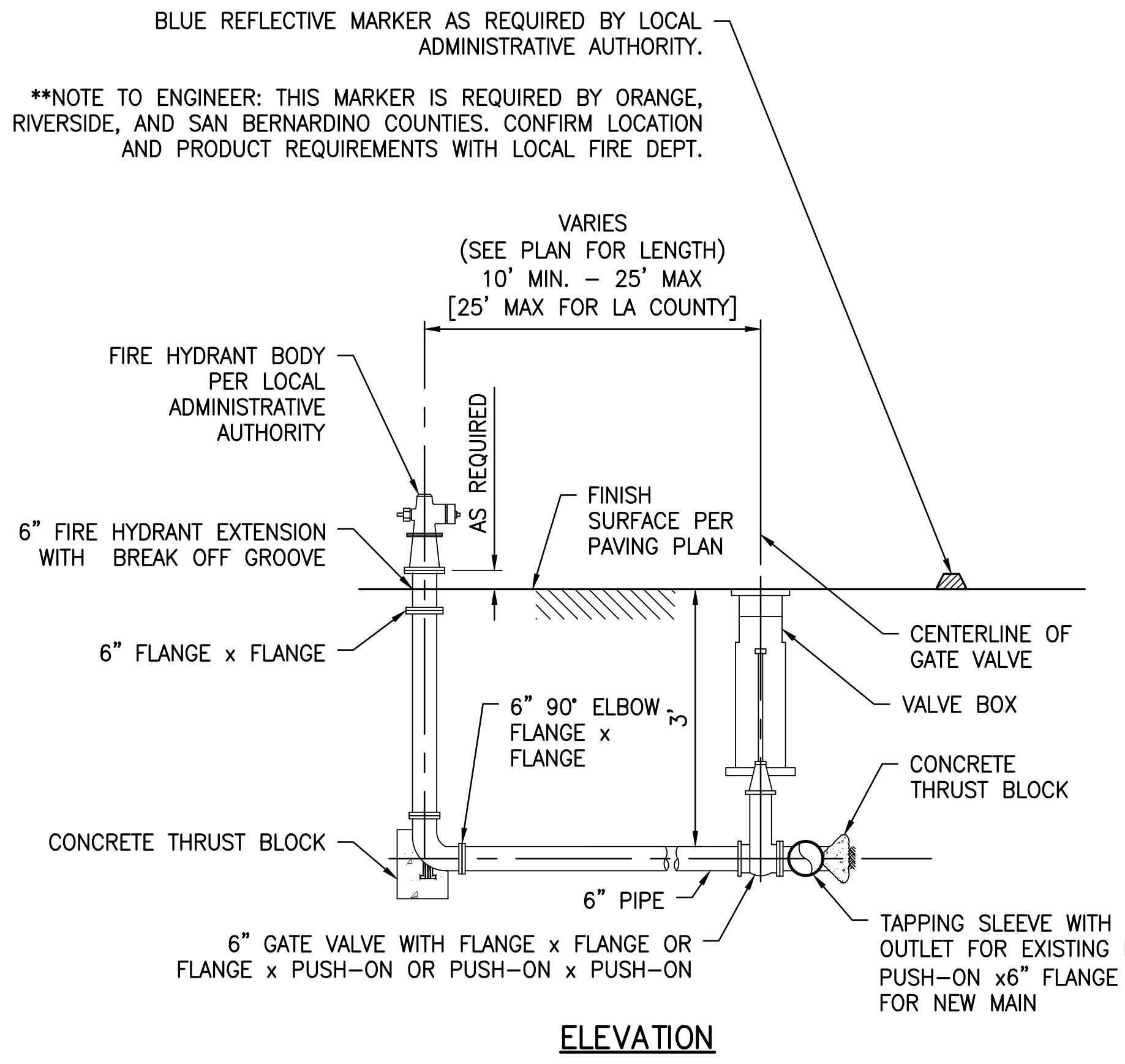

A
CONCRETE COLLAR MAY BE SQUARE OR CIRCULAR
24" MIN.
12" MIN.
12" MIN.
S
COVER
FRAME
PLAN
A
CONCRETE WALL SUPPORT FOR TRAFFIC LOAD CONDITIONS
CONCRETE BASE
18" MIN.
9" MIN.
9" MIN.
13" MIN.
13" MIN.
26" MIN.
SECTION B–B
ZURN "LEVEL–TROL" ADJUSTABLE FLOOR CLEANOUT MODEL Z–1400, OR APPROVED EQUIVALENT
FINISHED GRADE FULL HEIGHT SUPPORT
TOP ELEVATION PER PLAN
12" MIN.
PAVEMENT PER PLAN CONCRETE SUPPORT MAY BE LOWERED
ACCESS CAP (11" DIA. x 1/2" THICK WITH 3/4" FINGER HOLE IN CENTER)
11 3/4"
4"±
18" MAX.
12" MIN.
CONC. COLLAR MAY BE SQUARE OR CIRCULAR
CONC. WALL SUPPORT
CONC. WALL AND BASE SUPPORT FOR TRAFFIC LOAD CONDITION
OPTIONAL CONSTRUCTION JOINT
RISER SHALL BE THE SAME AS MAIN PIPE DIAMETER BUT NOT LARGER THAN 6"
B
B
1/8 BEND
WYE
4"
MAIN PIPE
13" MIN.
2" MIN.
INSTALL CAP & MORTAR IF TERMINAL CLEANOUT. INSTALL PIPE IF IN–LINE CLEANOUT
FLOW
INVERT ELEV. PER PLAN
4" MIN.
2" MIN.
UNDISTURBED EARTH
SECTION A–A

NOTES

1. SEE PROJECT PLANS FOR INVERT ELEVATION.
2. PIPE AND FITTINGS, EXCEPT AS OTHERWISE SHOWN ON HEREON, SHALL BE OF THE SAME MATERIAL AS THE SEWER, UNLESS APPROVED ADAPTERS ARE UTILIZED AND MAY BE ANY OF THE FOLLOWING:
   - A. VC PIPE
   - B. PE PIPE
   - C. ABS SOLID PIPE
   - D. ABS COMPOSITE PIPE
   - E. PVC PLASTIC PIPE
3. PIPES AND FITTINGS SHALL BE PROPERLY ALIGNED AND MAINTAINED WHILE CONCRETE IS BEING PLACED AND ALLOWED TO HARDEN. JOINTS FOR PIPES AND FITTINGS SHALL BE MADE PRIOR TO PLACING CONCRETE. CONCRETE FOR BEDDING, ENCASEMENT, AND WALL SUPPORT FOR PIPES AND FITTINGS SHALL BE PLACED UNIFORMLY AROUND THE PIPE AND FITTINGS AS SHOWN HEREON TO MAINTAIN PROPER ALIGNMENT.
4. THE ACCESS FRAME, COVER AND CAP SHALL BE CAST IRON. THE FINGER HOLES MAY BE DRILLED OUT OR MAY BE BLOCKED OUT PRIOR TO CASTING; THEY SHALL NOT BE PUNCHED OUT.
5. THE CONTRACTOR, AT HIS OPTION, MAY PLACE EITHER CIRCULAR OR SQUARE CONCRETE PIPE WALL SUPPORTS AS SHOWN HEREON.

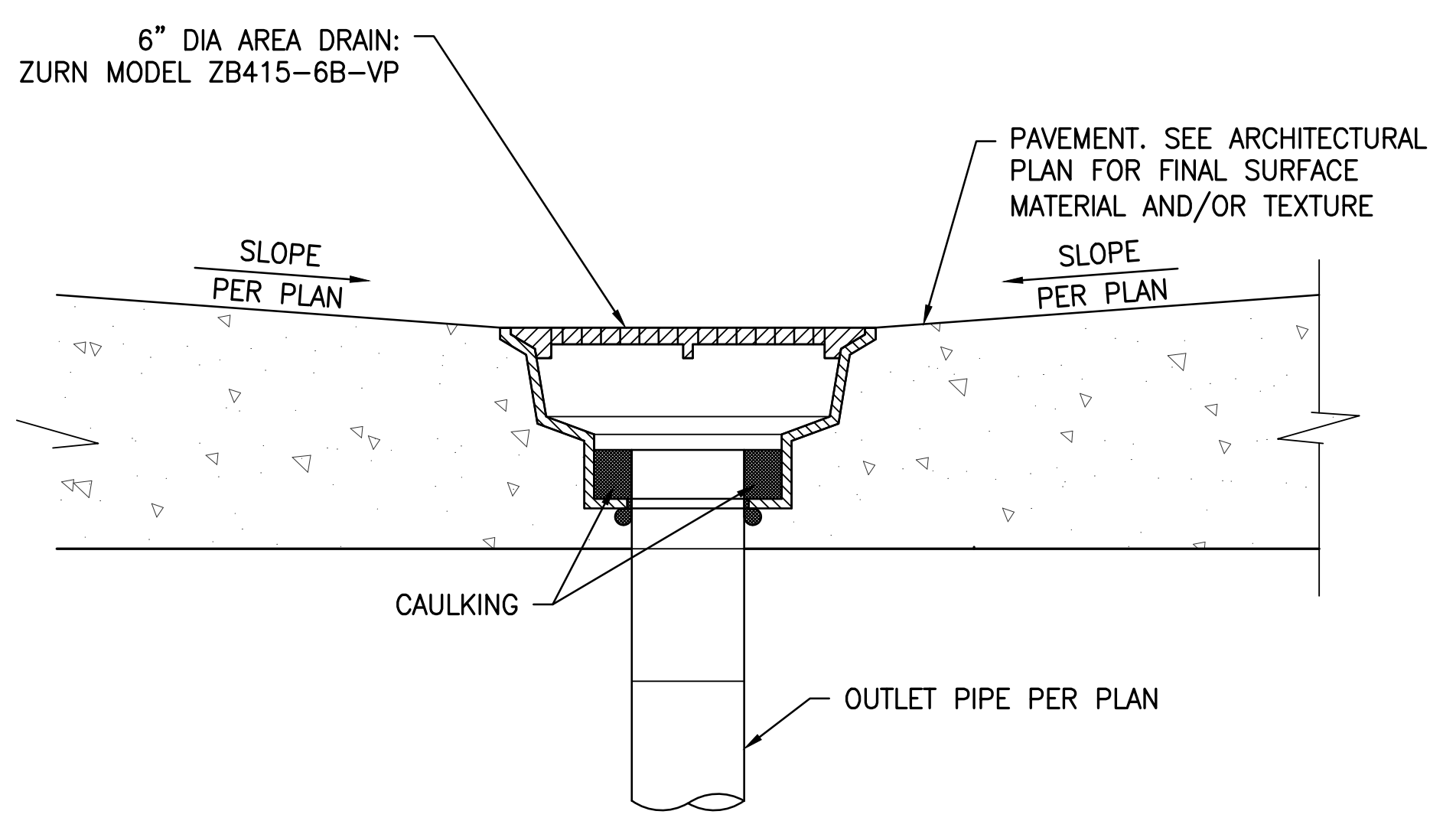
8 STANDARD CLEANOUT

N.T.S.


BLUE REFLECTIVE MARKER AS REQUIRED BY LOCAL ADMINISTRATIVE AUTHORITY.
**NOTE TO ENGINEER: THIS MARKER IS REQUIRED BY ORANGE, RIVERSIDE, AND SAN BERNARDINO COUNTIES. CONFIRM LOCATION AND PRODUCT REQUIREMENTS WITH LOCAL FIRE DEPT.
VARIES (SEE PLAN FOR LENGTH) 10' MIN. – 25' MAX [25' MAX FOR LA COUNTY]
FIRE HYDRANT BODY PER LOCAL ADMINISTRATIVE AUTHORITY
AS REQUIRED
FINISH SURFACE PER PAVING PLAN
6" FIRE HYDRANT EXTENSION WITH BREAK OFF GROOVE
6" FLANGE x FLANGE
CENTERLINE OF GATE VALVE
VALVE BOX
6" 90° ELBOW FLANGE x FLANGE
3'
CONCRETE THRUST BLOCK
CONCRETE THRUST BLOCK
6" PIPE
6" GATE VALVE WITH FLANGE x FLANGE OR FLANGE x PUSH–ON OR PUSH–ON x PUSH–ON
TAPPING SLEEVE WITH 6" OUTLET FOR EXISTING MAIN, PUSH–ON x6" FLANGE TEE FOR NEW MAIN
ELEVATION

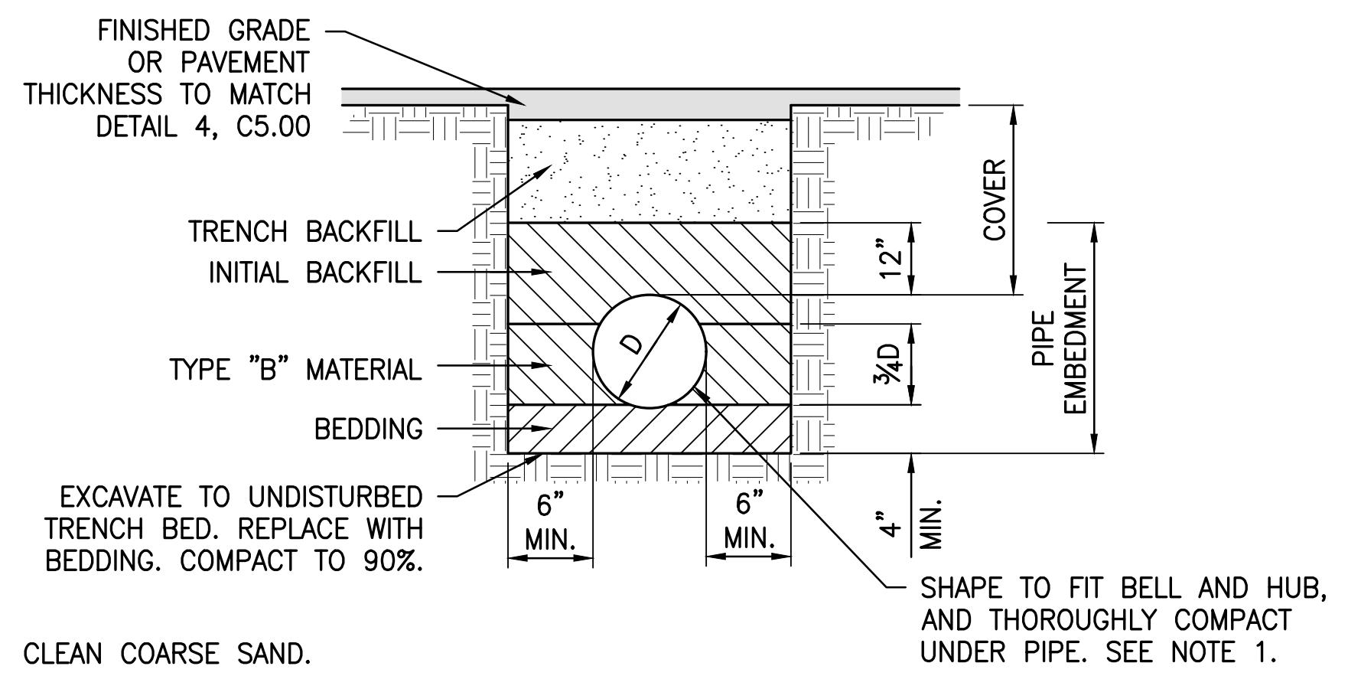
7 FIRE HYDRANT ASSEMBLY

N.T.S.


6" DIA AREA DRAIN: ZURN MODEL ZB415–6B–VP
PAVEMENT. SEE ARCHITECTURAL PLAN FOR FINAL SURFACE MATERIAL AND/OR TEXTURE
SLOPE PER PLAN
SLOPE PER PLAN
CAULKING
OUTLET PIPE PER PLAN

6 NON–TRAFFIC AREA DRAIN

N.T.S.


FINISHED GRADE OR PAVEMENT THICKNESS TO MATCH DETAIL 4, C5.00
TRENCH BACKFILL
INITIAL BACKFILL
TYPE "B" MATERIAL
BEDDING
EXCAVATE TO UNDISTURBED TRENCH BED. REPLACE WITH BEDDING. COMPACT TO 90%.
D
COVER
12"
¾D
PIPE EMBEDMENT
6" MIN.
6" MIN.
4" MIN.
SHAPE TO FIT BELL AND HUB, AND THOROUGHLY COMPACT UNDER PIPE. SEE NOTE 1.

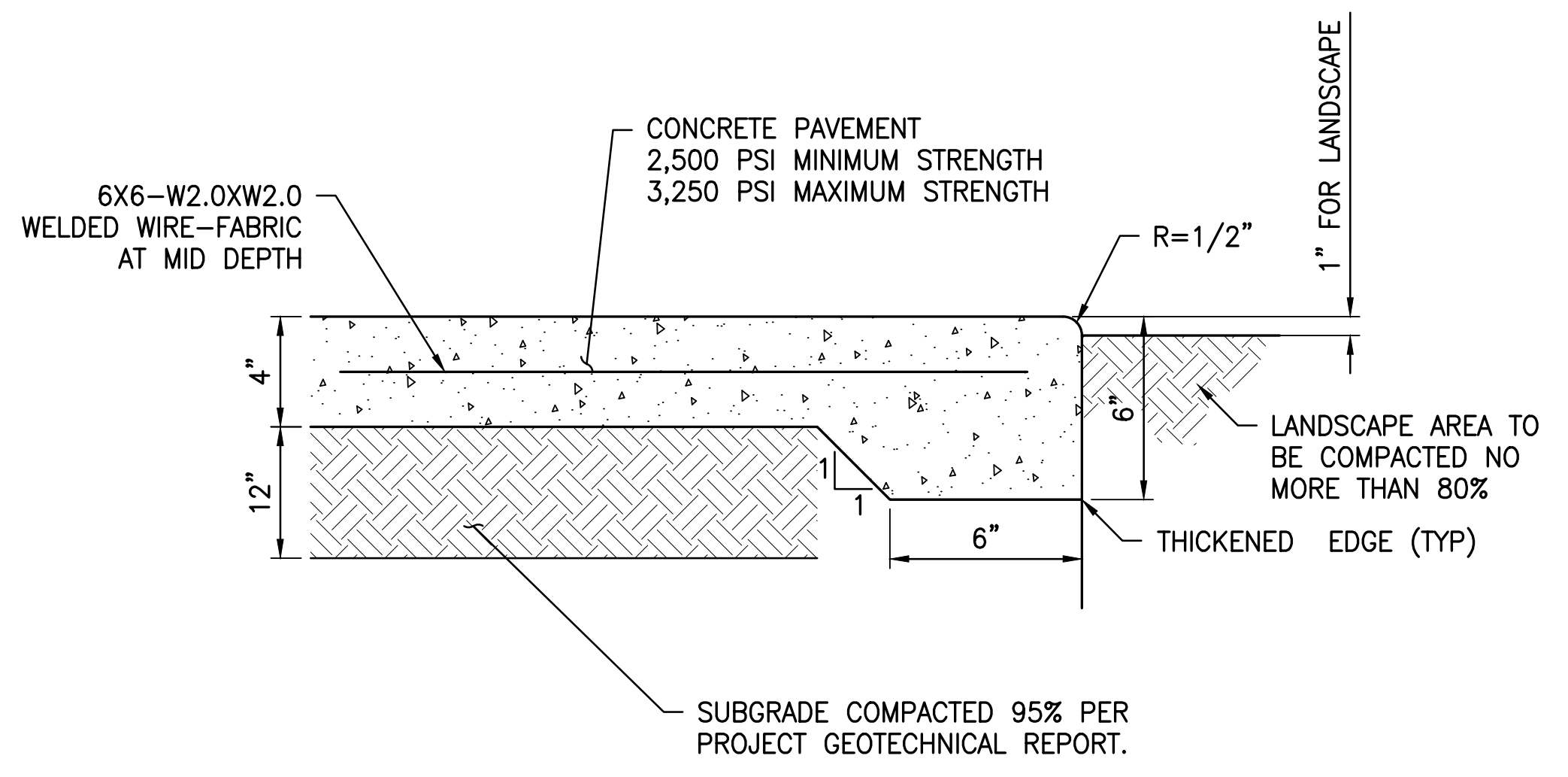
BEDDING	CLEAN COARSE SAND.
CLEAN COARSE SAND	SHALL CONFORM TO THE REQUIREMENTS OF SAND FOR PORTLAND CEMENT CONCRETE AS SPECIFIED IN SECTION 200–1.5.5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2021 EDITION.
INITIAL BACKFILL	NATIVE MATERIAL – MAXIMUM SIZE NOT TO EXCEED 1 1/2".
TRENCH BACKFILL	NATIVE MATERIAL – 90% COMPACTION MIN. (95% COMPACTION IN UPPER 3.0' OF PAVED AREAS). UP TO CLASS IV SOILS, TYPE ML,CL. FINE GRAINED, LL<50, MEDIUM TO NO PLASTICITY. NOTE, IF CLASS IV SOIL, TYPE MH OR ALL CLASS V SOILS THEN USE CLEAN COURSE SAND.
"TYPE" B MATERIAL	SHALL BE ONE OF THE FOLLOWING: 1. NATIVE FREE DRAINING MATERIAL OR CRUSHED ROCK CONFORMING TO SUBSECTION 200–1.2 AND TABLE 200–1.2.1(A) OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION". FOR PIPES UP TO AND INCLUDING 15", MAXIMUM ROCK GRADATION SHALL BE $\frac{1}{2}$". FOR PIPES OVER 15", MAXIMUM ROCK GRADATION SHALL BE $\frac{3}{4}$". 2. CLEAN COARSE SAND.

NOTES:

1. EXCAVATE FOR BELLS OR HUBS SO FULL LOAD IS CARRIED BY PIPE BARRELS.
2. TYPE "B" MATERIAL SHALL BE PLACED IN A MANNER SUCH AS SLICING SHOVEL–SPADING, OR SHOVEL RODDING TO INSURE COMPLETE FILLING OF THE "HAUNCH AREAS" BELOW THE PIPE. (JETTING OF TYPE "B" MATERIAL IS NOT AUTHORIZED UNLESS PREVIOUSLY APPROVED).
3. TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 217–2 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2021 EDITION. WATER DENSIFIED BACKFILL SHALL NOT BE USED.

5 FLEXIBLE PIPE BEDDING DETAIL

N.T.S.

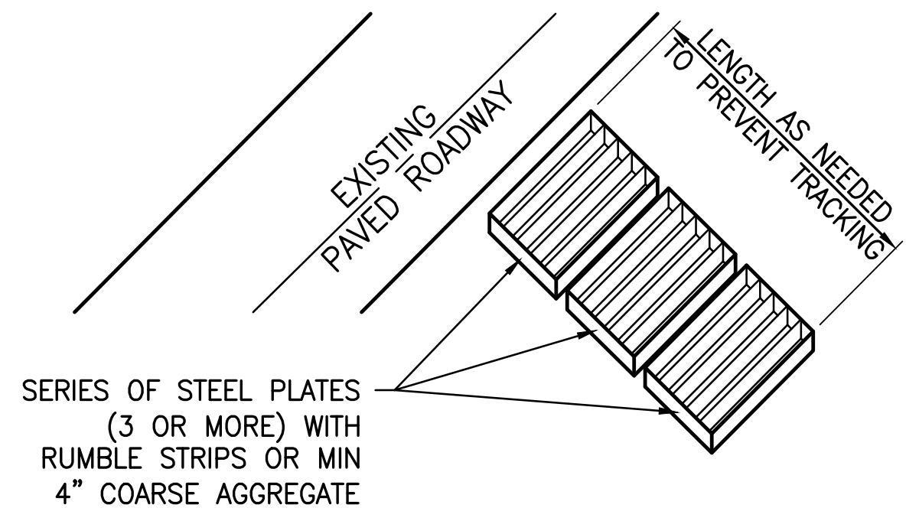

6X6–W2.0XW2.0 WELDED WIRE–FABRIC AT MID DEPTH
CONCRETE PAVEMENT 2,500 PSI MINIMUM STRENGTH 3,250 PSI MAXIMUM STRENGTH
1" FOR LANDSCAPE
R=1/2"
4"
12"
6"
1
1
6"
LANDSCAPE AREA TO BE COMPACTED NO MORE THAN 80%
THICKENED EDGE (TYP)
SUBGRADE COMPACTED 95% PER PROJECT GEOTECHNICAL REPORT.

NOTES:

1. ALL TREAD SURFACES SHALL BE SLIP–RESISTANT.
2. REFER TO ARCHITECTURAL DRAWINGS FOR COLOR, PATTERN, TEXTURE, AND FINISH.
3. SEE LANDSCAPE PLAN FOR LOCATION OF CONTROL JOINTS.
4. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2.

4 PEDESTRIAN CONCRETE WALK SECTION

N.T.S.


EXISTING PAVED ROADWAY
LENGTH AS NEEDED TO PREVENT TRACKING
SERIES OF STEEL PLATES (3 OR MORE) WITH RUMBLE STRIPS OR MIN 4" COARSE AGGREGATE

NOTES:

1. THE CONSTRUCTION ENTRANCE ROADWAYS SHALL BE STABILIZED SO AS TO PREVENT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC ROADS. DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS INTO THE STORM DRAIN SYSTEM.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE OR FROM A PUBLIC RIGHT OF WAY, STREET, ALLEY, AND SIDEWALK OR PARKING AREA.
3. IF A WASH RACK IS INCLUDED, A SEDIMENT TRAP OF SOME KIND MUST ALSO BE PROVIDED TO COLLECT WASH WATER RUNOFF.
4. ALL VEHICLES ACCESSING THE CONSTRUCTION SITE SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE.

STREET MAINTENANCE NOTES

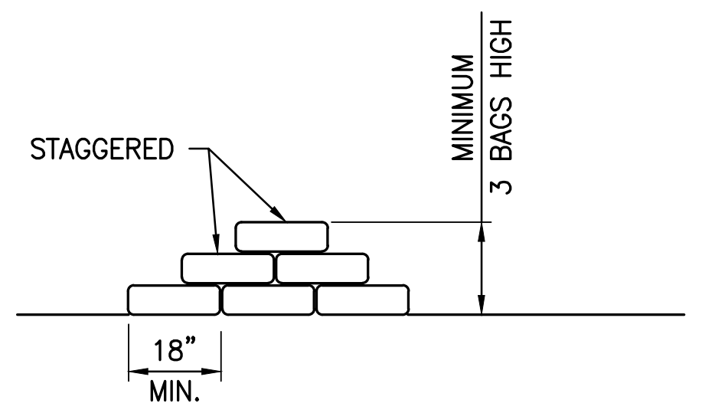
1. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS IMMEDIATELY.
2. SWEEP PAVED AREAS THAT RECEIVE CONSTRUCTION TRAFFIC WHENEVER SEDIMENT BECOMES VISIBLE.
3. PAVEMENT WASHING WITH WATER IS PROHIBITED IF IT RESULTS IN A DISCHARGE TO THE STORM DRAIN SYSTEM

3 STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

SLOPE INCLINATION	MAXIMUM SHEET FLOW LENGTH (FOR SLOPE INTERRUPTION)
< 4:1 (H:V)	*20'
4:1–2:1 (H:V)	*15'
> 2:1 (H:V)	*10'

* FIRST ROW NEAR SLOPE TOE

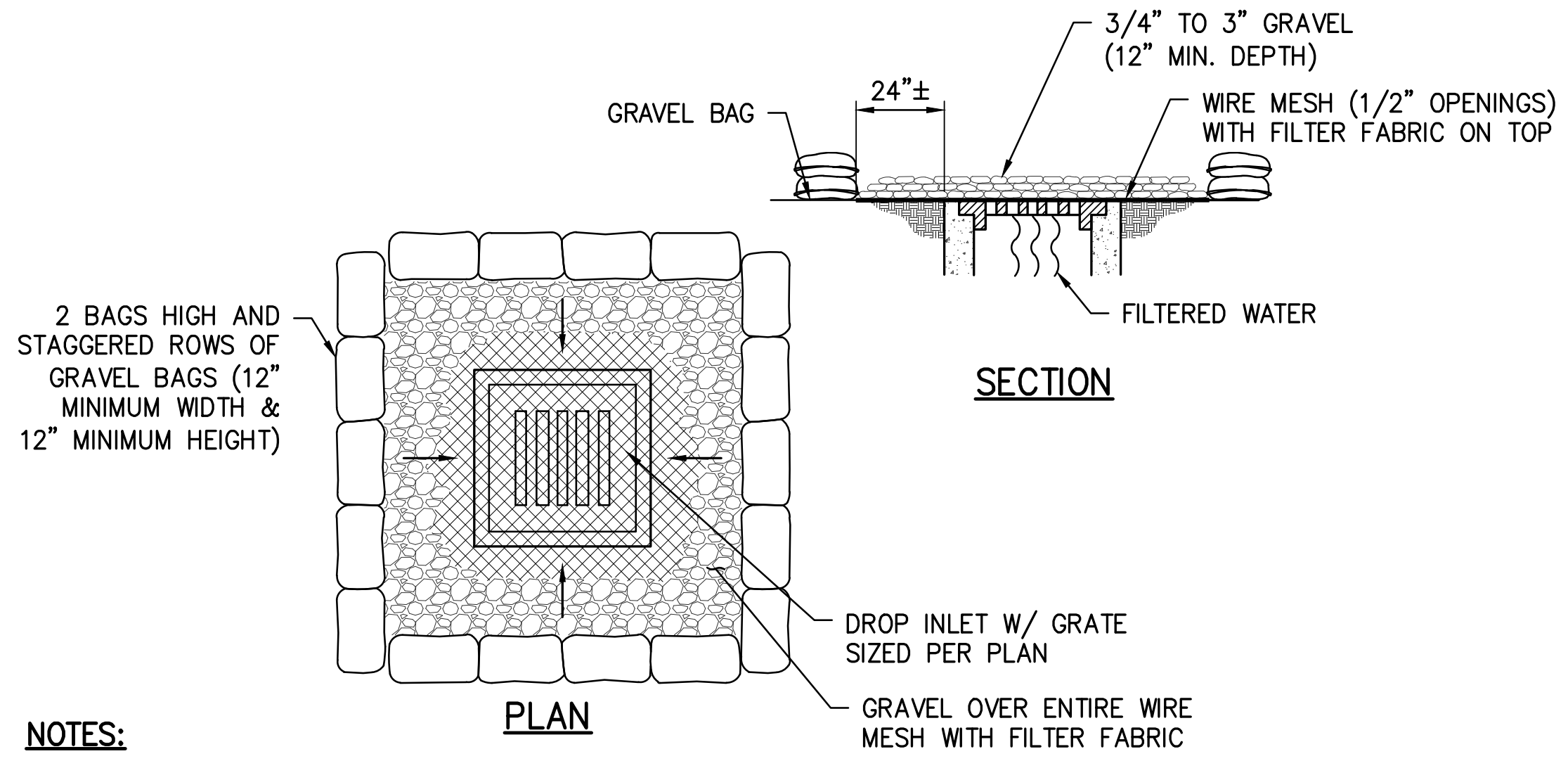

STAGGERED
MINIMUM 3 BAGS HIGH
18" MIN.

NOTES:

1. BAG MATERIAL: BAGS SHOULD BE WOVEN POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE FABRIC, MINIMUM UNIT WEIGHT OF 4 OUNCES/YD², MULLEN BURST STRENGTH EXCEEDING 300 LB/IN² IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70% IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355.
2. BAG SIZE: EACH GRAVEL–FILLED BAG SHOULD HAVE A LENGTH OF 18 IN., WIDTH OF 12 IN., THICKNESS OF 3 IN., AND MASS OF APPROXIMATELY 33 LBS. BAG DIMENSIONS ARE NOMINAL, AND MAY VARY BASED ON LOCALLY AVAILABLE MATERIALS.
3. FILL MATERIAL: FILL MATERIAL SHALL BE 0.5 TO 1.0 INCH CRUSHED ROCK, CLEAN AND FREE OF CLAY, ORGANIC MATTER, AND OTHER DELETERIOUS MATERIAL, OR OTHER SUITABLE OPEN–GRADED, NON–COHESIVE, POROUS GRAVEL.
4. TURN THE ENDS OF GRAVEL BAG BARRIER UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND BARRIER.
5. USE PYRAMID APPROACH WHEN STACKING BAGS.

2 GRAVEL BAG BARRIER

N.T.S.


3/4" TO 3" GRAVEL (12" MIN. DEPTH)
GRAVEL BAG
24"±
WIRE MESH (1/2" OPENINGS) WITH FILTER FABRIC ON TOP
FILTERED WATER
SECTION
2 BAGS HIGH AND STAGGERED ROWS OF GRAVEL BAGS (12" MINIMUM WIDTH & 12" MINIMUM HEIGHT)
DROP INLET W/ GRATE SIZED PER PLAN
GRAVEL OVER ENTIRE WIRE MESH WITH FILTER FABRIC
PLAN

NOTES:

1. PLACE WIRE MESH OVER AND 1' (MINIMUM) BEYOND THE INLET STRUCTURE. (MESH OPENINGS NOT TO EXCEED 1/2" x 1/2" WIRE)
2. PLACE FILTER FABRIC OVER WIRE MESH.
3. PLACE 3/4" TO 3" GRAVEL OVER THE FILTER FABRIC/WIRE MESH (12" MINIMUM DEPTH OVER THE ENTIRE INLET OPENING).
4. BAG MATERIAL: BAGS SHOULD BE WOVEN POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE FABRIC, MINIMUM UNIT WEIGHT OF 4 OUNCES/YD², MULLEN BURST STRENGTH EXCEEDING 300 LB/IN² IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70% IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355.
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7. USE PYRAMID APPROACH WHEN STACKING BAGS.
8. LEAVE GAP OF ONE BAG ON TOP ROW TO SERVE AS SPILLWAY.

1 STORM DRAIN INLET PROTECTION

N.T.S.

9 NOT USED

N.T.S.

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07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

DETAILS

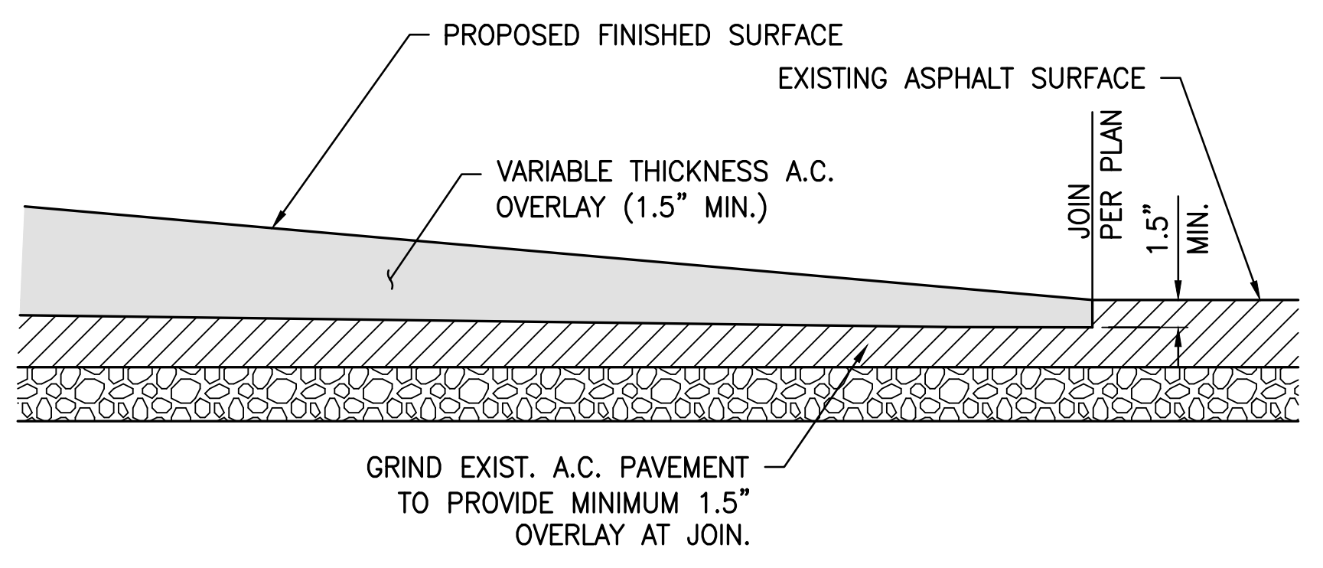
5C5.00

SCALE: AS INDICATED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/07/2026

11 ASPHALT CONCRETE OVERLAY JOIN DETAIL

N.T.S.



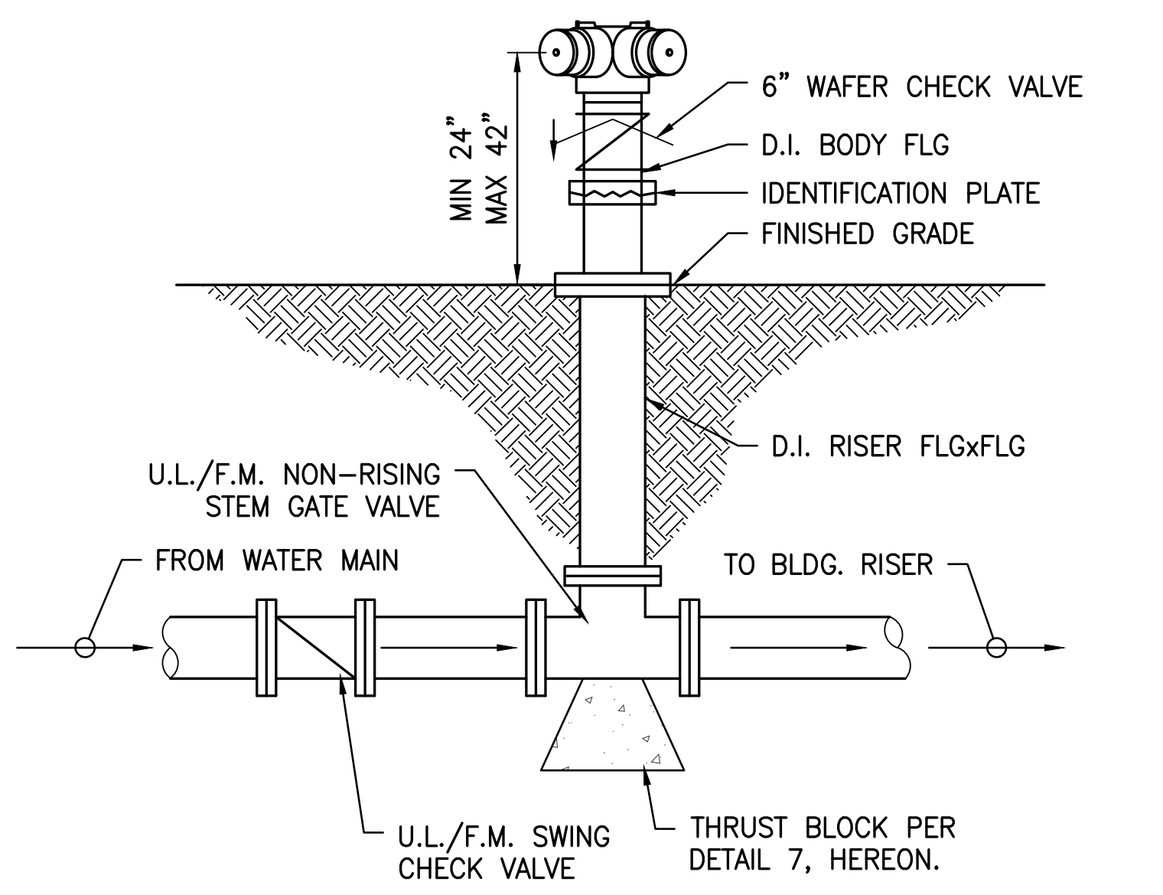
PROPOSED FINISHED SURFACE
EXISTING ASPHALT SURFACE
VARIABLE THICKNESS A.C. OVERLAY (1.5" MIN.)
JOIN PER PLAN
1.5" MIN.
GRIND EXIST. A.C. PAVEMENT TO PROVIDE MINIMUM 1.5" OVERLAY AT JOIN.

8 NOT USED

N.T.S.

6 FIRE DEPARTMENT CONNECTION ASSEMBLY

N.T.S.



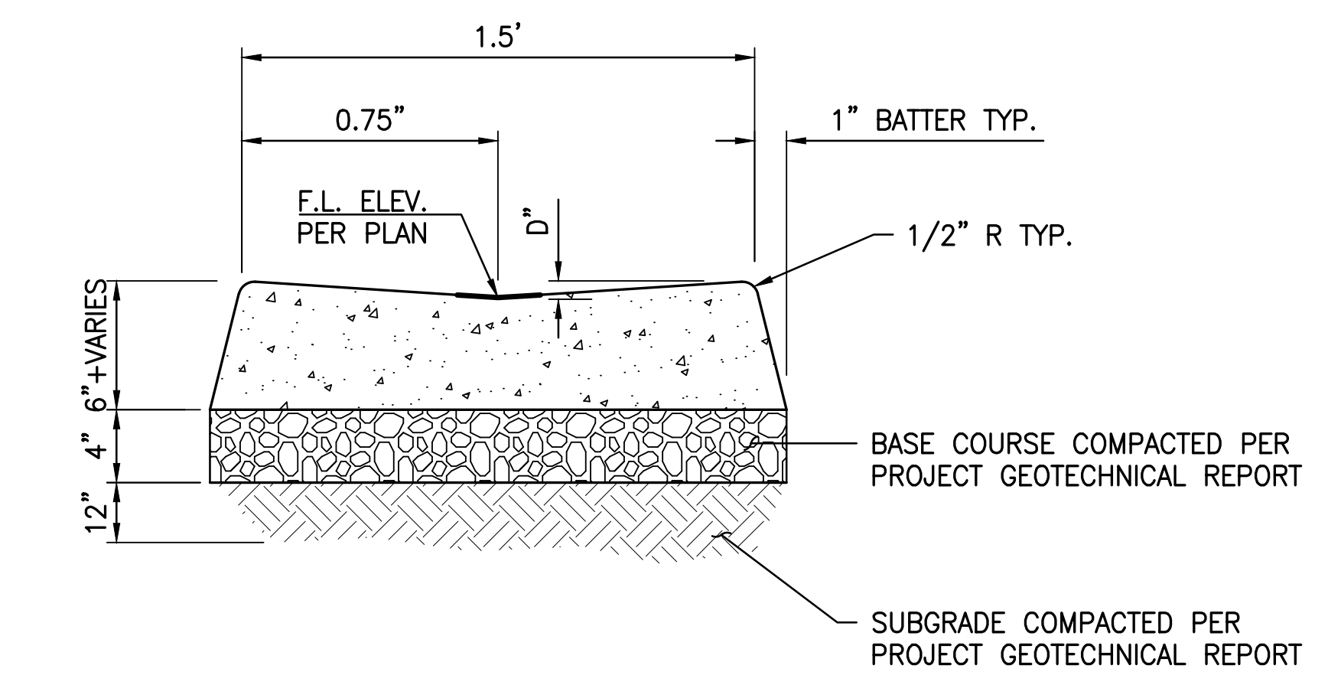
6" WAFER CHECK VALVE
D.I. BODY FLG
IDENTIFICATION PLATE
FINISHED GRADE
MIN 24" MAX 42"
D.I. RISER FLGxFLG
U.L./F.M. NON-RISING STEM GATE VALVE
FROM WATER MAIN
TO BLDG. RISER
U.L./F.M. SWING CHECK VALVE
THRUST BLOCK PER DETAIL 7, HEREON.

NOTES:

1. THE SYSTEM SHALL BE INSTALLED PER N.F.P.A. 13, 14, AND 24 (2013 ED.).
2. THE FDC IS CONCEPTUAL AND SHOWN FOR COORDINATION PURPOSES ONLY. THE CONTRACTOR SHALL COORDINATE THE FDC OUTLET CONFIGURATION WITH THE FIRE SPRINKLER DRAWINGS.
3. THE FDC SHALL BE PAINTED RED ON ANY EXPOSED SURFACES SUBJECT TO RUST OR CORROSION. COUPLING THREADS, OPERATION MECHANISMS, ANY COMPONENTS OR PORTION OF THE VALVE WHERE THE APPLICATION OF PAINT WOULD VIOLATE THE LISTING OR HINDER ITS OPERATION SHALL NOT BE PAINTED.
4. SIGN SHALL BE METAL, RAISED LETTERS MINIMUM 1" IN SIZE AND SHALL BE PERMANENTLY BANDED TO THE VALVE READING "FDC". SIGN SHALL BE ESCUTCHEON PLATE MARKING "AUTO SPKR." SIGN SHALL INDICATE THE STREET ADDRESS AND NAMES OF BUILDING SERVED. SIGNS SHALL BE PROVIDED AS OUTLINED IN THE LOS ANGELES COUNTY FIRE CODE, SECTION 912.5 SIGNS.

3 CONCRETE VALLEY GUTTER

N.T.S.



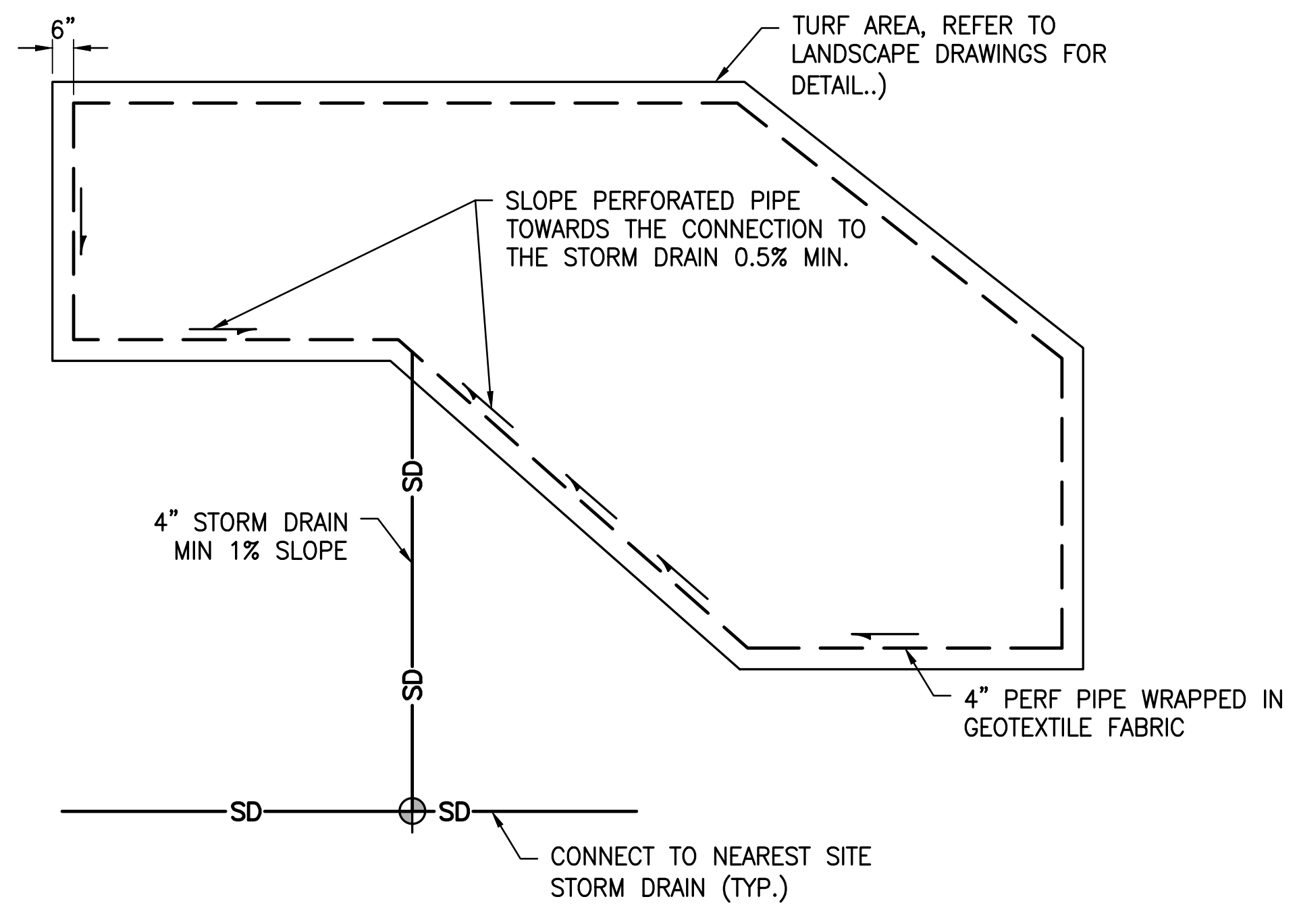
1.5'
0.75"
1" BATTER TYP.
F.L. ELEV. PER PLAN
D"
1/2" R TYP.
6"+VARIES
4"
12"
BASE COURSE COMPACTED PER PROJECT GEOTECHNICAL REPORT
SUBGRADE COMPACTED PER PROJECT GEOTECHNICAL REPORT

NOTES:

1. ISOLATION JOINTS SHALL BE PLACED ONLY AS SPECIFIED.
2. CONTROL JOINTS CONSISTING OF 1" DEEP SCORES SHALL BE PLACED AT 10' INTERVALS O.C.
3. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2.

10 TYPICAL TURF AREA PERFORATED PIPE DETAIL

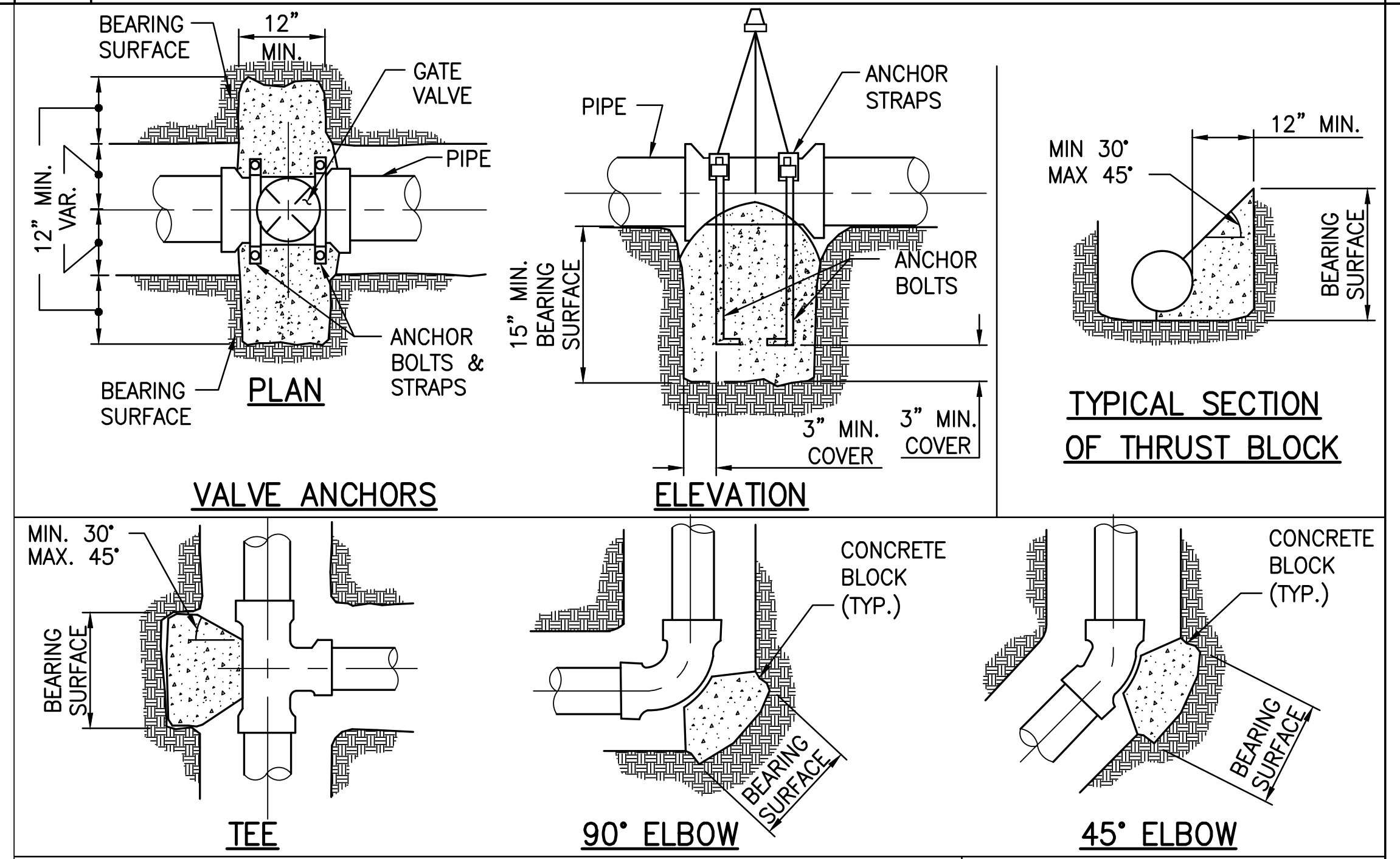
N.T.S.



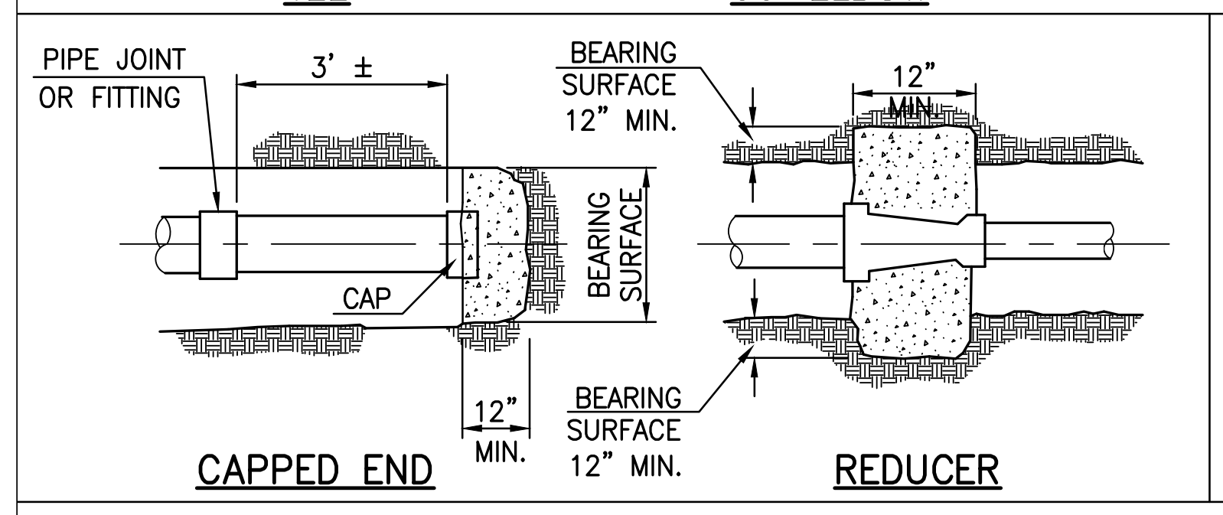
6"
TURF AREA, REFER TO LANDSCAPE DRAWINGS FOR DETAIL..)
SLOPE PERFORATED PIPE TOWARDS THE CONNECTION TO THE STORM DRAIN 0.5% MIN.
4" STORM DRAIN MIN 1% SLOPE
SD
4" PERF PIPE WRAPPED IN GEOTEXTILE FABRIC
CONNECT TO NEAREST SITE STORM DRAIN (TYP.)

7 THRUST AND ANCHOR BLOCK DETAILS

N.T.S.



BEARING SURFACE
12" MIN.
GATE VALVE
PIPE
12" MIN. VAR.
ANCHOR BOLTS & STRAPS
BEARING SURFACE
PLAN
VALVE ANCHORS
PIPE
ANCHOR STRAPS
ANCHOR BOLTS
15" MIN. BEARING SURFACE
3" MIN. COVER
3" MIN. COVER
ELEVATION
MIN 30° MAX 45°
12" MIN.
BEARING SURFACE
TYPICAL SECTION OF THRUST BLOCK
MIN. 30° MAX. 45°
BEARING SURFACE
TEE
CONCRETE BLOCK (TYP.)
BEARING SURFACE
90° ELBOW
CONCRETE BLOCK (TYP.)
BEARING SURFACE
45° ELBOW

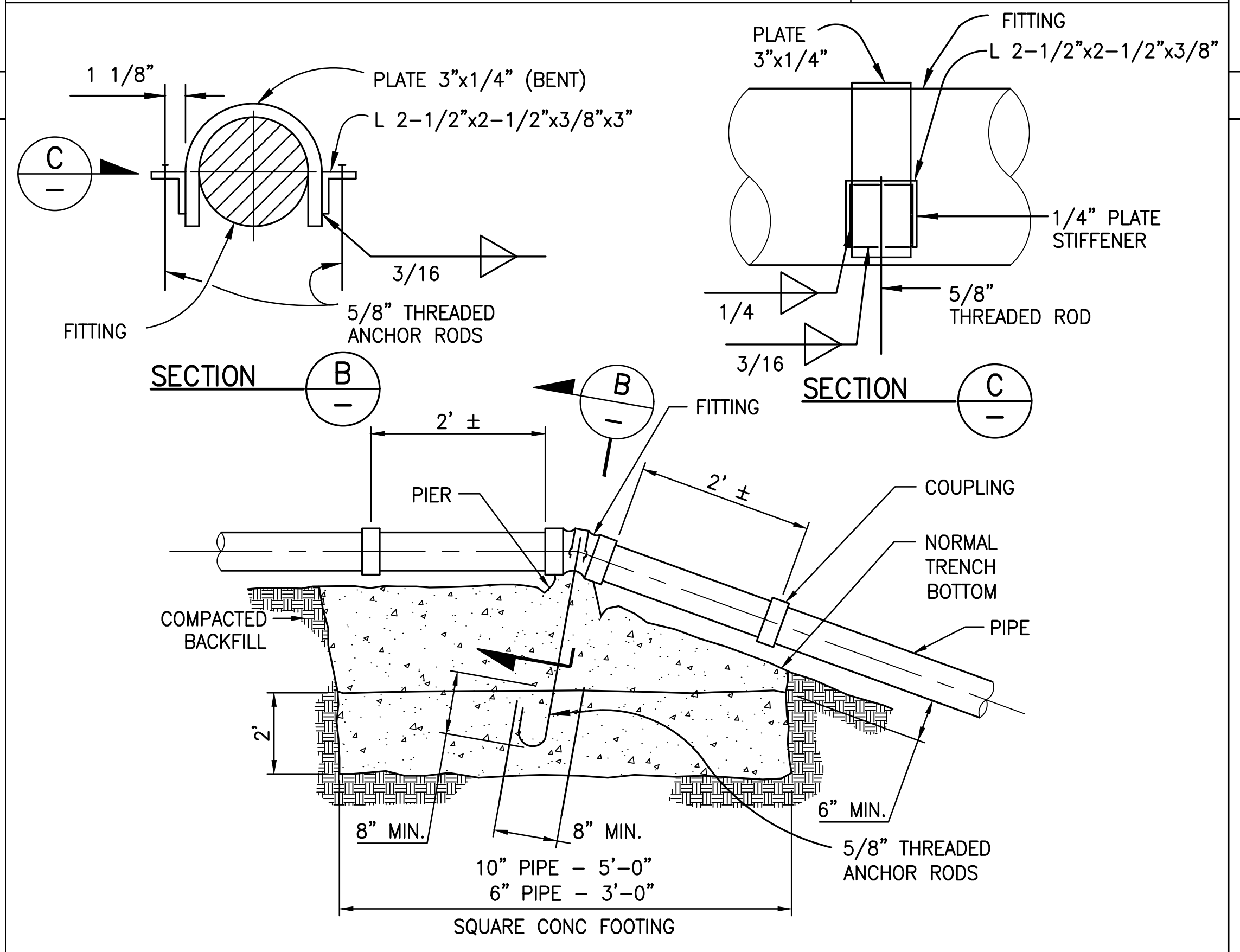


PIPE JOINT OR FITTING
3' ±
CAP
BEARING SURFACE
12" MIN.
CAPPED END
BEARING SURFACE 12" MIN.
12" MIN.
BEARING SURFACE 12" MIN.
REDUCER

THRUST BLOCK BEARING AREAS – S.F.

MAIN SIZE	TEE *	BEND			
		90°	45°	22.5°	11.25°
4"	4	4	4	3	2
6"	4	6	4	3	2

*INCLUDES TEES, PLUGS, CAPS, HYDRANTS & VALVES.



1 1/8"
PLATE 3"x1/4" (BENT)
L 2-1/2"x2-1/2"x3/8"x3"
C
3/16
FITTING
5/8" THREADED ANCHOR RODS
SECTION B
PLATE 3"x1/4"
FITTING
L 2-1/2"x2-1/2"x3/8"
1/4" PLATE STIFFENER
1/4
3/16
5/8" THREADED ROD
SECTION C
B
2' ±
FITTING
PIER
2' ±
COUPLING
NORMAL TRENCH BOTTOM
PIPE
COMPACTED BACKFILL
2'
8" MIN.
8" MIN.
6" MIN.
10" PIPE – 5'-0"
6" PIPE – 3'-0"
SQUARE CONC FOOTING
5/8" THREADED ANCHOR RODS

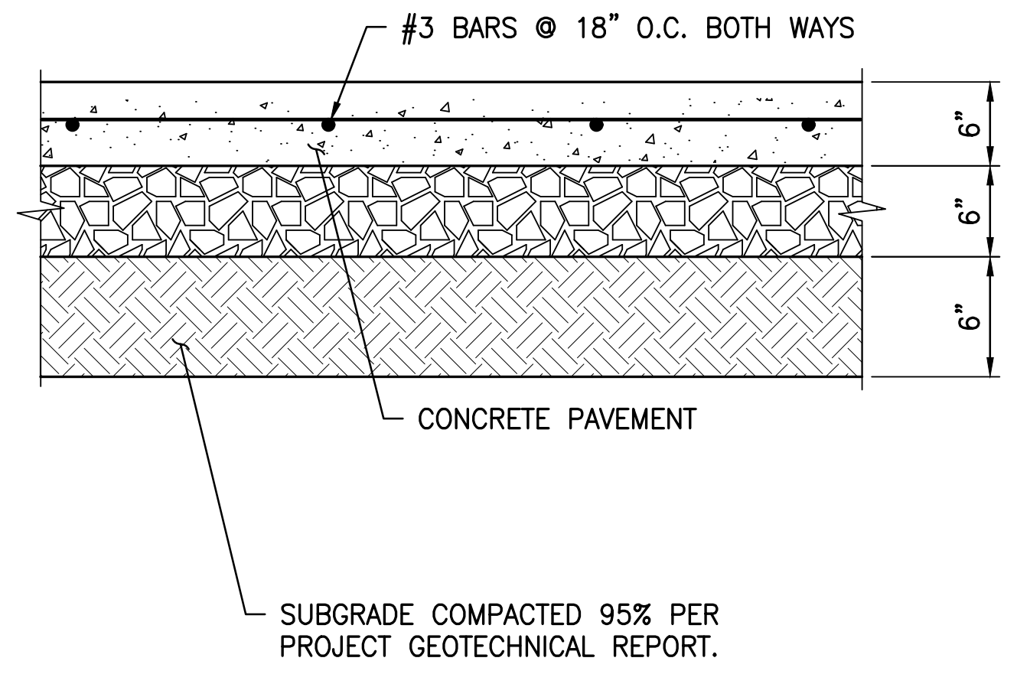
VERTICAL BEND

GENERAL NOTES:

1. ALL THRUST/ANCHOR BLOCKS SHALL BEAR AGAINST UNDISTURBED SOIL.
2. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
3. ALL ANCHOR RODS AND ANCHOR BOLTS SHALL BE MINIMUM 5/8" DIA. & ANCHOR STRAPS SHALL BE 3"X1/4".
4. THRUST BLOCK DESIGN IS BASED ON A WATER PRESSURE OF 150 P.S.I., AND A MINIMUM ALLOWABLE SOIL BEARING VALUE OF 1500 P.S.F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SOIL BEARING VALUES AND THE POSITION AND SIZE OF BEARING AREAS, BASED UPON N.F.P.A. 24.
5. THE RATIO OF WIDTH TO HEIGHT OF THRUST BLOCKS SHALL NOT EXCEED 1.5 TO 1.

5 REINFORCED VEHICULAR CONCRETE PAVEMENT

N.T.S.



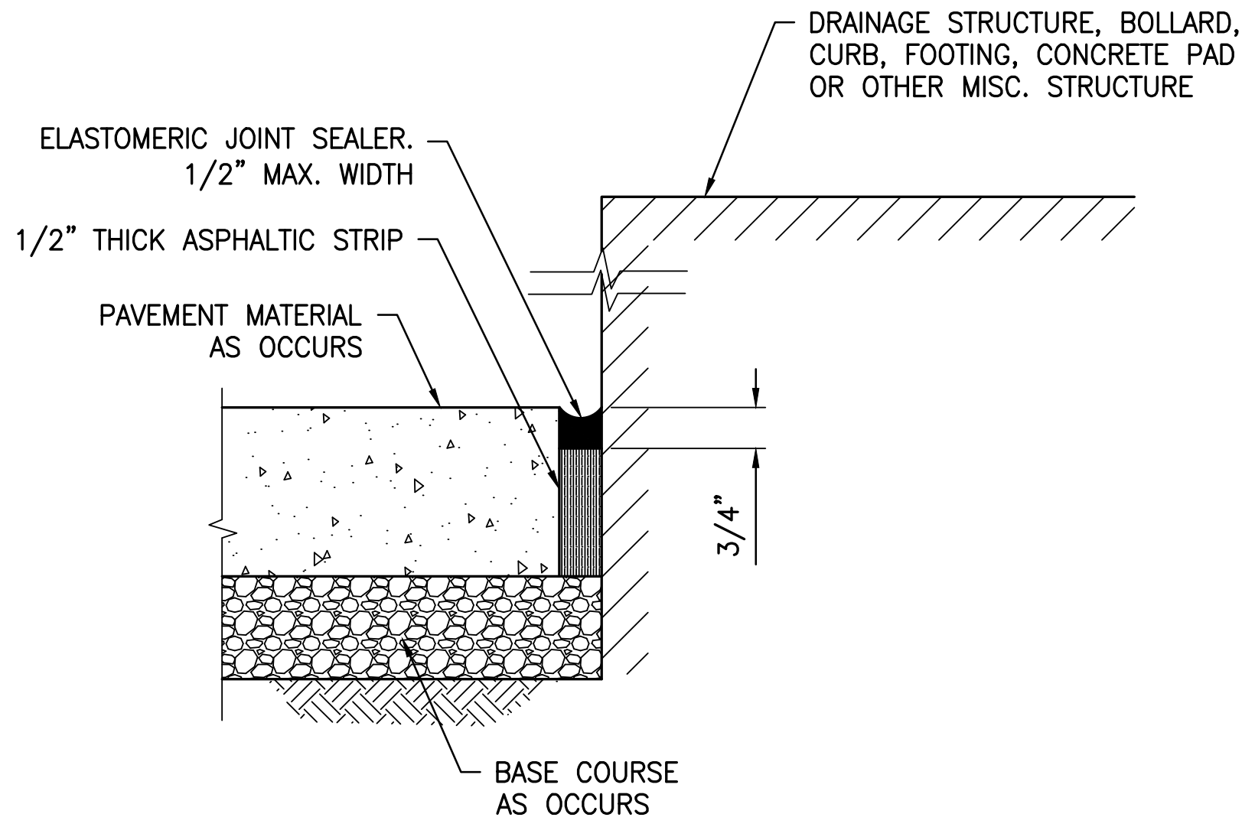
#3 BARS @ 18" O.C. BOTH WAYS
6"
6"
6"
CONCRETE PAVEMENT
SUBGRADE COMPACTED 95% PER PROJECT GEOTECHNICAL REPORT.

NOTES:

1. PAVEMENT SECTIONS ARE BASED ON RECOMMENDATIONS FROM THE PROJECT GEOTECHNICAL REPORT.
2. REFER TO ARCHITECTURAL PLANS FOR CONCRETE COLOR, PATTERN, TEXTURE, AND FINISH.
3. SEE PLAN FOR LOCATION OF CONTROL JOINTS.
4. ALL ROCKS LARGER THAN 3" IN DIMENSION SHALL BE REMOVED FROM SUBGRADE DURING PROCESSING, PER GEOTECHNICAL REPORT.
5. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2.

2 ISOLATION JOINT AT STRUCTURE

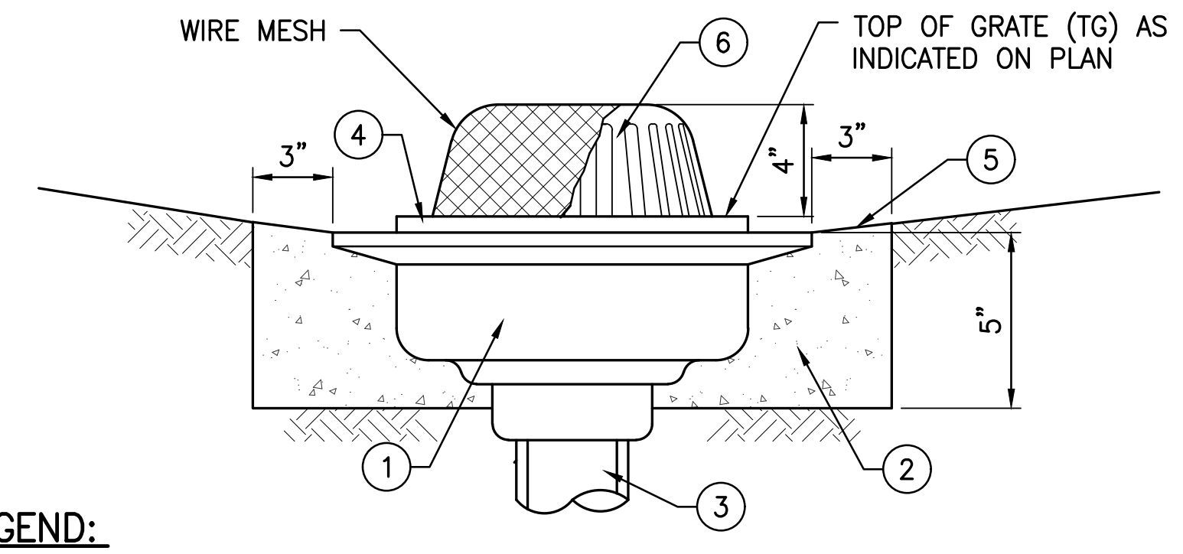
N.T.S.



DRAINAGE STRUCTURE, BOLLARD, CURB, FOOTING, CONCRETE PAD OR OTHER MISC. STRUCTURE
ELASTOMERIC JOINT SEALER. 1/2" MAX. WIDTH
1/2" THICK ASPHALTIC STRIP
PAVEMENT MATERIAL AS OCCURS
3/4"
BASE COURSE AS OCCURS

9 PLANTER DRAIN DETAIL

N.T.S.



WIRE MESH
6
TOP OF GRATE (TG) AS INDICATED ON PLAN
4
3"
4"
3"
5
5"
1
2
3

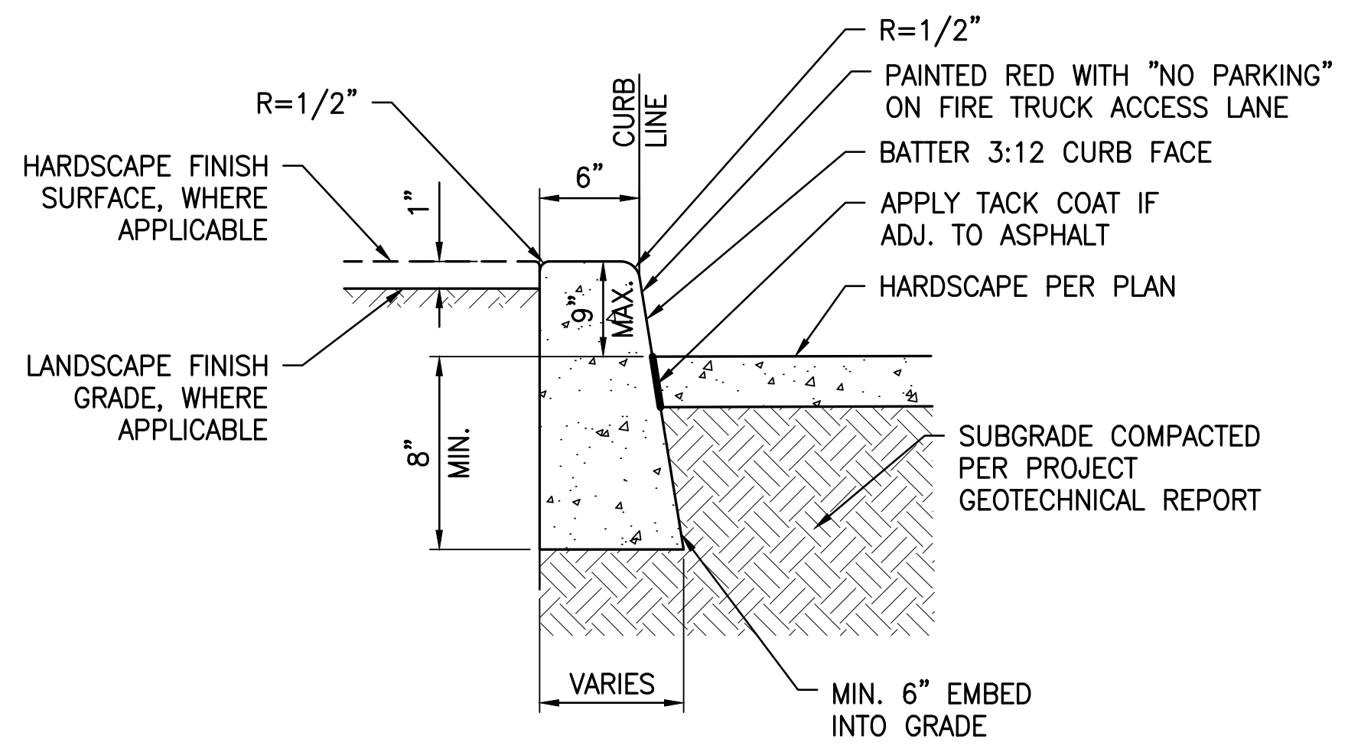
LEGEND:

1. GALVANIZED CAST IRON BODY AND GRATE AREA DRAIN.
2. 2,500 PSI PORTLAND CEMENT CONCRETE PAD (PAD MAY BE EITHER ROUND OR SQUARE IN PLAN VIEW).
3. OUTLET PIPE TO MATCH PIPE SIZE PER PLAN.
4. TOP OF DRAIN ELEVATION PER PLAN.
5. FINISH GRADE PER PLAN.
6. DOME TOP WHERE INDICATED ON PLAN (SEE TABLE BELOW)

SIZE	TYPE	ITEM DESCRIPTION	MODEL NO.	FREE AREA (SQ IN)
6" DIA.	DOME	JAY R. SMITH MFG. CO.	2671-U-G	25
6" DIA.	DOME	ZURN PLUMBING PRODUCTS	Z415-VP-G	12
12" DIA.	DOME	ZURN PLUMBING PRODUCTS	Z121-VP-G	78
12" DIA.	DOME	JAY R. SMITH MFG. CO.	2675-G	53

4 CONCRETE CURB

N.T.S.



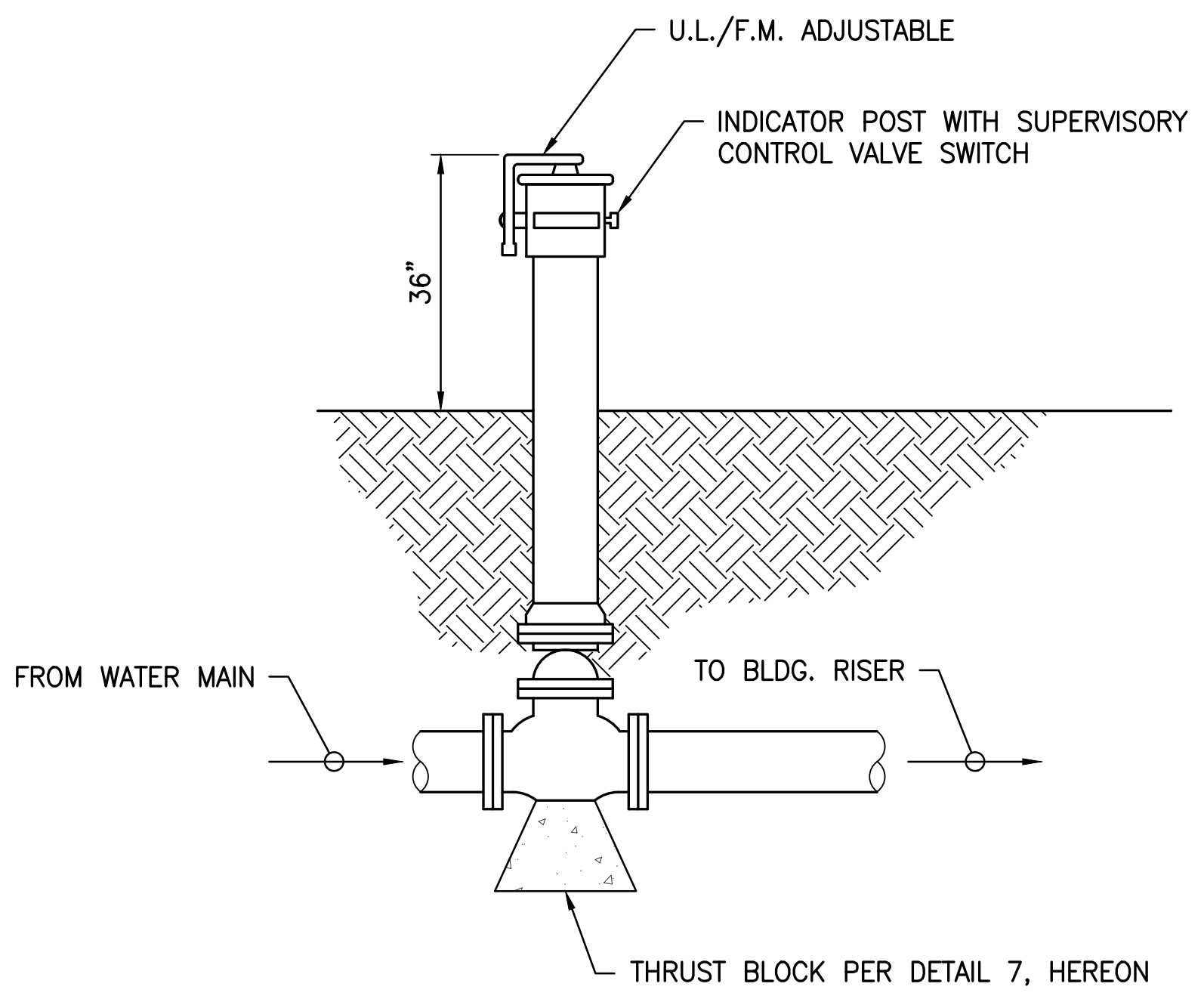
R=1/2"
PAINTED RED WITH "NO PARKING" ON FIRE TRUCK ACCESS LANE
BATTER 3:12 CURB FACE
APPLY TACK COAT IF ADJ. TO ASPHALT
HARDSCAPE PER PLAN
R=1/2"
CURB LINE
6"
HARDSCAPE FINISH SURFACE, WHERE APPLICABLE
1"
9" MAX.
LANDSCAPE FINISH GRADE, WHERE APPLICABLE
8" MIN.
SUBGRADE COMPACTED PER PROJECT GEOTECHNICAL REPORT
VARIES
MIN. 6" EMBED INTO GRADE

NOTES:

1. ISOLATION JOINTS SHALL BE PLACED ONLY AS SPECIFIED.
2. CONTROL JOINTS CONSISTING OF 1" DEEP SCORES SHALL BE PLACED AT 10' INTERVALS O.C.
3. WHERE A WALK IS ADJACENT TO THE CURB, THE JOINTS SHALL ALIGN WITH JOINTS IN THE WALK.
4. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2.

1 POST INDICATOR VALVE

N.T.S.



U.L./F.M. ADJUSTABLE
INDICATOR POST WITH SUPERVISORY CONTROL VALVE SWITCH
36"
FROM WATER MAIN
TO BLDG. RISER
THRUST BLOCK PER DETAIL 7, HEREON

NOTES:

1. THE SYSTEM SHALL BE INSTALLED PER N.F.P.A. 24.
2. THE CONTRACTOR SHALL COORDINATE VALVE LAYOUT WITH FIRE SPRINKLER PLANS.

Practice
135 W. Green St Suite 200 Pasadena, CA 91105 | 626.568.1248 | practice-la.com

kpff
700 South Flower Street
Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
www.kpff.com

No. C77744
Exp. 6/30/27
CIVIL

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

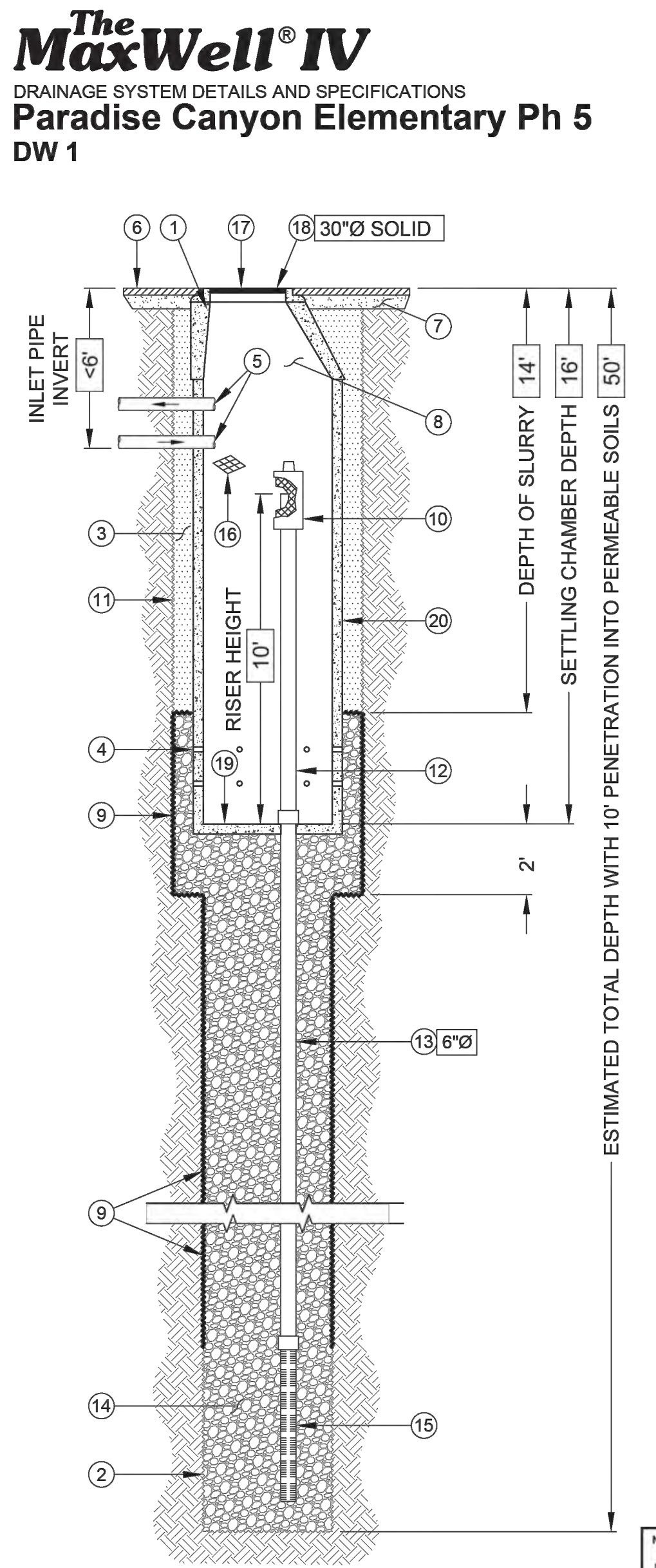
DETAILS

5C5.01

SCALE: AS INDICATED

P:\2020\2000742 Paradise Canyon ES Modernization\5 CAD\Sheets\New North Buildings\2000742-C-5.01DT.dwg, Mar 18, 2026 - 1:49pm

If this sheet is smaller than 30" high by 42" wide then it has been reduced.


The MaxWell® IV
DRAINAGE SYSTEM DETAILS AND SPECIFICATIONS
Paradise Canyon Elementary Ph 5
DW 1
30"Ø SOLID
INLET PIPE INVERT
<6'
RISER HEIGHT
10'
DEPTH OF SLURRY
14'
SETTLING CHAMBER DEPTH
16'
ESTIMATED TOTAL DEPTH WITH 10' PENETRATION INTO PERMEABLE SOILS
50'
2'
6"Ø
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

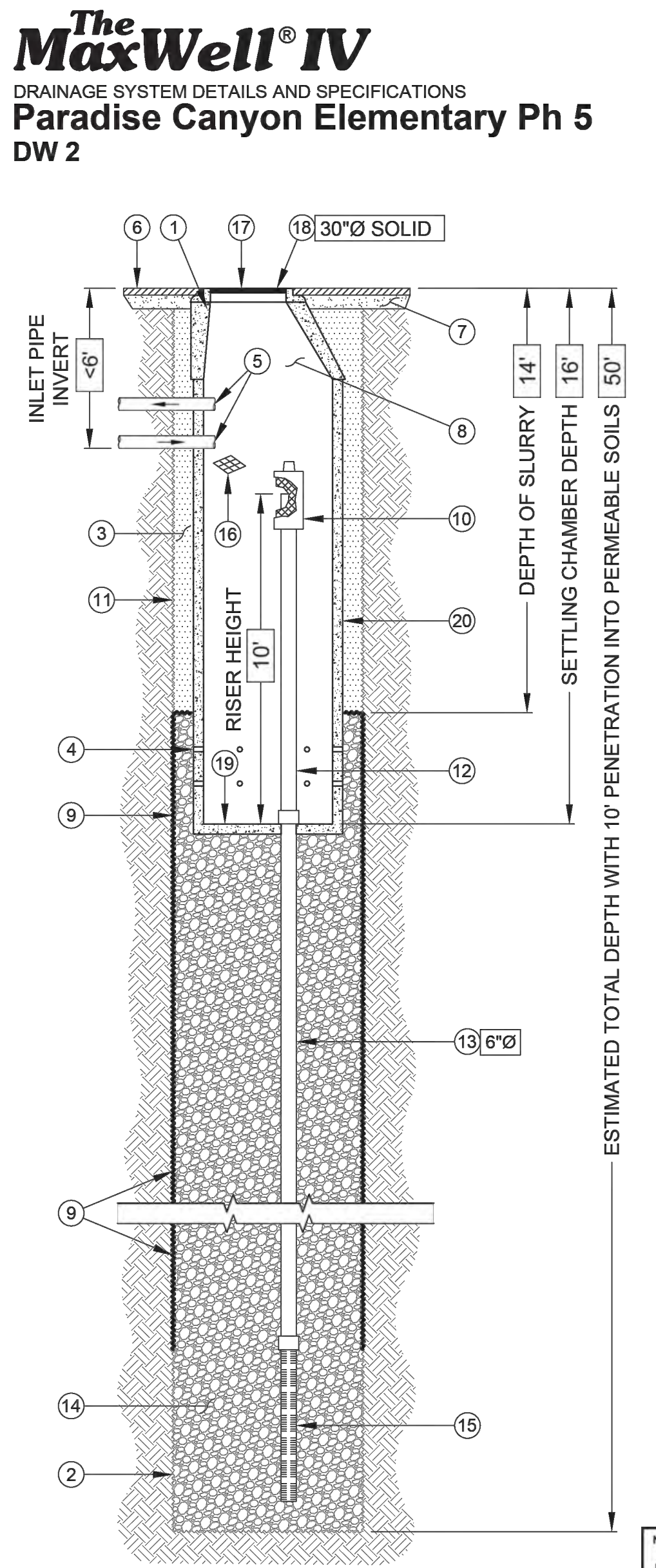
○ ITEM NUMBERS

1. **MANHOLE CONE** - MODIFIED FLAT BOTTOM.
2. **MIN 4' Ø DRILLED SHAFT.**
3. **STABILIZED BACKFILL** - TWO-SACK SLURRY MIX.
4. **6 PERFORATIONS MINIMUM PER ROW, 2 ROWS MINIMUM.**
5. **INLET PIPE/OUTLET PIPE (BY OTHERS).** SEE SEPARATE PLAN FOR INVERT ELEVATIONS.
6. **GRADED BASIN OR PAVING** (BY OTHERS).
7. **COMPACTED BASE MATERIAL**, IF REQUIRED (BY OTHERS).
8. **FREEBOARD DEPTH VARIES** WITH INLET PIPE ELEVATION. INCREASE SETTLING CHAMBER DEPTH AS NEEDED TO MAINTAIN ALL INLET PIPE ELEVATIONS ABOVE RISER PIPE.
9. **NON-WOVEN GEOTEXTILE SLEEVE** - MIRAFI 140 NL. MIN. 6 FT Ø. HELD APPROX. 10 FEET OFF THE BOTTOM OF EXCAVATION.
10. **PUREFLO® DEBRIS SHIELD** - ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL 0.265" MAX. SWO FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. **FUSION BONDED EPOXY COATED**.
11. **MIN. 6' Ø DRILLED SHAFT.**
12. **RISER PIPE** - SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE SEAL.
13. **DRAINAGE PIPE** - ADS HIGHWAY GRADE OR SCH. 40 PVC WITH TRI-A COUPLER. SUSPEND PIPE DURING BACKFILL OPERATIONS. DIAMETER AS NOTED.
14. **ROCK** - WASHED, SIZED BETWEEN 3/8" AND 1-1/2".
15. **FLOFAST® DRAINAGE SCREEN** - SCH. 40 PVC 0.120" SLOTTED WELL SCREEN WITH MIN. 32 SLOTS PER ROW/FT. OVERALL LENGTH VARIES, UP TO 120" WITH TRI-B COUPLER.
16. **ABSORBENT** - HYDROPHOBIC PETROCHEMICAL SPONGE. MIN. 128 OZ. CAPACITY. TYPICAL, 2 PER CHAMBER.
17. **FABRIC SEAL** - U.V. RESISTANT GEOTEXTILE - **TO BE REMOVED BY CUSTOMER** AT PROJECT COMPLETION. GRATED ONLY.
18. **BOLTED RING & GRATE/COVER -** DIAMETER & TYPE AS SHOWN. CLEAN CAST IRON WITH WORDING "STORM WATER ONLY" IN RAISED LETTERS. BOLTED IN 2 LOCATIONS AND SECURE TO CONE WITH MORTAR. RIM ELEVATION ±0.02' OF PLANS.
19. **BASE SEAL** - CONCRETE SLURRY.
20. **PRE-CAST LINER -** 4000 PSI CONCRETE 48" ID. X 54" OD. CENTER IN HOLE AND ALIGN SECTIONS TO MAXIMIZE BEARING SURFACE.

NOTE: DETAIL TO BE USED IN CONJUNCTION WITH THE MAXWELL SIZING SUMMARY. ANY CHANGES TO THE SYSTEM WILL REQUIRE APPROVAL FROM THE CIVIL ENGINEER ON RECORD AND UPDATED SIZING FROM TORRENT RESOURCES.

TorrentResources
A **CRH** COMPANY
WWW.TORRENTRESOURCES.COM
Installing MaxWells SINCE 1972
909-829-0740

DETAIL: IV-4-SS-CA	REVISED BY: AB	
DRAWN ON: 04-07-25	REVISED DATE: 07-30-25	SCALE: N.T.S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DRAINAGE SYSTEM DETAILS AND SPECIFICATIONS
Paradise Canyon Elementary Ph 5
DW 2
30"Ø SOLID
INLET PIPE INVERT
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RISER HEIGHT
10'
DEPTH OF SLURRY
14'
SETTLING CHAMBER DEPTH
16'
ESTIMATED TOTAL DEPTH WITH 10' PENETRATION INTO PERMEABLE SOILS
50'
6"Ø
1
2
3
4
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○ ITEM NUMBERS

1. **MANHOLE CONE** - MODIFIED FLAT BOTTOM.
2. **MIN 6' Ø DRILLED SHAFT.**
3. **STABILIZED BACKFILL** - TWO-SACK SLURRY MIX.
4. **6 PERFORATIONS MINIMUM PER ROW, 2 ROWS MINIMUM.**
5. **INLET PIPE/OUTLET PIPE (BY OTHERS).** SEE SEPARATE PLAN FOR INVERT ELEVATIONS.
6. **GRADED BASIN OR PAVING** (BY OTHERS).
7. **COMPACTED BASE MATERIAL**, IF REQUIRED (BY OTHERS).
8. **FREEBOARD DEPTH VARIES** WITH INLET PIPE ELEVATION. INCREASE SETTLING CHAMBER DEPTH AS NEEDED TO MAINTAIN ALL INLET PIPE ELEVATIONS ABOVE RISER PIPE.
9. **NON-WOVEN GEOTEXTILE SLEEVE** - MIRAFI 140 NL. MIN. 6 FT Ø. HELD APPROX. 10 FEET OFF THE BOTTOM OF EXCAVATION.
10. **PUREFLO® DEBRIS SHIELD** - ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL 0.265" MAX. SWO FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. **FUSION BONDED EPOXY COATED**.
11. **MIN. 6' Ø DRILLED SHAFT.**
12. **RISER PIPE** - SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE SEAL.
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14. **ROCK** - WASHED, SIZED BETWEEN 3/8" AND 1-1/2".
15. **FLOFAST® DRAINAGE SCREEN** - SCH. 40 PVC 0.120" SLOTTED WELL SCREEN WITH MIN. 32 SLOTS PER ROW/FT. OVERALL LENGTH VARIES, UP TO 120" WITH TRI-B COUPLER.
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20. **PRE-CAST LINER -** 4000 PSI CONCRETE 48" ID. X 54" OD. CENTER IN HOLE AND ALIGN SECTIONS TO MAXIMIZE BEARING SURFACE.

NOTE: DETAIL TO BE USED IN CONJUNCTION WITH THE MAXWELL SIZING SUMMARY. ANY CHANGES TO THE SYSTEM WILL REQUIRE APPROVAL FROM THE CIVIL ENGINEER ON RECORD AND UPDATED SIZING FROM TORRENT RESOURCES.

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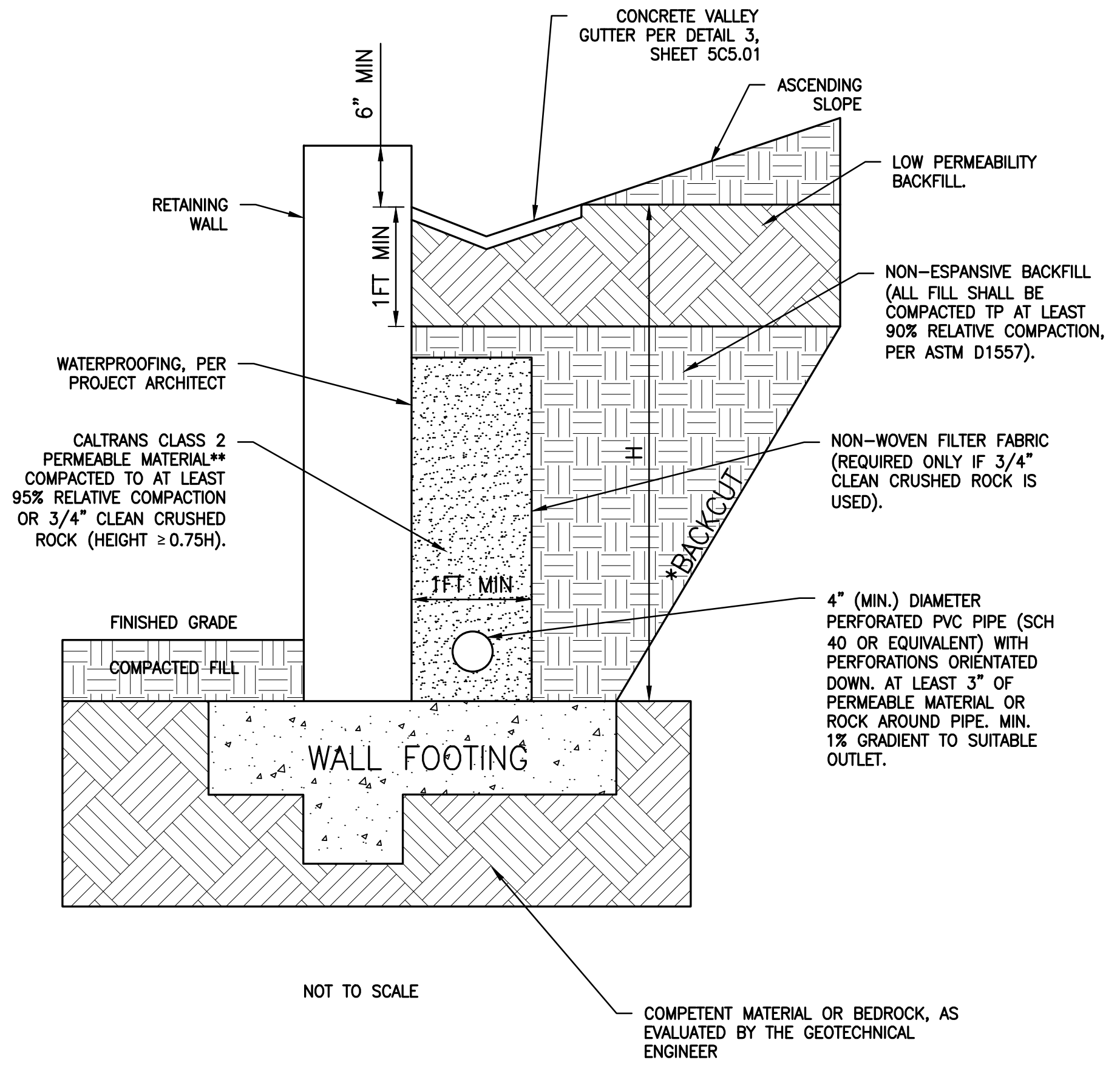
DETAIL: IV-6-SS-CA	REVISED BY: AB	
DRAWN ON: 04-07-25	REVISED DATE: 07-30-25	SCALE: N.T.S

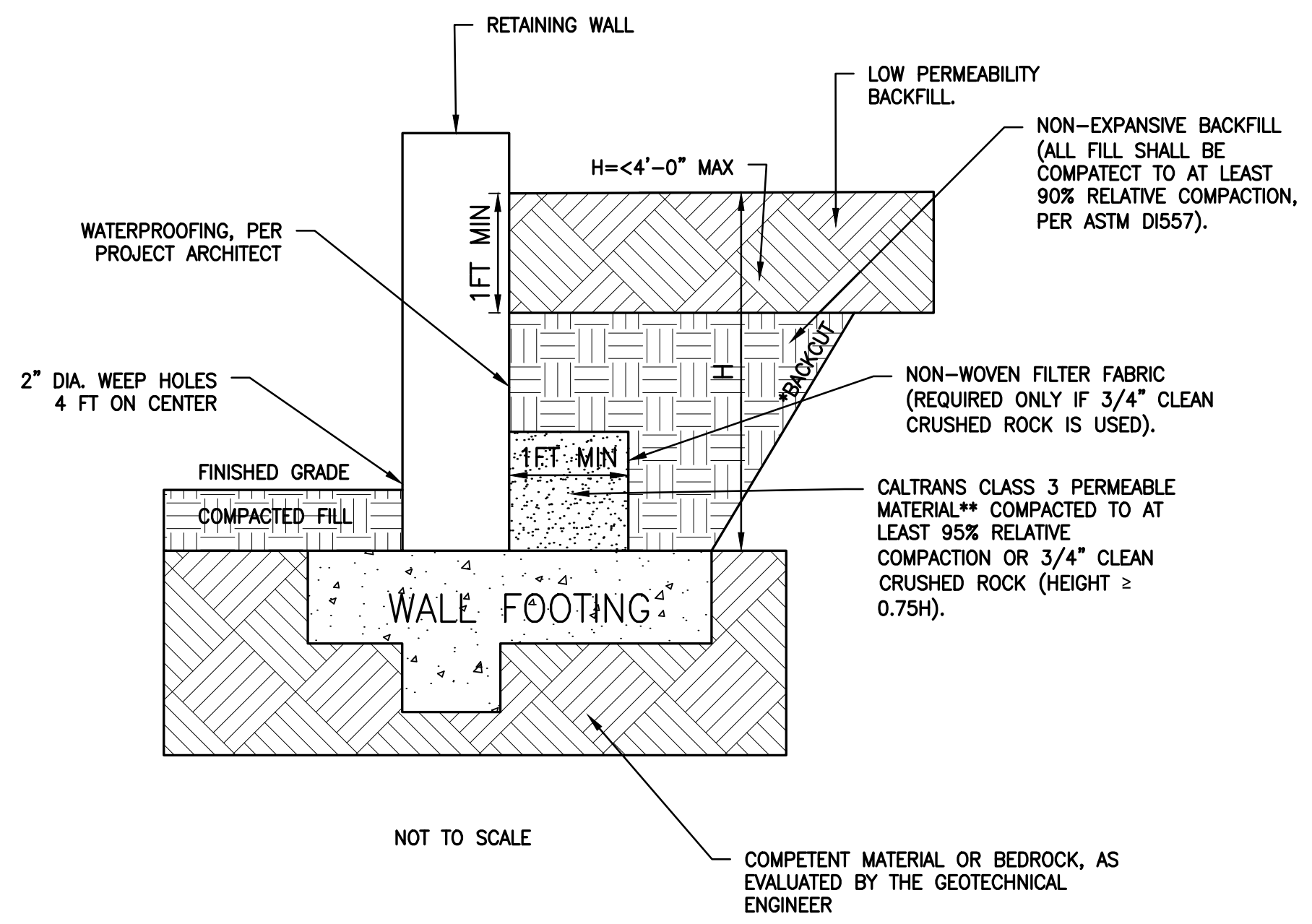
8 MAXWELL IV DRYWELL

N.T.S.

FREEBOARD AND SWALE DRAINAGE RECOMMENDATIONS


CONCRETE VALLEY GUTTER PER DETAIL 3, SHEET 5C5.01
ASCENDING SLOPE
6" MIN
1FT MIN
RETAINING WALL
LOW PERMEABILITY BACKFILL.
NON-ESPANSIVE BACKFILL (ALL FILL SHALL BE COMPACTED TP AT LEAST 90% RELATIVE COMPACTION, PER ASTM D1557).
WATERPROOFING, PER PROJECT ARCHITECT
CALTRANS CLASS 2 PERMEABLE MATERIAL** COMPACTED TO AT LEAST 95% RELATIVE COMPACTION OR 3/4" CLEAN CRUSHED ROCK (HEIGHT ≥ 0.75H).
H
*BACKCUT
NON-WOVEN FILTER FABRIC (REQUIRED ONLY IF 3/4" CLEAN CRUSHED ROCK IS USED).
1FT MIN
FINISHED GRADE
COMPACTED FILL
4" (MIN.) DIAMETER PERFORATED PVC PIPE (SCH 40 OR EQUIVALENT) WITH PERFORATIONS ORIENTATED DOWN. AT LEAST 3" OF PERMEABLE MATERIAL OR ROCK AROUND PIPE. MIN. 1% GRADIENT TO SUITABLE OUTLET.
WALL FOOTING
COMPETENT MATERIAL OR BEDROCK, AS EVALUATED BY THE GEOTECHNICAL ENGINEER

NOT TO SCALE


RETAINING WALL
LOW PERMEABILITY BACKFILL.
NON-EXPANSIVE BACKFILL (ALL FILL SHALL BE COMPATECT TO AT LEAST 90% RELATIVE COMPACTION, PER ASTM DI557).
H=<4'-0" MAX
WATERPROOFING, PER PROJECT ARCHITECT
1FT MIN
H
*BACKCUT
2" DIA. WEEP HOLES 4 FT ON CENTER
NON-WOVEN FILTER FABRIC (REQUIRED ONLY IF 3/4" CLEAN CRUSHED ROCK IS USED).
FINISHED GRADE
COMPACTED FILL
1FT MIN
CALTRANS CLASS 3 PERMEABLE MATERIAL** COMPACTED TO AT LEAST 95% RELATIVE COMPACTION OR 3/4" CLEAN CRUSHED ROCK (HEIGHT ≥ 0.75H).
WALL FOOTING
COMPETENT MATERIAL OR BEDROCK, AS EVALUATED BY THE GEOTECHNICAL ENGINEER

NOT TO SCALE

**SPECIFICATIONS FOR CALTRANS CLASS 2 PERMEABLE MATERIAL

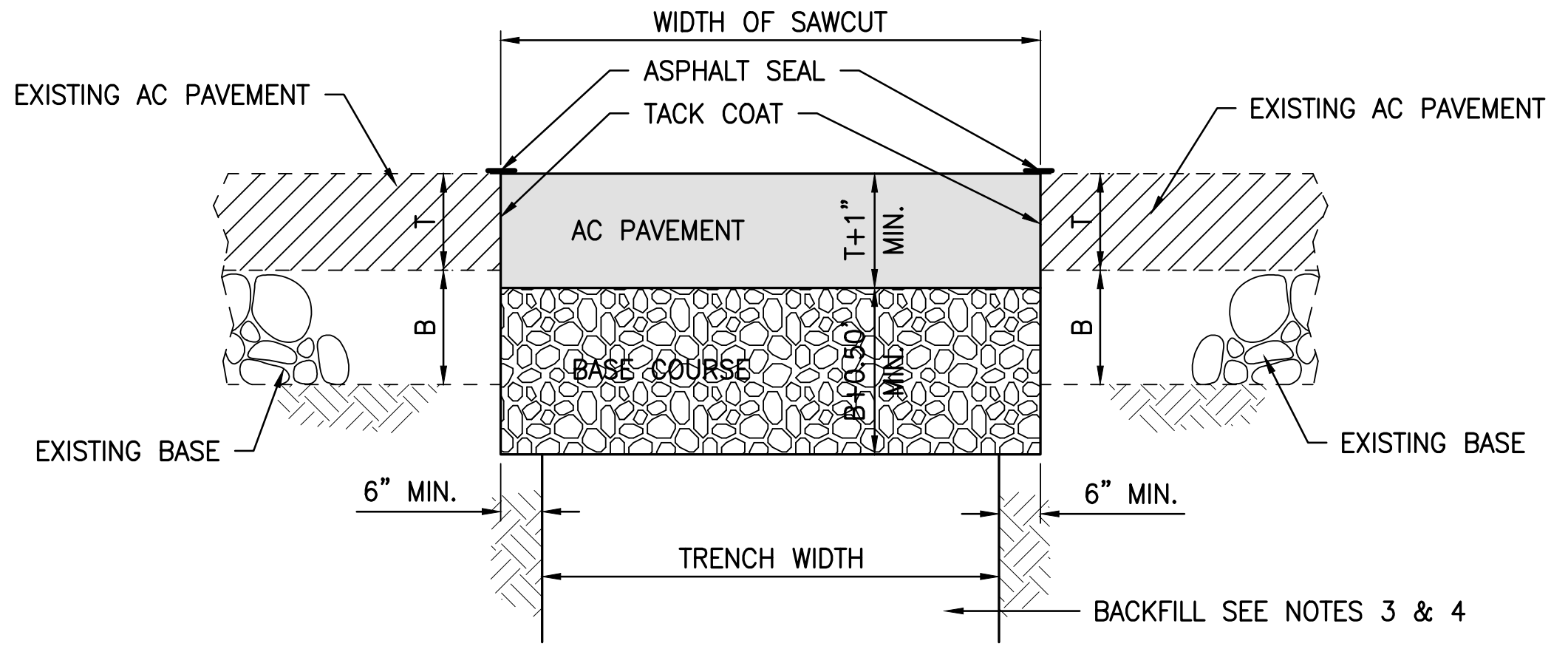
*ALL BACKCUTS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS, UNLESS SITE-SPECIFIC BACKCUT AND BACKFILL RECOMMENDATIONS ARE MADE BY THIS OFFICE.

NOTES:

1. REFER TO THE GEOTECHNICAL REPORT BLDG C D E & F AND STRUCTURAL DRAWINGS FOR MORE DETAILS.
2. FOR GEOTECHNICAL RECOMMENDATIONS, PLEASE REFERENCE THE REVISED RETAINING WALL DRAINAGE RECOMMENDATIONS FILE

7 WALL DRAINAGE

N.T.S.


WIDTH OF SAWCUT
ASPHALT SEAL
TACK COAT
EXISTING AC PAVEMENT
EXISTING AC PAVEMENT
AC PAVEMENT
T
T+1" MIN.
B
BASE COURSE
B+0.50' MIN.
B
T
EXISTING BASE
EXISTING BASE
6" MIN.
6" MIN.
TRENCH WIDTH
BACKFILL SEE NOTES 3 & 4

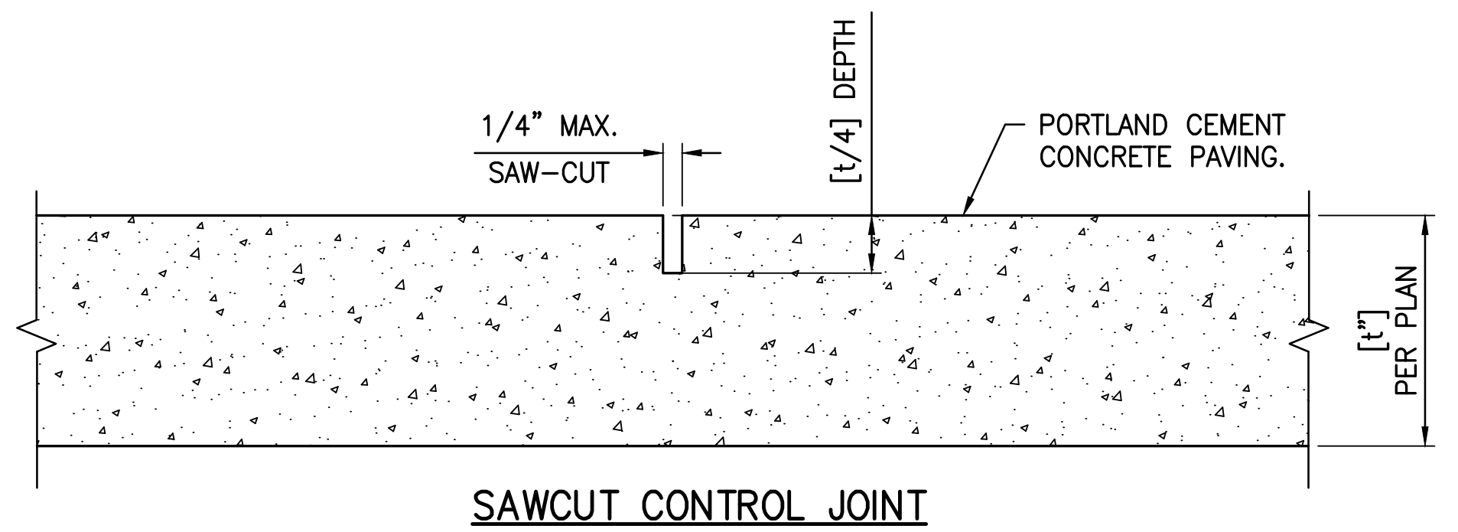
NOTES:

1. DURING EXCAVATION AND SUBGRADE PREPARATION, THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO ENSURE THE PROTECTION OF ALL IMPROVEMENTS, WHETHER PUBLIC OR PRIVATE, INCLUDING UTILITIES AND THEIR SERVICES, FROM ANY DAMAGE THAT COULD OCCUR DUE TO CONTRACTOR'S CONSTRUCTION ACTIVITIES.
2. BACKFILL AND DENSIFICATION SHALL BE DONE IN CONFORMANCE WITH SUBSECTION 306–1.3 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION LATEST EDITION, EXCEPT AS FOLLOWS:

   A) IF NOT OTHERWISE SPECIFIED, TRENCH BACKFILL SHALL BE DENSIFIED TO A MINIMUM OF 90 PERCENT RELATIVE COMPACTION.
3. TEMPORARY PAVEMENT RESURFACING SHALL BE PLACED AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. IT SHALL BE PLACED LEVEL WITH THE EXISTING PAVEMENT ON COMPACTED TRENCH BACKFILL, SHALL BE A MINIMUM OF 2" THICK, AND PLACED PER SSPWC 306–1.5.1.
4. PERMANENT PAVEMENT RESURFACING SHALL BE DONE WITHIN TWO (2) WEEKS AFTER BACKFILLING OF TRENCHES HAS BEEN COMPLETED, ONLY AFTER SETTLEMENT HAS TAKEN PLACE AND THE FILL SURFACE HAS SUFFICIENTLY DRIED. ALL CUTS SHALL BE GROOMED CLEAN AND STRAIGHT.
5. CONTACT SURFACES OF EXISTING PAVEMENT, MANHOLE FRAMES AND SHAFTS AND CONCRETE SURFACES SHALL HAVE A TACK COATING APPLIED BEFORE PERMANENT ASPHALT RESURFACING IS PLACED.
6. ASPHALT CONCRETE PAVEMENT SHALL BE AS SPECIFIED.

6 ASPHALT CONCRETE PAVEMENT TRENCH RESURFACING

N.T.S.


1/4" MAX.
SAW-CUT
[1/4] DEPTH
PORTLAND CEMENT CONCRETE PAVING.
[T] PER PLAN

SAWCUT CONTROL JOINT

NOTES:

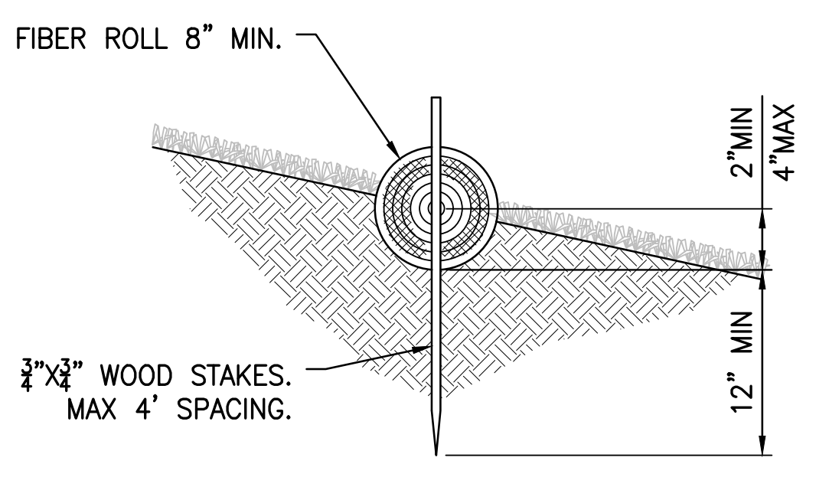
1. CONTROL JOINTS SHALL BE CONSTRUCTED PER S.S.P.W.C.
2. CONSTRUCT CONTROL JOINTS WITHIN 24 HOURS OF POUR.
3. SEE PLAN FOR LOCATION OF CONTROL JOINTS.

5 CONTROL JOINT FOR CONCRETE PAVEMENT

N.T.S.

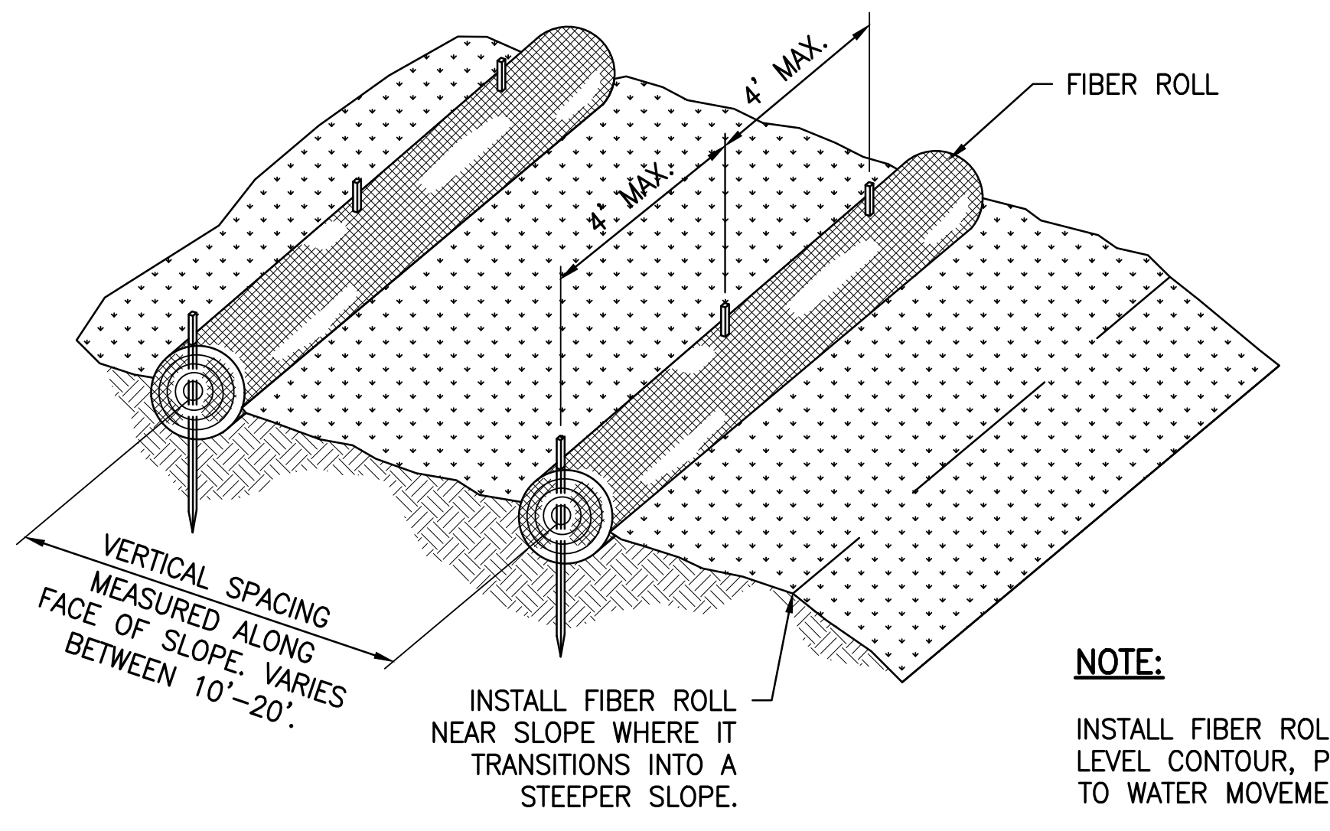
4 NOT USED

N.T.S.


FIBER ROLL 8" MIN.
2"MIN
4"MAX
12" MIN
¾"X¾" WOOD STAKES. MAX 4' SPACING.

ENTRENCHMENT DETAIL
N.T.S.

SLOPE INCLINATION	MAXIMUM SHEET FLOW LENGTH (FOR SLOPE INTERRUPTION)
< 4:1 (H:V)	20'
4:1–2:1 (H:V)	15'
> 2:1 (H:V)	10'


4' MAX.
4' MAX.
FIBER ROLL
VERTICAL SPACING MEASURED ALONG FACE OF SLOPE. VARIES BETWEEN 10'–20'.
INSTALL FIBER ROLL NEAR SLOPE WHERE IT TRANSITIONS INTO A STEEPER SLOPE.

NOTE:

INSTALL FIBER ROLL ALONG A LEVEL CONTOUR, PERPENDICULAR TO WATER MOVEMENT.

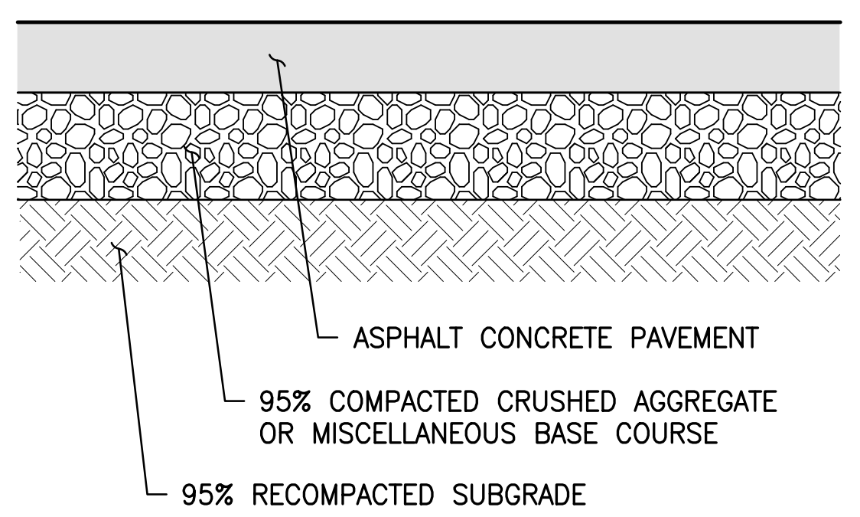
TYPICAL FIBER ROLL INSTALLATION DETAIL
N.T.S.

3 FIBER ROLL

N.T.S.

2 NOT USED

N.T.S.


ASPHALT CONCRETE PAVEMENT
95% COMPACTED CRUSHED AGGREGATE OR MISCELLANEOUS BASE COURSE
95% RECOMPACTED SUBGRADE

TRAFFIC INDEX (TI)	PAVEMENT SECTION (THICKNESS IN INCHES)	
	ASPHALT CONCRETE	BASE COURSE
4	3.0	4.5
5	3.0	5.5
6	4.0	7.0
7	4.5	8.5

NOTE:
1. PAVEMENT SECTIONS ARE BASED ON RECOMMENDATIONS FROM THE PROJECT GEOTECHNICAL REPORT.

1 ASPHALT PAVEMENT SECTION

N.T.S.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/07/2026

Practice
135 W. Green St Suite 200 Pasadena, CA 91105 | 626.568.1248 | practice-la.com

kpff
700 South Flower Street
Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
www.kpff.com

No. C77744
Exp. 6/30/27
CIVIL

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

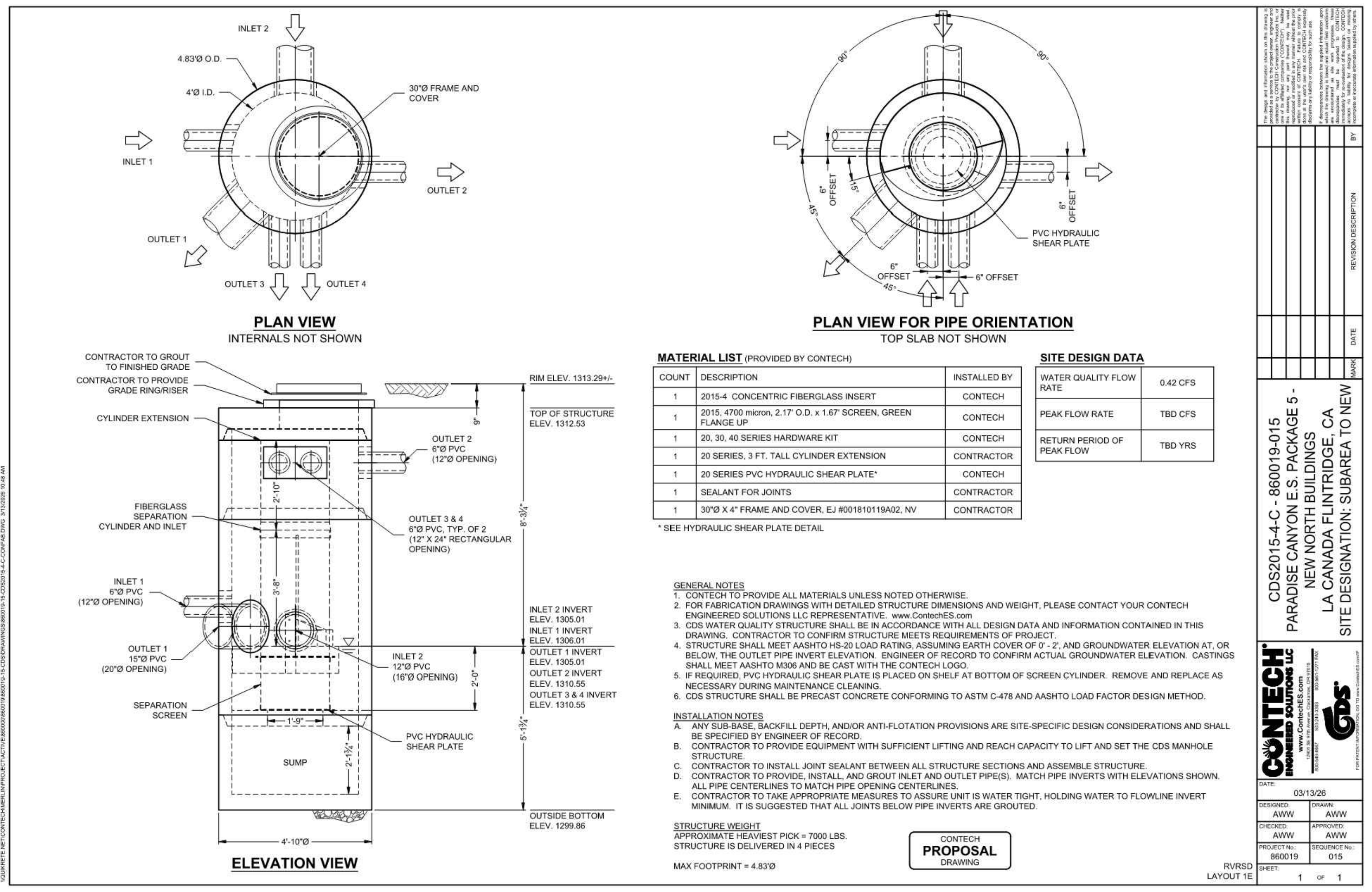
DETAILS

5C5.02

SCALE: AS INDICATED

P:\2020\200742 Paradise Canyon ES Modernization\5 CAD\Sheets\New North Buildings\200742-C-5.02DT.dwg, Mar 18, 2026 - 1:49pm

If this sheet is smaller than 30" high by 42" wide then it has been reduced.


INLET 2
4.83'Ø O.D.
4'Ø I.D.
30"Ø FRAME AND COVER
INLET 1
OUTLET 2
OUTLET 1
OUTLET 3
OUTLET 4
CONTRACTOR TO GROUT TO FINISHED GRADE
CONTRACTOR TO PROVIDE GRADE RING/RISER
CYLINDER EXTENSION
FIBERGLASS SEPARATION CYLINDER AND INLET
INLET 1 6"Ø PVC (12"Ø OPENING)
OUTLET 1 15"Ø PVC (20"Ø OPENING)
SEPARATION SCREEN
SUMP
OUTLET 2 6"Ø PVC (12"Ø OPENING)
OUTLET 3 & 4 6"Ø PVC, TYP. OF 2 (12" X 24" RECTANGULAR OPENING)
INLET 2 12"Ø PVC (16"Ø OPENING)
PVC HYDRAULIC SHEAR PLATE
RIM ELEV. 1313.29+/-
TOP OF STRUCTURE ELEV. 1312.53
INLET 2 INVERT ELEV. 1305.01
INLET 1 INVERT ELEV. 1306.01
OUTLET 1 INVERT ELEV. 1305.01
OUTLET 2 INVERT ELEV. 1310.55
OUTLET 3 & 4 INVERT ELEV. 1310.55
OUTSIDE BOTTOM ELEV. 1299.86
9"
2'-10"
3'-8"
8'-3¾"
2'-0"
1'-9"
2'-1¾"
5'-1¾"
4'-10"Ø
45°
6" OFFSET
PVC HYDRAULIC SHEAR PLATE

PLAN VIEW
INTERNALS NOT SHOWN

ELEVATION VIEW

PLAN VIEW FOR PIPE ORIENTATION
TOP SLAB NOT SHOWN

MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
1	2015-4 CONCENTRIC FIBERGLASS INSERT	CONTECH
1	2015, 4700 micron, 2.17' O.D. x 1.67' SCREEN, GREEN FLANGE UP	CONTECH
1	20, 30, 40 SERIES HARDWARE KIT	CONTECH
1	20 SERIES, 3 FT. TALL CYLINDER EXTENSION	CONTRACTOR
1	20 SERIES PVC HYDRAULIC SHEAR PLATE*	CONTECH
1	SEALANT FOR JOINTS	CONTRACTOR
1	30"Ø X 4" FRAME AND COVER, EJ #001810119A02, NV	CONTRACTOR

* SEE HYDRAULIC SHEAR PLATE DETAIL

SITE DESIGN DATA

WATER QUALITY FLOW RATE	0.42 CFS
PEAK FLOW RATE	TBD CFS
RETURN PERIOD OF PEAK FLOW	TBD YRS

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 7000 LBS.
STRUCTURE IS DELIVERED IN 4 PIECES

MAX FOOTPRINT = 4.83'Ø

CONTECH
PROPOSAL
DRAWING

RVRSD
LAYOUT 1E

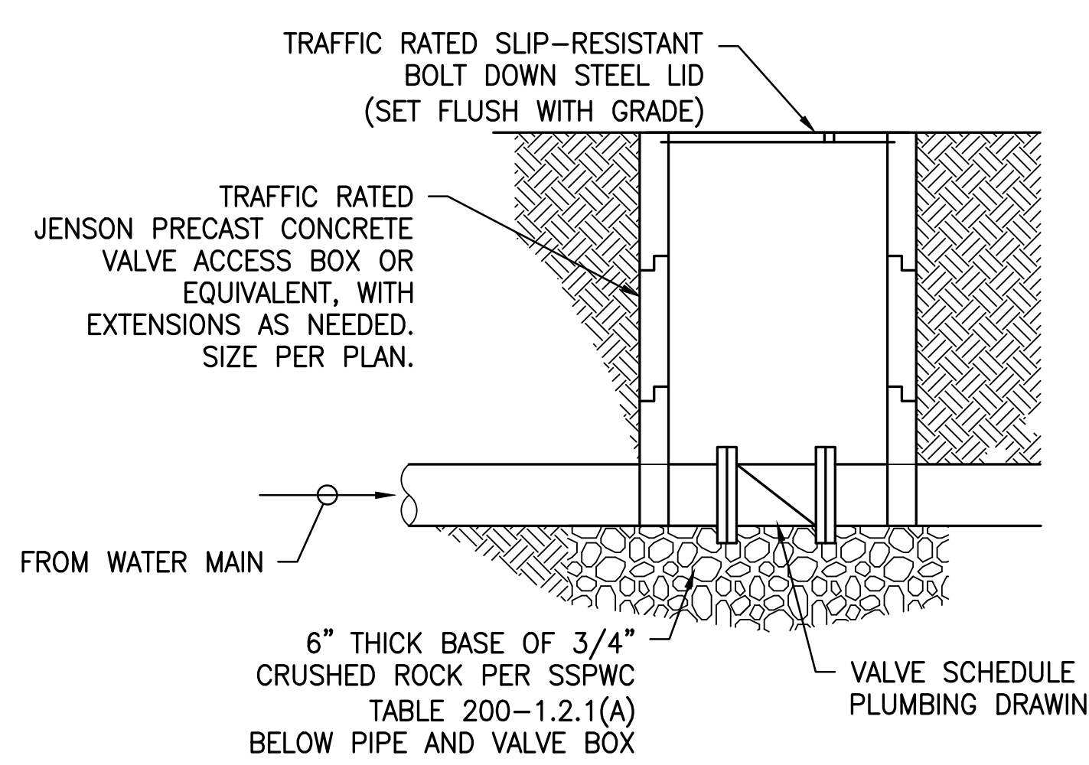
CDS2015-4-C - 860019-015
PARADISE CANYON E.S. PACKAGE 5 -
NEW NORTH BUILDINGS
LA CANADA FLINTRIDGE, CA
SITE DESIGNATION: SUBAREA TO NEW

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com

DATE: 03/13/26	
DESIGNED: AWW	DRAWN: AWW
CHECKED: AWW	APPROVED: AWW
PROJECT No.: 860019	SEQUENCE No.: 015
SHEET: 1 OF 1	

4 CDS UNIT 2

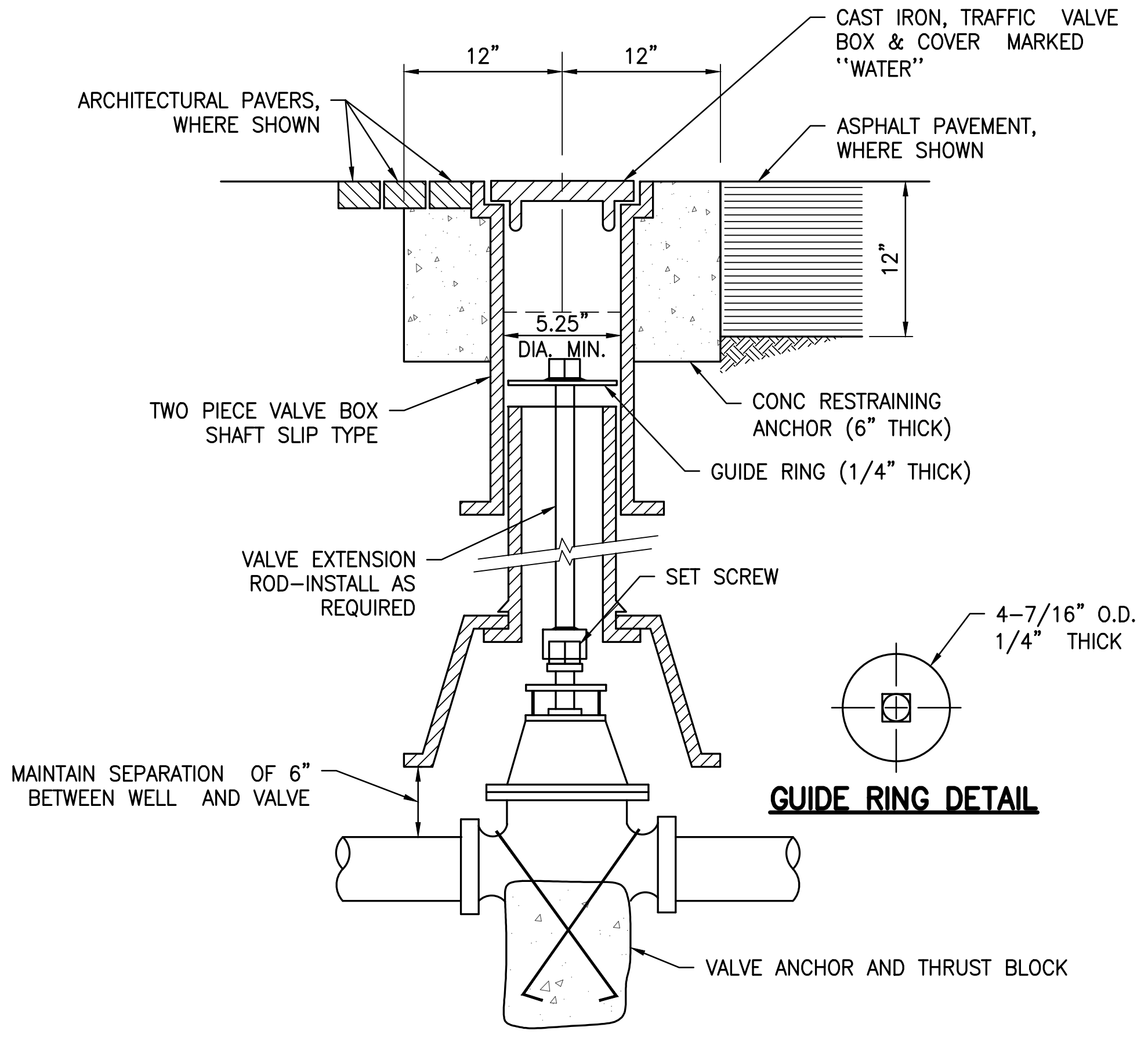
N.T.S.


TRAFFIC RATED SLIP-RESISTANT BOLT DOWN STEEL LID (SET FLUSH WITH GRADE)
TRAFFIC RATED JENSON PRECAST CONCRETE VALVE ACCESS BOX OR EQUIVALENT, WITH EXTENSIONS AS NEEDED. SIZE PER PLAN.
FROM WATER MAIN
6" THICK BASE OF 3/4" CRUSHED ROCK PER SSPWC TABLE 200-1.2.1(A) BELOW PIPE AND VALVE BOX
VALVE SCHEDULE PER PLUMBING DRAWINGS

NOTES:

1. THE SYSTEM SHALL BE INSTALLED PER N.F.P.A. 13, 14, AND 24.

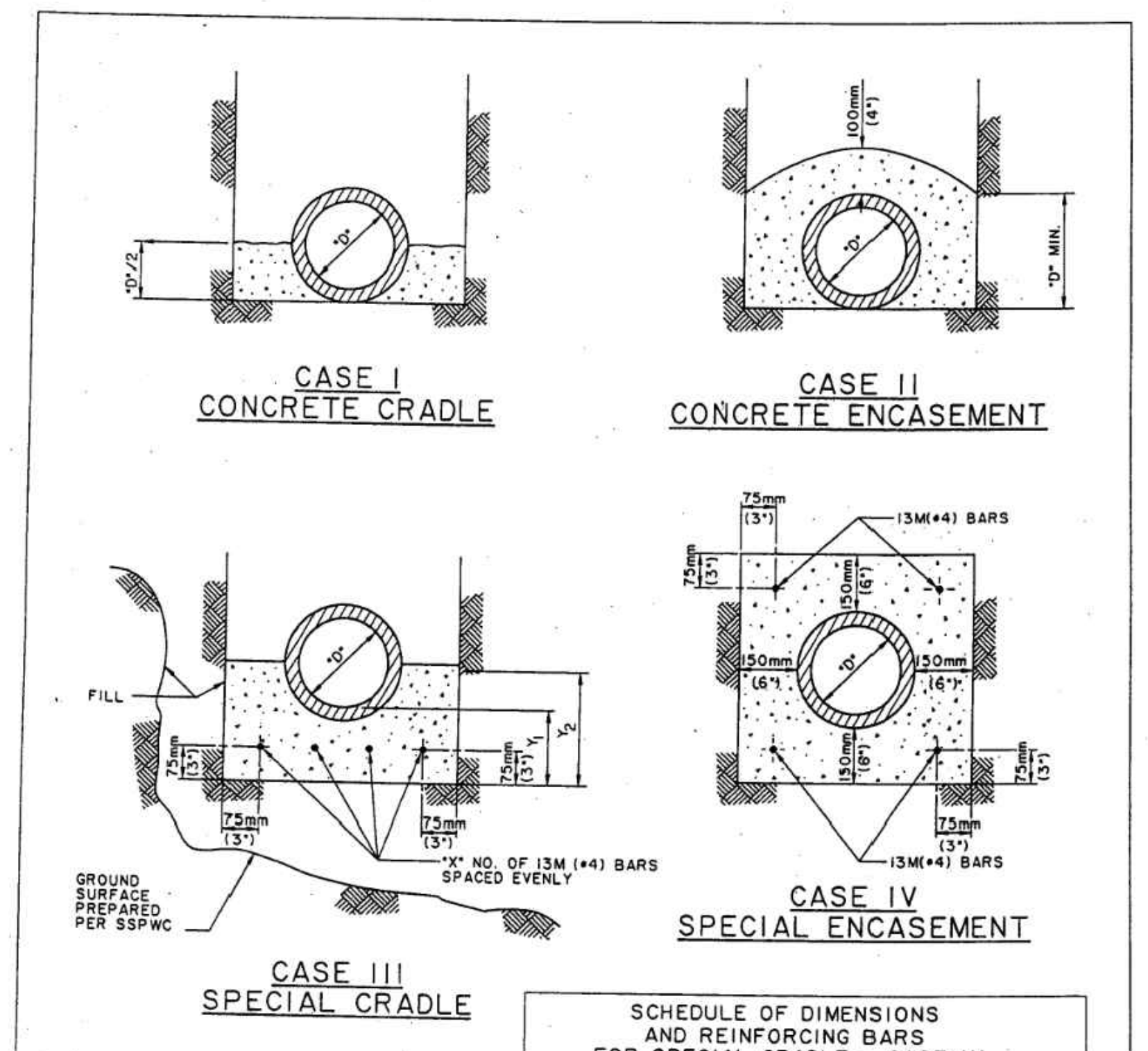
SIZE	JENSEN PRECAST SERIES
10"X17"	HT1017
10" DIA	TRAFFIC VALVE BOXES


12"
12"
CAST IRON, TRAFFIC VALVE BOX & COVER MARKED ''WATER''
ARCHITECTURAL PAVERS, WHERE SHOWN
ASPHALT PAVEMENT, WHERE SHOWN
12"
5.25" DIA. MIN.
TWO PIECE VALVE BOX SHAFT SLIP TYPE
CONC RESTRAINING ANCHOR (6" THICK)
GUIDE RING (1/4" THICK)
VALVE EXTENSION ROD-INSTALL AS REQUIRED
SET SCREW
4-7/16" O.D. 1/4" THICK
MAINTAIN SEPARATION OF 6" BETWEEN WELL AND VALVE
VALVE ANCHOR AND THRUST BLOCK

GUIDE RING DETAIL

2 WATER VALVE AND VALVE BOX

N.T.S.


"D"/2
"D"
100mm (4")
"D" MIN.
FILL
75mm (3")
13M(#4) BARS
150mm (6")
Y1
Y2
"X" NO. OF 13M (#4) BARS SPACED EVENLY
GROUND SURFACE PREPARED PER SSPWC

CASE I
CONCRETE CRADLE

CASE II
CONCRETE ENCASEMENT

CASE III
SPECIAL CRADLE

CASE IV
SPECIAL ENCASEMENT

SCHEDULE OF DIMENSIONS
AND REINFORCING BARS
FOR SPECIAL CRADLE - CASE III

"D" (DIAMETER)	"X" NO. OF 13M(#4) BARS	THICKNESS	
		Y_1	Y_2
150mm (6")	2	100mm (4")	200mm (8")
200mm (8")	4	130mm (5")	250mm (10")
250mm (10")	4	150mm (6")	300mm (12")
300mm (12")	4	180mm (7")	380mm (15")
380mm (15")	5	230mm (9")	480mm (19")
460mm (18")	5	250mm (10")	560mm (22")
530mm (21")	6	300mm (12")	660mm (26")
600mm (24")	6	330mm (13")	710mm (28")

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

CRADLING AND ENCASEMENT

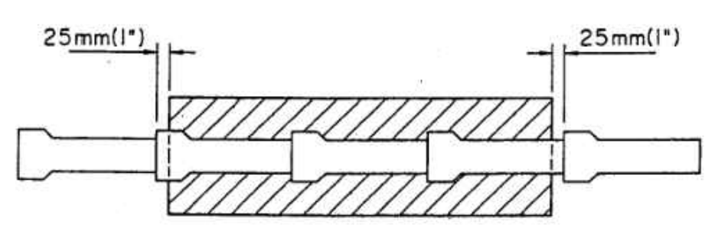
APPROVED Thomas A. Tidemanson 5/31/1992 1995, 1999
DIRECTOR OF PUBLIC WORKS DATE REVISIONS

STANDARD PLAN
METRIC
2023-2
SHEET 1 OF 2

23

NOTES

1. EXTEND BOTH ENDS OF CRADLE OR ENCASEMENT TO A POINT 25mm(1") SHORT OF FIRST PIPE JOINT BEYOND LOCATIONS SPECIFIED ON PLANS.


25mm(1")
25mm(1")

PLAN VIEW

2. APPLY FORM OIL, THIN PLASTIC SHEET, OR OTHER ACCEPTABLE MATERIAL TO PIPE, TO PREVENT BOND BETWEEN PIPE AND CONCRETE.
3. USE CLASS 265-C-14(420-C-2000) CONCRETE FOR ALL CASES.
4. CONDITIONS OF REQUIRED USE:
   a. CASE I - CONCRETE CRADLE
      1. WHEN OVERBURDEN DEPTH IS GREATER THAN 6.1m(20').
      2. AS A SUPPORT WHEN CROSSING OVER A STRUCTURE WITH A CLEARANCE LESS THAN 450mm(1.5') AND GREATER THAN 150mm(0.5').
      3. WHEN WITHIN A 45° ANGLE DOWNWARD FROM THE BOTTOM OF A FOOTING.
   b. CASE II - CONCRETE ENCASEMENT
      1. WHEN CROSSING UNDER A STRUCTURE WITH A CLEARANCE LESS THAN 450mm(1.5') AND GREATER THAN 150mm(0.5').
      2. WHEN COVER DIRT IS LESS THAN 1.2m(4').
      3. WHEN LESS THAN 900mm(3') FROM A POWER POLE.
   c. CASE III - SPECIAL CRADLE
      1. AS A SUPPORT WHEN CROSSING OVER A TRENCH GREATER THAN 1.2m(4') IN WIDTH SEE APWA STANDARD PLAN 224.
   d. CASE IV - SPECIAL ENCASEMENT
      1. WHEN CROSSING UNDER A STRUCTURE WITH A WIDTH GREATER THAN 1.5m(5') AND A CLEARANCE LESS THAN 450mm(1.5') AND GREATER THAN 150mm(0.5').
      2. WHEN WITHIN 3m(10') OF A PRESSURIZED WATER MAIN, OR WITHIN 7.6m(25') OF A GRAVITY FLOW WATER MAIN.
5. DIMENSIONS SHOWN ON THE PLAN FOR METRIC AND ENGLISH UNITS ARE NOT EXACTLY EQUAL VALUES. IF METRIC UNITS ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE METRIC VALUES. IF ENGLISH UNITS ARE USED, ALL VALUES FOR CONSTRUCTION SHALL BE ENGLISH VALUES.

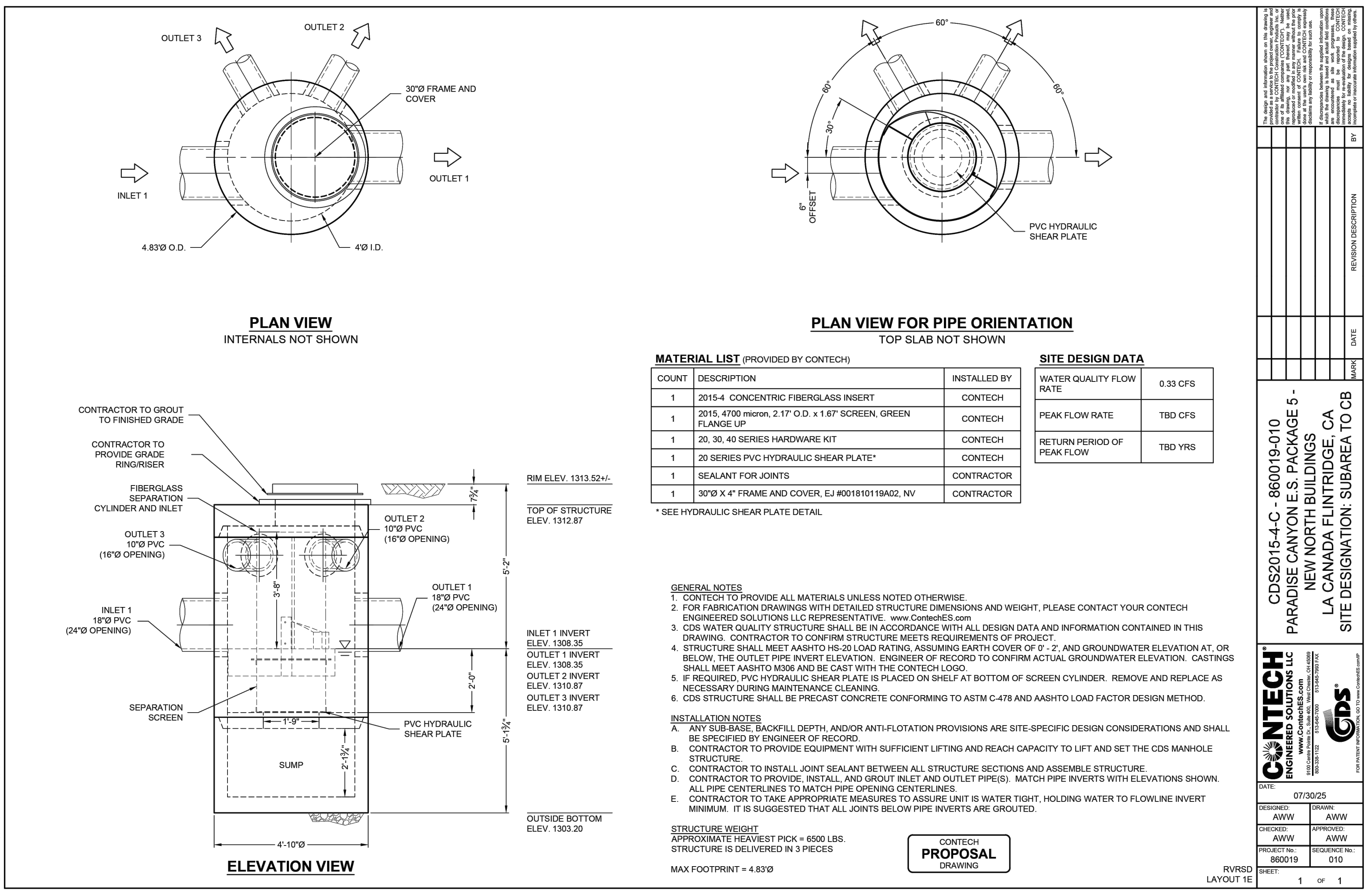
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

CRADLING AND ENCASEMENT

STANDARD PLAN
METRIC
2023-2
SHEET 2 OF 2

3 PIPE ENCASEMENT

N.T.S.


OUTLET 3
OUTLET 2
30"Ø FRAME AND COVER
INLET 1
OUTLET 1
4.83'Ø O.D.
4'Ø I.D.
60°
6" OFFSET
PVC HYDRAULIC SHEAR PLATE
CONTRACTOR TO GROUT TO FINISHED GRADE
CONTRACTOR TO PROVIDE GRADE RING/RISER
FIBERGLASS SEPARATION CYLINDER AND INLET
OUTLET 3 10"Ø PVC (16"Ø OPENING)
INLET 1 18"Ø PVC (24"Ø OPENING)
SEPARATION SCREEN
SUMP
OUTLET 2 10"Ø PVC (16"Ø OPENING)
OUTLET 1 18"Ø PVC (24"Ø OPENING)
PVC HYDRAULIC SHEAR PLATE
RIM ELEV. 1313.52+/-
TOP OF STRUCTURE ELEV. 1312.87
INLET 1 INVERT ELEV. 1308.35
OUTLET 1 INVERT ELEV. 1308.35
OUTLET 2 INVERT ELEV. 1310.87
OUTLET 3 INVERT ELEV. 1310.87
OUTSIDE BOTTOM ELEV. 1303.20
7¾"
3'-8"
5'-2"
2'-0"
1'-9"
2'-1¾"
5'-1¾"
4'-10"Ø

PLAN VIEW
INTERNALS NOT SHOWN

ELEVATION VIEW

PLAN VIEW FOR PIPE ORIENTATION
TOP SLAB NOT SHOWN

MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
1	2015-4 CONCENTRIC FIBERGLASS INSERT	CONTECH
1	2015, 4700 micron, 2.17' O.D. x 1.67' SCREEN, GREEN FLANGE UP	CONTECH
1	20, 30, 40 SERIES HARDWARE KIT	CONTECH
1	20 SERIES PVC HYDRAULIC SHEAR PLATE*	CONTECH
1	SEALANT FOR JOINTS	CONTRACTOR
1	30"Ø X 4" FRAME AND COVER, EJ #001810119A02, NV	CONTRACTOR

* SEE HYDRAULIC SHEAR PLATE DETAIL

SITE DESIGN DATA

WATER QUALITY FLOW RATE	0.33 CFS
PEAK FLOW RATE	TBD CFS
RETURN PERIOD OF PEAK FLOW	TBD YRS

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
3. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
6. CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE.
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 6500 LBS.
STRUCTURE IS DELIVERED IN 3 PIECES

MAX FOOTPRINT = 4.83'Ø

CONTECH
PROPOSAL
DRAWING

RVRSD
LAYOUT 1E

CDS2015-4-C - 860019-010
PARADISE CANYON E.S. PACKAGE 5 -
NEW NORTH BUILDINGS
LA CANADA FLINTRIDGE, CA
SITE DESIGNATION: SUBAREA TO CB

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

DATE: 07/30/25	
DESIGNED: AWW	DRAWN: AWW
CHECKED: AWW	APPROVED: AWW
PROJECT No.: 860019	SEQUENCE No.: 010
SHEET: 1 OF 1	

1 CDS UNIT

N.T.S.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/07/2026

135 W. Green St Suite 200 Pasadena, CA 91105 | 626.568.1248 | practice-la.com

700 South Flower Street
Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
www.kpff.com

No. C77744
Exp. 6/30/27
CIVIL

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

DETAILS

5C5.03

SCALE: AS INDICATED

P:\2020\2000742 Paradise Canyon ES Modernization\5 CAD\Sheets\New North Buildings\2000742-C-5.03DT.dwg, Mar 18, 2026 - 1:49pm

If this sheet is smaller than 30" high by 42" wide then it has been reduced.

STRUCTURAL TESTS AND SPECIAL INSPECTIONS

1. STRUCTURAL TESTS AND SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 17A OF THE CODE.
2. THE SPECIAL INSPECTOR MUST BE CERTIFIED BY DIVISION OF THE STATE ARCHITECT (DSA), IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.
3. THE SPECIAL INSPECTORS AND TESTING FIRM MUST BE HIRED BY THE OWNER OR OWNER'S REPRESENTATIVE.
4. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS AND FURNISH COPIES TO THE DSA, OWNER, AND STRUCTURAL ENGINEER OF RECORD. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS, OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS AND FURNISH COPIES TO THE DSA, COMPLETED IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (LATEST EDITION), AND WITH CHAPTER 22A OF THE CODE.
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM DESIGNATION AS INDICATED BELOW (UNO):

ALL W AND WT SHAPES	A992 OR A572, GRADE 50
PLATES, CONNECTION PLATES, AND MISC	A36 UNO (A572 GR50 OPTIONAL)
ROUND SECTIONS	A500, GRADE C, Fy = 46 KSI
SQUARE / RECTANGULAR SECTIONS	A500, GRADE C, Fy = 50 KSI
HIGH STRENGTH BOLTS (TYP FOR CONNECTIONS, UNO)	F3125, GRADE A325-N
ANCHOR BOLTS IN CONCRETE	A36 THREADED RODS F1554 GR 36, ANCHOR RODS UNO
COMMON/MACHINE BOLTS	A307, GR A
ANGLES, CHANNELS	A36

3. THE STRUCTURAL STEEL FABRICATOR SHALL FURNISH SHOP DRAWINGS TO THE ARCHITECT OF ALL STEEL FOR ARCHITECTS AND STRUCTURAL ENGINEERS REVIEW BEFORE FABRICATION.
4. BOLT HOLES USED IN STEEL SHALL BE 1/16" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, EXCEPT AS NOTED.
5. ALL STRUCTURAL STEEL SURFACES THAT ARE ENCASED IN CONCRETE, OR SPRAY ON FIREPROOFING SHALL BE LEFT UNPAINTED.
6. ALL WELDING IS TO BE DONE BY CERTIFIED WELDERS USING E70XX ELECTRODES (UNO). ALL WELDS SHALL BE IN CONFORMITY WITH THE PROJECT SPECIFICATIONS AND THE CODE FOR WELDING IN BUILDING CONSTRUCTION (AWS D1.1 LATEST REVISION) OF THE AMERICAN WELDING SOCIETY. SEE SPECIAL INSPECTIONS SECTION FOR WELDING INSPECTION REQUIREMENTS.
7. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE FILLET WELD SYMBOL IS GIVEN WITHOUT INDICATION OF SIZE, USE MINIMUM SIZE WELDS AS SPECIFIED IN AISC MANUAL OF STEEL CONSTRUCTION 15TH EDITION, SECTION J2.2b.
8. ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL EXPOSED TO THE WEATHER SHALL BE HOT DIP GALVANIZED AFTER FABRICATION, UNLESS CALLED OUT TO BE PAINTED ON THE CONSTRUCTION DOCUMENTS. PROTECT FIELD WELDS EXPOSED TO THE WEATHER VIA PRIME AND PAINT OR BRUSH / COLD GALVANIZING. REFER TO ARCH DRAWINGS FOR STEEL FINISH.
9. THE USE OF E70T-4 WELDING WIRE IS NOT ALLOWED FOR ANY APPLICATION. ALL WELD FILLER METAL SHALL BE OF THE LOW HYDROGEN TYPE AND SHALL HAVE A MINIMUM CHARPY V-NOTCH (CVN) VALUE OF 20 FT-LBS AT A TEMPERATURE OF 0°F.
10. FOR ALL STRUCTURAL STEEL THAT IS TO REMAIN EXPOSED AND VISIBLE PER THE ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL GRIND SMOOTH ALL EXPOSED GROOVE WELDS AND SHALL COMPLY WITH THE SPECIFICATIONS FOR (AESS) ARCHITECTURALLY EXPOSED STRUCTURAL STEEL FOUND ON THE AISC CODE OF STANDARD PRACTICE.
11. WRITTEN WELDING PROCEDURE SPECIFICATIONS (WPS) PER THE RECOMMENDATIONS OF THE AMERICAN WELDING SOCIETY (AWS) SHALL BE DEVELOPED BY THE FABRICATOR/ERECTOR AND SUBMITTED FOR REVIEW TO THE ENGINEER PRIOR TO ANY WELDING OF THE STRUCTURAL STEEL. THE WELDING PROCEDURES SHALL INCLUDE ALL THE WELDED JOINTS AND CONFIGURATIONS TO BE USED ON THIS PROJECT-ONLY WPS WHICH ARE RELEVANT TO THIS PROJECT SHALL BE SUBMITTED. ALL WELDED JOINTS SHALL BE PREQUALIFIED PER AWS OR BE QUALIFIED BY TEST PER DSA-103 FORM, SPECIFICATIONS, AND AWS. A PROCEDURE QUALIFICATION RECORD (PQR) SHALL BE INCLUDED WITH THE WPS IF THE WELDING PROCEDURE OR JOINT IS QUALIFIED BY TESTING. THE ELECTRODE MANUFACTURER AND PRODUCT/TRADE NAME SHALL BE IDENTIFIED IN THE WPS IN ADDITION TO THE AWS ELECTRODE CLASSIFICATION NAME. A COPY OF THE ELECTRODE MANUFACTURER'S TECHNICAL DATA SHEETS WITH THE RECOMMENDED ZEWELDING PARAMETERS SHALL BE SUBMITTED WITH THE WPS.
12. ALL FLARE BEVEL WELDS SHALL BE OF SUFFICIENT SIZE TO PROVIDE EFFECTIVE THROAD OF (5/16) x RADIUS.
13. NELSON STUDS SHALL BE PER ESR-2856 AND SHALL BE GRADE A706.

REINFORCING STEEL

1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 19A OF THE CODE, ASTM A615, GRADE 60 UNO. DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A-305. WELDED REINFORCEMENT SHALL CONFORM TO ASTM A706 GRADE 60.
2. BARS SHALL BE CLEAN OF RUST, GREASE, OR OTHER MATERIALS LIKELY TO IMPAIR BOND. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
3. REINFORCING BAR SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS. MINIMUM SPLICE LENGTH FOR REINFORCING STEEL BARS IN CONCRETE SHALL BE AS REQUIRED FOR CLASS B SPLICES PER ACI 318 SECTION 25.5.2 UNO. LAP ALL HORIZONTAL BARS AT CORNERS AND INTERSECTIONS.
4. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.
5. WHERE WELDING OF REINFORCING IS APPROVED BY THE STRUCTURAL ENGINEER, IT SHALL BE DONE BY AWS CERTIFIED WELDERS USING APPROVED ELECTRODES. WELDER SHALL BE APPROVED BY DSA. WELDING PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF STRUCTURAL WELDING CODE-REINFORCING STEEL AWS-D1.4, LATEST REVISION. REINFORCING BARS TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-706.
6. BARS IN SLABS SHALL BE SECURELY SUPPORTED ON WELL-CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS, PRIOR TO PLACING CONCRETE.
7. REINFORCING STEEL SHALL BE DETAILED IN ACCORDANCE WITH THE "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," LATEST EDITION.
8. COMPLETE AND DETAILED REINFORCING PLACEMENT DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE ARCHITECT FOR REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION IN ACCORDANCE WITH THE SPECIFICATIONS AND APPLICABLE CODES. THESE DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE PRIOR TO PLACING OF CONCRETE.
9. MILL TEST REPORTS FOR GRADE 60 BARS SHALL BE SUBMITTED PRIOR TO PLACEMENT OF CONCRETE.
10. CONTINUOUS INSPECTION OF CONCRETE SHALL INCLUDE INSPECTION DURING INSTALLATION OF REINFORCING STEEL. INSPECTION SHALL BE SCHEDULED SO THAT PLACEMENT OF REINFORCING STEEL, CONDUIT, SLEEVES AND EMBEDDED ITEMS MAY BE CORRECTED PRIOR TO PLACEMENT OF OVERLYING GRIDS OR REINFORCING STEEL.
11. CONCRETE PROTECTION FOR REINFORCEMENT:
(I) CAST IN PLACE CONCRETE (NON-PRESTRESSED). THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

		MINIMUM COVER, IN.
A.	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
B.	CONCRETE EXPOSED TO EARTH OR WEATHER:	
	NO. 6 THROUGH NO. 18 BAR	2
	NO. 5 BAR, W31 OR D31 WIRE AND SMALLER	1 1/2
C.	CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
	SLABS, WALLS, JOISTS:	
	NO. 14 AND NO. 18 BAR	1 1/2
	NO. 11 BAR AND SMALLER	3/4
	BEAMS, COLUMNS:	
	PRIMARY REINFORCEMENT TIES, STIRRUPS, SPIRALS	1 1/2

12. TESTS OF REINFORCING BARS ARE EXEMPT FOR ALL SITE CONCRETE PER CBC SECTION 1910A.2

FOUNDATION

1. FOUNDATION DESIGN BASED ON THE SOILS REPORT BY ALLAN E. SEWARD ENGINEERING GEOLOGY, INC DATED JUNE 19, 2024. (PROJ NO. 24-2775-6)
2. RETAINING WALL FOUNDATIONS WILL BEAR ON COMPACTED FILL AND ARE DESIGNED BASED ON THE FOLLOWING INFORMATION:

ALLOWABLE BEARING* = 2,000 PSF
PASSIVE EARTH PRESSURE* = 200 PCF; 2,000 PSF MAX
COEFFICIENT OF FRICTION = 0.3 (MAY BE COMBINED WITH PASSIVE WITH NO REDUCTION)
EQUIVALENT FLUID PRESSURE = 38 PCF; UNRESTRAINED WALLS (SOIL ACTIVE), LEVEL BACKFILL
= 58 PCF; RESTRAINED WALLS (SOIL AT REST), LEVEL BACKFILL
= 60 PCF; UNRESTRAINED WALLS (SOIL ACTIVE), 2:1 BACKFILL
= 80 PCF; RESTRAINED WALLS (SOIL AT REST), 2:1 BACKFILL

* ALLOWABLE BEARING AND PASSIVE PRESSURE MAY BE INCREASED BY 1/3 FOR WIND AND SEISMIC LOAD CASES WHEN ALTERNATE BASIC LOAD COMBINATIONS ARE USED.

FOOTINGS SHALL BEAR ON A MINIMUM COMPACTED FILL PER 6/5SS5.1. MINIMUM DEPTH OF FOOTINGS BELOW LOWEST ADJACENT FINAL GRADE WILL BE 24".

MINIMUM WIDTH OF FOOTING SHALL BE 24". THE ALLOWABLE BEARING PRESSURE NOTED ABOVE MAY BE INCREASED BY 250 PSF FOR EVERY ADDITIONAL FOOT OF WIDTH OF THE FOUNDATIONS, TO A MAXIMUM VALUE OF 2,500 PSF.

3. RETAINING WALL LIVE LOAD SURCHARGE

TRAFFIC LOADS* = 250 PSF
= 83.3 PSF; WHEN APPLIED WITHIN 1:1 (H:V) PROJECTION FROM THE BASE OF THE WALL
= 0 PSF; WHEN APPLIED BEYOND 2:1 (H:V) PROJECTION FROM THE BASE OF THE WALL

PEDESTRIAN LOADS* = 100 PSF
= 33.3 PSF; WHEN APPLIED WITHIN 1:1 (H:V) PROJECTION FROM THE BASE OF THE WALL
= 0 PSF; WHEN APPLIED BEYOND 2:1 (H:V) PROJECTION FROM THE BASE OF THE WALL

* LINEAR INTERPOLATION ALLOWED IN BETWEEN THE TWO CASES

4. CONTRACTOR TO PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE, IF REQUIRED.
5. CONTRACTOR SHALL PROVIDE FOR DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED AND SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES.
6. EXCAVATION FOR FOOTINGS SHALL BE APPROVED BY THE INSPECTOR OR SOILS ENGINEER PRIOR TO PLACING THE CONCRETE AND REINFORCING CONTRACTOR TO NOTIFY THE INSPECTOR WHEN INSPECTION OF EXCAVATION IS READY. INSPECTOR TO SUBMIT A LETTER OF COMPLIANCE.
7. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE OR GROUT HAS ATTAINED FULL DESIGN STRENGTH. CONTRACTORS SHALL BRACE OR PROTECT ALL BUILDING AND PIT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHING FLOORS ARE COMPLETELY IN PLACE AND HAVE ATTAINED FULL STRENGTH. CONTRACTOR SHALL PROVIDE FOR DESIGN, PERMITS AND INSTALLATION OF SUCH BRACING.
8. FOUNDATIONS SHALL BE PLACED AND ESTIMATED ACCORDING TO DEPTHS SHOWN ON DRAWINGS. SHOULD SOIL ENCOUNTERED AT THESES DEPTHS NOT BE APPROVED BY THE INSPECTOR OF SOILS ENGINEER, FOUNDATION ELEVATIONS / DIMENSIONS MAY NEED TO BE MODIFIED BY THE ENGINEER.
9. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS IN ACCORDANCE WITH THE SOILS REPORT AND APPROVED BY THE SOILS ENGINEER. FLOODING WILL NOT BE PERMITTED. ALL FILLS USED TO SUPPORT FOUNDATIONS SHALL BE INSPECTED BY THE SOILS ENGINEER REPRESENTATIVE PER CBC SECTION 1705A6.1.
10. ALL ABANDONED FOOTINGS, UTILITIES, ETC. SHALL BE REMOVED UNLESS NOTED OTHERWISE. NEW FOOTINGS MUST EXTEND INTO UNDISTURBED SOILS OR FOUNDED ON STRUCTURALLY CERTIFIED FILL PER THE SOILS REPORT.

GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING FABRICATION AND CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
2. ALL DRAWINGS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT.
3. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
4. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES:

2022 CALIFORNIA BUILDING CODE REFERRED TO HERE AS "THE CODE" AND ANY OTHER REGULATING AGENCIES WHICH HAVE LOCAL AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE DIVISION OF INDUSTRIAL SAFETY AND THOSE CODES & STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS.

5. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
   a. SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT SIZE AND LOCATION OF ALL CONCRETE CURBS, EQUIPMENT PADS, PITS, FLOOR DRAINS, SLOPES, DEPRESSED AREAS, CHANGE IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
   e. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
6. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
   a. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL AND SLAB OPENINGS, ETC., EXCEPT AS SHOWN OR NOTED.
   b. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS. CONCRETE INSERTS FOR ELECTRICAL, MECHANICAL OR PLUMBING FIXTURES.
   c. SIZE AND LOCATION OF MACHINE OR EQUIPMENT BASES, ANCHOR BOLTS FOR MOTOR MOUNTS.
7. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
8. OPENINGS, POCKETS, ETC., SHALL BE BROUGHT TO THE ATTENTION OF THE SEOR PRIOR TO THE START OF WORK. IN NO CASE SHALL OPENINGS OR PENETRATIONS LARGER THAN 4" BE PLACED IN CONCRETE SLABS OR WALLS, UNLESS SPECIALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., LARGER THAN 4" NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS. FOR ANY FURTHER RESTRICTIONS ON OPENINGS IN STRUCTURAL ELEMENTS.
9. ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE LATEST YEAR ADOPTED BY CHAPTER 35 OF THE CODE.

DESIGN LOADS

1. LIVE LOADS:

RETAINING WALL LIVE LOAD SURCHARGE

SURCHARGE LOADS PER SOILS REPORT (SEE FOUNDATION GENERAL NOTES)

PEDESTRIAN LOADS = 100 PSF

2. WIND LOADS:

WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609A OF THE CODE AND CHPT 26 OF ASCE 7-16.

V = 95 MPH (WIND SPEED)
EXPOSURE CATEGORY C

3. EARTHQUAKE LOADS

EARTHQUAKE LOADS ARE IN ACCORDANCE WITH SECTION 1613A OF THE CODE AND CHPT 15 OF ASCE 7-16.

SITE CLASS D

S_{DS} = 1.278g S_{D1} = 1.223g
S_S = 1.917g S_1 = 0.719g

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE CONSTRUCTION SHALL CONFORM WITH CHAPTER 19A OF THE CODE.
2. REINFORCED CONCRETE WAS DESIGNED BY THE "ULTIMATE STRENGTH DESIGN METHOD."
3. CONCRETE MIXES SHALL BE DESIGNED BY AN APPROVED TESTING LABORATORY AND REVIEWED BY THE STRUCTURAL ENGINEER. THE COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE PROPORTIONED BASED ON SECTION 4 OF ACI 301.
4. SCHEDULE OF STRUCTURAL CONCRETE STRENGTH AND TYPES (UNO):

LOCATION IN STRUCTURE	MINIMUM STRENGTH (PSI)	DENSITY (PCF)	SLUMP (IN ±1)	WATER CEMENT RATIO MAX
SITE STRUCTURES	3000 @ 28 DAYS	145	4	0.45

5. TYPICAL PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II. PORTLAND CEMENT IN CONCRETE IN CONTACT WITH EARTH SHALL CONFORM TO ASTM C-150, TYPE II.
6. AGGREGATE FOR HARDROCK CONCRETE SHALL CONFORM TO ALL REQUIREMENTS AND TESTS OF ASTM C-33 AND PROJECT SPECIFICATIONS. AGGREGATE SHALL BE NONREACTIVE WHEN TESTED FOR ALKALI REACTIVITY AS DETERMINED BY THE METHODS IN ASTM C-33 APPENDIX XI.
7. CONCRETE MIXING OPERATION, ETC. SHALL CONFORM TO ASTM C-94.
8. PLACEMENT OF CONCRETE SHALL CONFORM TO CODE SECTION 4 OF ACI 301 AND PROJECT SPECIFICATIONS. CLEAN AND ROUGHEN TO 1/4" AMPLITUDE ALL CONCRETE SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED.
9. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
10. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS. SEE DETAILS IN STRUCTURAL DRAWINGS FOR ADDITIONAL RESTRICTIONS OF THE PLACEMENT OF OPENINGS IN SLABS AND WALLS.
11. PIPES/CONDUIT SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED BY STRUCTURAL ENGINEER. PIPES SHALL NOT DISPLACE OR INTERRUPT REINFORCING BARS, SPACE EMBEDDED PIPES AND SLEEVES AT A MINIMUM OF 3 DIAMETERS.
12. FLY ASH SHALL BE CLASS F AND CONFORM TO THE REQUIREMENTS OF ASTM C618 AND CBC SECTION 1903A.6.

SHEET INDEX

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SS5.2	STRUCTURAL CONCRETE DETAILS
SS6.0	EQUIPMENT ANCHORAGE DETAILS
SS6.1	EQUIPMENT ANCHORAGE DETAILS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
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DATE: 05/07/2026

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PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

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S4399

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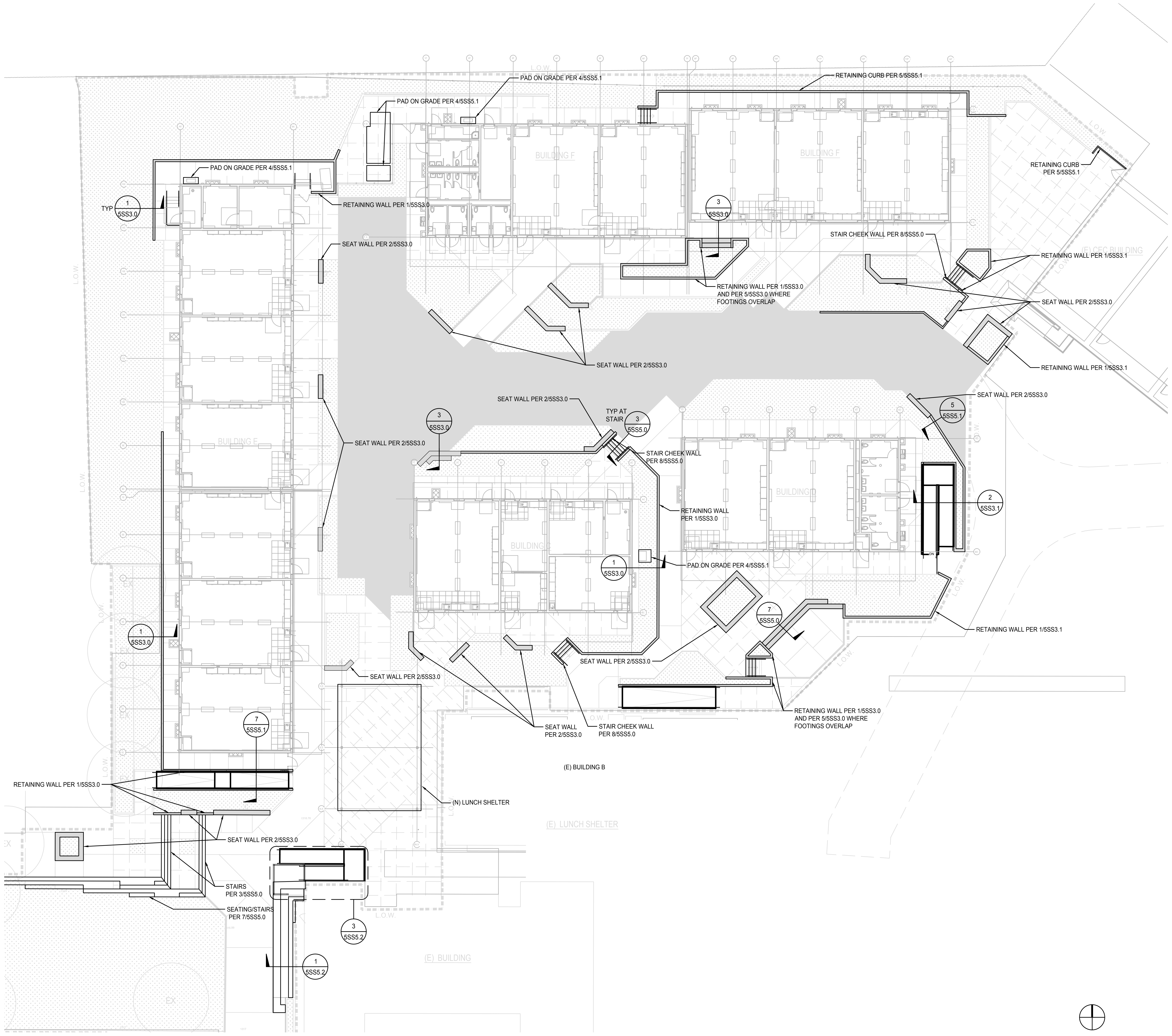
STRUCTURAL GENERAL NOTES

5SS1.0

SCALE As indicated

PLOT DATE 7/31/2024 10:13:04 AM


PAD ON GRADE PER 4/5SS5.1
PAD ON GRADE PER 4/5SS5.1
RETAINING CURB PER 5/5SS5.1
PAD ON GRADE PER 4/5SS5.1
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RETAINING WALL PER 1/5SS3.0
BUILDING F
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STAIR CHEEK WALL PER 8/5SS5.0
RETAINING WALL PER 1/5SS3.1
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RETAINING WALL PER 1/5SS3.0
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FOOTINGS OVERLAP
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STAIR CHEEK WALL
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(E) BUILDING B
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(N) LUNCH SHELTER
(E) LUNCH SHELTER
SEAT WALL PER 2/5SS3.0
STAIRS
PER 3/5SS5.0
SEATING/STAIRS
PER 7/5SS5.0
3
5SS5.2
(E) BUILDING
1
5SS5.2
L.O.W.
EX

1 STRUCTURAL SITE PLAN
1/16"=1'-0"

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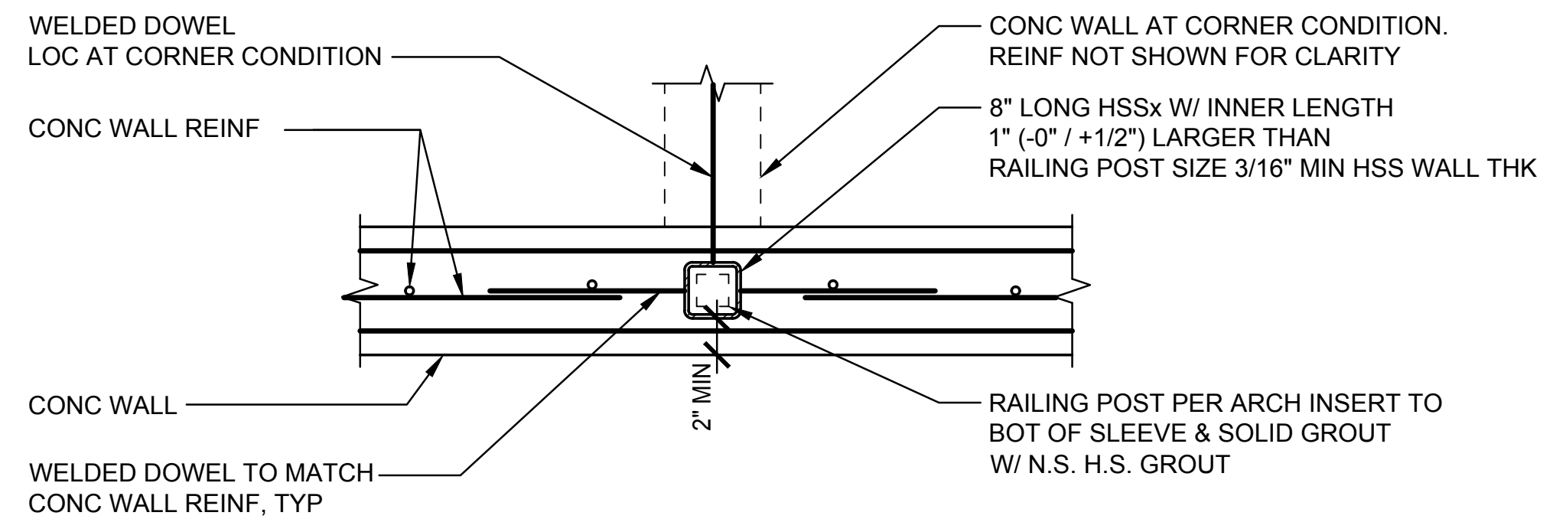
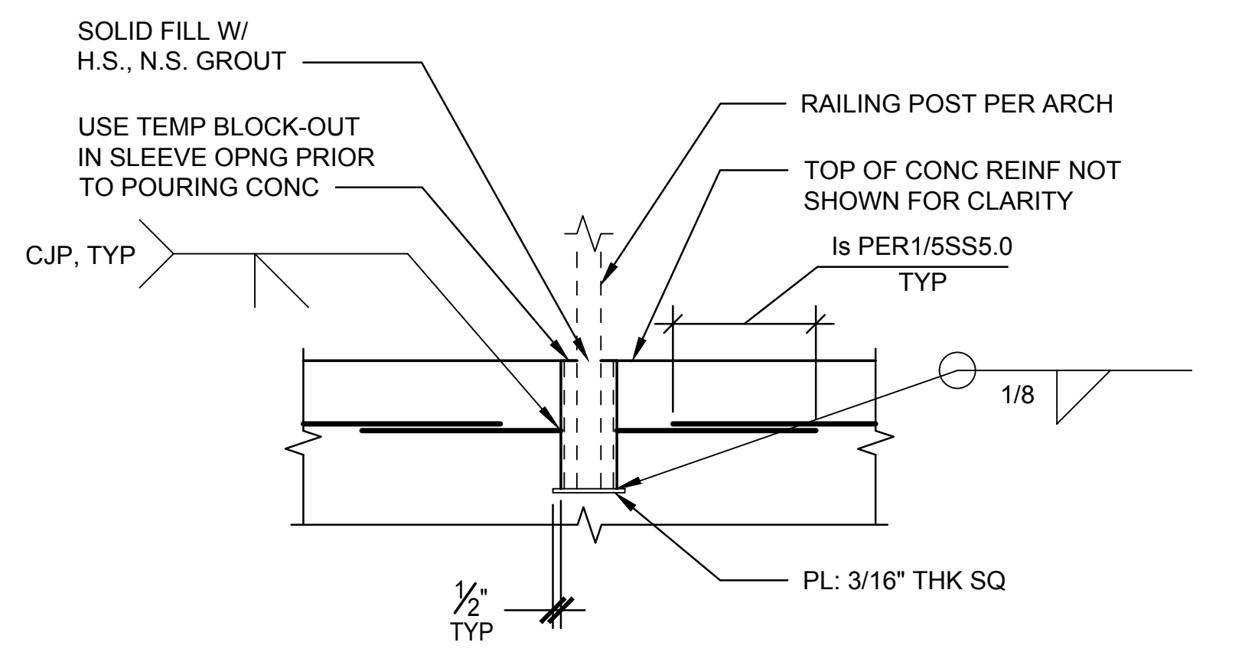
SCALE As indicated

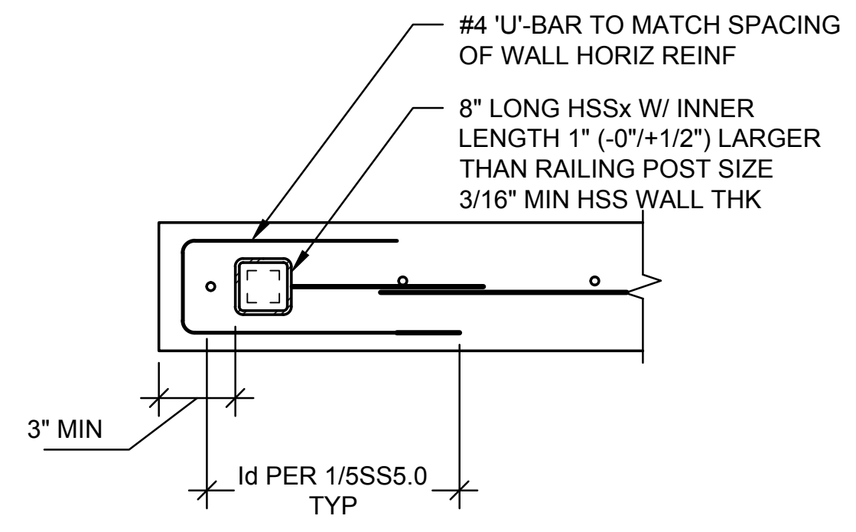
PLOT DATE 7/31/2024 10:13:04 AM


WELDED DOWEL
LOC AT CORNER CONDITION
CONC WALL REINF
CONC WALL
WELDED DOWEL TO MATCH
CONC WALL REINF, TYP
2" MIN
CONC WALL AT CORNER CONDITION.
REINF NOT SHOWN FOR CLARITY
8" LONG HSSx W/ INNER LENGTH
1" (-0" / +1/2") LARGER THAN
RAILING POST SIZE 3/16" MIN HSS WALL THK
RAILING POST PER ARCH INSERT TO
BOT OF SLEEVE & SOLID GROUT
W/ N.S. H.S. GROUT

4A INTERMEDIATE OR CORNER POST - PLAN VIEW

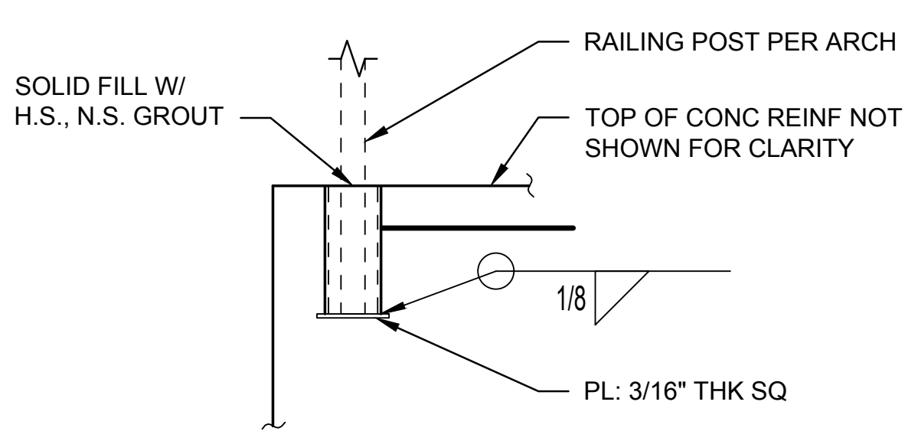

SOLID FILL W/
H.S., N.S. GROUT
USE TEMP BLOCK-OUT
IN SLEEVE OPNG PRIOR
TO POURING CONC
CJP, TYP
RAILING POST PER ARCH
TOP OF CONC REINF NOT
SHOWN FOR CLARITY
ls PER1/5SS5.0
TYP
1/8
PL: 3/16" THK SQ
½"
TYP

4B SINGLE REINF LAYER AT SLEEVE


#4 'U'-BAR TO MATCH SPACING
OF WALL HORIZ REINF
8" LONG HSSx W/ INNER
LENGTH 1" (-0"/+1/2") LARGER
THAN RAILING POST SIZE
3/16" MIN HSS WALL THK
3" MIN
ld PER 1/5SS5.0
TYP

NOTE:

FOR BALANCE OF INFO SEE A/-.


SOLID FILL W/
H.S., N.S. GROUT
RAILING POST PER ARCH
TOP OF CONC REINF NOT
SHOWN FOR CLARITY
1/8
PL: 3/16" THK SQ

NOTE:

FOR BALANCE OF INFO SEE B/-.

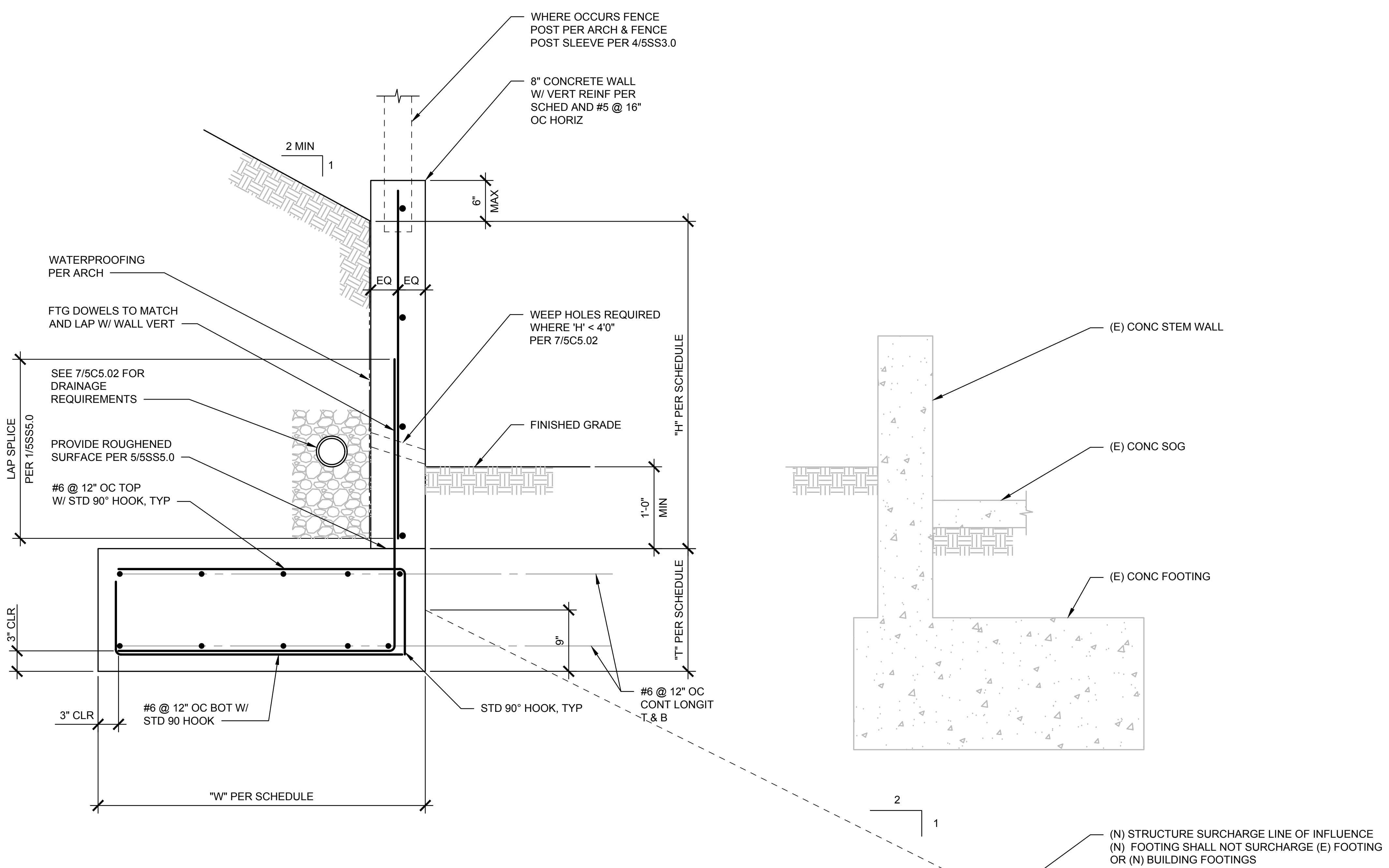
4C END POST - PLAN VIEW

4D END POST - ELEV VIEW

NOTE:
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

4 FENCE POST SLEEVE

SCALE: 1"=1'-0"

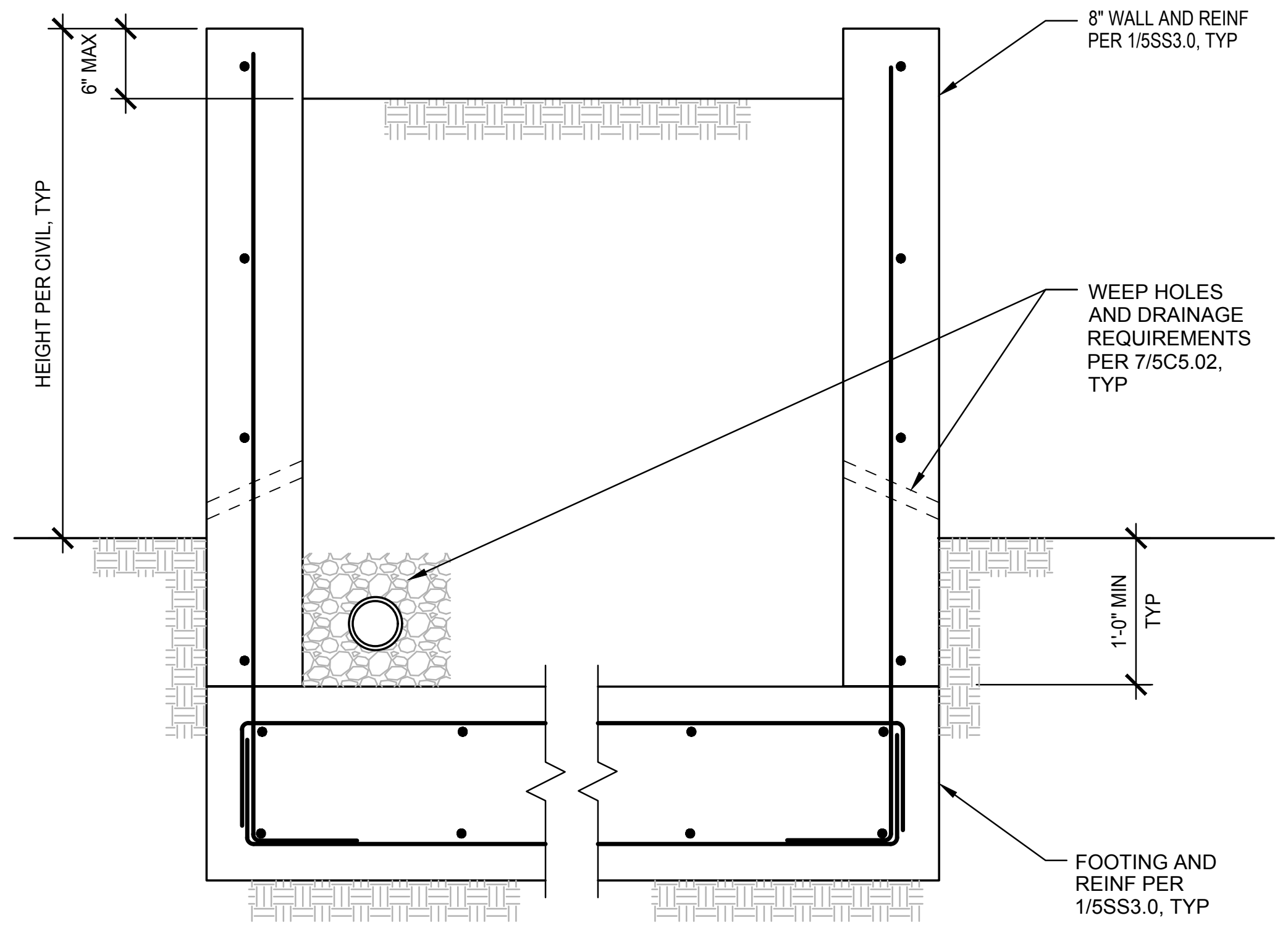

WHERE OCCURS FENCE
POST PER ARCH & FENCE
POST SLEEVE PER 4/5SS3.0
8" CONCRETE WALL
W/ VERT REINF PER
SCHED AND #5 @ 16"
OC HORIZ
2 MIN
1
6"
MAX
WATERPROOFING
PER ARCH
EQ
EQ
FTG DOWELS TO MATCH
AND LAP W/ WALL VERT
WEEP HOLES REQUIRED
WHERE 'H' < 4'0"
PER 7/5C5.02
"H" PER SCHEDULE
LAP SPLICE
PER 1/5SS5.0
SEE 7/5C5.02 FOR
DRAINAGE
REQUIREMENTS
FINISHED GRADE
PROVIDE ROUGHENED
SURFACE PER 5/5SS5.0
#6 @ 12" OC TOP
W/ STD 90° HOOK, TYP
1'-0"
MIN
"T" PER SCHEDULE
3" CLR
9"
#6 @ 12" OC
CONT LONGIT
T & B
3" CLR
#6 @ 12" OC BOT W/
STD 90 HOOK
STD 90° HOOK, TYP
"W" PER SCHEDULE
(E) CONC STEM WALL
(E) CONC SOG
(E) CONC FOOTING
2
1
(N) STRUCTURE SURCHARGE LINE OF INFLUENCE
(N) FOOTING SHALL NOT SURCHARGE (E) FOOTING
OR (N) BUILDING FOOTINGS

RETAINING WALL SCHEDULE			
H	T	W	VERT REINF
2'-0"	1'-4"	2'-6"	#5 @ 16" OC
4'-0"	1'-4"	4'-6"	#5 @ 16" OC
6'-0"	1'-6"	7'-0"	#7 @ 16" OC

NOTE:
1. SEE DETAIL 6/5SS5.1 FOR OVER EXCAVATION REQUIREMENTS.
2. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

1 TYPICAL RETAINING WALL DETAIL

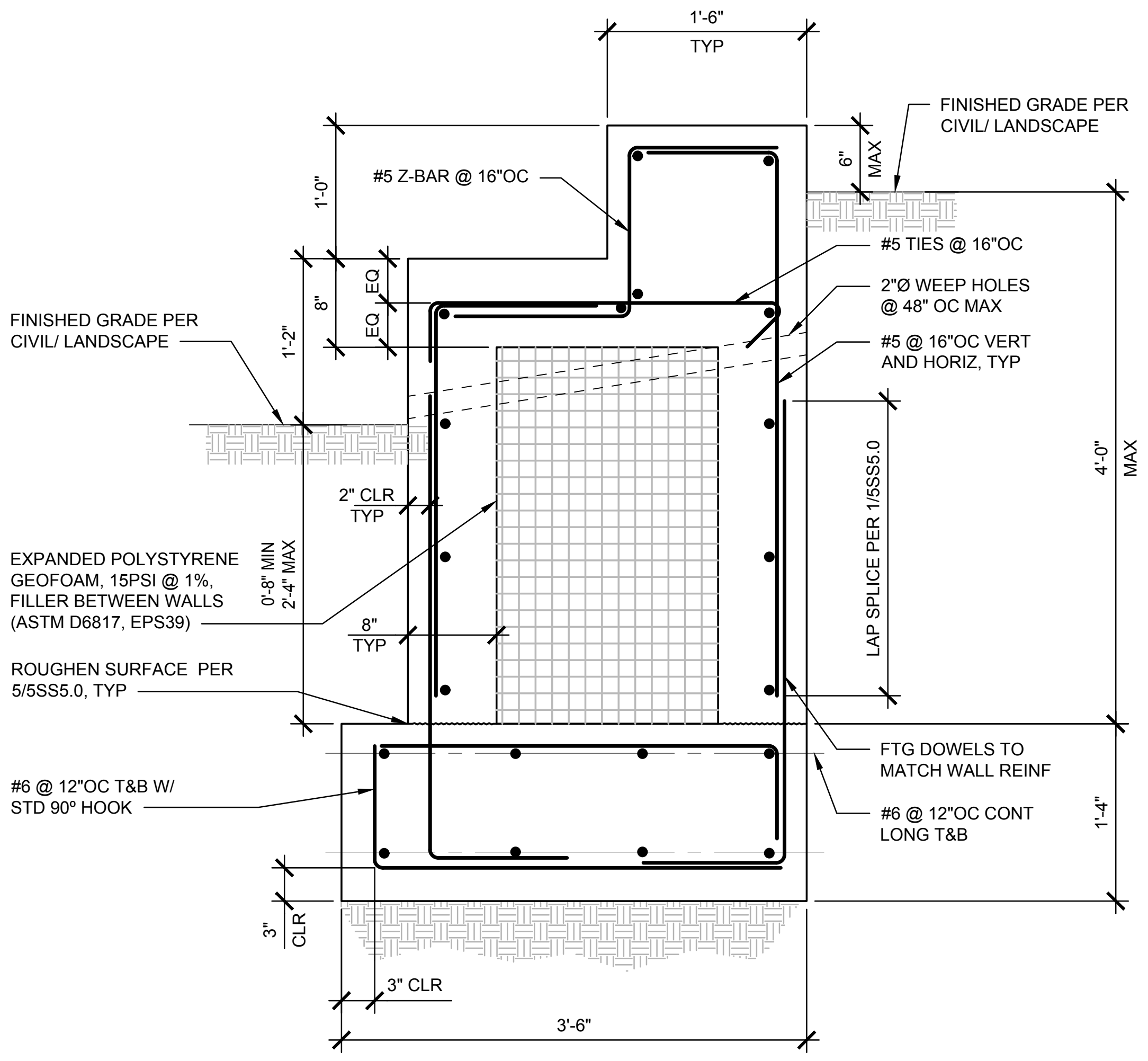
SCALE: 1"=1'-0"


6" MAX
HEIGHT PER CIVIL, TYP
8" WALL AND REINF
PER 1/5SS3.0, TYP
WEEP HOLES
AND DRAINAGE
REQUIREMENTS
PER 7/5C5.02,
TYP
1'-0" MIN
TYP
FOOTING AND
REINF PER
1/5SS3.0, TYP

NOTE:
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

5 COMBINED FOOTING AT OPPOSING RETAINING WALLS

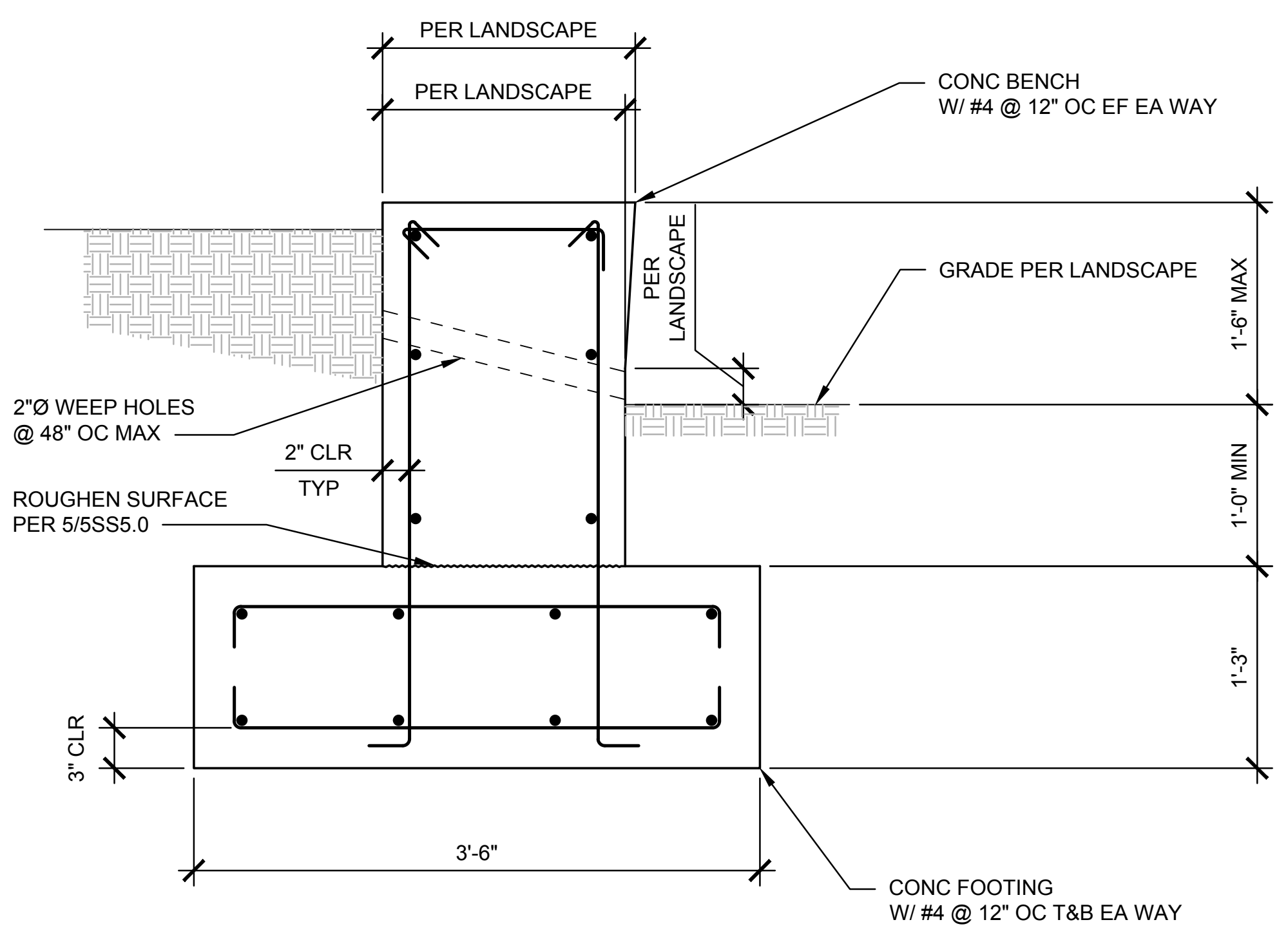
SCALE: 1"=1'-0"


1'-6"
TYP
#5 Z-BAR @ 16"OC
FINISHED GRADE PER
CIVIL/ LANDSCAPE
6"
MAX
1'-0"
8"
EQ
EQ
1'-2"
#5 TIES @ 16"OC
2"Ø WEEP HOLES
@ 48" OC MAX
#5 @ 16"OC VERT
AND HORIZ, TYP
FINISHED GRADE PER
CIVIL/ LANDSCAPE
2" CLR
TYP
EXPANDED POLYSTYRENE
GEOFOAM, 15PSI @ 1%,
FILLER BETWEEN WALLS
(ASTM D6817, EPS39)
0'-8" MIN
2'-4" MAX
8"
TYP
LAP SPLICE PER 1/5SS5.0
4'-0"
MAX
ROUGHEN SURFACE PER
5/5SS5.0, TYP
#6 @ 12"OC T&B W/
STD 90º HOOK
FTG DOWELS TO
MATCH WALL REINF
#6 @ 12"OC CONT
LONG T&B
1'-4"
3"
CLR
3" CLR
3'-6"

NOTE:
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

3 TIERED SEAT WALL

SCALE: 1"=1'-0"


PER LANDSCAPE
PER LANDSCAPE
CONC BENCH
W/ #4 @ 12" OC EF EA WAY
PER
LANDSCAPE
GRADE PER LANDSCAPE
1'-6" MAX
2"Ø WEEP HOLES
@ 48" OC MAX
2" CLR
TYP
ROUGHEN SURFACE
PER 5/5SS5.0
1'-0" MIN
1'-3"
3" CLR
3'-6"
CONC FOOTING
W/ #4 @ 12" OC T&B EA WAY

NOTE:
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

2 CONCRETE BENCH DETAIL

SCALE: 1"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/07/2026

Practice

135 W. Green St Suite 200 Pasadena, CA 91105 | 626.568.1248 | practice-la.com

kpff

700 S. Flower St, Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
www.kpff.com

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER

ALDRIN J. ORUE
S4399

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

STRUCTURAL
SITE DETAILS

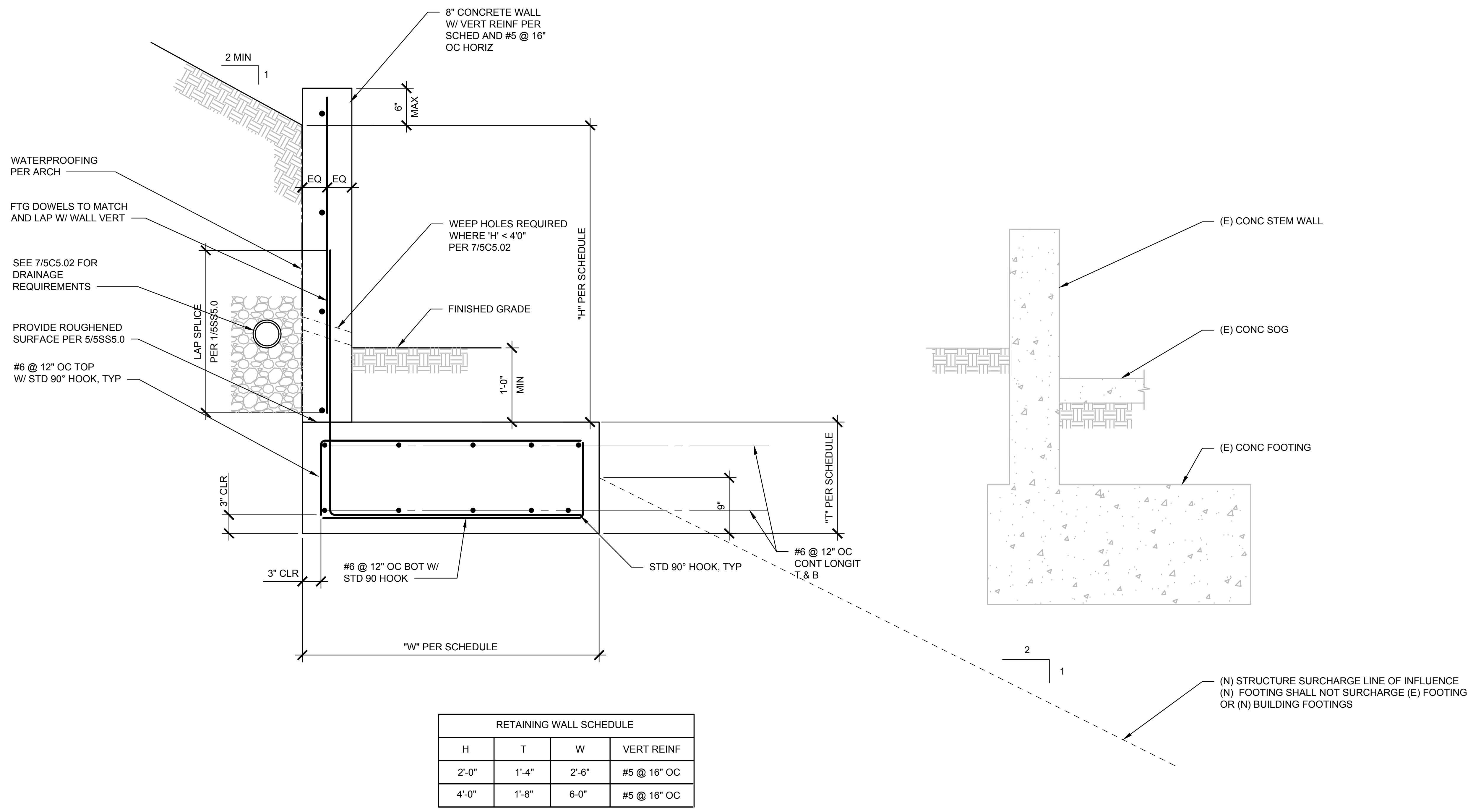
5SS3.0

SCALE As indicated

PLOT DATE 7/31/2024 10:13:04 AM

File: K:\2021\2100853 – LCUSD – Paradise Canyon ES – Campus Upgrades\5 SDraft\PACKAGE 5\2100853 – 5SS3.0 – Structural Site Details.dwg
Plotted: 3/17/26 at 9:05am By: krose
XREFs: 2100853 – xref – titleblock – 30x42–pkg5.dwg

If this sheet is smaller than 30" high by 42" wide then it has been reduced.

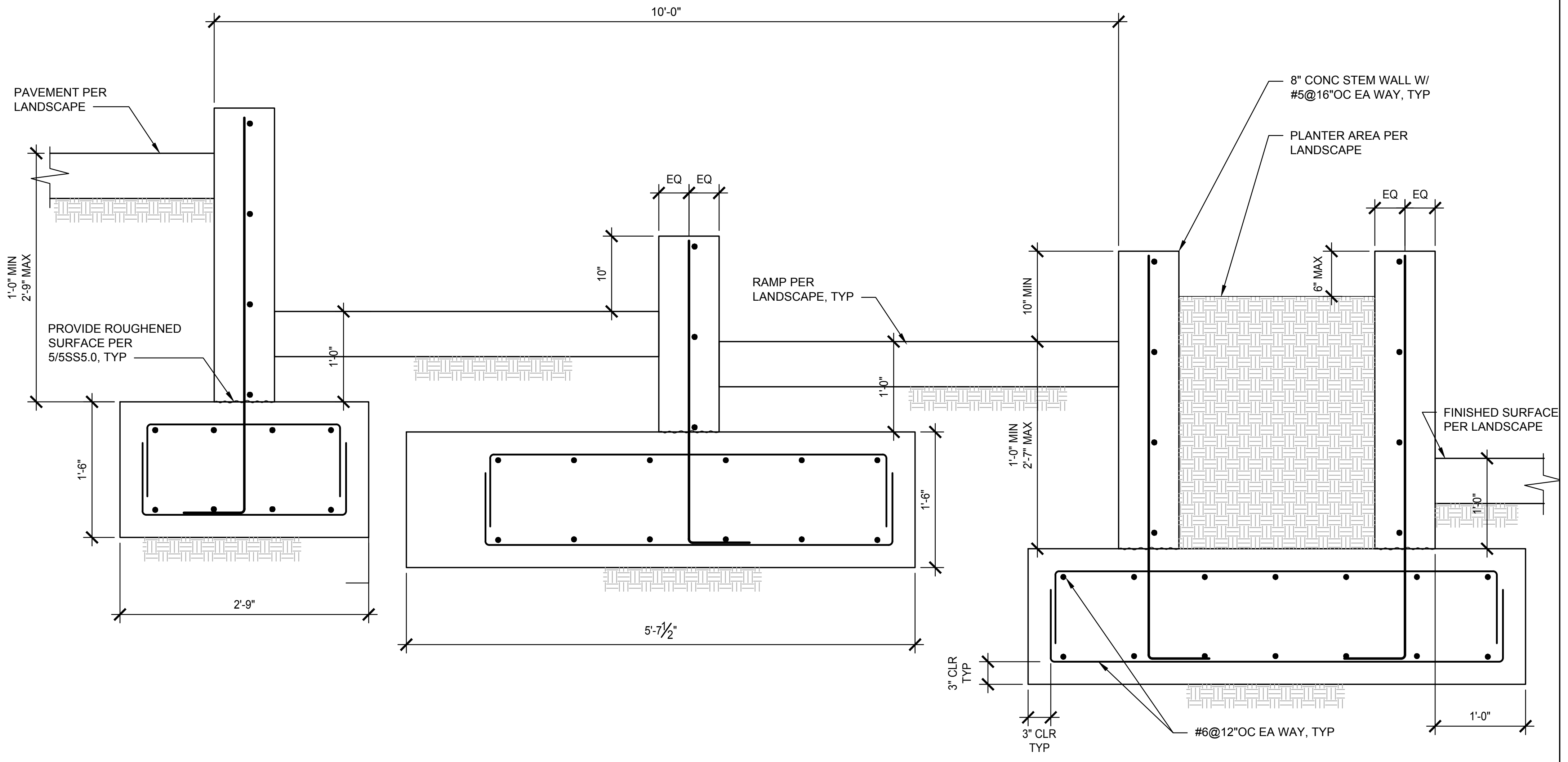

8" CONCRETE WALL W/ VERT REINF PER SCHED AND #5 @ 16" OC HORIZ
2 MIN
1
6" MAX
WATERPROOFING PER ARCH
EQ
EQ
FTG DOWELS TO MATCH AND LAP W/ WALL VERT
WEEP HOLES REQUIRED WHERE 'H' < 4'0" PER 7/5C5.02
SEE 7/5C5.02 FOR DRAINAGE REQUIREMENTS
"H" PER SCHEDULE
FINISHED GRADE
LAP SPLICE PER 1/5SS5.0
PROVIDE ROUGHENED SURFACE PER 5/5SS5.0
#6 @ 12" OC TOP W/ STD 90° HOOK, TYP
1'-0" MIN
"T" PER SCHEDULE
3" CLR
9"
#6 @ 12" OC CONT LONGIT T & B
3" CLR
#6 @ 12" OC BOT W/ STD 90 HOOK
STD 90° HOOK, TYP
"W" PER SCHEDULE
(E) CONC STEM WALL
(E) CONC SOG
(E) CONC FOOTING
2
1
(N) STRUCTURE SURCHARGE LINE OF INFLUENCE (N) FOOTING SHALL NOT SURCHARGE (E) FOOTING OR (N) BUILDING FOOTINGS

RETAINING WALL SCHEDULE			
H	T	W	VERT REINF
2'-0"	1'-4"	2'-6"	#5 @ 16" OC
4'-0"	1'-8"	6-0"	#5 @ 16" OC

NOTE:
1. SEE DETAIL 6/5SS5.1 FOR OVER EXCAVATION REQUIREMENTS.
2. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

1 RETAINING WALL DETAIL

SCALE: 1"=1'-0"


10'-0"
PAVEMENT PER LANDSCAPE
1'-0" MIN 2'-9" MAX
PROVIDE ROUGHENED SURFACE PER 5/5SS5.0, TYP
1'-0"
1'-6"
2'-9"
EQ
EQ
10"
RAMP PER LANDSCAPE, TYP
1'-0"
1'-6"
5'-7½"
8" CONC STEM WALL W/ #5@16"OC EA WAY, TYP
PLANTER AREA PER LANDSCAPE
EQ
EQ
6" MAX
10" MIN
1'-0" MIN 2'-7" MAX
FINISHED SURFACE PER LANDSCAPE
1'-0"
3" CLR TYP
3" CLR TYP
#6@12"OC EA WAY, TYP
1'-0"

NOTE:
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

2 SECTION AT RAMP AT BLDG D

SCALE: 1"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
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HARRY R DRAKE
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REN. 05-31-27

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#	REVISION DATE	DESCRIPTION

DRAWING TITLE

STRUCTURAL SITE DETAILS

5SS3.1

SCALE As indicated

PLOT DATE 7/31/2024 10:13:04 AM

File: K:\2021\2100853 - LCUSD - Paradise Canyon ES - Campus Upgrades\5 SDraft\PACKAGE 5\2100853 - 5SS3.1 - Structural Site Details.dwg
Plotted: 3/17/26 at 9:05am By: krose
XREFs: 2100853 - xref - titleblock - 30x42-pkg5.dwg

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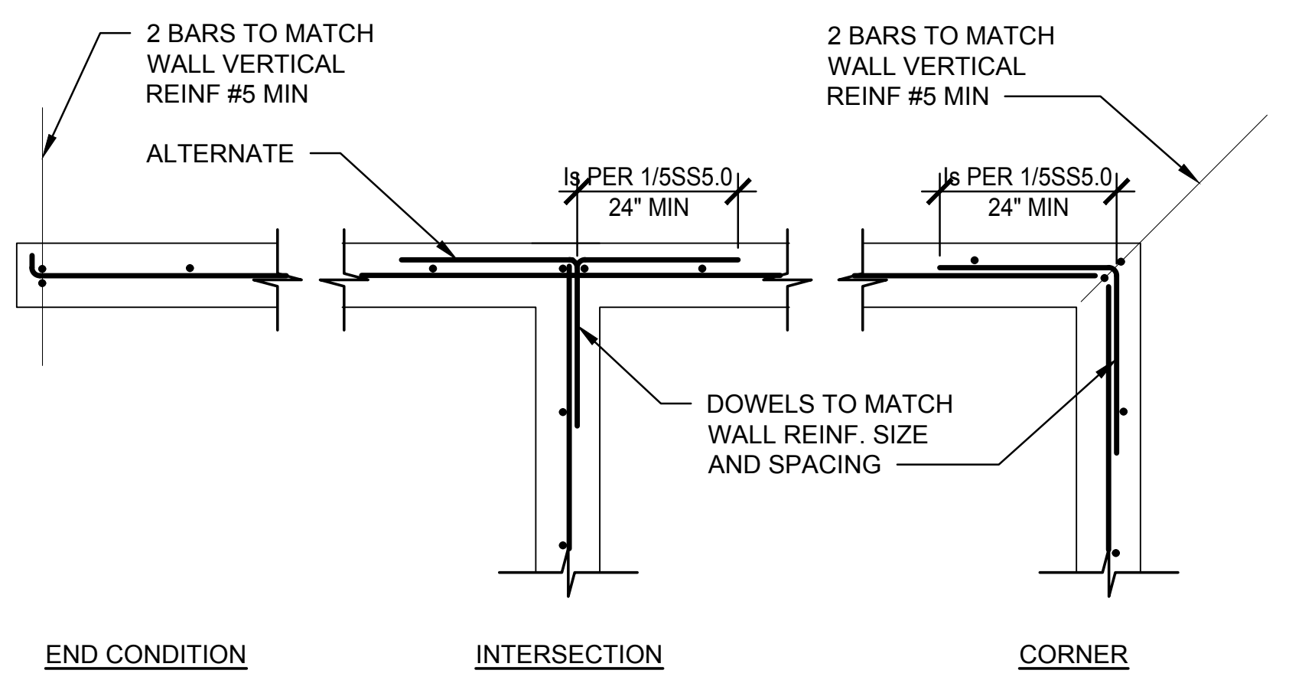
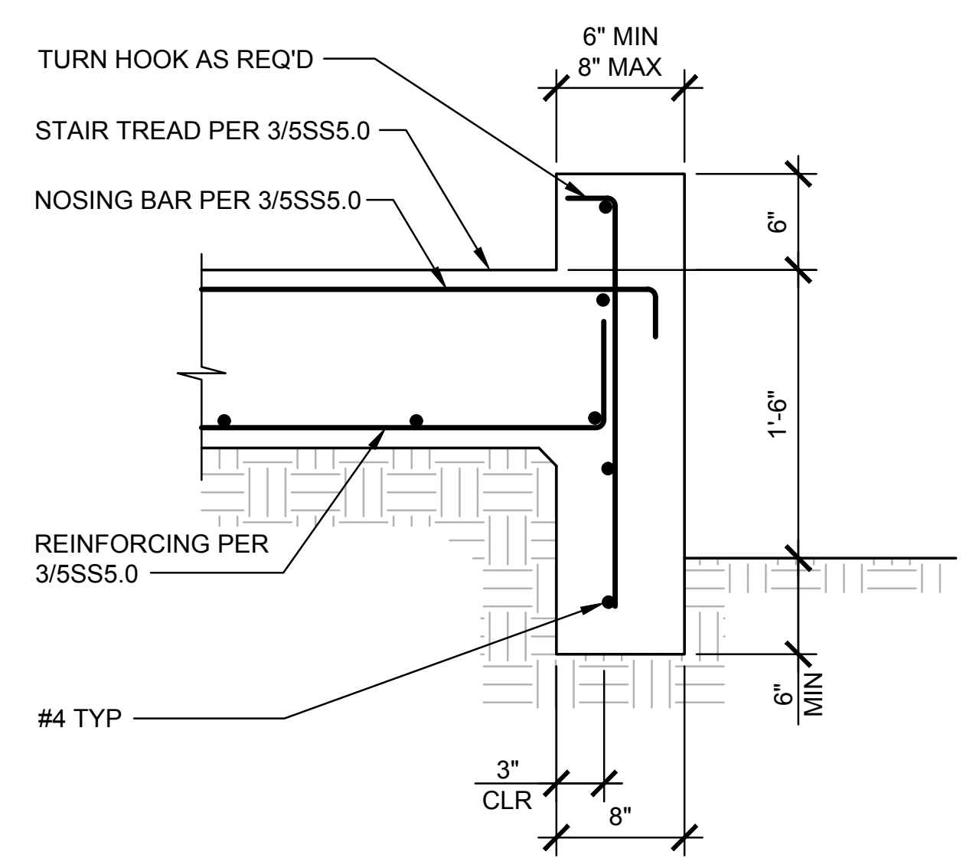

2 BARS TO MATCH
WALL VERTICAL
REINF #5 MIN
ALTERNATE
ls PER 1/5SS5.0
24" MIN
ls PER 1/5SS5.0
24" MIN
2 BARS TO MATCH
WALL VERTICAL
REINF #5 MIN
DOWELS TO MATCH
WALL REINF. SIZE
AND SPACING
END CONDITION
INTERSECTION
CORNER

NOTE:

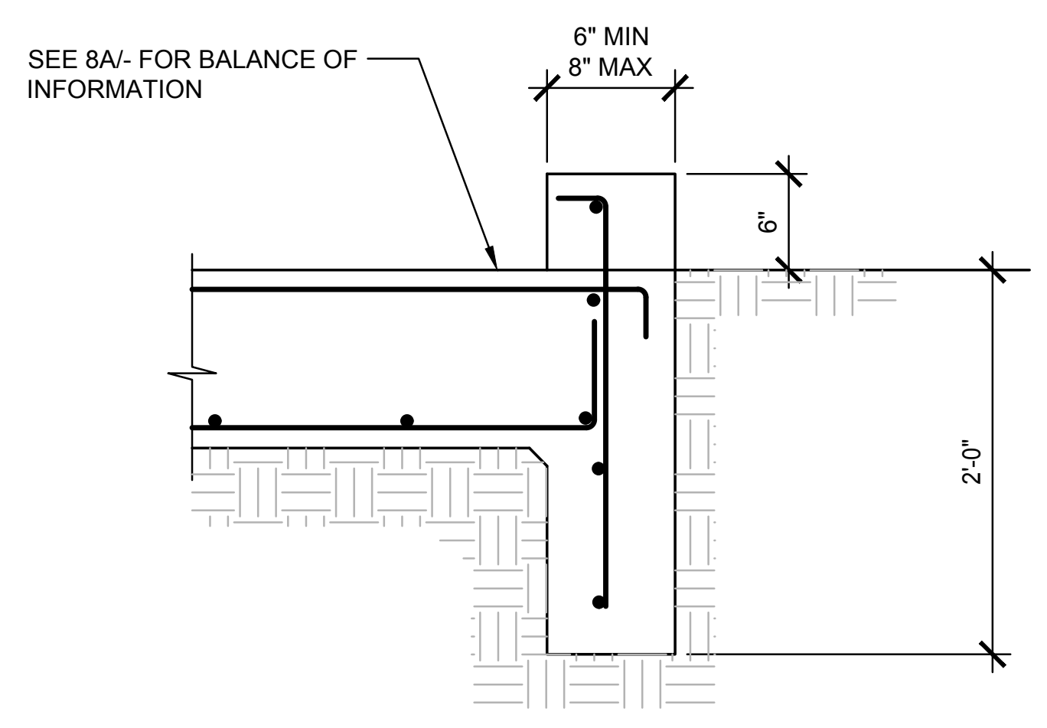
1. REINFORCEMENT SHOWN ON WALL ELEVATIONS AND OTHER SPECIFICALLY REFERENCED DETAILS TAKE PRECEDENCE OVER REINFORCEMENT SHOWN HERE.
2. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

10 PLAN - CONC WALL & FTG DETAIL W/ SINGLE LAYER REINF

SCALE: 1" = 1'-0"


TURN HOOK AS REQ'D
STAIR TREAD PER 3/5SS5.0
NOSING BAR PER 3/5SS5.0
6" MIN
8" MAX
6"
1'-6"
REINFORCING PER
3/5SS5.0
#4 TYP
6" MIN
3"
CLR
8"

8A TYPICAL SECTION


SEE 8A/- FOR BALANCE OF
INFORMATION
6" MIN
8" MAX
6"
2'-0"

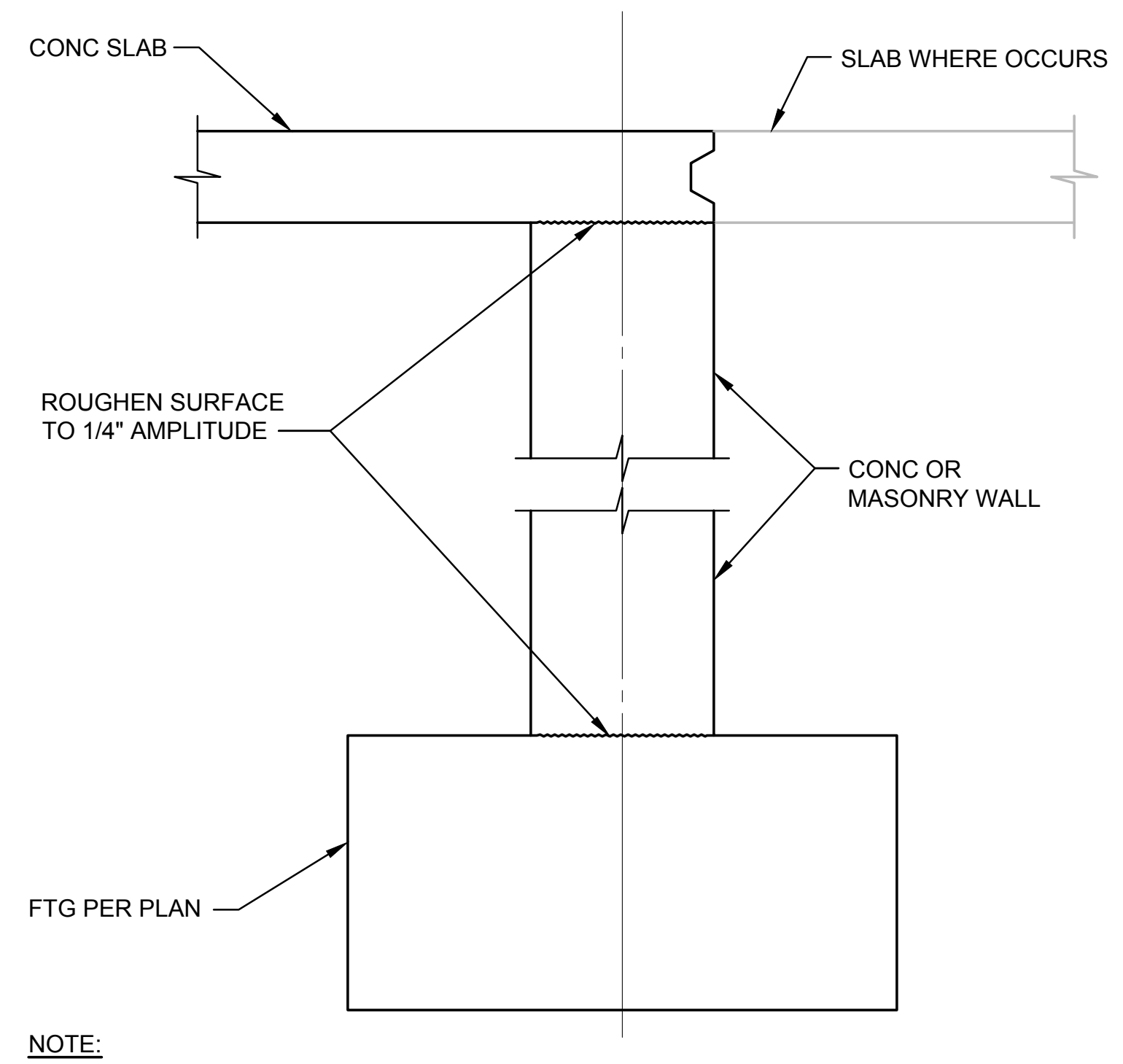
8B ALTERNATE SECTION

NOTES:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

8 STAIR CHEEK WALL DETAIL

SCALE: 1" = 1'-0"


CONC SLAB
SLAB WHERE OCCURS
ROUGHEN SURFACE
TO 1/4" AMPLITUDE
CONC OR
MASONRY WALL
FTG PER PLAN

NOTE:

PROVIDE THIS DETAIL AT ALL CONCRETE WALLS, UNO.

5 TYP CONC CONSTRUCTION JOINTS

SCALE: 1" = 1'-0"

BAR SIZE	"TOP" REINFORCEMENT		"OTHER" REINFORCEMENT	
	DEVELOPMENT LENGTH (ld)	LAP SPLICE LENGTH (ls)	DEVELOPMENT LENGTH (ld)	LAP SPLICE LENGTH (ls)
#3	1'-7"	2'-1"	1'-3"	1'-7"
#4	2'-1"	2'-10"	1'-7"	2'-1"
#5	2'-7"	3'-5"	2'-1"	2'-7"
#6	3'-1"	4'-1"	2'-5"	3'-1"
#7	4'-7"	5'-10"	3'-6"	4'-7"
#8	5'-2"	6'-8"	4'-0"	5'-2"
#9	5'-10"	7'-7"	4'-6"	5'-10"
#10	6'-7"	8'-6"	5'-1"	6'-7"
#11	7'-3"	9'-6"	5'-8"	7'-3"

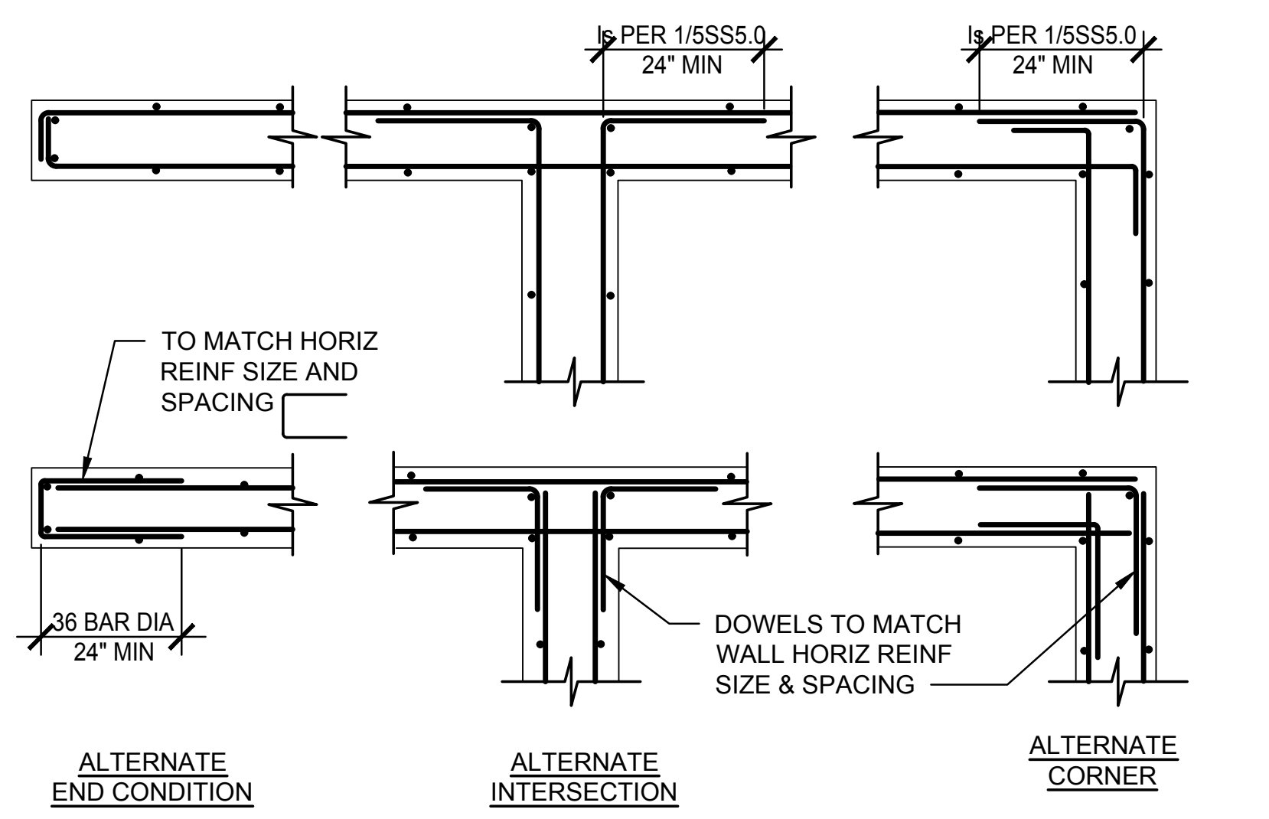
NOTES:

1. USE SPLICE LENGTH (ls) INDICATED ON TABLE FOR ALL DOWEL LENGTHS NOT SHOWN ON PLANS UNLESS OTHERWISE PERMITTED BY ENGINEER.
2. DEVELOPMENT LENGTH (ld) AND SPLICE LENGTHS (ls) SHOWN IN THE SCHEDULE ABOVE ARE IN ACCORDANCE WITH ACI 318-19 AND CORRESPOND TO GRADE 60 BARS EMBEDDED IN NORMAL WEIGHT CONCRETE (f'c=4000 PSI). FOR CONCRETE WITH f'c=5000 PSI MULTIPLY VALUES IN TABLE BY 0.9. FOR CONCRETE WITH f'c=3000 PSI, MULTIPLY VALUES IN TABLE BY 1.15.
3. THIS SCHEDULE SHALL BE USED WHERE DEVELOPMENT AND SPLICE LENGTHS ARE NOT SPECIFICALLY DETAILED AND DIMENSIONED ON THE DRAWINGS.
4. THE SCHEDULE ABOVE IS APPLICABLE FOR THE FOLLOWING CONDITIONS:
    - a). CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN db, CLEAR COVER NOT LESS THAN db, AND STIRRUPS OR TIES THROUGHOUT dl, NOT LESS THAN THE CODE MINIMUM.

      OR
    - b). CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2db AND CLEAR COVER NOT LESS THAN db.
5. "TOP" REINFORCEMENT IS DEFINED AS HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE DEVELOPMENT OR SPLICE LENGTH. "OTHER" REINFORCEMENT INCLUDES ALL VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF CONCRETE CAST BELOW BAR.
6. WHERE BARS OF DIFFERENT SIZE ARE LAP SPLICED, SPLICE LENGTH SHALL BE THE LARGER OF DEVELOPMENT LENGTH OF LARGER BAR OR SPLICE LENGTH OF SMALLER BAR.

1 REINFORCEMENT DEVELOPMENT SPLICE SCHEDULE

SCALE: 1" = 1'-0"

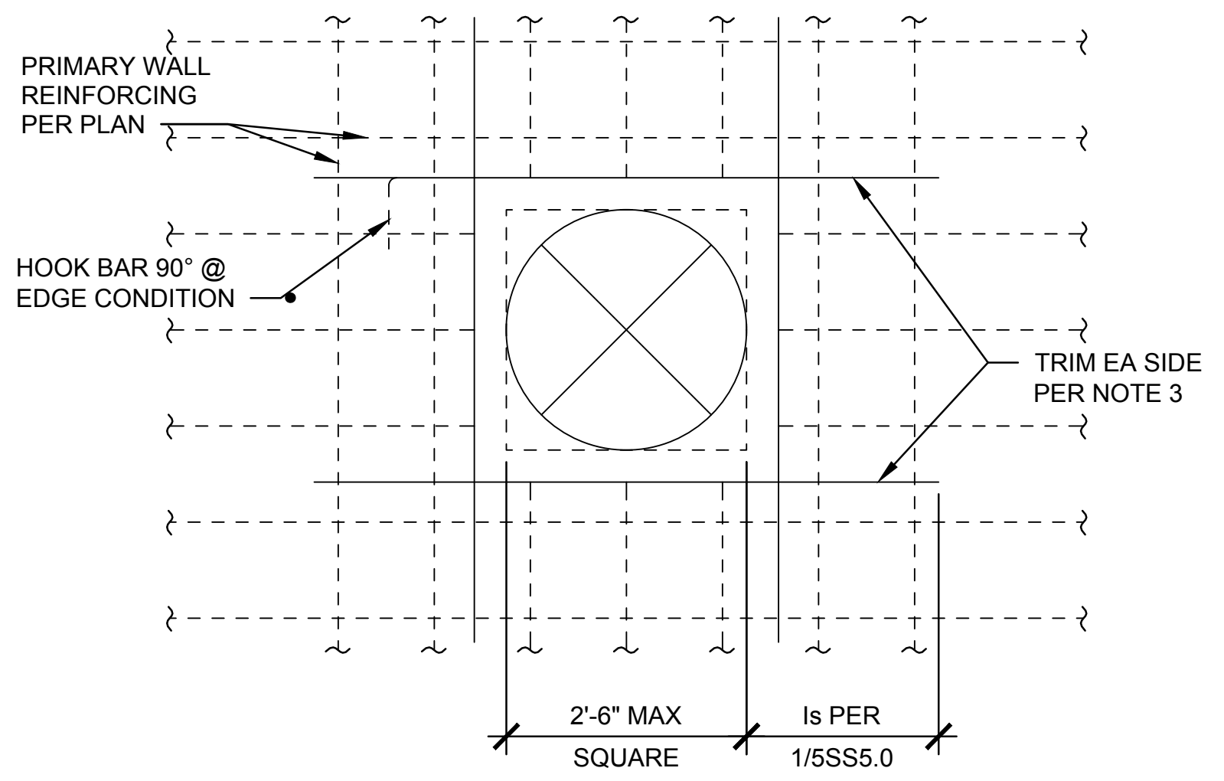

ls PER 1/5SS5.0
24" MIN
ls PER 1/5SS5.0
24" MIN
TO MATCH HORIZ
REINF SIZE AND
SPACING
36 BAR DIA
24" MIN
DOWELS TO MATCH
WALL HORIZ REINF
SIZE & SPACING
ALTERNATE
END CONDITION
ALTERNATE
INTERSECTION
ALTERNATE
CORNER

NOTES:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

11 PLAN - CONC WALL & FTG DETAIL W/ DOUBLE LAYER REINF

SCALE: 1"=1'-0"


PRIMARY WALL
REINFORCING
PER PLAN
HOOK BAR 90° @
EDGE CONDITION
TRIM EA SIDE
PER NOTE 3
2'-6" MAX
SQUARE
ls PER
1/5SS5.0

NOTES:

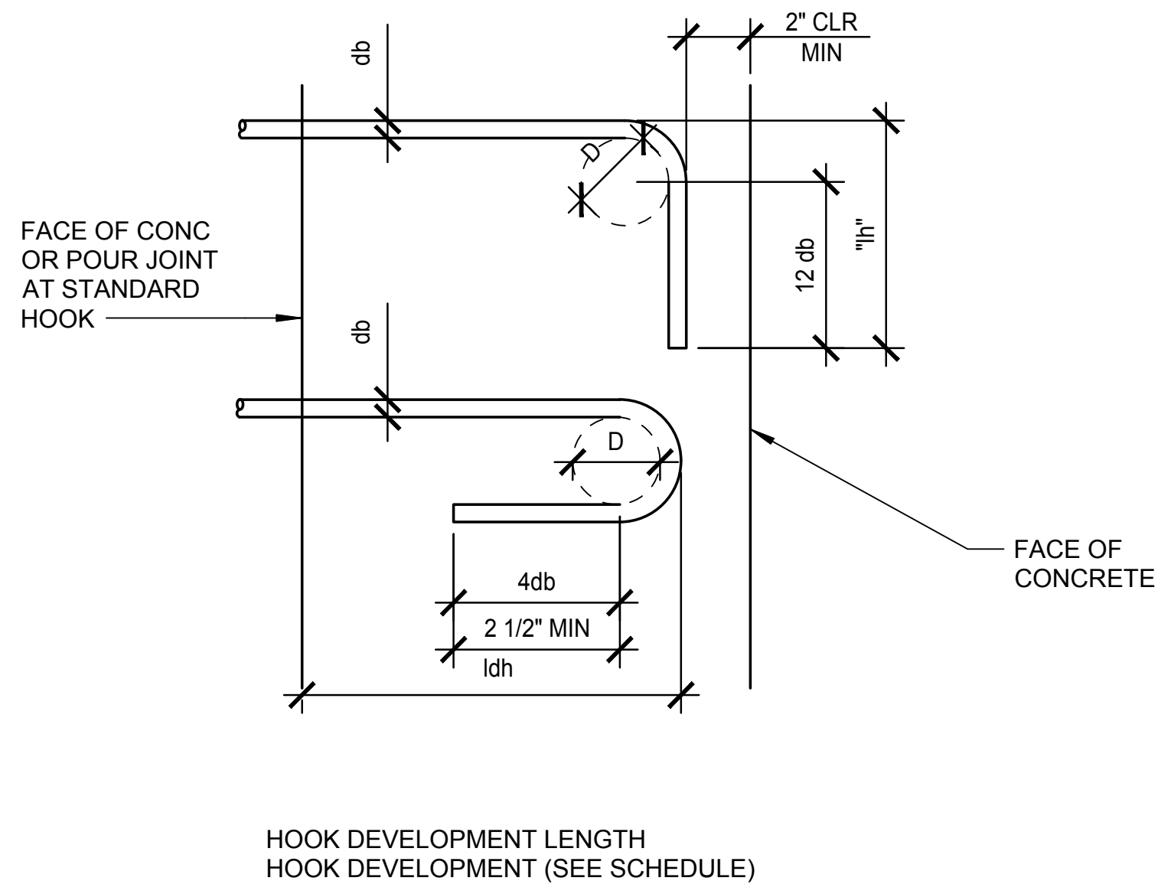
1. SEE WALL ELEVATIONS OR PLANS FOR REINFORCEMENT AT LARGER OPENINGS.
2. CLUSTERS OF SMALL HOLES WHOSE OVERALL MEASUREMENT EXCEED 1'-0" SHOULD BE REINFORCED AS ONE OPENING.
3. TRIM AT EA SIDE OF OPENING TO MATCH SIZE AND QUANTITY OF PRIMARY REINFORCEMENT INTERRUPTED DUE TO OPENING, MIN (2) #5 EA SIDE EF.
4. ALL OPENINGS NOT SHOWN ON PLANS TO BE SUBMITTED TO STRUCTURAL ENGINEER OF RECORD FOR APPROVAL.
5. MAINTAIN MIN CENTER-TO-CENTER SPACING BETWEEN ADJACENT SLEEVES OF 3x DIAMETER OF THE LARGER SLEEVE.
6. PROVIDE REINFORCMENT AT LOCATIONS WHERE SLEEVES INTERRUPT REINFORCMENT AND AT SLEEVES THAT ARE 6" OR LARGER IN DIAMETER.

9 WALL OPENING DETAIL

SCALE: 1"=1'-0"

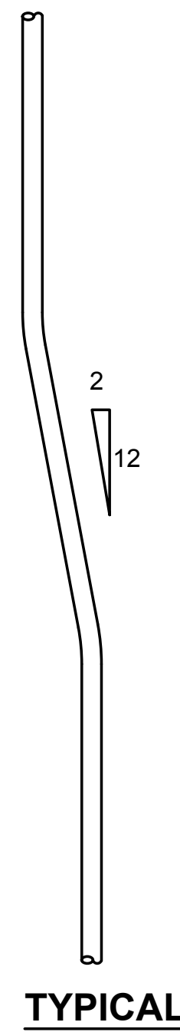
STANDARD HOOK DEVELOPMENT LENGTH "ldh"

BAR SIZE	D	"lh"	NORMAL WEIGHT			
			fc = 3,000 psi	fc = 4,000 psi	fc = 5,000 psi	fc = 8,000 psi
#3	2 1/4"	6"	6"	6"	6"	6"
#4	3"	8"	8"	7"	7"	6"
#5	3 3/4"	10"	10"	9"	9"	6"
#6	4 1/2"	1'-0"	1'-0"	10"	10"	8"
#7	5 1/4"	1'-2"	1'-2"	1'-0"	1'-0"	9"
#8	6"	1'-4"	1'-4"	1'-2"	1'-2"	10"
#9	9 1/2"	1'-7 1/2"	1'-6"	1'-3"	1'-3"	11"
#10	10 1/4"	1'-10"	1'-8"	1'-5"	1'-5"	1'-0"
#11	11 1/2"	2'-0 1/2"	1'-10"	1'-7"	1'-7"	1'-2"


FACE OF CONC
OR POUR JOINT
AT STANDARD
HOOK
db
db
2" CLR
MIN
D
12 db
"lh"
D
4db
2 1/2" MIN
ldh
FACE OF
CONCRETE

HOOK DEVELOPMENT LENGTH
HOOK DEVELOPMENT (SEE SCHEDULE)

BAR SIZE	D
#3 THRU #8	6d
#9 THRU #11	8d



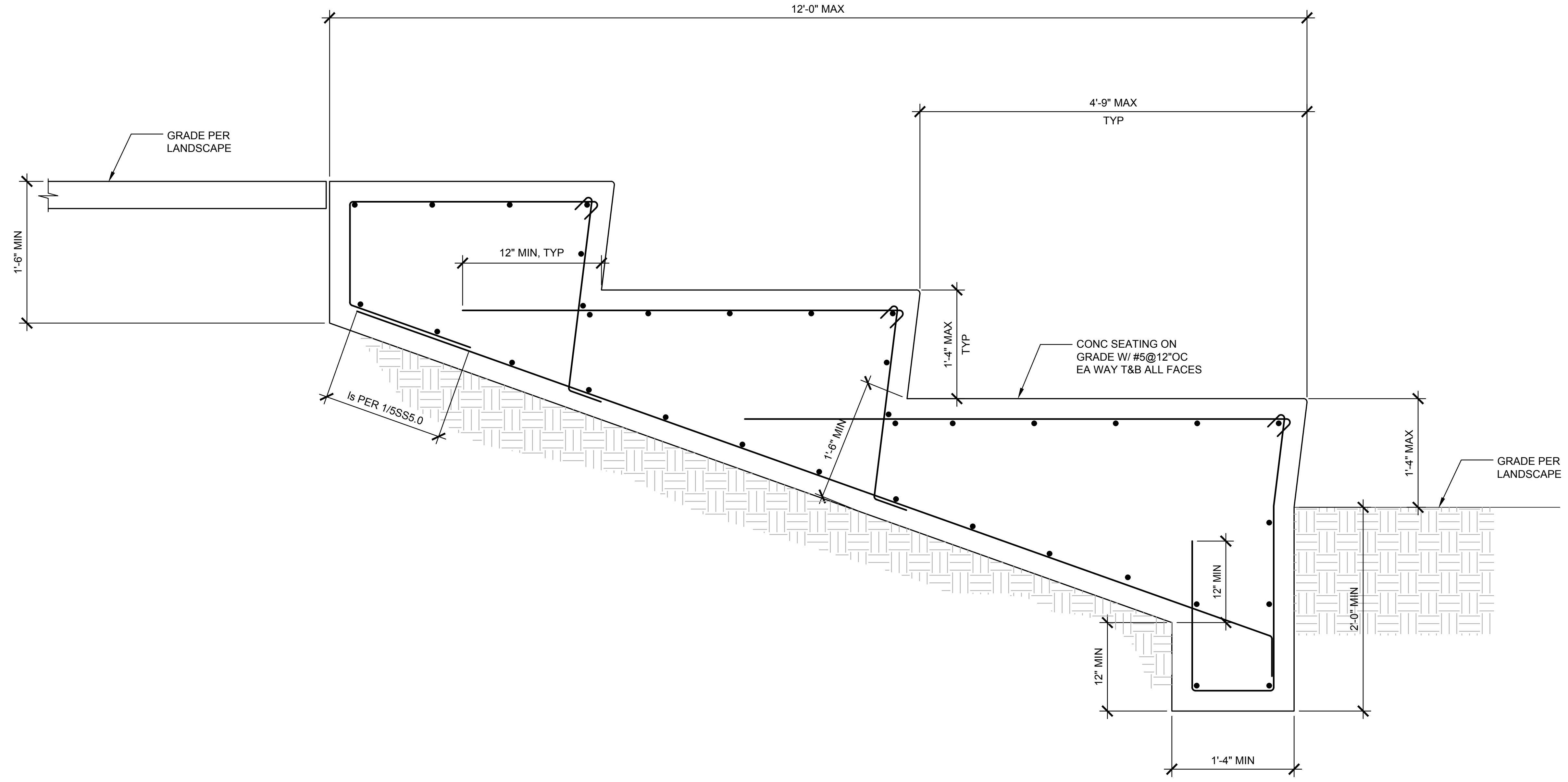
TYPICAL COLUMN BAR OFFSET

NOTES:

1. ALL HOOKED BARS SHALL EXTEND AS FAR AS POSSIBLE WITH A MINIMUM 2" END COVER AND WITH EMBEDMENT NOT LESS THAN SHOWN ON THE SCHEDULE UNLESS NOTED OTHERWISE ON PLANS.
2. MINIMUM SIDE COVER AND SPACING = 6db.
3. FOR LIGHTWEIGHT CONCRETE MULTIPLY LENGTHS IN SCHEDULE BY 1.3.
4. FOR GRADE 80 REINFORCING MULTIPLY THE LENGTHS IN THE SCHEDULE BY 1.33.

6 STANDARD HOOK DEVELOPMENT LENGTH BENDING DETAIL

SCALE: 1"=1'-0"


12'-0" MAX
4'-9" MAX
TYP
GRADE PER
LANDSCAPE
1'-6" MIN
12" MIN, TYP
1'-4" MAX
TYP
CONC SEATING ON
GRADE W/ #5@12"OC
EA WAY T&B ALL FACES
ls PER 1/5SS5.0
1'-6" MIN
1'-4" MAX
GRADE PER
LANDSCAPE
12" MIN
2'-0" MIN
12" MIN
1'-4" MIN

NOTES:

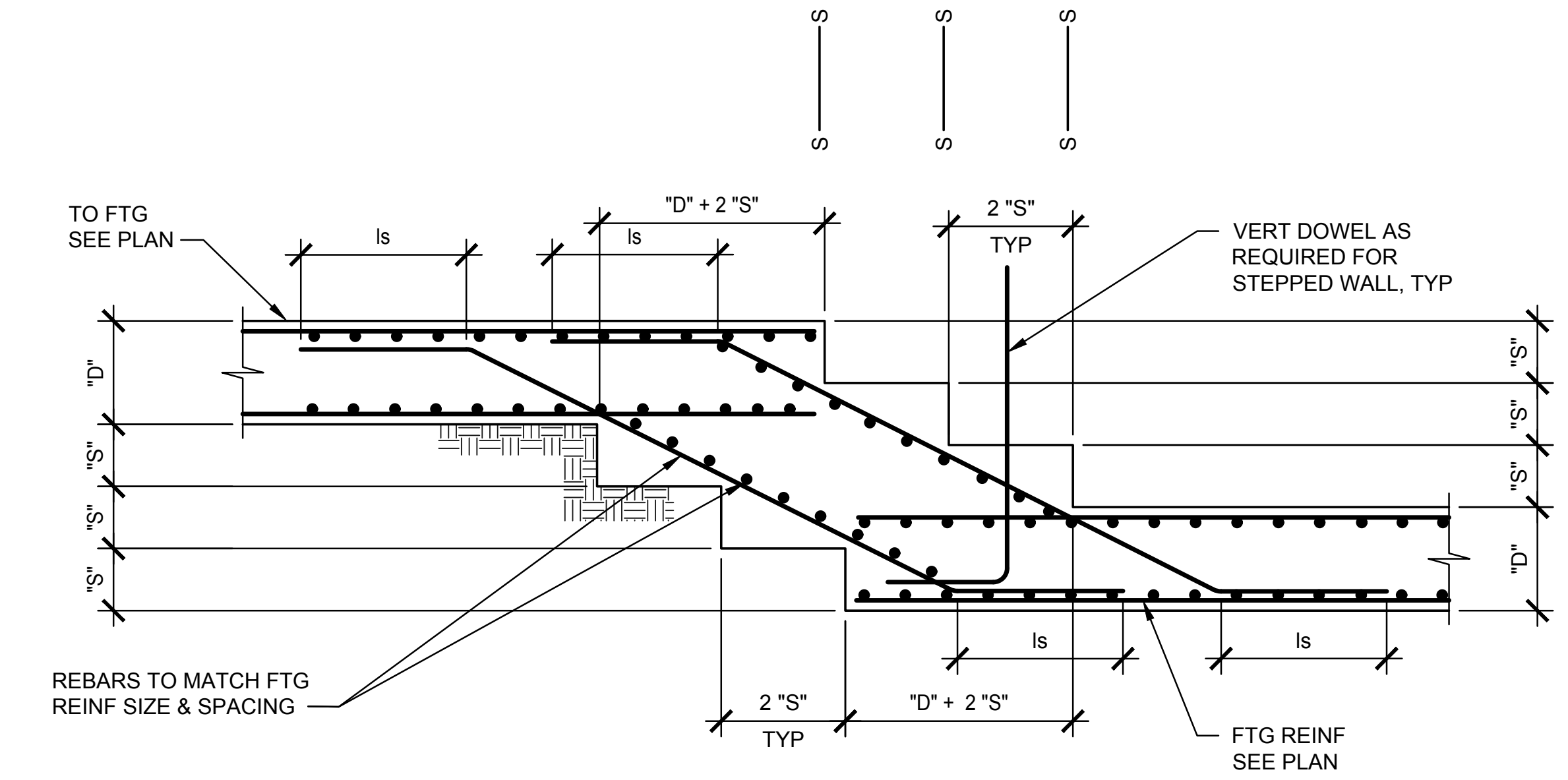
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

7 TERRACED CONCRETE WALL

SCALE: 1"=1'-0"

NOTES:

1. "S" = 1'-6" MAX
2. "D" = DEPTH OF FTG
3. FOR LAP LENGTHS SEE SCHEDULE

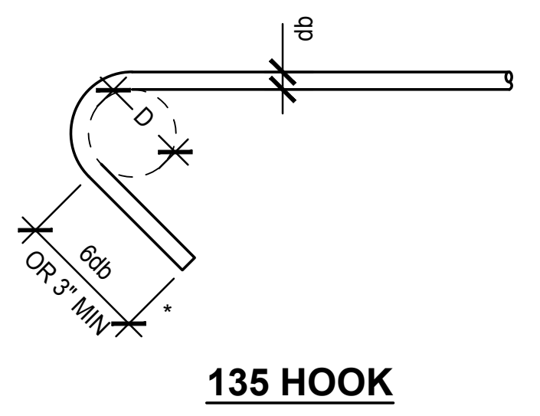

S
S
S
S
S
S
TO FTG
SEE PLAN
ls
"D" + 2 "S"
ls
2 "S"
TYP
VERT DOWEL AS
REQUIRED FOR
STEPPED WALL, TYP
"D"
"S"
"S"
"S"
"S"
"S"
"S"
"D"
ls
ls
REBARS TO MATCH FTG
REINF SIZE & SPACING
2 "S"
TYP
"D" + 2 "S"
FTG REINF
SEE PLAN

NOTES:

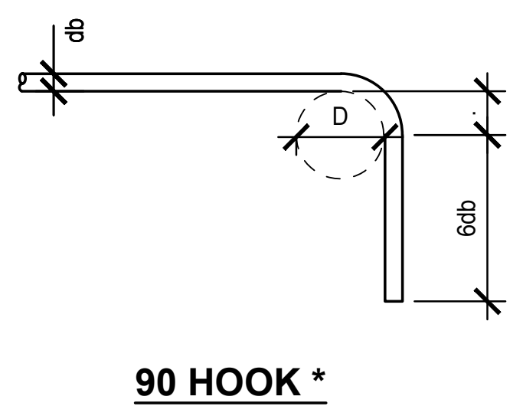
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

2 STEPPED FOOTING DETAIL

SCALE: 1" = 1'-0"


db
D
6db
OR 3" MIN
*

135 HOOK



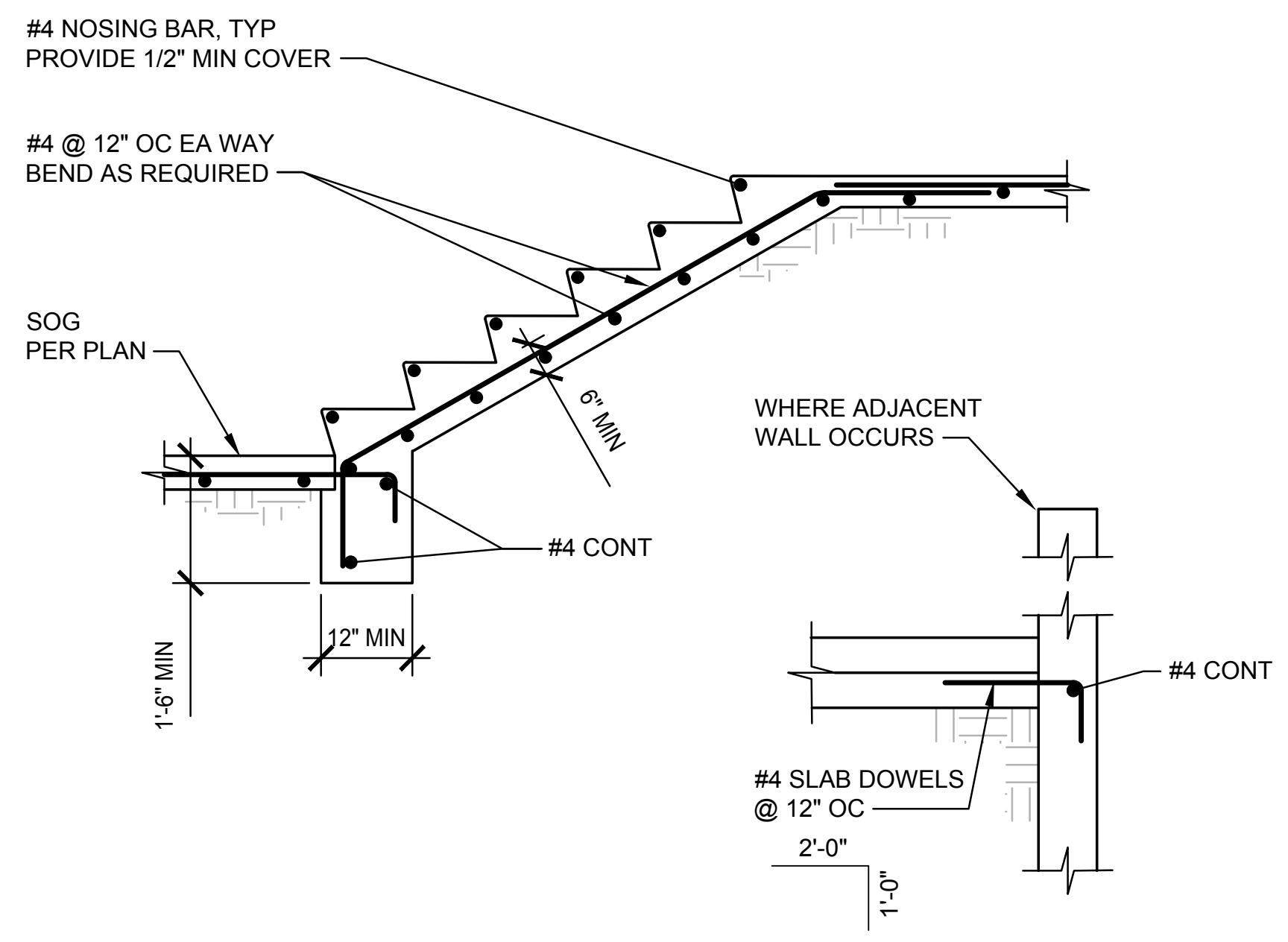
90 HOOK *

BAR SIZE	D
#3	1 1/2"
#4	2"
#5	2 1/2"

* PROVIDE 10db EXTENSIONS IN LIEU OF 6db AT ALL FRAME COLUMNS, GIRDERS, SHEAR WALLS AND SHEAR WALL BOUNDARY MEMBERS.

4 TIES AND STIRRUPS DETAIL

SCALE: 1"=1'-0"


#4 NOSING BAR, TYP
PROVIDE 1/2" MIN COVER
#4 @ 12" OC EA WAY
BEND AS REQUIRED
SOG
PER PLAN
6" MIN
#4 CONT
WHERE ADJACENT
WALL OCCURS
12" MIN
1'-6" MIN
#4 CONT
#4 SLAB DOWELS
@ 12" OC
2'-0"
1'-0"

NOTES:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

3 CONCRETE STAIRS ON GRADE

SCALE: 1"=1'-0"

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PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER

ALDRIN J. ORUE
S4399

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
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07/05/2024	50% DESIGN DEVELOPMENT
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03/20/2026	DSA V3

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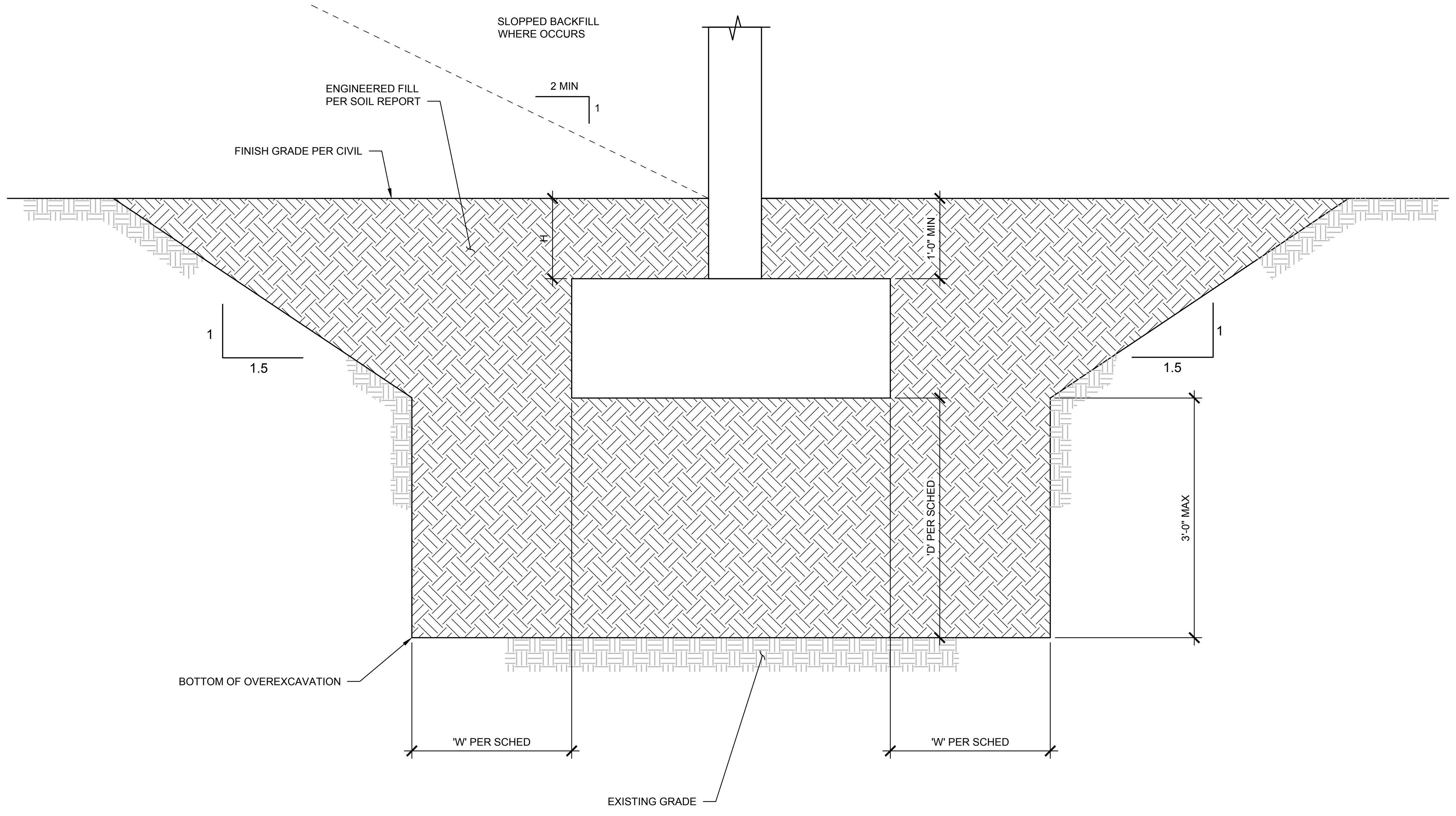
DRAWING TITLE

STRUCTURAL CONCRETE DETAILS

5SS5.0

SCALE As indicated

PLOT DATE 7/31/2024 10:13:04 AM


SLOPED BACKFILL
WHERE OCCURS
ENGINEERED FILL
PER SOIL REPORT
2 MIN
1
FINISH GRADE PER CIVIL
H
1'-0" MIN
1
1.5
1
1.5
'D' PER SCHED
3'-0" MAX
BOTTOM OF OVEREXCAVATION
'W' PER SCHED
'W' PER SCHED
EXISTING GRADE

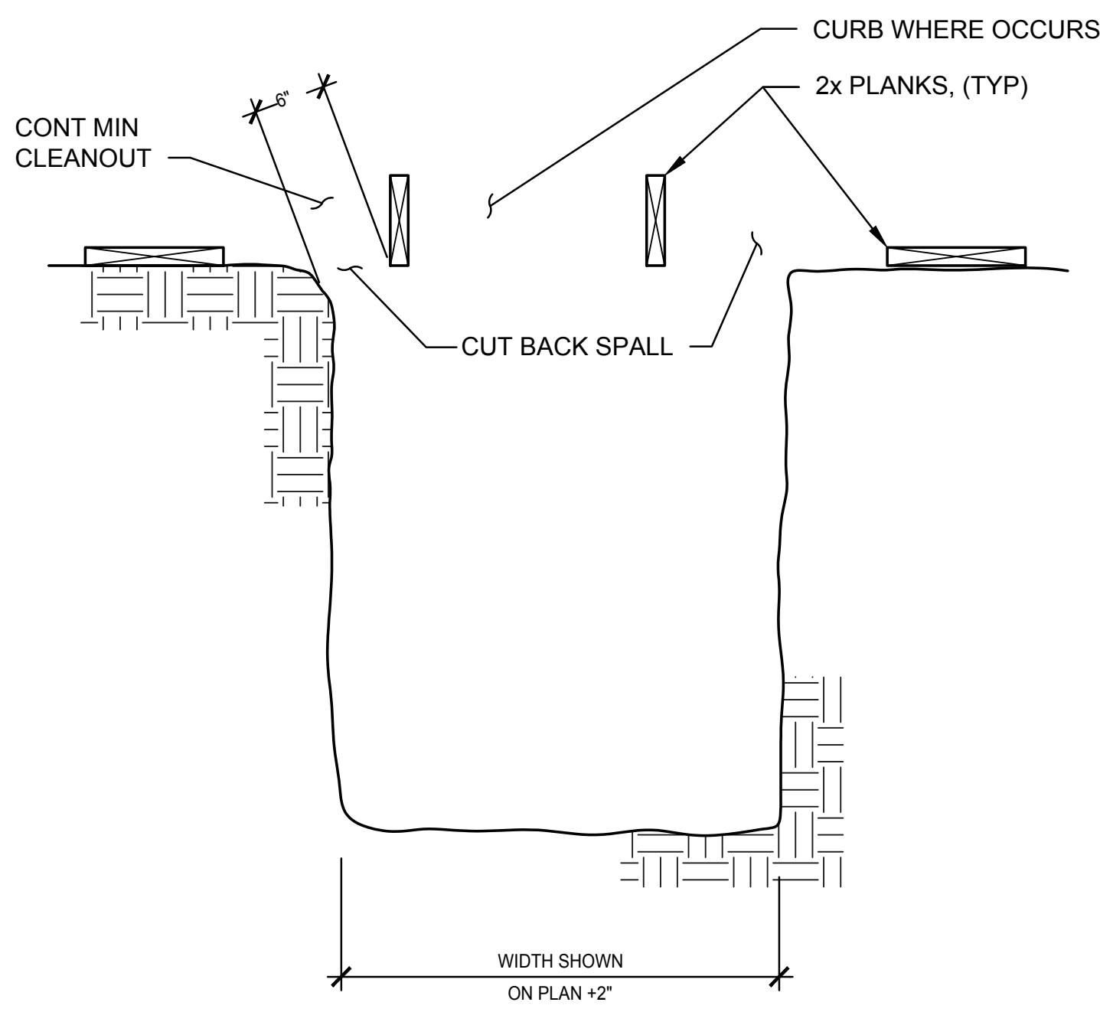
NOTES:

1. SEE GEOTECH REPORT SECTION 8.2.3 FOR ADDITIONAL REQUIREMENTS.
2. MAX RETAINED HEIGHT IN SCHEDULE IS THE DIFFERENCE FROM THE TOP OF THE FOOTING TO THE TOP OF RETAINED SOIL BEHIND THE RETAINING WALL.
3. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705.3.3.2.

SCHEDULE			
MAX RETAINING HT			
LEVEL BACKFILL	SLOPED BACKFILL	W	D
H < = 2'-0"	-	0'-0"	0'-0"
2'-0" < H < 4'-0"	H < 2'-0"	1'-0"	1'-0"
4'-0" < H < 6'-0"	2'-0" < H < 6'-0"	2'-0"	2'-0"

6 RETAINING WALL FOOTING GRADING DIAGRAM

NTS

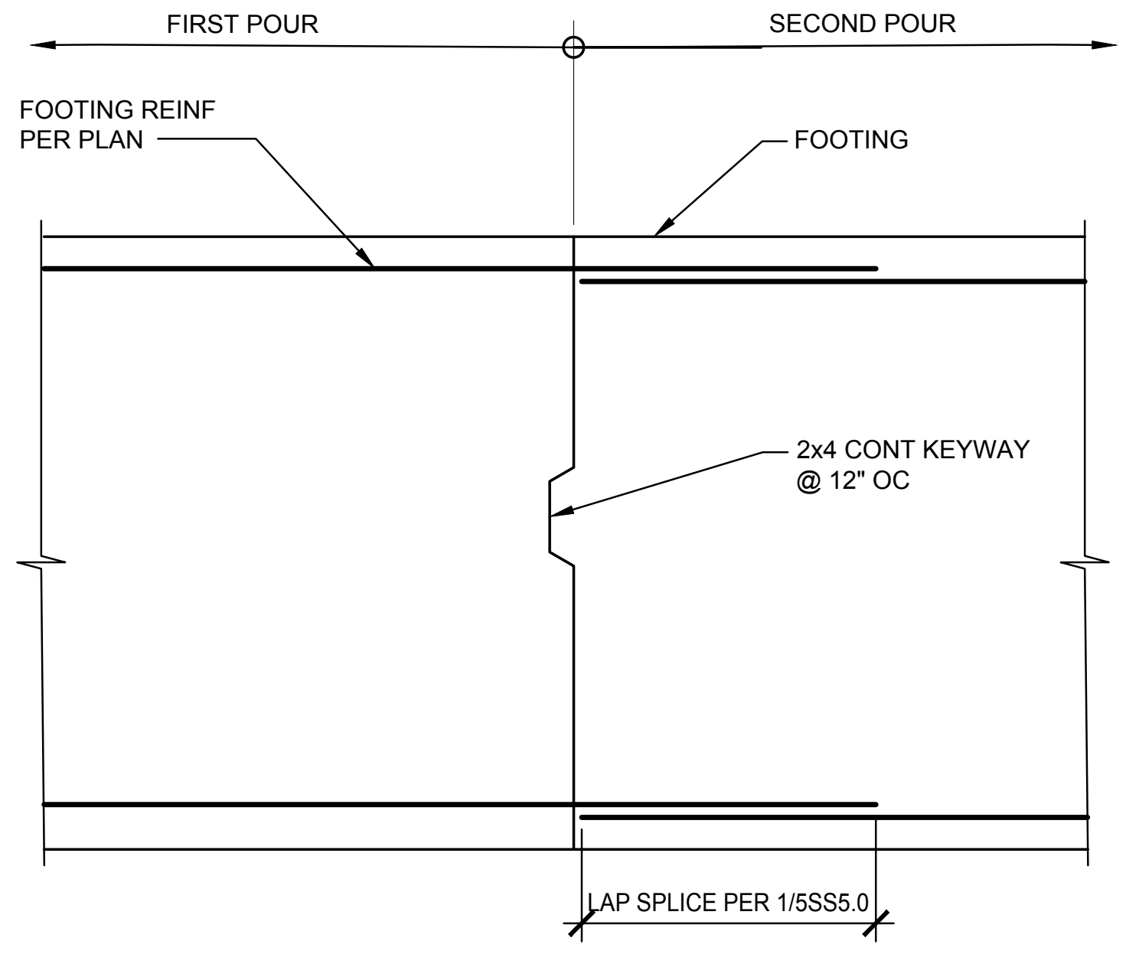

CURB WHERE OCCURS
2x PLANKS, (TYP)
CONT MIN
CLEANOUT
6"
CUT BACK SPALL
WIDTH SHOWN
ON PLAN +2"

NOTE:

FRAMEWORK NOT PERMITTED BELOW GRADE (UNLESS SIDES OF THE FTG ARE FULLY FORMED) STAKES NOT PERMITTED IN FOOTING SECTION.

1 MANDATORY MINIMUM FORMWORK

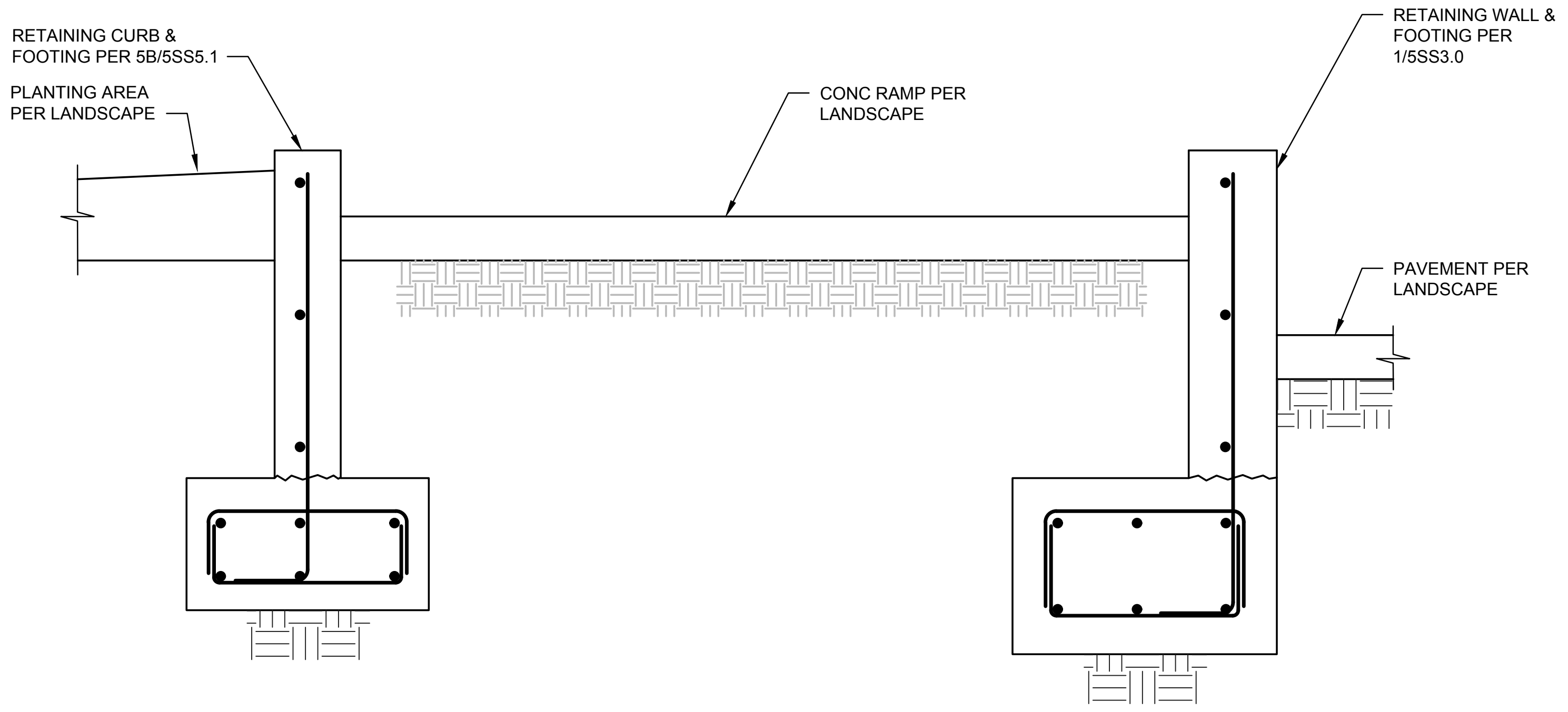
SCALE: 3/4" = 1'-0"


FIRST POUR
SECOND POUR
FOOTING REINF
PER PLAN
FOOTING
2x4 CONT KEYWAY
@ 12" OC
LAP SPLICE PER 1/5SS5.0

ELEVATION

2 CONT FOOTING CONSTRUCTION JOINT

SCALE: 1"=1'-0"

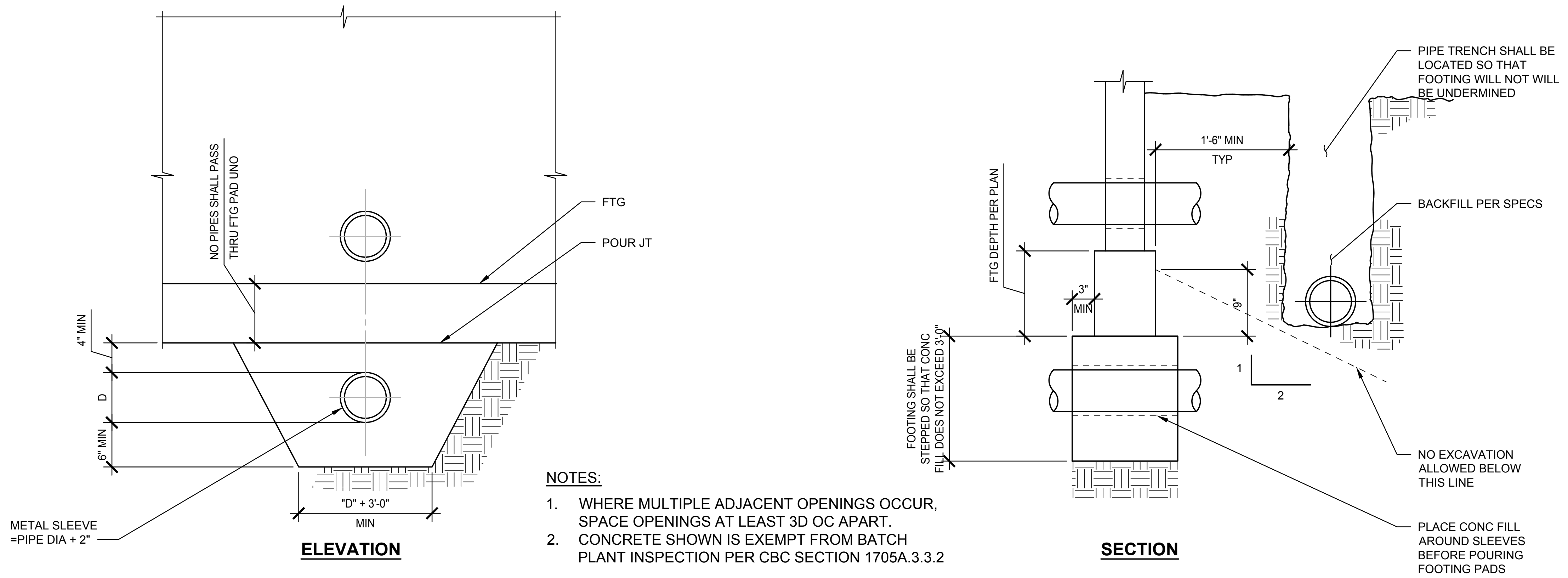

RETAINING CURB &
FOOTING PER 5B/5SS5.1
PLANTING AREA
PER LANDSCAPE
CONC RAMP PER
LANDSCAPE
RETAINING WALL &
FOOTING PER
1/5SS3.0
PAVEMENT PER
LANDSCAPE

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

7 RAMP SECTION AT BLDG E

1"=1'-0"


NO PIPES SHALL PASS
THRU FTG PAD UNO
FTG
POUR JT
4" MIN
D
6" MIN
"D" + 3'-0"
MIN
METAL SLEEVE
=PIPE DIA + 2"
PIPE TRENCH SHALL BE
LOCATED SO THAT
FOOTING WILL NOT WILL
BE UNDERMINED
1'-6" MIN
TYP
FTG DEPTH PER PLAN
BACKFILL PER SPECS
3"
MIN
6"
1
2
FOOTING SHALL BE
STEPPED SO THAT CONC
FILL DOES NOT EXCEED 3'-0"
NO EXCAVATION
ALLOWED BELOW
THIS LINE
PLACE CONC FILL
AROUND SLEEVES
BEFORE POURING
FOOTING PADS

ELEVATION

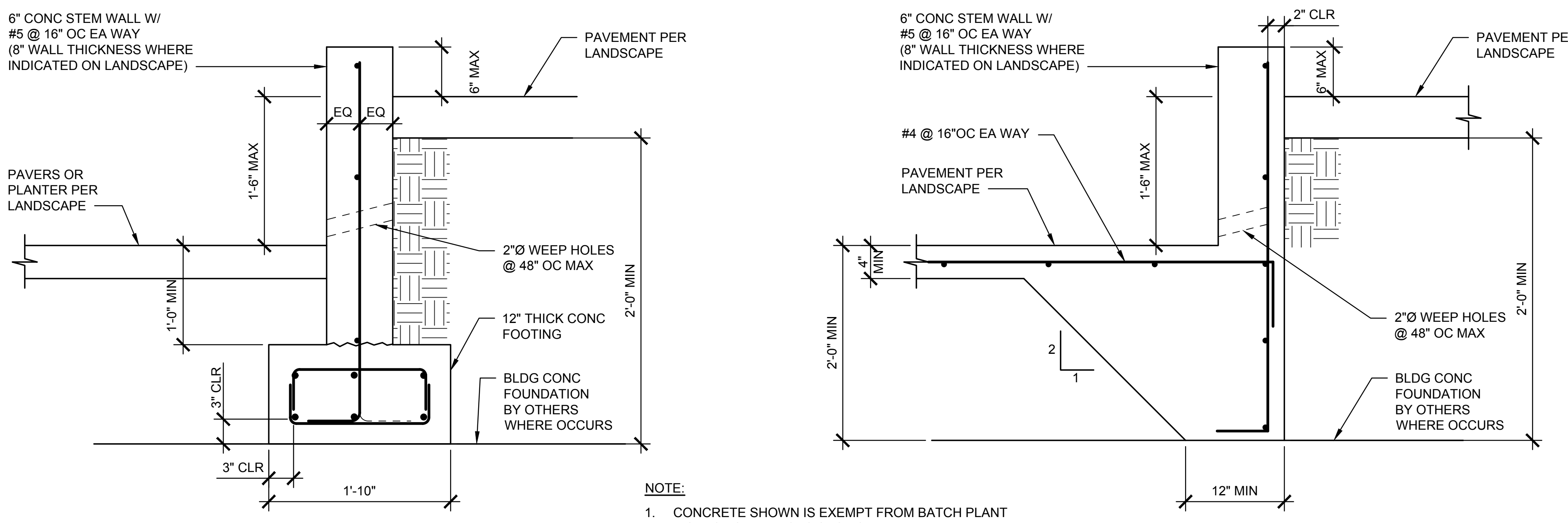
SECTION

NOTES:

1. WHERE MULTIPLE ADJACENT OPENINGS OCCUR, SPACE OPENINGS AT LEAST 3D OC APART.
2. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

3 TYPICAL PIPE SLEEVE AND TRENCH FOOTING DETAIL

NTS


6" CONC STEM WALL W/
#5 @ 16" OC EA WAY
(8" WALL THICKNESS WHERE
INDICATED ON LANDSCAPE)
PAVEMENT PER
LANDSCAPE
6" MAX
EQ
EQ
1'-6" MAX
PAVERS OR
PLANTER PER
LANDSCAPE
2"Ø WEEP HOLES
@ 48" OC MAX
1'-0" MIN
2'-0" MIN
12" THICK CONC
FOOTING
3" CLR
BLDG CONC
FOUNDATION
BY OTHERS
WHERE OCCURS
3" CLR
1'-10"
6" CONC STEM WALL W/
#5 @ 16" OC EA WAY
(8" WALL THICKNESS WHERE
INDICATED ON LANDSCAPE)
2" CLR
PAVEMENT PER
LANDSCAPE
6" MAX
#4 @ 16"OC EA WAY
PAVEMENT PER
LANDSCAPE
1'-6" MAX
4" MIN
2'-0" MIN
2
1
2"Ø WEEP HOLES
@ 48" OC MAX
2'-0" MIN
BLDG CONC
FOUNDATION
BY OTHERS
WHERE OCCURS
12" MIN

5B AT PAVERS/PLANTER AREA

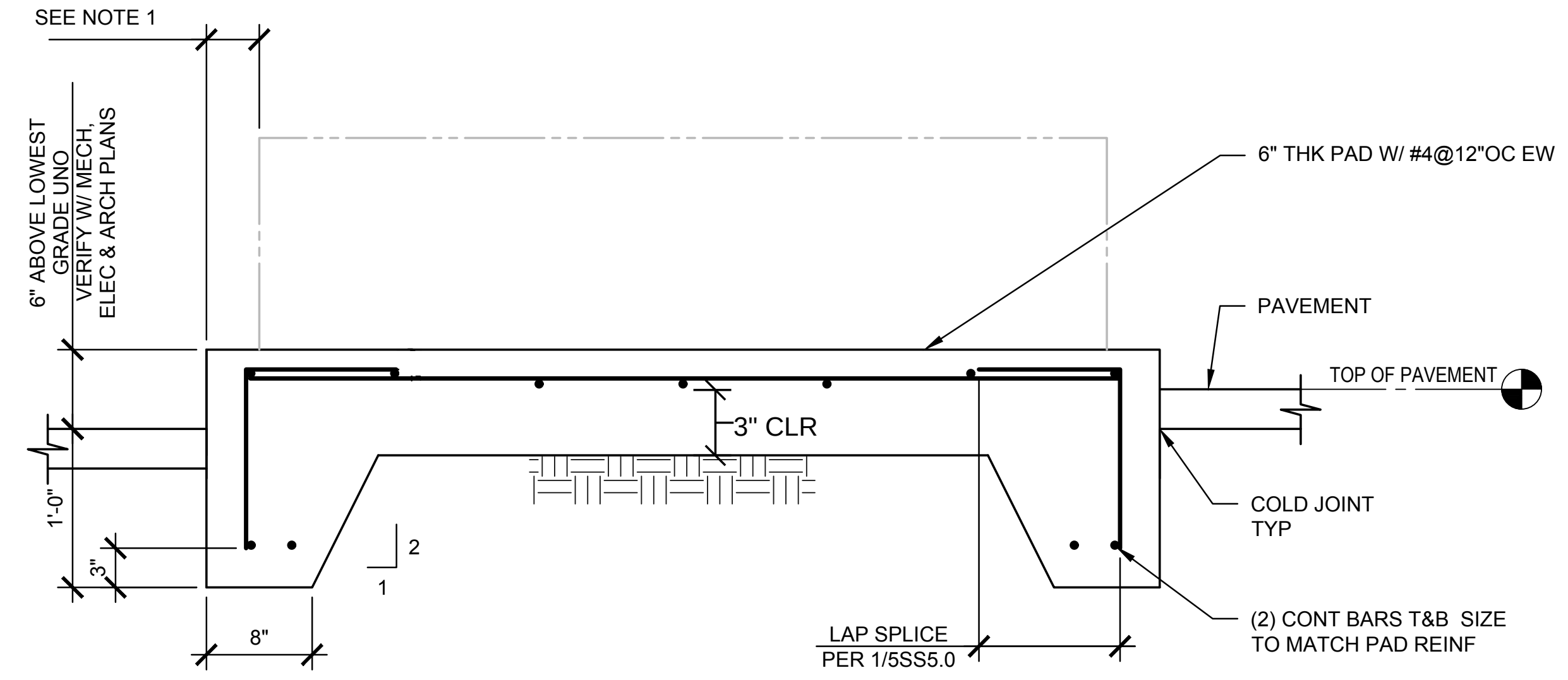
NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

5A AT PAVEMENT

5 RETAINING CURB DETAIL

SCALE: 1"=1'-0"


SEE NOTE 1
6" ABOVE LOWEST
GRADE UNO
VERIFY W/ MECH,
ELEC & ARCH PLANS
6" THK PAD W/ #4@12"OC EW
PAVEMENT
TOP OF PAVEMENT
3" CLR
1'-0"
3"
2
1
COLD JOINT
TYP
8"
LAP SPLICE
PER 1/5SS5.0
(2) CONT BARS T&B SIZE
TO MATCH PAD REINF

NOTE:

1. EXTEND PAD 6" MINIMUM BEYOND FACE OF UNIT UNLESS A GREATER DISTANCE IS REQUIRED FOR ANCHOR EDGE DISTANCES (SEE MECH/ELECT DRAWINGS).
2. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

4 EQUIPMENT PAD ON GRADE

SCALE: 1"=1'-0"

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DRAWING TITLE

STRUCTURAL
CONCRETE
DETAILS

5SS5.1

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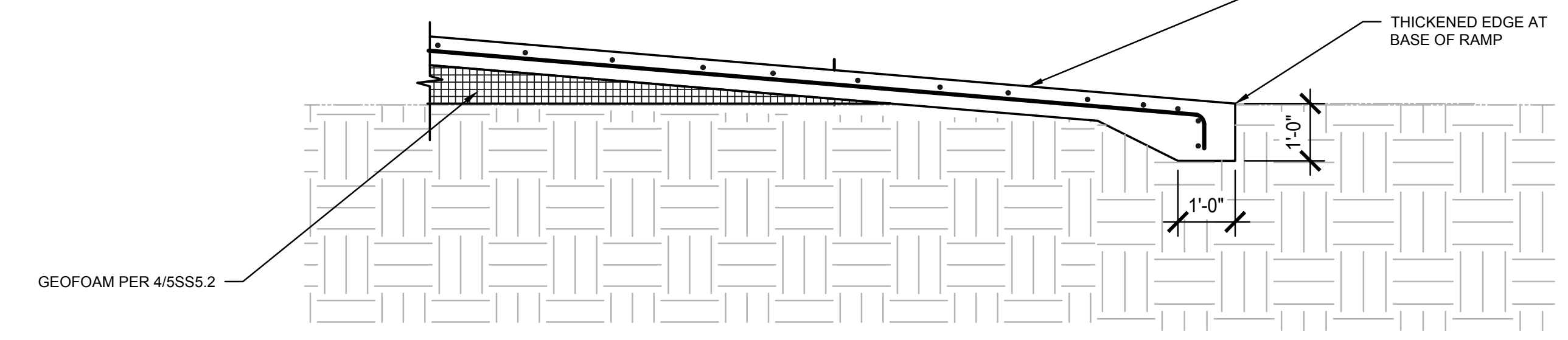
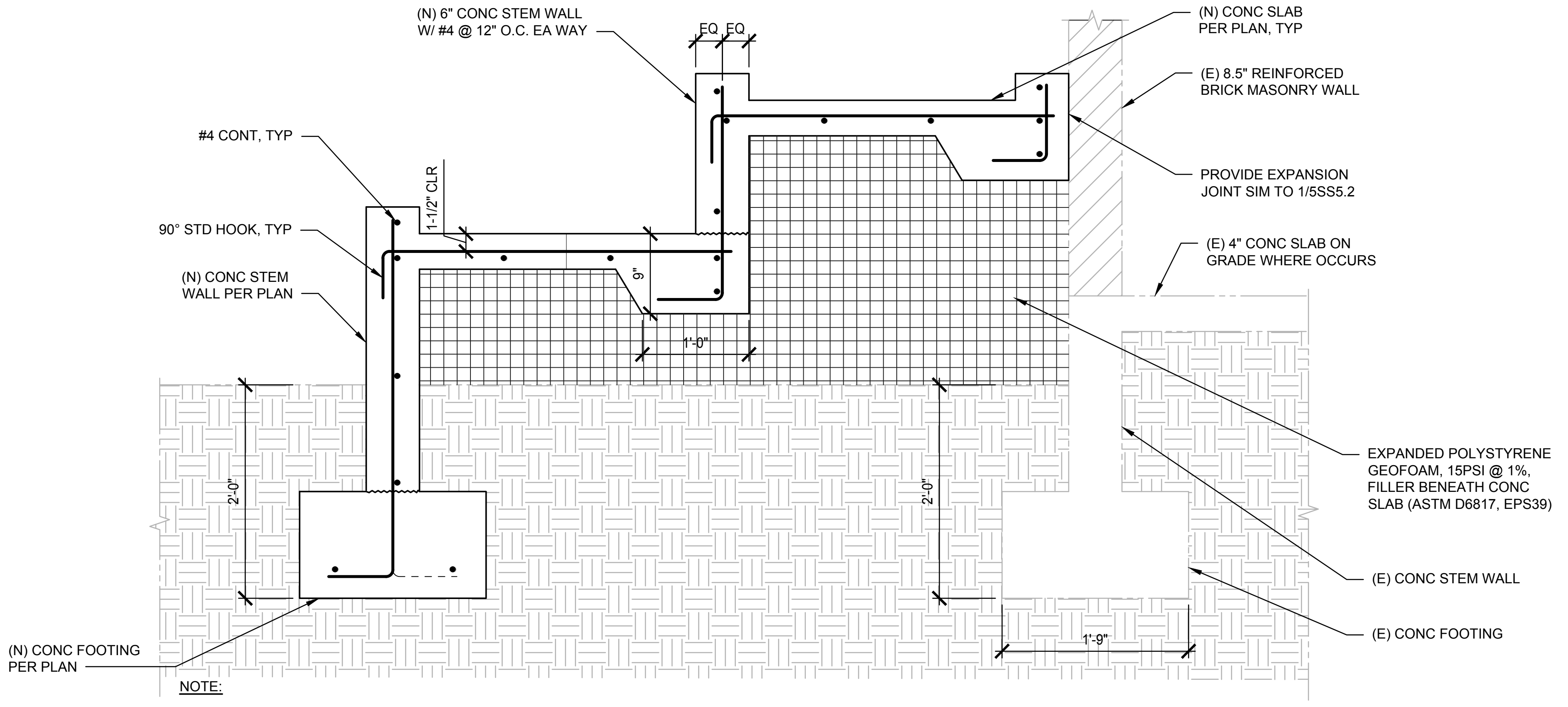

(N) CONC SLAB PER PLAN
THICKENED EDGE AT BASE OF RAMP
1'-0"
1'-0"
GEOFOAM PER 4/5SS5.2

5 SECTION AT BASE OF RAMP

SCALE: 3/8"=1'-0"

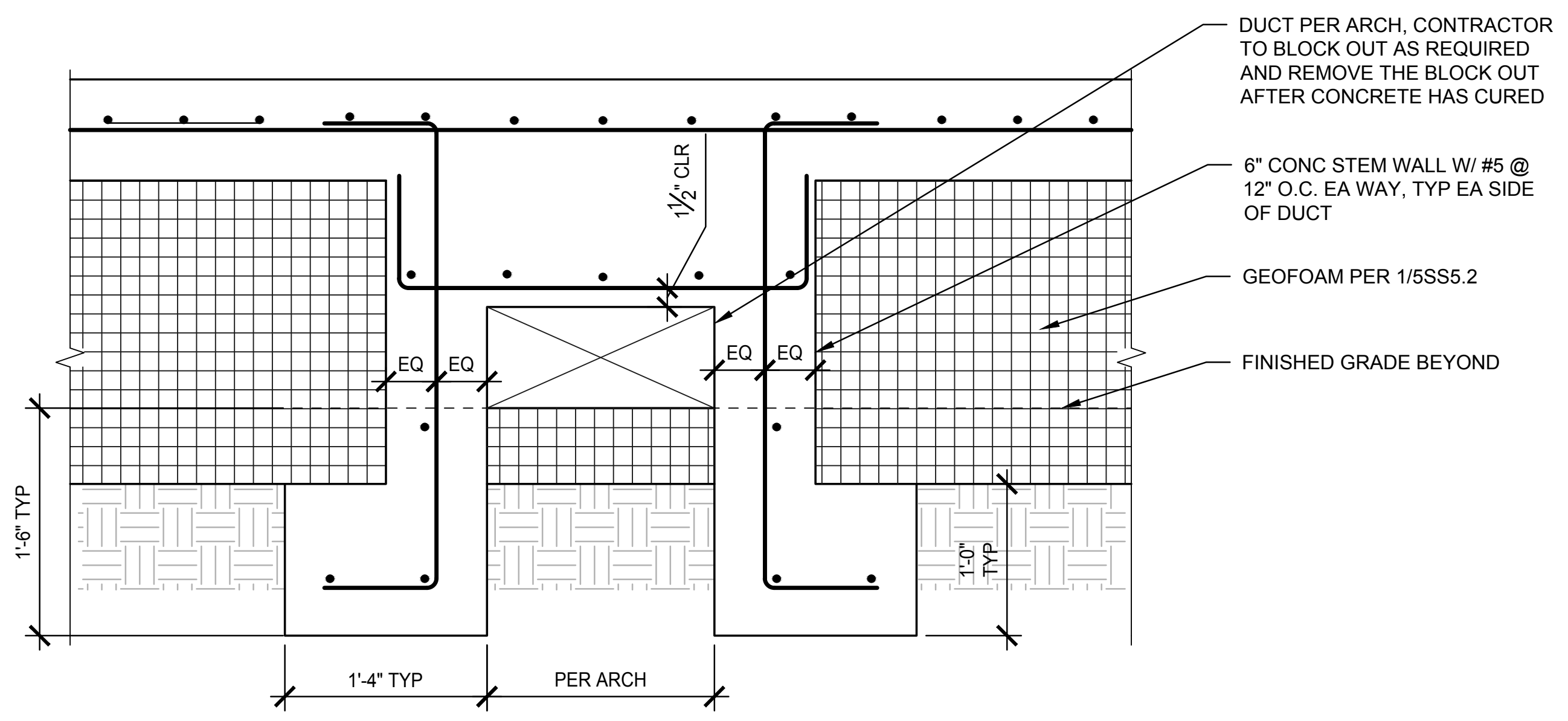

(N) 6" CONC STEM WALL W/ #4 @ 12" O.C. EA WAY
EQ
EQ
(N) CONC SLAB PER PLAN, TYP
(E) 8.5" REINFORCED BRICK MASONRY WALL
#4 CONT, TYP
1-1/2" CLR
PROVIDE EXPANSION JOINT SIM TO 1/5SS5.2
90° STD HOOK, TYP
(E) 4" CONC SLAB ON GRADE WHERE OCCURS
(N) CONC STEM WALL PER PLAN
9"
1'-0"
2'-0"
2'-0"
EXPANDED POLYSTYRENE GEOFOAM, 15PSI @ 1%, FILLER BENEATH CONC SLAB (ASTM D6817, EPS39)
(E) CONC STEM WALL
(E) CONC FOOTING
1'-9"
(N) CONC FOOTING PER PLAN

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

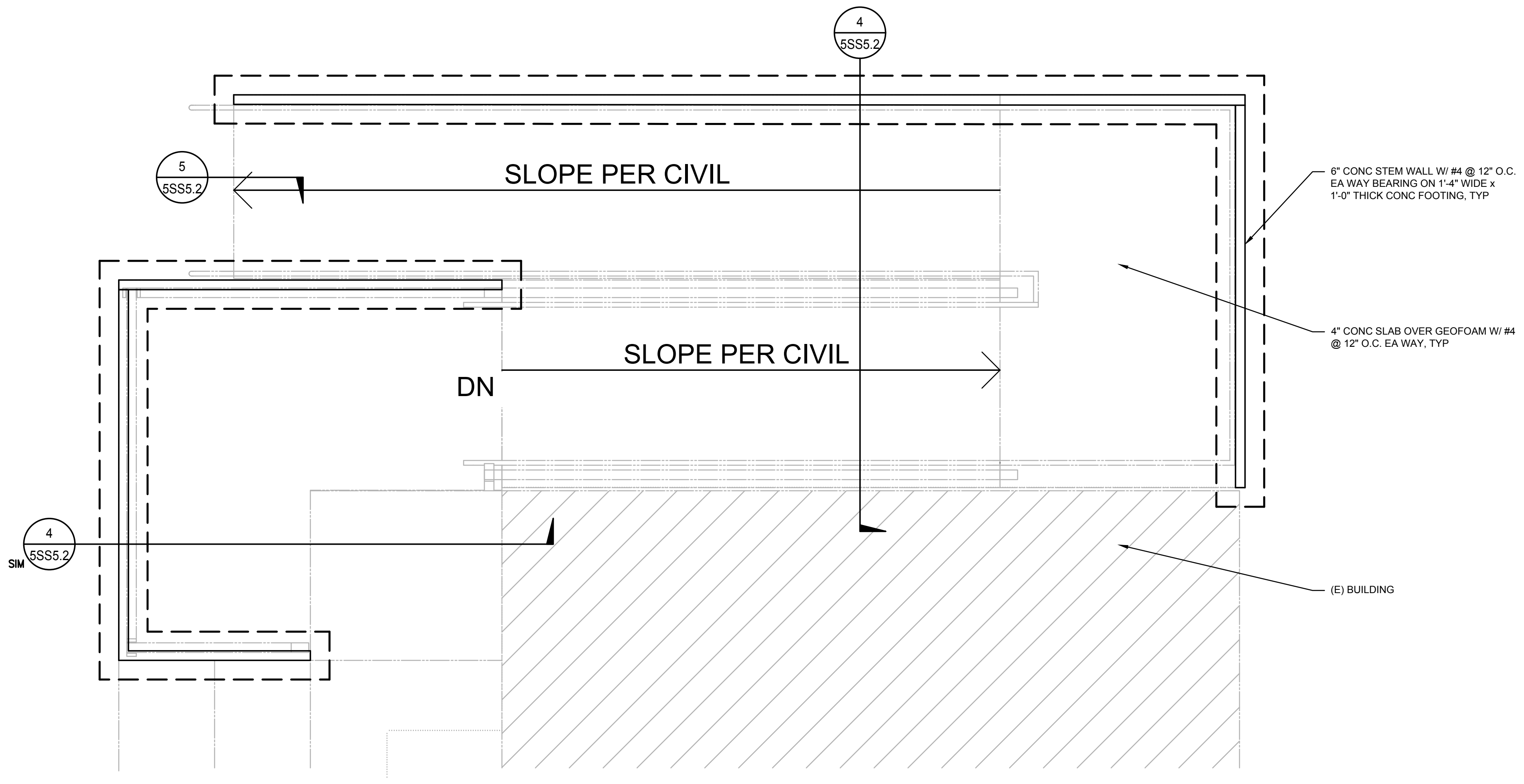
4 SECTION AT NEW RAMP

SCALE: 1"=1'-0"


DUCT PER ARCH, CONTRACTOR TO BLOCK OUT AS REQUIRED AND REMOVE THE BLOCK OUT AFTER CONCRETE HAS CURED
1½" CLR
6" CONC STEM WALL W/ #5 @ 12" O.C. EA WAY, TYP EA SIDE OF DUCT
GEOFOAM PER 1/5SS5.2
EQ
EQ
EQ
EQ
FINISHED GRADE BEYOND
1'-6" TYP
1'-0" TYP
1'-4" TYP
PER ARCH

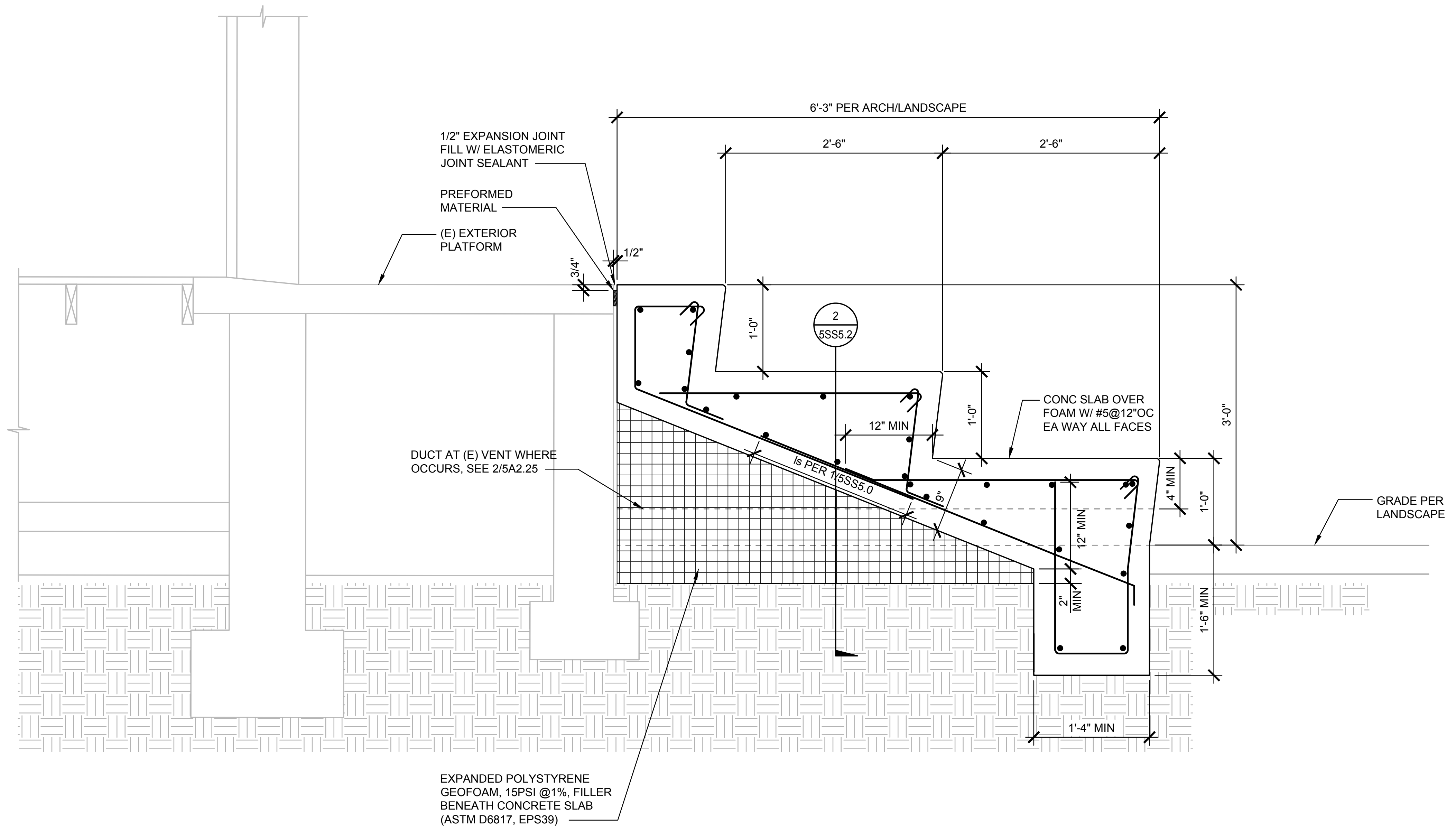
2 DUCT THROUGH TERRACE WALL

SCALE: 1"=1'-0"


4
5SS5.2
5
5SS5.2
SLOPE PER CIVIL
6" CONC STEM WALL W/ #4 @ 12" O.C. EA WAY BEARING ON 1'-4" WIDE x 1'-0" THICK CONC FOOTING, TYP
SLOPE PER CIVIL
DN
4" CONC SLAB OVER GEOFOAM W/ #4 @ 12" O.C. EA WAY, TYP
4
5SS5.2
SIM
(E) BUILDING

3 ENLARGED RAMP PLAN

SCALE: 3/8"=1'-0"


6'-3" PER ARCH/LANDSCAPE
2'-6"
2'-6"
1/2" EXPANSION JOINT FILL W/ ELASTOMERIC JOINT SEALANT
PREFORMED MATERIAL
(E) EXTERIOR PLATFORM
1/2"
3/4"
1'-0"
2
5SS5.2
1'-0"
3'-0"
12" MIN
CONC SLAB OVER FOAM W/ #5@12"OC EA WAY ALL FACES
DUCT AT (E) VENT WHERE OCCURS, SEE 2/5A2.25
ls PER 1/5SS5.0
9"
4" MIN
1'-0"
12" MIN
GRADE PER LANDSCAPE
2" MIN
1'-6" MIN
1'-4" MIN
EXPANDED POLYSTYRENE GEOFOAM, 15PSI @1%, FILLER BENEATH CONCRETE SLAB (ASTM D6817, EPS39)

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

1 TERRACE WALL AT (E) STAGE

SCALE: 1"=1'-0"

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5SS5.2

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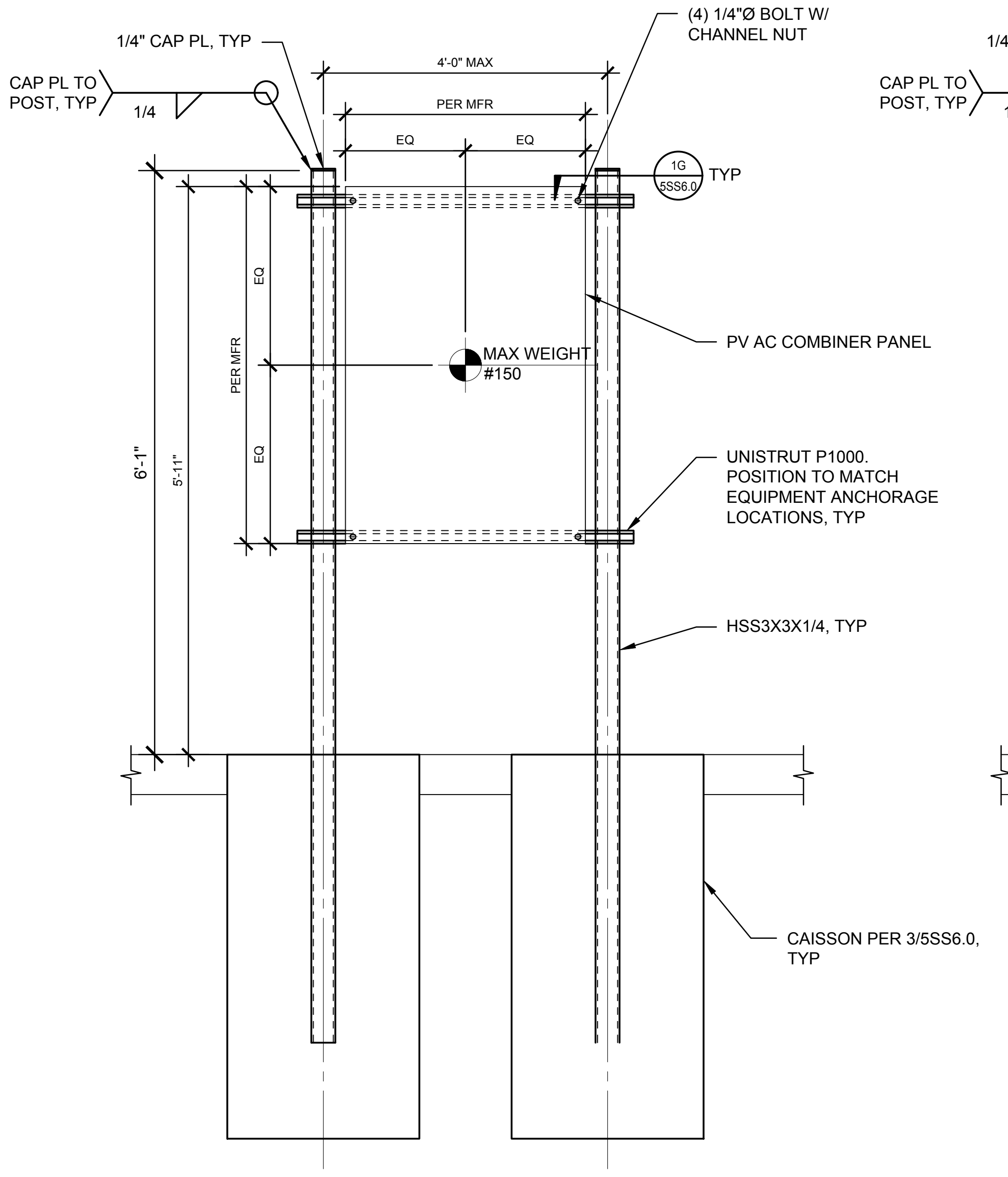
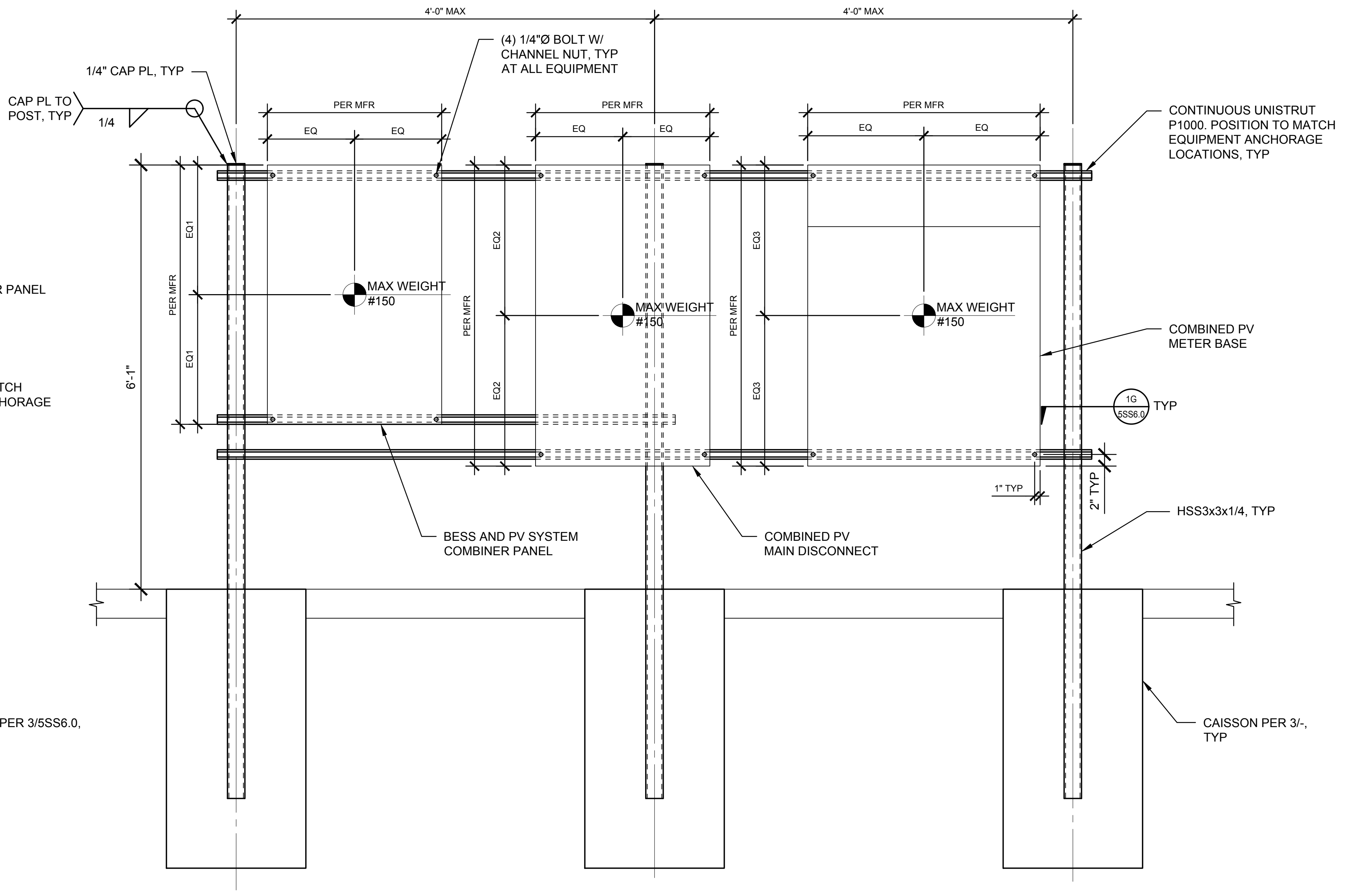

1/4" CAP PL, TYP
CAP PL TO POST, TYP
1/4
(4) 1/4"Ø BOLT W/ CHANNEL NUT
4'-0" MAX
PER MFR
EQ
EQ
1G
5SS6.0
TYP
6'-1"
5'-11"
PER MFR
EQ
EQ
MAX WEIGHT #150
PV AC COMBINER PANEL
UNISTRUT P1000. POSITION TO MATCH EQUIPMENT ANCHORAGE LOCATIONS, TYP
HSS3X3X1/4, TYP
CAISSON PER 3/5SS6.0, TYP

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

5 PV COMBINER PANEL WALL FRAME

SCALE: 3/4"=1'-0"

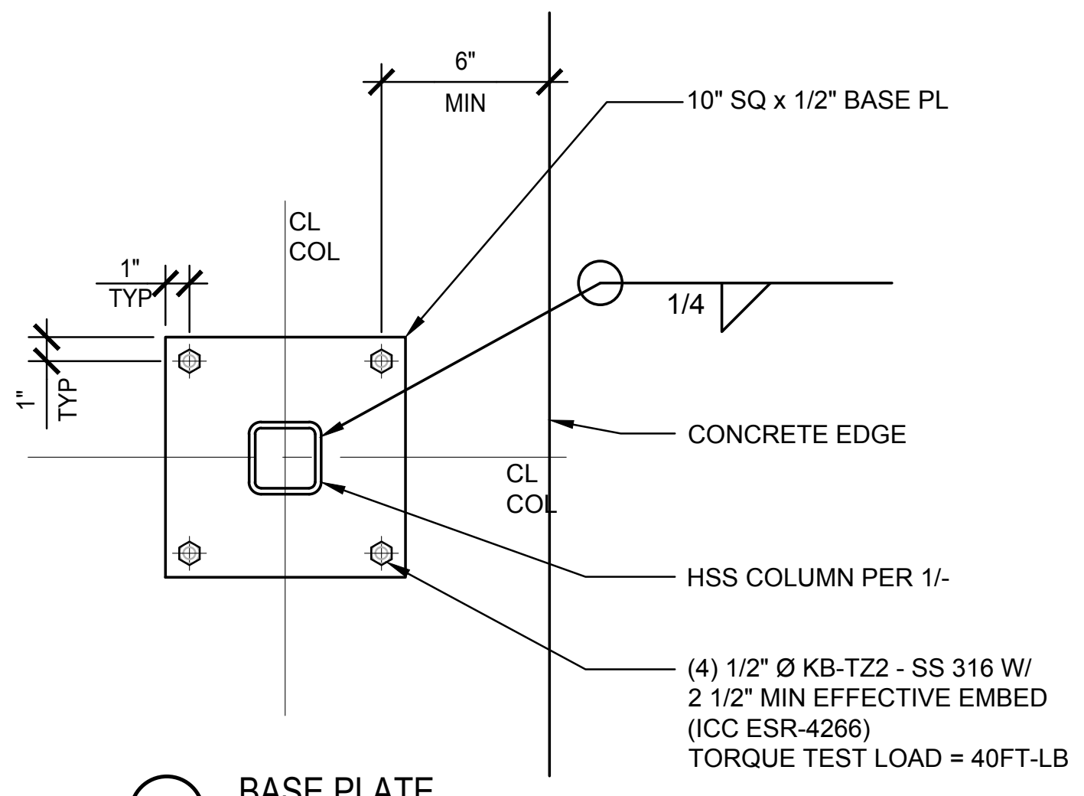

4'-0" MAX
4'-0" MAX
1/4" CAP PL, TYP
CAP PL TO POST, TYP
1/4
(4) 1/4"Ø BOLT W/ CHANNEL NUT, TYP AT ALL EQUIPMENT
PER MFR
EQ
EQ
PER MFR
EQ
EQ
PER MFR
EQ
EQ
CONTINUOUS UNISTRUT P1000. POSITION TO MATCH EQUIPMENT ANCHORAGE LOCATIONS, TYP
6'-1"
PER MFR
EQ1
EQ1
PER MFR
EQ2
EQ2
PER MFR
EQ3
EQ3
MAX WEIGHT #150
MAX WEIGHT #150
MAX WEIGHT #150
COMBINED PV METER BASE
1G
5SS6.0
TYP
1" TYP
2" TYP
HSS3x3x1/4, TYP
BESS AND PV SYSTEM COMBINER PANEL
COMBINED PV MAIN DISCONNECT
CAISSON PER 3/-, TYP

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

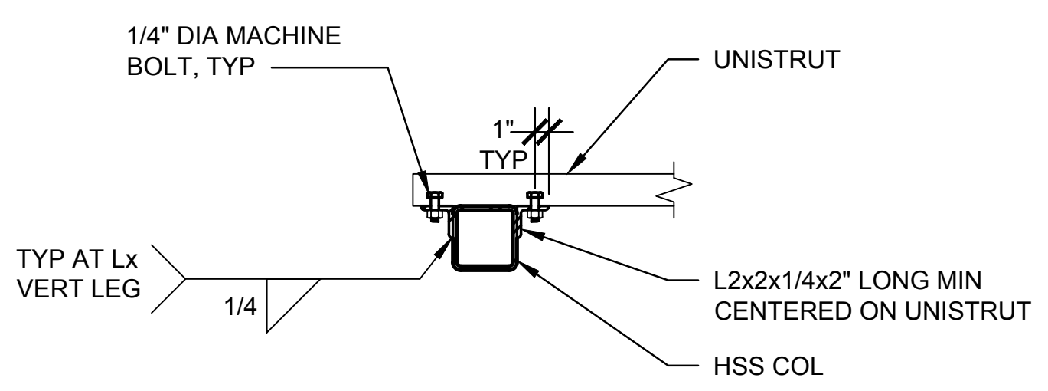
2 WALL FRAME ELEVATION

SCALE: 3/4"=1'-0"

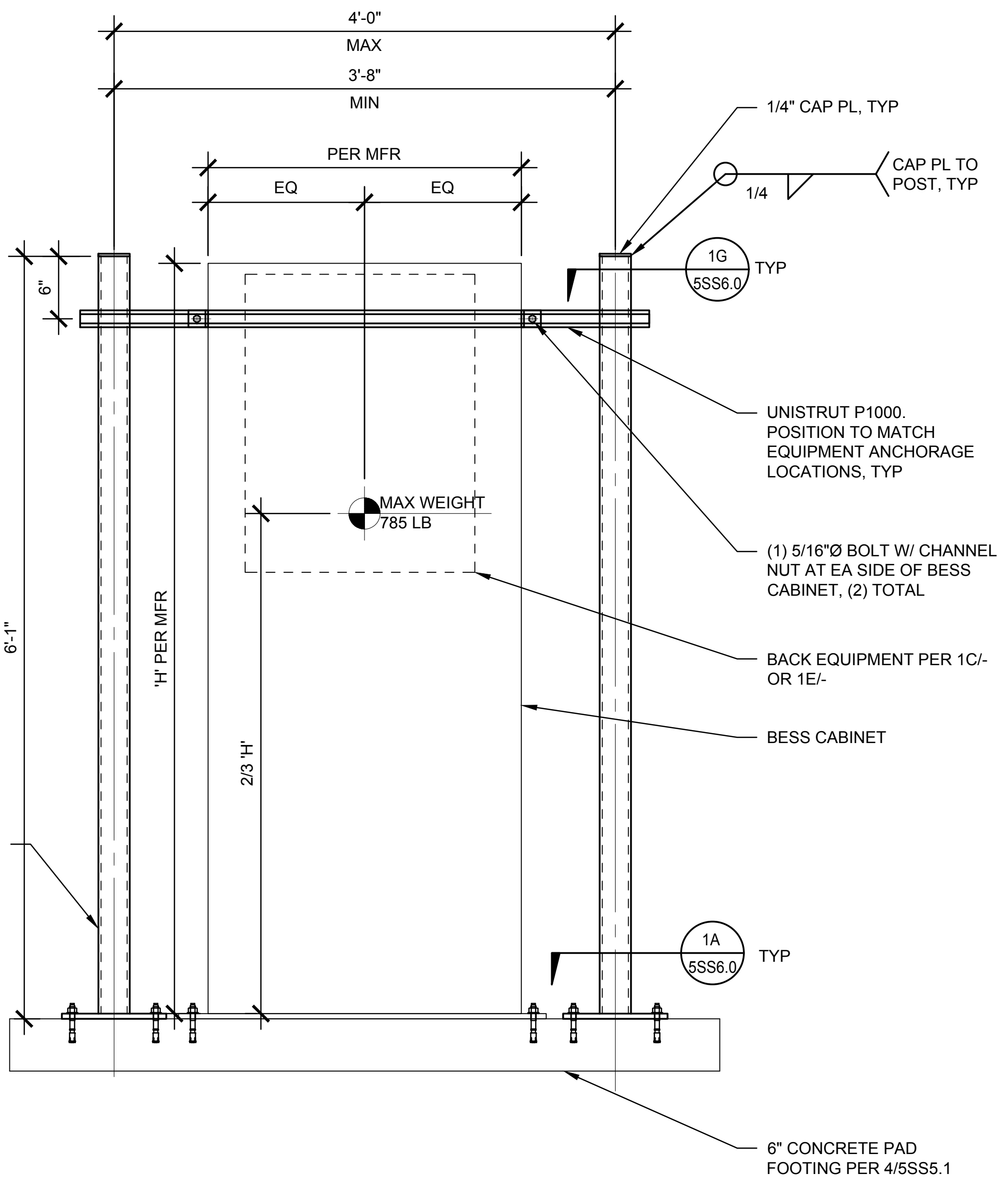

6"
MIN
10" SQ x 1/2" BASE PL
CL
COL
1"
TYP
1"
TYP
1/4
CONCRETE EDGE
CL
COL
HSS COLUMN PER 1/-
(4) 1/2" Ø KB-TZ2 - SS 316 W/ 2 1/2" MIN EFFECTIVE EMBED (ICC ESR-4266) TORQUE TEST LOAD = 40FT-LB

1A BASE PLATE

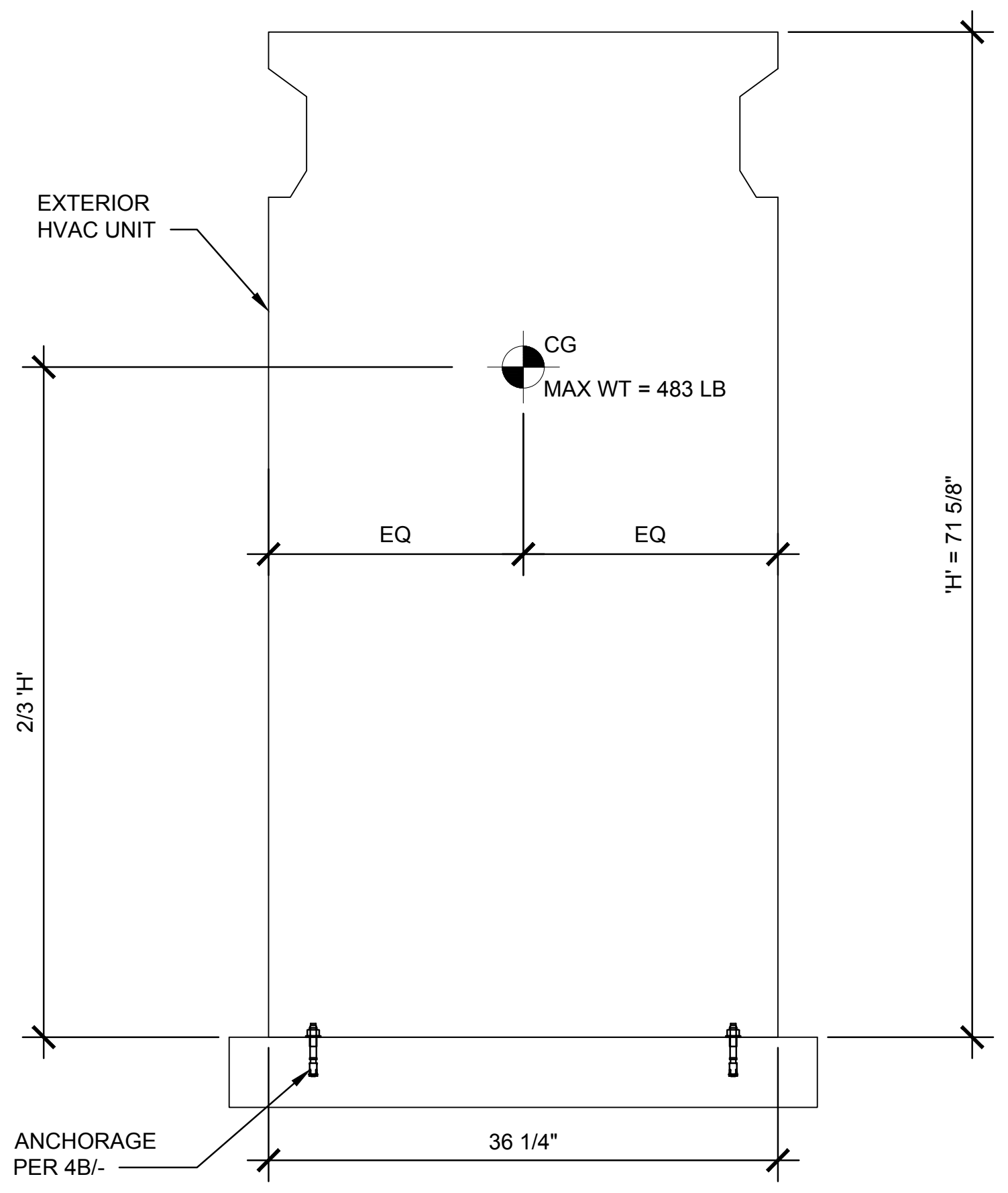
1 1/2"='-0"


1/4" DIA MACHINE BOLT, TYP
UNISTRUT
1"
TYP
TYP AT Lx VERT LEG
1/4
L2x2x1/4x2" LONG MIN CENTERED ON UNISTRUT
HSS COL

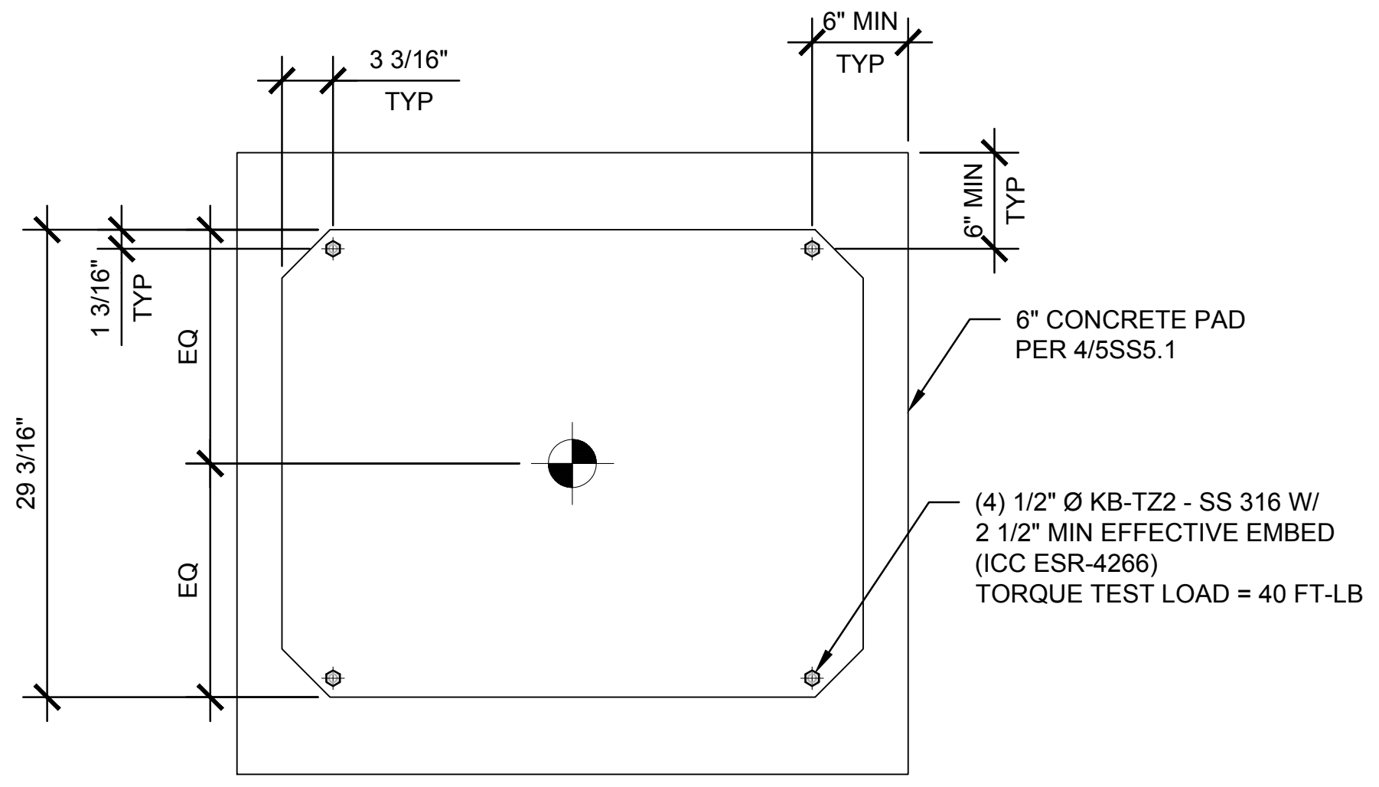
1G CONNECTION DETAIL


4'-0"
MAX
3'-8"
MIN
PER MFR
EQ
EQ
1/4" CAP PL, TYP
CAP PL TO POST, TYP
1/4
1G
5SS6.0
TYP
6"
UNISTRUT P1000. POSITION TO MATCH EQUIPMENT ANCHORAGE LOCATIONS, TYP
MAX WEIGHT 785 LB
(1) 5/16"Ø BOLT W/ CHANNEL NUT AT EA SIDE OF BESS CABINET, (2) TOTAL
BACK EQUIPMENT PER 1C/- OR 1E/-
6'-1"
'H' PER MFR
2/3 'H'
BESS CABINET
HSS3x3x1/4 POST, TYP
1A
5SS6.0
TYP
6" CONCRETE PAD FOOTING PER 4/5SS5.1

1B FRONT VIEW


EXTERIOR HVAC UNIT
CG
MAX WT = 483 LB
EQ
EQ
2/3 'H'
'H' = 71 5/8"
ANCHORAGE PER 4B/-
36 1/4"

4A ELEVATION


3 3/16"
TYP
6" MIN
TYP
6" MIN
TYP
1 3/16"
TYP
EQ
EQ
29 3/16"
6" CONCRETE PAD PER 4/5SS5.1
(4) 1/2" Ø KB-TZ2 - SS 316 W/ 2 1/2" MIN EFFECTIVE EMBED (ICC ESR-4266) TORQUE TEST LOAD = 40 FT-LB

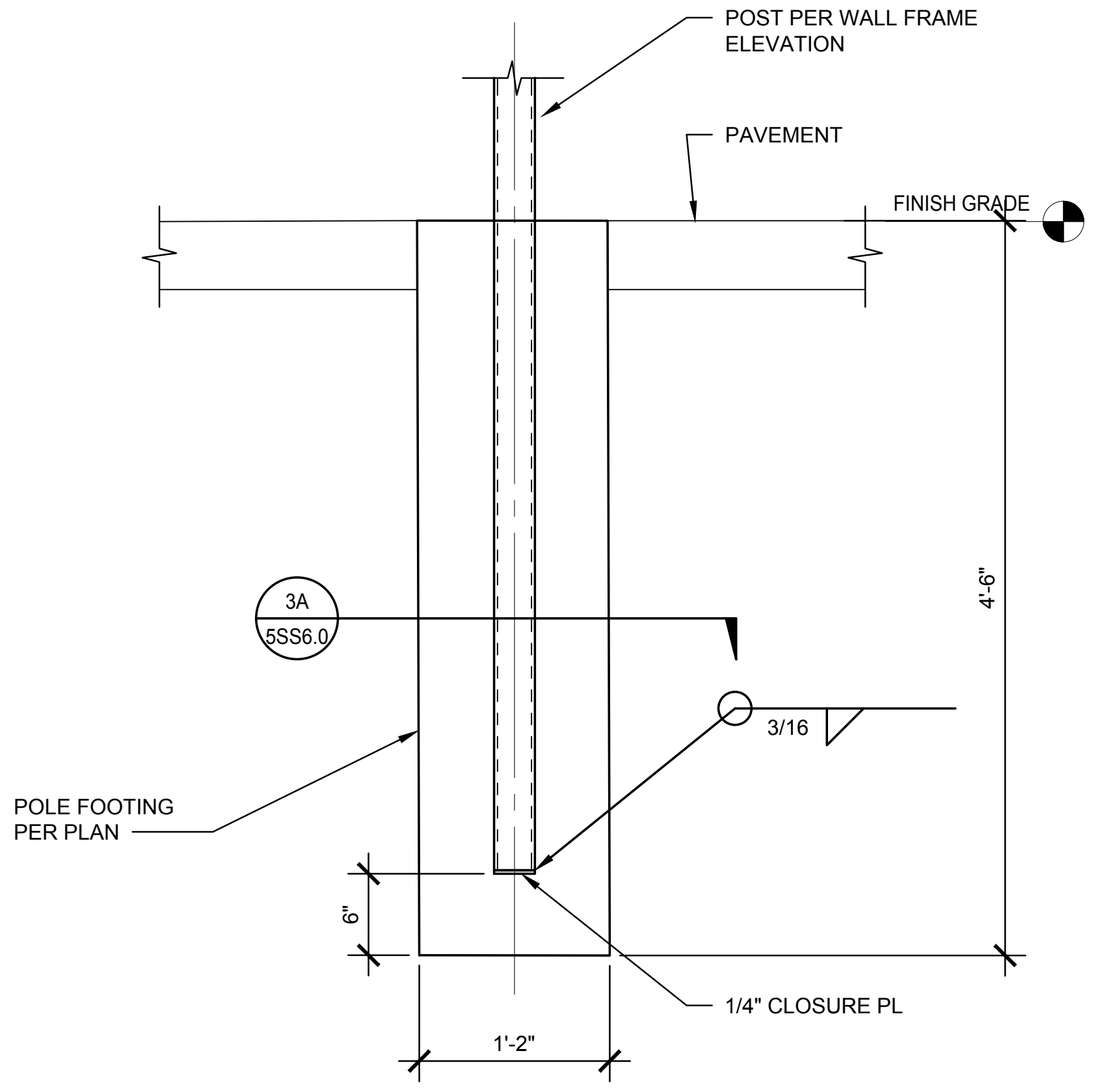
4B BASE

NOTE:

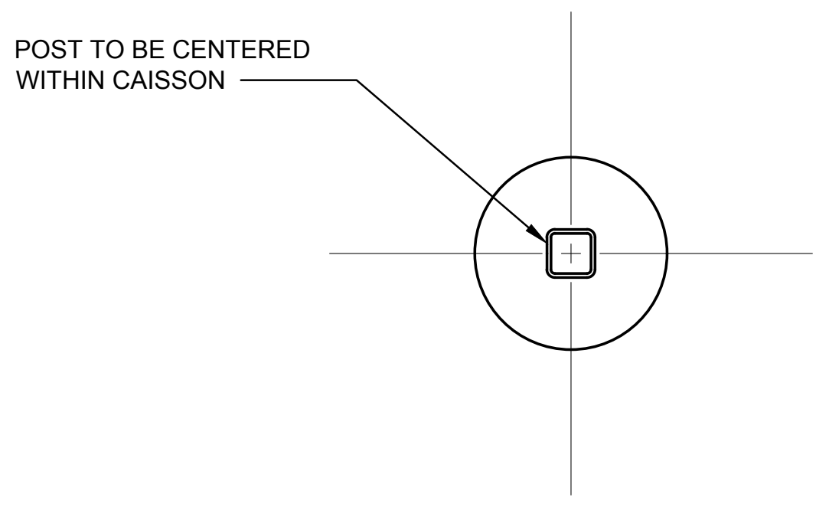
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

4 HEAT RECOVERY SYSTEM ANCHORAGE DETAIL

SCALE: 1"=1'-0"


POST PER WALL FRAME ELEVATION
PAVEMENT
FINISH GRADE
3A
5SS6.0
4'-6"
3/16
POLE FOOTING PER PLAN
6"
1'-2"
1/4" CLOSURE PL

3B CAISSON ELEVATION


POST TO BE CENTERED WITHIN CAISSON

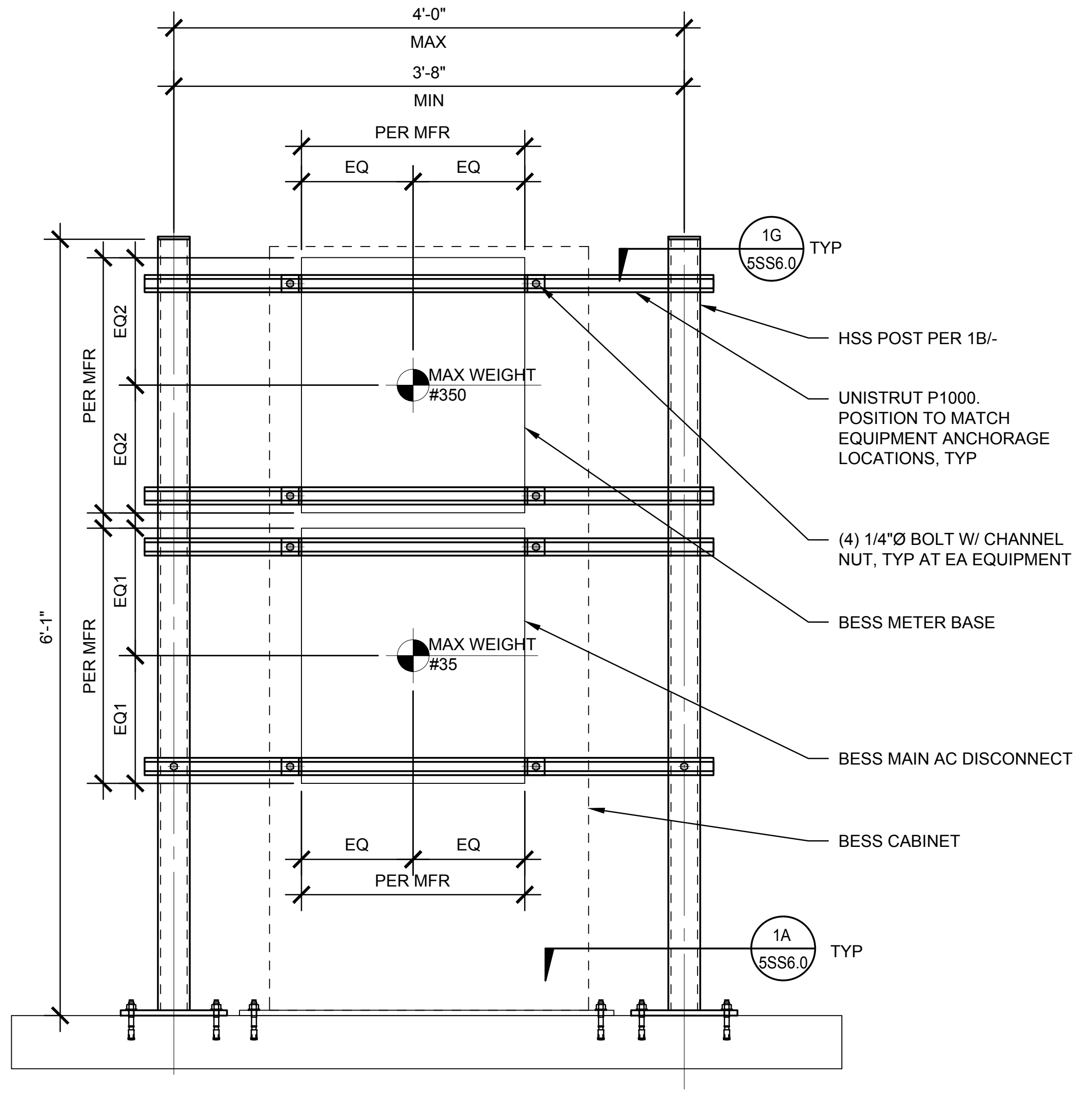
3A SECTION

NOTE:

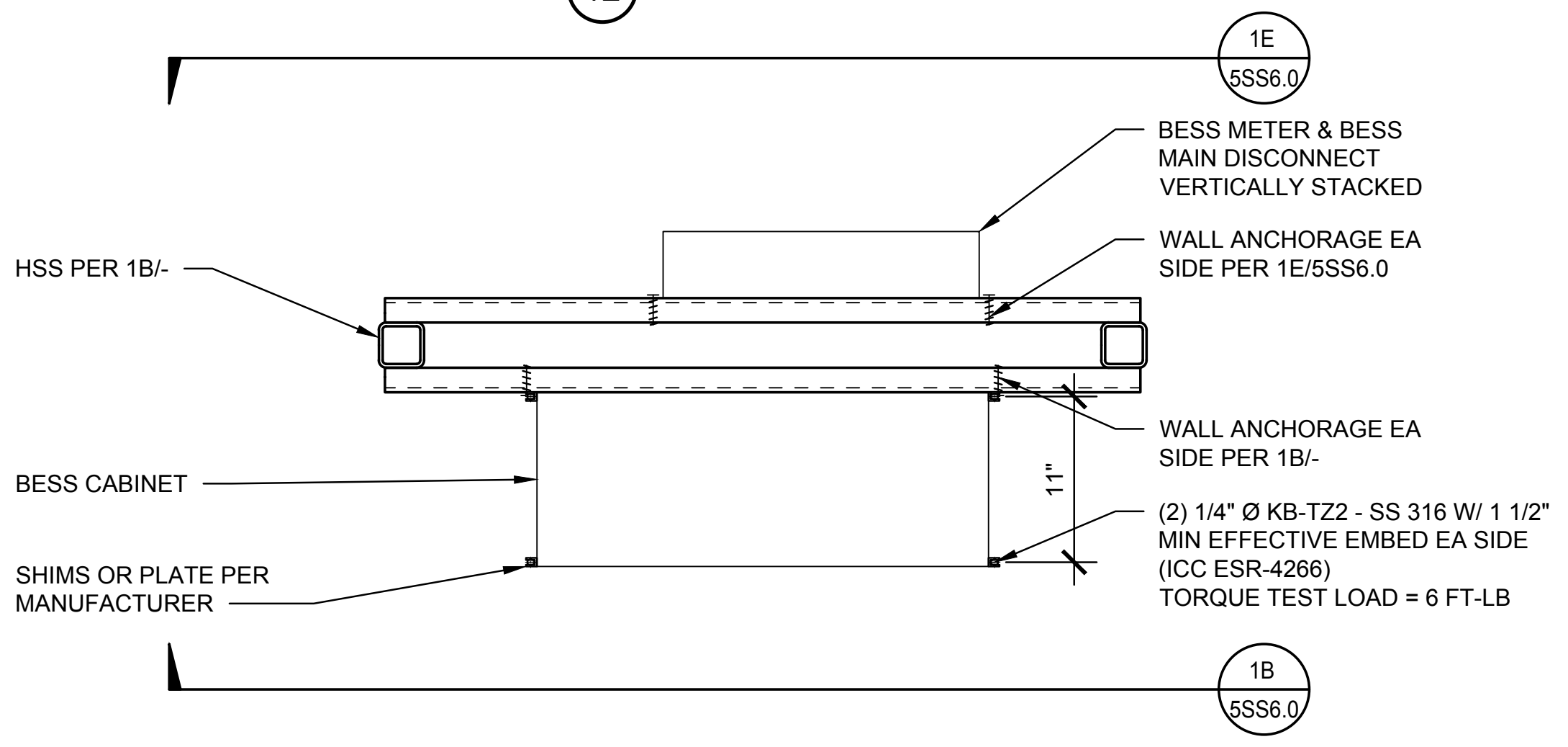
1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

3 CAISSON DETAIL

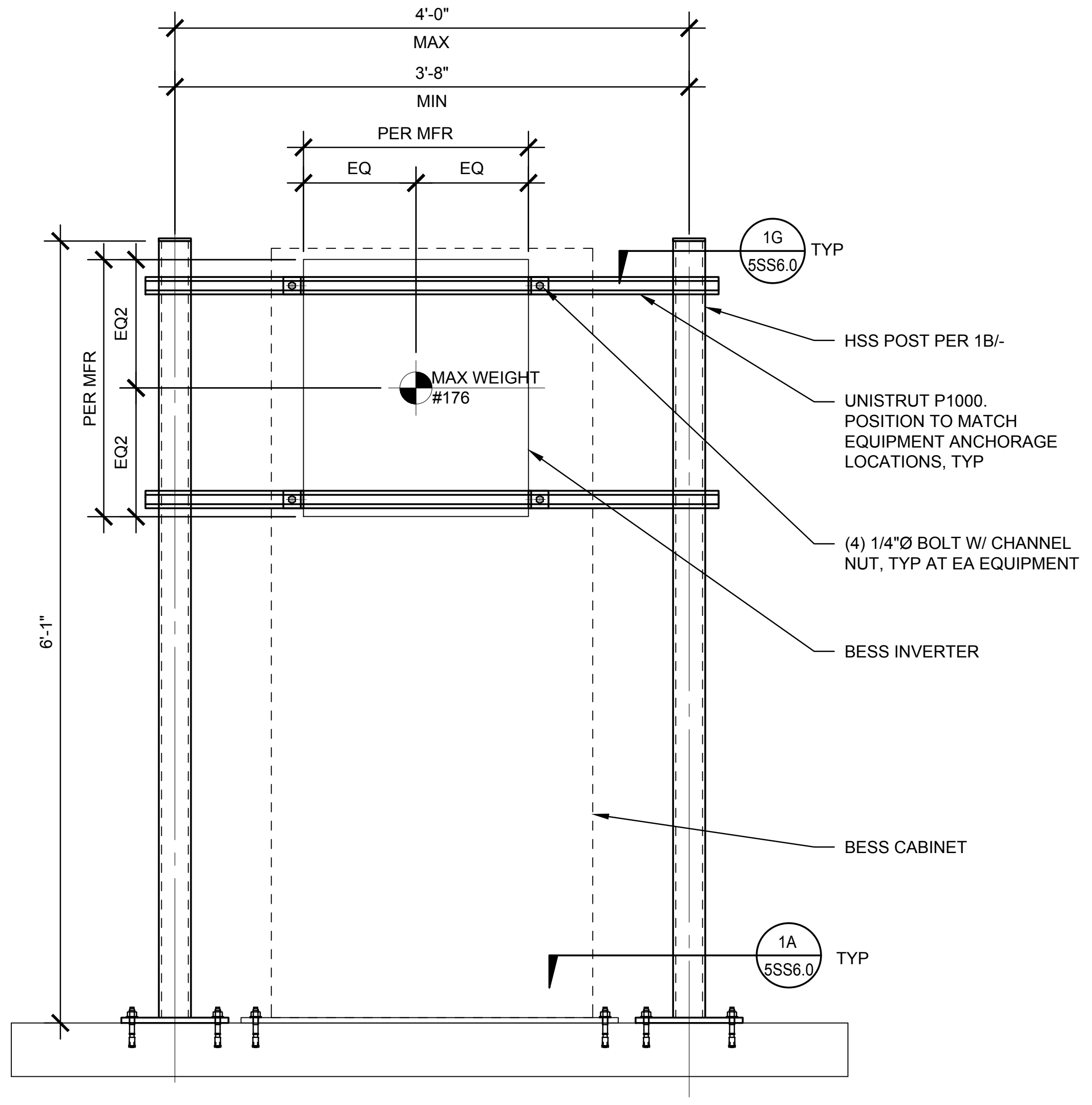
SCALE: 1"=1'-0"


4'-0"
MAX
3'-8"
MIN
PER MFR
EQ
EQ
1G
5SS6.0
TYP
HSS POST PER 1B/-
EQ2
EQ2
PER MFR
MAX WEIGHT #350
UNISTRUT P1000. POSITION TO MATCH EQUIPMENT ANCHORAGE LOCATIONS, TYP
(4) 1/4"Ø BOLT W/ CHANNEL NUT, TYP AT EA EQUIPMENT
6'-1"
EQ1
EQ1
PER MFR
MAX WEIGHT #35
BESS METER BASE
BESS MAIN AC DISCONNECT
BESS CABINET
EQ
EQ
PER MFR
1A
5SS6.0
TYP

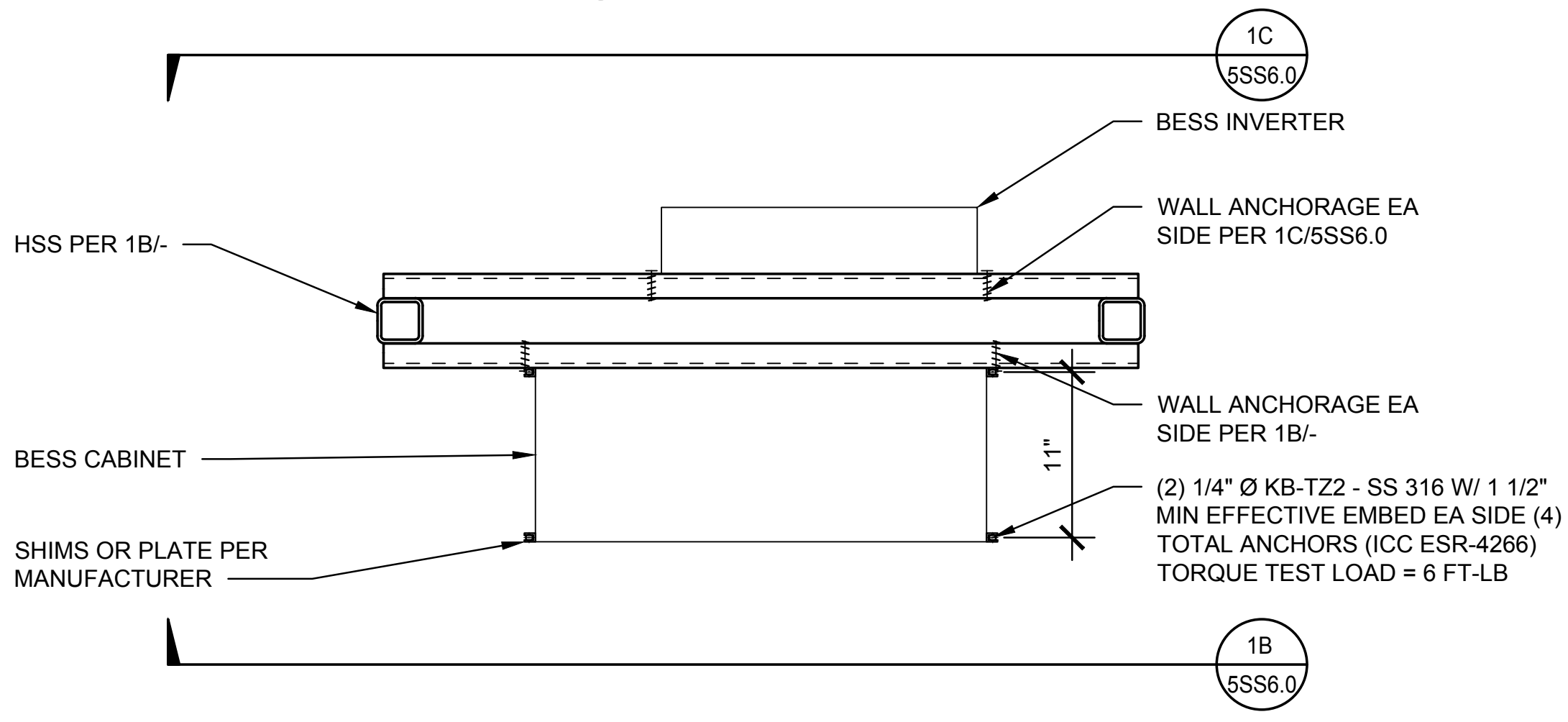
1E FRAME 2 - BACK VIEW


1E
5SS6.0
BESS METER & BESS MAIN DISCONNECT VERTICALLY STACKED
HSS PER 1B/-
WALL ANCHORAGE EA SIDE PER 1E/5SS6.0
WALL ANCHORAGE EA SIDE PER 1B/-
BESS CABINET
11"
SHIMS OR PLATE PER MANUFACTURER
(2) 1/4" Ø KB-TZ2 - SS 316 W/ 1 1/2" MIN EFFECTIVE EMBED EA SIDE (ICC ESR-4266) TORQUE TEST LOAD = 6 FT-LB
1B
5SS6.0

1F FRAME 2 - PLAN VIEW


4'-0"
MAX
3'-8"
MIN
PER MFR
EQ
EQ
1G
5SS6.0
TYP
HSS POST PER 1B/-
EQ2
EQ2
PER MFR
MAX WEIGHT #176
UNISTRUT P1000. POSITION TO MATCH EQUIPMENT ANCHORAGE LOCATIONS, TYP
(4) 1/4"Ø BOLT W/ CHANNEL NUT, TYP AT EA EQUIPMENT
6'-1"
BESS INVERTER
BESS CABINET
1A
5SS6.0
TYP

1C FRAME 1 - BACK VIEW


1C
5SS6.0
BESS INVERTER
HSS PER 1B/-
WALL ANCHORAGE EA SIDE PER 1C/5SS6.0
WALL ANCHORAGE EA SIDE PER 1B/-
BESS CABINET
11"
SHIMS OR PLATE PER MANUFACTURER
(2) 1/4" Ø KB-TZ2 - SS 316 W/ 1 1/2" MIN EFFECTIVE EMBED EA SIDE (4) TOTAL ANCHORS (ICC ESR-4266) TORQUE TEST LOAD = 6 FT-LB
1B
5SS6.0

1D FRAME 1 - PLAN VIEW

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

1 WALL FRAME ELEVATION

SCALE: 1"=1'-0"

If this sheet is smaller than 30" high by 42" wide then it has been reduced.

File: K:\2021\2100853 – LCUSD – Paradise Canyon ES – Campus Upgrades\5 SDraft\PACKAGE 5\2100853 – 5SS6.0 – Equipment Anchorage Details.dwg
Plotted: 3/17/26 at 9:05am By: krose
XREFs: 2100853 – xref – titleblock – 30x42–pkg5.dwg

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DATE: 05/07/2026

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Los Angeles, CA 90017
O: 213.418.0201
www.kpff.com

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER

ALDRIN J. ORUE
S4399

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

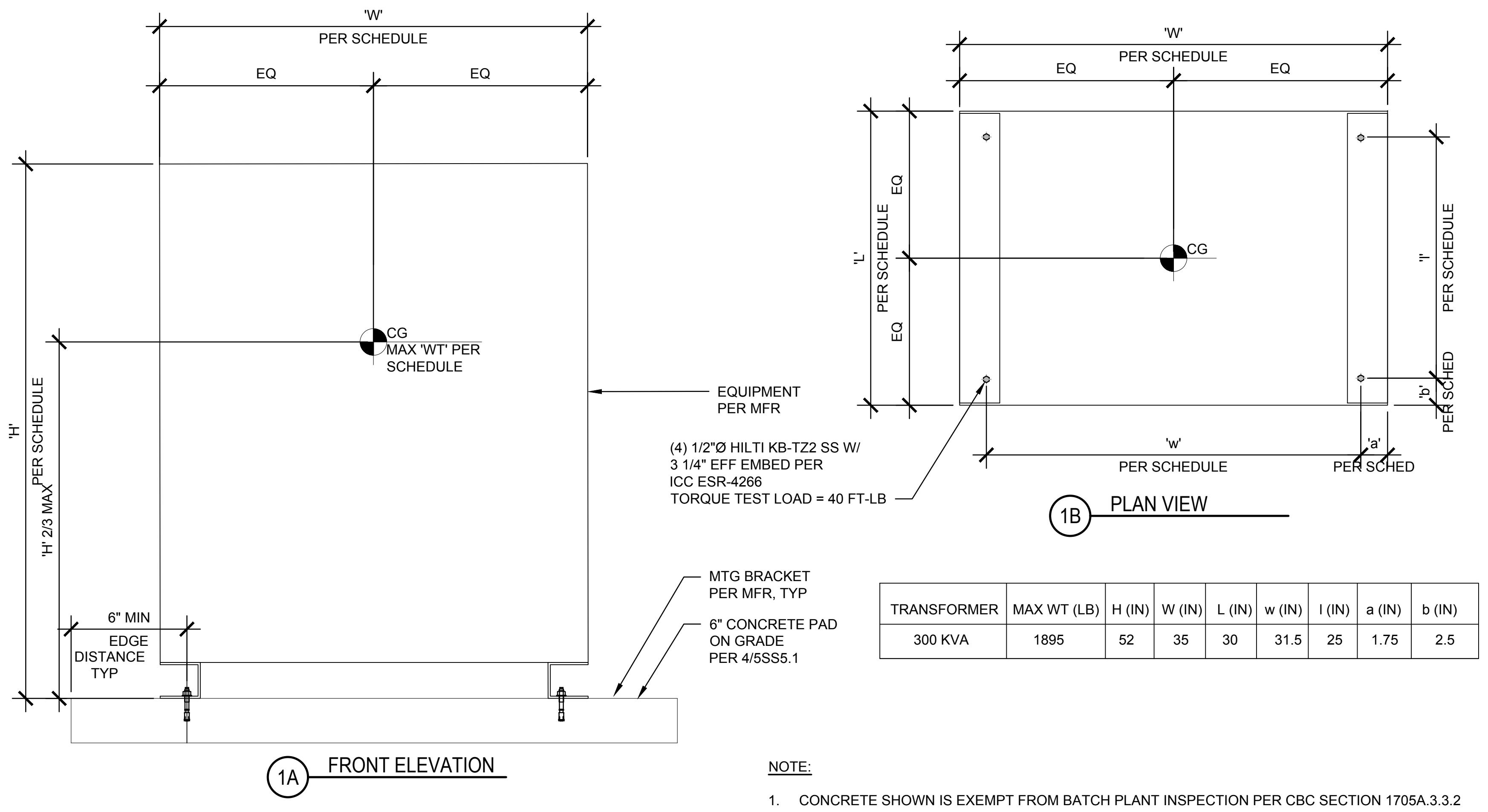
DRAWING TITLE

EQUIIPMENT ANCHORAGE DETAILS

5SS6.0

SCALE As indicated

PLOT DATE 7/31/2024 10:13:04 AM


'W'
PER SCHEDULE
EQ
EQ
'H'
PER SCHEDULE
'H' 2/3 MAX
CG
MAX 'WT' PER SCHEDULE
EQUIPMENT PER MFR
6" MIN
EDGE DISTANCE TYP
MTG BRACKET PER MFR, TYP
6" CONCRETE PAD ON GRADE PER 4/5SS5.1
1A
FRONT ELEVATION
(4) 1/2"Ø HILTI KB-TZ2 SS W/ 3 1/4" EFF EMBED PER ICC ESR-4266 TORQUE TEST LOAD = 40 FT-LB
'W'
PER SCHEDULE
EQ
EQ
'L'
PER SCHEDULE
EQ
EQ
CG
'l'
PER SCHEDULE
'b'
PER SCHED
'w'
PER SCHEDULE
'a'
PER SCHED
1B
PLAN VIEW

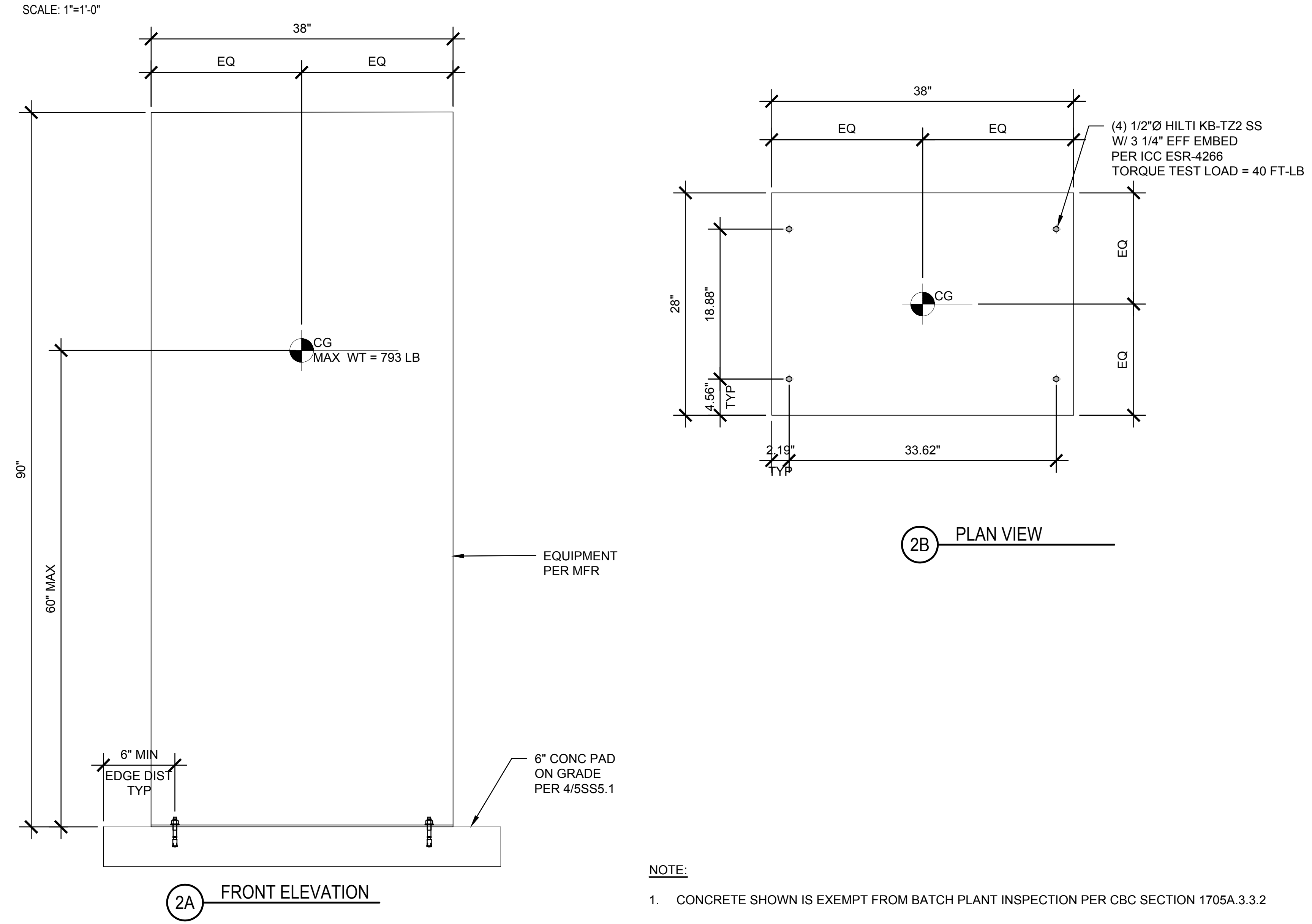
TRANSFORMER	MAX WT (LB)	H (IN)	W (IN)	L (IN)	w (IN)	l (IN)	a (IN)	b (IN)
300 KVA	1895	52	35	30	31.5	25	1.75	2.5

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

1 TRANSFORMER

SCALE: 1"=1'-0"

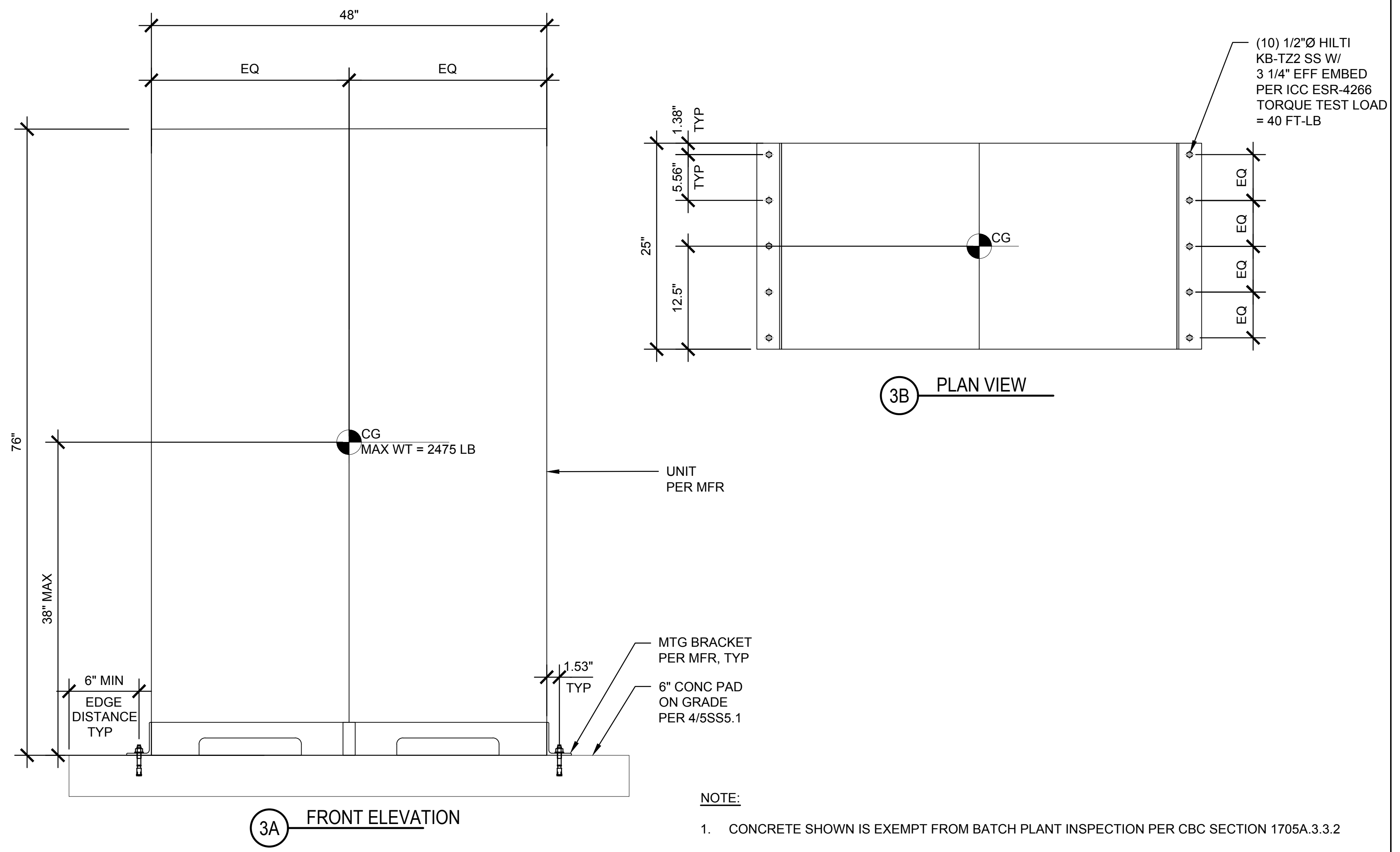

38"
EQ
EQ
90"
60" MAX
CG
MAX WT = 793 LB
EQUIPMENT PER MFR
6" MIN
EDGE DIST TYP
6" CONC PAD ON GRADE PER 4/5SS5.1
2A
FRONT ELEVATION
38"
EQ
EQ
(4) 1/2"Ø HILTI KB-TZ2 SS W/ 3 1/4" EFF EMBED PER ICC ESR-4266 TORQUE TEST LOAD = 40 FT-LB
28"
18.88"
4.56" TYP
CG
EQ
EQ
2.19" TYP
33.62"
2B
PLAN VIEW

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

2 SWITCHBOARD

SCALE: 1"=1'-0"


48"
EQ
EQ
76"
38" MAX
CG
MAX WT = 2475 LB
UNIT PER MFR
6" MIN
EDGE DISTANCE TYP
1.53" TYP
MTG BRACKET PER MFR, TYP
6" CONC PAD ON GRADE PER 4/5SS5.1
3A
FRONT ELEVATION
(10) 1/2"Ø HILTI KB-TZ2 SS W/ 3 1/4" EFF EMBED PER ICC ESR-4266 TORQUE TEST LOAD = 40 FT-LB
1.38" TYP
5.56" TYP
25"
12.5"
CG
EQ
EQ
EQ
EQ
3B
PLAN VIEW

NOTE:

1. CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2

3 INVERTER

SCALE: 1"=1'-0"

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#	REVISION DATE	DESCRIPTION

DRAWING TITLE

EQUIIPMENT
ANCHORAGE
DETAILS

5SS6.1

SCALE As indicated

PLOT DATE 7/31/2024 10:13:04 AM

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Plotted: 3/17/26 at 9:05am By: krose
XREFs: 2100853 – xref – titleblock – 30x42–pkg5.dwg

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GENERAL CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS TO EXAMINE AND PREPARE THE TOTAL SCOPE OF WORK AND ALL REQUIRED COORDINATION.
2. THE CONTRACTOR SHALL VERIFY THE LIMIT OF THE SCOPE AREA PRIOR TO CONSTRUCTION.
3. ALL CONSTRUCTION AND INSTALLATION OF PROPOSED LANDSCAPE ITEMS SHALL BE PER LOCAL AND GOVERNING CODES AND ORDINANCES.
4. ALL QUANTITIES SHALL BE VERIFIED BY THE CONTRACTOR. IN CASE OF DISCREPANCIES, GRAPHICALLY SHOWN MATERIAL QUANTITIES SHALL TAKE PRECEDENCE. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARITY WITH ALL EXISTING UNDERGROUND UTILITIES, PIPES, AND STRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR STAKING ALL EXISTING SEWER, UTILITY, AND WATER MAIN LINES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR COST INCURRED DUE TO DAMAGES AND REPLACEMENT OF SAID UTILITIES.
6. THE LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE UTILITIES OR STRUCTURES, INCLUDING ALL PRIVATE & PUBLIC UTILITY EASEMENTS, SHOWN AND NOT SHOWN ON THE DRAWINGS. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING OVER OR NEAR EXISTING GAS MAINS AND ELECTRICAL LINES, AND UTILITY EASEMENTS. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES, ABOVE AND BELOW GRADE PRIOR TO EXCAVATION AND TRENCHING.
7. CONTRACTOR SHALL REVIEW EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AND / OR REGRADING WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS EXIST THAT MAY HAVE NOT BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE.
8. SPOT ELEVATIONS AND GRADES SHOWN ON THE DRAWINGS ARE BASED ON SURVEY INFORMATION AND ARE FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS FOR FINISH GRADES AND SPOT ELEVATIONS. CONTRACTOR SHALL VERIFY EXISTING GRADES IN THE FIELD AND REPORT DISCREPANCIES TO OWNER'S AUTHORIZED REPRESENTATIVE AND NOTIFY THE CIVIL ENGINEER AND LANDSCAPE ARCHITECT PRIOR TO ANY GRADING AND CONSTRUCTION.
9. ARCHITECTURAL ELEMENTS AND SITE UTILITIES ARE SHOWN ON LANDSCAPE PLANS FOR REFERENCE ONLY. REFER TO ARCHITECTURAL AND ENGINEERING DRAWINGS FOR ACTUAL ARCHITECTURAL AND UTILITY INFORMATION. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR SHALL PROTECT ALL EXISTING TREES TO REMAIN DURING CONSTRUCTION. SEE TREE PROTECTION DRAWINGS, NOTES AND SPECIFICATIONS.
11. OFFSETS, FITTINGS, SLEEVES, ETC.; DUE TO THE SCALE OF DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL WHICH MAY BE REQUIRED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL OF THIS WORK AND PLAN THIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO MEET SUCH CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE INSTALLED. THE WORK SHALL BE INSTALLED IN SUCH A MANNER AS TO AVOID CONFLICTS BETWEEN IRRIGATION SYSTEMS, SITE STRUCTURAL DESIGN SUCH AS WALLS AND FOOTINGS, WATER FEATURE MECHANICAL SYSTEMS, PLANTING AND ARCHITECTURAL FEATURES.
12. THE LOCATION OF FEATURES TO BE CONSTRUCTED NOT SPECIFICALLY DIMENSIONED SHOULD BE FIELD VERIFIED BY THE CONTRACTOR AND REVIEWED BY THE LANDSCAPE ARCHITECT IN SHOP DRAWINGS.
13. REQUIRED SHOP DRAWINGS SHALL BE BASED ON FIELD MEASUREMENT AND LAYOUT VERIFICATION BY THE CONTRACTOR.
14. ANY AREA DISTURBED OUTSIDE THE LIMIT OF WORK SHALL BE RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.

SOIL PREPARATION AND FINE GRADING NOTES

1. SITE DRAINAGE AND SITE DEVICES INCLUDING ALL ON GRADE SLABS, WALKWAYS, ALL PLANTING AREAS, ON GRADE PAVED SURFACES ARE BY CIVIL ENGINEER. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR ALL SITE DRAINAGE. SEE CIVIL DRAWINGS FOR OVERALL DRAINAGE STRATEGY AND RIM ELEVATIONS OF ALL DRAINAGE AND SEWER STRUCTURES.
2. REFER TO CIVIL ENGINEER'S DRAWINGS FOR GRADING AND DRAINAGE INFORMATION AND OTHER RELATED NON-LANDSCAPE WORK. VERIFY ON-SITE AND REPORT DISCREPANCIES TO THE LANDSCAPE ARCHITECT BEFORE START OF ANY WORK ON THIS CONTRACT.
3. THE CONTRACTOR MUST MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS, STRUCTURES, AND WALLS. FINISHED GRADES SHALL BE SMOOTHED TO ELIMINATE PONDING OR STANDING WATER. REFER TO CIVIL AND ARCHITECTURAL DRAWINGS. ALL WALKWAYS AND HARDSCAPE AREAS MUST HAVE POSITIVE DRAINAGE.
4. VERIFY EXISTING GRADES IN THE FIELD AND REPORT ANY DISCREPANCIES BETWEEN THE EXISTING AND PROPOSED CONDITION TO THE LANDSCAPE ARCHITECT.
5. PITCH EVENLY BETWEEN ELEVATIONS ENSURING POSITIVE DRAINAGE THROUGHOUT SPACE. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT PRIOR TO CONTINUING WORK.
6. WHERE NEW PAVING OR EARTHWORK MEETS EXISTING PAVING OR EARTHWORK, SMOOTHLY BLEND LINE AND GRADE OF EXISTING WITH NEW.
7. SOIL PREPARATION PER SPECIFICATIONS IS REQUIRED IN ALL PLANTING AREAS.
8. SUFFICIENT PLANTING AREA DRAINAGE, COMPACTION AND PERCOLATION SHALL BE ESTABLISHED BY THE GENERAL CONTRACTOR. UNLESS OTHERWISE NOTED IN THE CIVIL DRAWINGS, THE GENERAL CONTRACTOR IS RESPONSIBLE FORE REVIEWING PREPARED AND INSTALLED SITE SOILS AND SUBGRADE BASED ON THE GEOTECHNICAL ENGINEER'S REPORT AND SPECIFICATIONS. THE GENERAL CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IF THE COMPACTION IN PLANTING AREAS EXCEEDS WHICH IS SPECIFIED.
9. FINAL GRADING SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT AND CIVIL ENGINEER IN THE FIELD AFTER SOIL PREPARATION AND PRIOR TO PLANTING. ALL PLANTING AREAS SHALL BE GRADED TO THE ELEVATIONS INDICATED ON THE CIVIL ENGINEER'S PLANS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
10. ANY AREA DISTURBED OUTSIDE THE LIMIT OF WORK SHALL BE RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

SHEET INDEX

SHEET NUMBER	SHEET TITLE
5L0.00	CONSTRUCTION NOTES AND SCHEDULE
5L0.01	TREE PROTECTION AND TREE REMOVAL PLAN
5L0.02	LANDSCAPE REFERENCE PLAN
5L1.01	CONSTRUCTION PLAN
5L1.02	CONSTRUCTION PLAN
5L1.51	WALLS, CURBS AND EDGING PLAN
5L1.52	WALLS, CURBS AND EDGING PLAN
5L2.01	CONSTRUCTION DETAILS
5L2.02	CONSTRUCTION DETAILS
5L2.03	CONSTRUCTION DETAILS
5L2.04	CONSTRUCTION DETAILS
5L2.50	SITE SECTIONS AND ELEVATIONS
5L2.51	SITE SECTIONS
5L2.52	SITE SECTIONS
5L4.00	MASTER IRRIGATION LEGEND, NOTES AND CALCS
5L4.01	OVERALL IRRIGATION PLAN
5L4.02	IRRIGATION PLAN
5L4.03	IRRIGATION PLAN
5L4.10	IRRIGATION DETAILS
5L4.11	IRRIGATION DETAILS
5L4.51	LANDSCAPE HYDROZONE PLAN
5L5.00	PLANTING NOTES AND SCHEDULE
5L5.01	PLANTING PLAN
5L5.02	PLANTING PLAN
5L5.20	PLANTING DETAILS

REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	DETAIL	MANUFACTURER	MATERIALS	FINISH	COLOR	REMARKS
Edging								
▬	E-101	CONCRETE MOW CURB	4/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
▬	E-102	RAISED CONCRETE CURB	4/5C5.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
SYMBOL	CODE	DESCRIPTION	DETAIL	MANUFACTURER	MATERIAL	FINISH	COLOR	REMARKS
Paving								
▨	P-101	C.I.P. CONCRETE TYPE A - PEDESTRIAN	2/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	GC TO PROVIDE 4` X 4` MOCKUPS AT THE SITE FOR REVIEW & APPROVAL PRIOR TO CONSTRUCTION
▨	P-102	C.I.P. CONCRETE TYPE A - VEHICULAR	2/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	GC TO PROVIDE 4` X 4` MOCKUPS AT THE SITE FOR REVIEW & APPROVAL PRIOR TO CONSTRUCTION
▨	P-103	C.I.P. CONCRETE TYPE B - PEDESTRIAN	2/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #100	DARK GRAY	GC TO PROVIDE 4` X 4` MOCKUPS AT THE SITE FOR REVIEW & APPROVAL PRIOR TO CONSTRUCTION
▨	P-104	C.I.P. CONCRETE TYPE B - VEHICULAR	2/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #100	DARK GRAY	GC TO PROVIDE 4` X 4` MOCKUPS AT THE SITE FOR REVIEW & APPROVAL PRIOR TO CONSTRUCTION
▨	P-105	C.I.P. CONCRETE TYPE C - PEDESTRIAN	2/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	MEDIUM BROOM FINISH	NATURAL GRAY	GC TO PROVIDE 4` X 4` MOCKUPS AT THE SITE FOR REVIEW & APPROVAL PRIOR TO CONSTRUCTION
▨	P-106	PAVER TYPE 1	3/5L2.01	GLEN-GERY 310-326-5160	CLAY BRICK PAVER	-	LIBERTY COPPER	4" X 8" X 2-1/4"
▨	P-107	PAVER TYPE 2	3/5L2.01	GLEN-GERY 310-326-5160	CLAY BRICK PAVER	-	PLUM PLAZA	4" X 8" X 2-1/4"
▨	P-108	PAVER TYPE 3	3/5L2.01	GLEN-GERY 310-326-5160	CLAY BRICK PAVER	-	EMPIRE BLUE	4" X 8" X 2-1/4"
▨	P-109	PAVER TYPE 4	3/5L2.01	GLEN-GERY 310-326-5160	CLAY BRICK PAVER	-	FULL RANGE 2IN1	4" X 8" X 2-1/4"
▨	P-110	CONCRETE RAMP WITH HANDRAIL	6/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
▨	P-111	CONCRETE AT MAINTENANCE STRIP	2/5L2.01	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
Wall								
▭	W-101	CHEEK WALL 6" WIDE	2/5L2.03	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
▭	W-102	CHEEK WALL 8" WIDE	2/5L2.03	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOP CAST #05	NATURAL GRAY	-
▬	W-103	RETAINING WALL	3/5L2.03	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	SMOOTH	NATURAL GRAY	-
▬	W-104	SEAT WALL	1/5L2.02	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
▬	W-105	TIERED SEAT WALL	2/5L2.02	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
▨	W-106	TERRACED WALL	1/5L2.04	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	-
▬	W-107	RAISED PLANTER WALL	3/5L2.02	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	SMOOTH	NATURAL GRAY	-
▭	W-108	CONCRETE STAIRS	1/5L2.03	TRADEMARK 805-642-2441 OR EQUAL	C.I.P. CONCRETE	TOPCAST #05	NATURAL GRAY	GC TO PROVIDE MOCKUP SAMPLE AT THE SITE FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION

SOD	NATURAL GRASS AREA, SEE PLANTING PLAN FOR DETAILS & LAYOUT
P.A.	GENERAL PLANTING AREA; SEE PLANTING PLAN FOR DETAILS & LAYOUT

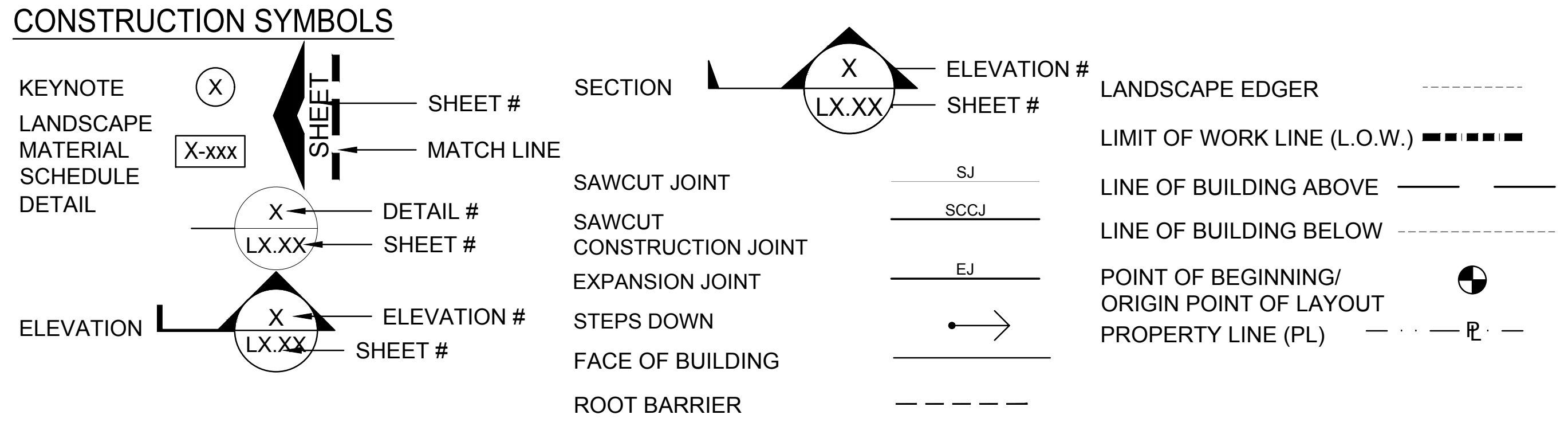
REFERENCE NOTES SCHEDULE

CODE	DESCRIPTION
1	(E) RAMP AND HANDRAIL. PROTECT IN PLACE.
2	(E) CIP CONCRETE WALL. PROTECT IN PLACE.
3	(E) CANOPY. PROTECT IN PLACE.
4	(N) LUNCH SHELTER, SEE ARCH DRAWINGS
5	BUILDING OVERHANG, SEE ARCH DRAWINGS
6	CONDENSOR, SEE MEP DWGS
7	UTILITIES PER CIVIL
8	FENCE/ GATE PER ARCH DWGS
9	VENT, SEE ARCH DWGS
10	FIRE LANE
11	(E) WALL. PROTECT IN PLACE.
12	FIRE HYDRANT, SEE CIVIL DWGS
13	LIGHTING PER ELECTRICAL, SEE LIGHTING DWGS
14	(E) WALL REPLACE IN KIND
15	TERRACE WALL, SEE ARCH DWGS

ABBREVIATIONS

AC.	ASPHALTIC CONCRETE	INT.	INTERIOR	GR.	GRADE	SC	SAW CUT JOINT	DIM.	DIMENSION
⌒	ALIGN	L.A.	LANDSCAPE ARCHITECT	HORIZ.	HORIZONTAL	SHT.	SHEET	D.L.	DRAIN LINE
ARCH.	ARCHITECT(URAL)	L.O.W	LIMIT OF WORK	T.C.	TOP OF CURB	SIM.	SIMILAR	DN	DOWN
AUTO.	AUTOMATIC	M	MULTI-TRUNKED	T.COP.	TOP OF COPING	SPEC.	SPECIFICATION	D.S.	DOWN SPOUT
BLDG.	BUILDING	MAX.	MAXIMUM	T.F.	TOP OF FENCE	S.L.	SCORE LINE	DWG.	DRAWING
B.O.C.	BACK OF CURB	MIN.	MINIMUM	T.O.F.	TOP OF FOOTING	SQ.	SQUARE	EA.	EACH
B.S.	BOTTOM OF STEP	F.F.	FINISH FLOOR	T.G.	TOP OF GRATE	STD.	STANDARD	E.J.	EXPANSION JOINT
B.R.	BOTTOM OF RAMP	F.G.	FINISH GRADE	THK.	THICK(NESS)	T.	TURF	ELEV.	ELEVATION
B.W.	BOTTOM OF WALL	FIN.	FINISH (ED)	T.P.	TOP OF PILASTER	TYP	TYPICAL	EQ.	EQUAL
C.B.	CATCH BASIN	F.J.	FOUNTAIN JET	T.S.	TOP OF STEP	MED.	MEDIUM	EXT.	EXTERIOR
C.I.	CAST IRON	F.L.	FLOW LINE	T.R.	TOP OF RAMP	MFR.	MANUFACTURER	(E)	EXISTING
C.I.P.	CAST IN PLACE	F.O.B.	FACE OF BUILDING	T.W.	TOP OF WALL	MISC.	MISCELLANEOUS	TYP.	TYPICAL
C.J.	CONTROL JOINT	F.O.C.	FACE OF CURB	P.A.	PLANTING AREA	NAT.	NATURAL	W/	WITH
C.L.	CENTERLINE	F.O.W.	FACE OF WALL	P.L.	PROPERTY LINE	N.I.C.	NOT IN CONTRACT	W/O	WITHOUT
CLR.	CLEAR	F.S.	FINISH SURFACE	P.O.B.	POINT OF BEGINNING	N.T.S.	NOT TO SCALE	WD.	WOOD
COL.	COLUMN	FT.	FOOT OR FEET	P.O.C.	POINT OF CURVATURE	O.C.	ON CENTER	W.I.	WROUGHT IRON
CONC.	CONCRETE	FTG.	FOOTING	P.O.T.	POINT OF TANGENCY	O.D.	OUTSIDE DIAMETER	W.W.M.	WELDED WIRE MESH
CONT.	CONTINUOUS	GA.	GAUGE	PREFAB.	PREFABRICATED	DBL.	DOUBLE	W.S.	WATER SURFACE
H.P.	HIGH POINT	GAL.	GALLON	R./RAD.	RADIUS	DET.	DETAIL		
HT.	HEIGHT	GALV.	GALVANIZED	REF.	REFERENCE	DIA.	DIAMETER		
I.D.	INSIDE DIAMETER	G.C.	GROUNDCOVER	REV.	REVISION	DIAG.	DIAGONAL		
INV.	INVERT								

CONSTRUCTION SYMBOLS



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HONGJOO KIM NO. 5087
Signature
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

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07/05/2024	50% DESIGN DEVELOPMENT
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03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

CONSTRUCTION NOTES AND SCHEDULE

5L0.00

SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

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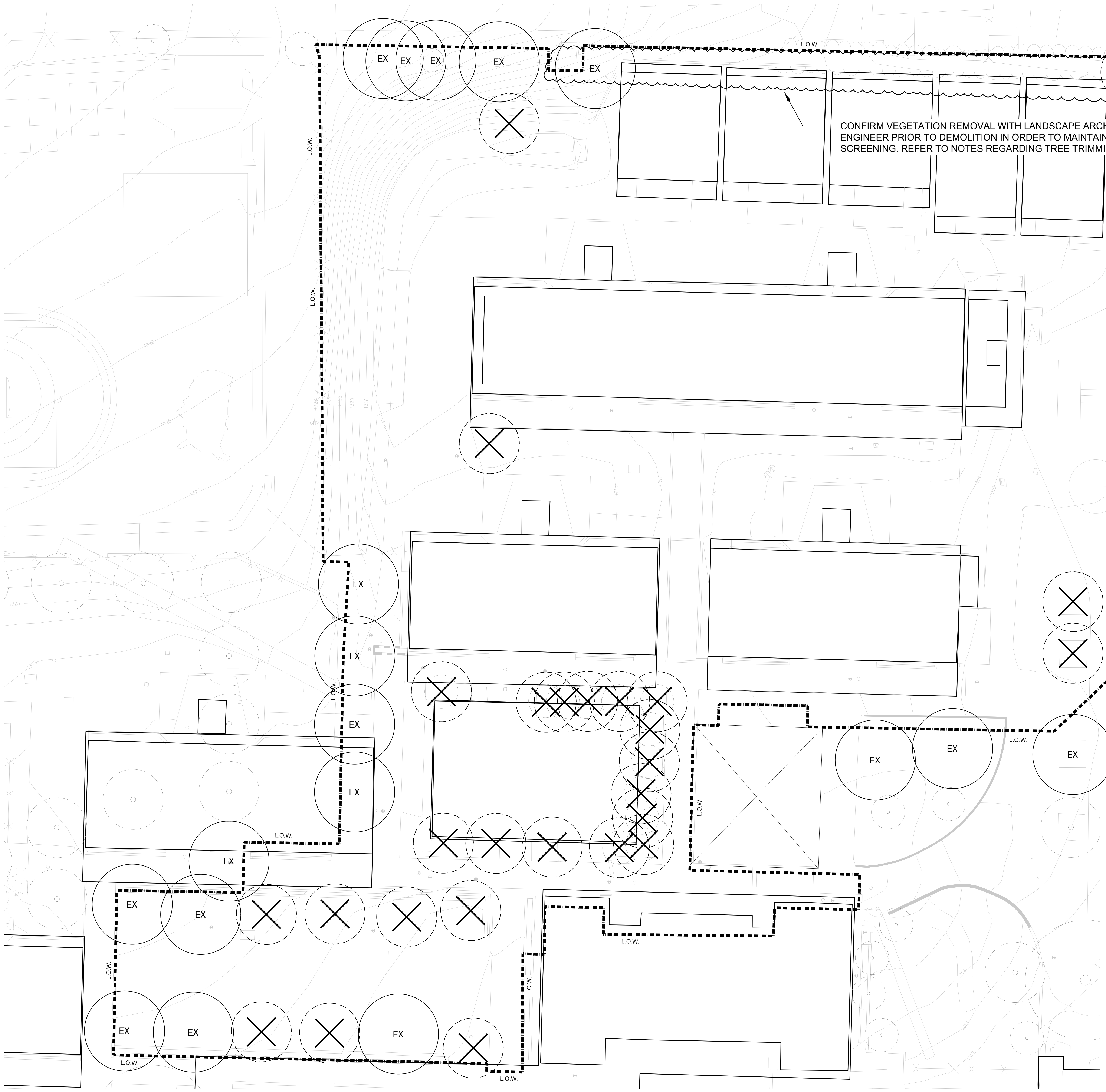
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CONFIRM VEGETATION REMOVAL WITH LANDSCAPE ARCHITECT AND CIVIL ENGINEER PRIOR TO DEMOLITION IN ORDER TO MAINTAIN SUFFICIENT SCREENING. REFER TO NOTES REGARDING TREE TRIMMING.
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0 8 16 32

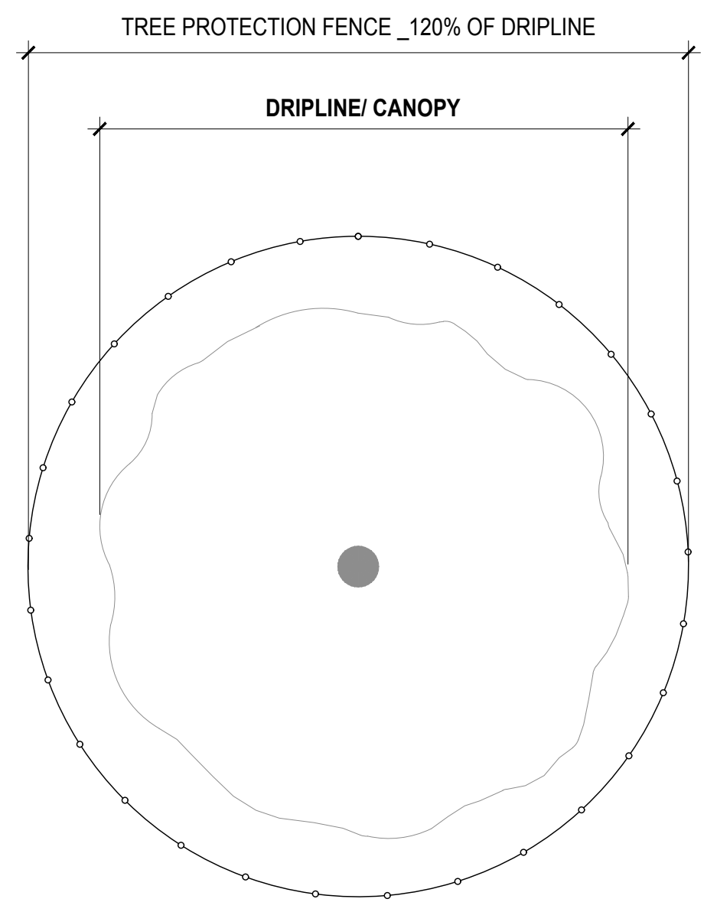
TREE PROTECTION AND TREE REMOVAL PLAN | 1/16" = 1'-0" | 1

NORTH

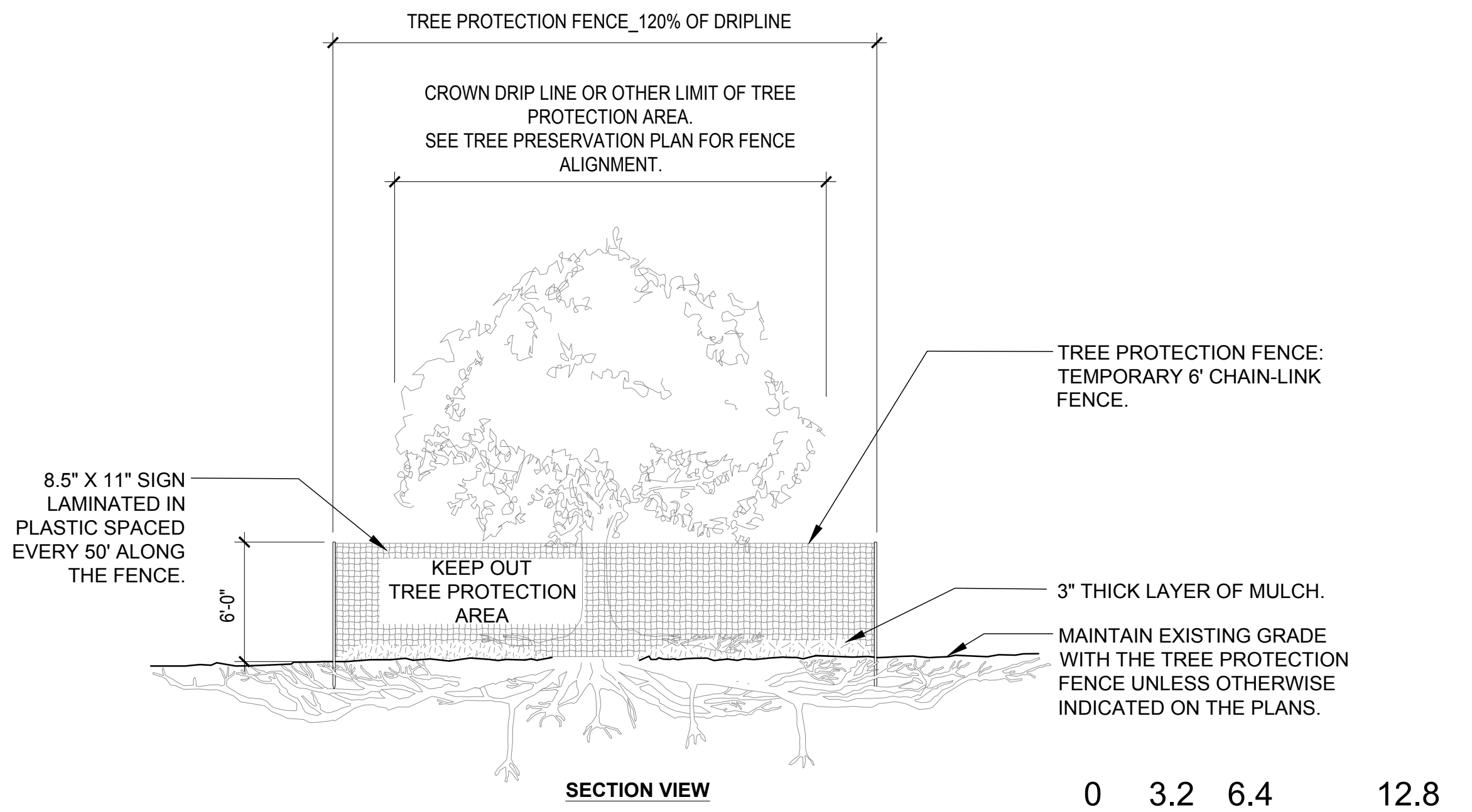
NOTE: THE CHAIN LINK FENCE DETAIL SHOWN ON THIS SHEET IS EXEMPT FORM DSA STRUCTURAL SAFETY REVIEW AND IS NOT A PART OF THE STRUCTURAL SAFETY APPROVAL PER DSA IR A-22.

LEGEND:

⊗	TREE TO BE REMOVED
EX	TREE TO BE PROTECTED, SEE TREE PROTECTION FENCE DETAIL 2/5L0.01
◌	TREE NOT IN PACKAGE 5



PLAN VIEW


TREE PROTECTION FENCE_120% OF DRIPLINE
CROWN DRIP LINE OR OTHER LIMIT OF TREE PROTECTION AREA.
SEE TREE PRESERVATION PLAN FOR FENCE ALIGNMENT.
TREE PROTECTION FENCE: TEMPORARY 6' CHAIN-LINK FENCE.
8.5" X 11" SIGN LAMINATED IN PLASTIC SPACED EVERY 50' ALONG THE FENCE.
KEEP OUT TREE PROTECTION AREA
6'-0"
3" THICK LAYER OF MULCH.
MAINTAIN EXISTING GRADE WITH THE TREE PROTECTION FENCE UNLESS OTHERWISE INDICATED ON THE PLANS.

SECTION VIEW

0 3.2 6.4 12.8

TREE PROTECTION FENCE | 3/16" = 1'-0" | 2

TREE PROTECTION NOTES

1. REFER TO THE CIVIL ENGINEER'S DEMOLITION PLAN FOR ALL OTHER SITE DEMOLITION.
2. MAXIMUM EFFORT MUST BE MADE TO RETAIN EXISTING TREES ON SITE. SEE TREE PROTECTION SPECIFICATIONS AND/OR DETAILS.
3. ALL EXISTING TREES NOT INDICATED FOR REMOVAL MUST BE PROTECTED ON SITE DURING CONSTRUCTION.
4. INSTALL TEMPORARY MINIMUM 6' HEIGHT CHAIN-LINK FENCING AT DRIP LINE OF TREES TO PROTECT PRIOR TO DEMOLITION. ADD 3-INCH MULCH PROTECTION LAYER TO RETAIN MOISTURE. REFER TO SPECIFICATIONS AND DETAILS FOR ADDITIONAL TREE PROTECTION.
5. THE PROTECTION ZONE SHOULD BE IRRIGATED SUFFICIENTLY WITH CLEAN POTABLE WATER TO KEEP THE TREE IN GOOD HEALTH AND VIGOR BEFORE, DURING, AND AFTER CONSTRUCTION.
6. CUTTING THROUGH WOODY ROOTS SHALL NOT BE ALLOWED.
7. TRENCHING, DIGGING AND GRADING (BOTH EXCAVATION AND FILL) IS TO TAKE PLACE OUTSIDE THE DRIP ZONE OF TREES TO REMAIN.
8. ANY REQUIRED TRENCHING SHOULD BE ROUTED IN SUCH A MANNER AS TO MINIMIZE ROOT DAMAGE. RADIAL TRENCHING (RADIAL TO THE TREE TRUCK) IS PREFERRED AS IT IS LESS HARMFUL THAN TANGENTIAL TRENCHING. CONSTRUCTION ACTIVITY SHOULD BE DIVERTED FROM THE ROOT PROTECTION ZONE. CUTTING OF ROOTS SHOULD BE AVOIDED (I.E. PLACE PIPES AND CABLES BELOW UNCUT ROOTS). WHEREVER POSSIBLE AND IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS, THE SAME TRENCH SHOULD BE USED FOR MULTIPLE UTILITIES.
9. THE CONDITION OF EXISTING TREES TO REMAIN IS TO BE REVIEWED BY THE LANDSCAPE ARCHITECT VIA PHOTO DOCUMENTATION SUBMITTED BY THE CONTRACTOR PRIOR TO DEMOLITION OR CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT AT LEAST ONE WEEK PRIOR TO BEGINNING THE WORK.
10. THE LOCATION OF TREE PROTECTION FENCE, IS TO BE REVIEWED BY LANDSCAPE ARCHITECT VIA PHOTO DOCUMENTATION SUBMITTED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. NOTIFY LANDSCAPE ARCHITECT AT LEAST ONE WEEK PRIOR TO BEGINNING THE WORK.
11. NO CONSTRUCTION STAGING OR DISPOSAL OF CONSTRUCTION MATERIALS OR BYPRODUCTS INCLUDING BUT NOT LIMITED TO PAINT, PLASTER, OR CHEMICAL SOLUTIONS IS ALLOWED IN THE ROOT PROTECTION ZONE.
12. THE ROOT PROTECTION ZONE SHOULD NOT BE SUBJECTED TO FLOODING INCIDENTAL TO THE CONSTRUCTION WORK.
13. ALL WORK CONDUCTED IN THE GROUND WITHIN THE ROOT PROTECTION ZONE OF ANY PROTECTED TREE SHOULD BE ACCOMPLISHED WITH HAND TOOLS UNLESS AN AIR SPADE IS UTILIZED. TRENCHES IN THE ROOT PROTECTION ZONE SHOULD BE TUNNELED OR COMPLETED WITH AN AIR SPADE TO AVOID DAMAGE TO SMALL FEEDER ROOTS WITHIN THE ROOT PROTECTION ZONE.
14. WHERE MORE THAN 30 PERCENT OF THE ROOT ZONE IS IMPACTED OR ROOTS ARE TO BE REMOVED WITHIN THE ROOT PROTECTION AREA, THE CONTRACTOR SHALL SUBMIT ACCEPTABLE DESIGN ALTERNATIVES AS WELL AS A TREE PROTECTION PLAN BY A CERTIFIED THIRD-PARTY ARBORIST TO THE LANDSCAPE ARCHITECT FOR REVIEW.
15. WHEN ROOTS IN PROTECTION ZONE ARE TO BE MODIFIED, NOTIFY THE LANDSCAPE ARCHITECT AND SUBMIT A REVIEW BY A CERTIFIED THIRD-PARTY ARBORIST.
16. WHEN REMOVING EXISTING PAVEMENT IN THE ROOT PROTECTION ZONE, AVOID THE USE OF HEAVY EQUIPMENT, WHICH WILL COMPACT AND DAMAGE THE ROOT SYSTEM.
17. THE CONTRACTOR SHALL INFORM THE LANDSCAPE ARCHITECT OF ADDITIONAL TREE PROTECTION REQUIRED FOR ANY CONSTRUCTION STAGING OR ADDITIONAL CONSTRUCTION ACTIVITIES IDENTIFIED OUTSIDE OF THE AREAS SHOWN ON THE CONTRACT DRAWINGS.
18. THE GENERAL CONTRACTOR TO COORDINATE WITH THE LANDSCAPE ARCHITECT TO ATTEND THE PRE-COPNSTRUCTION MEETING WITH THE CONTRACTOR TO DISCUSS TREE PROTECTION PROCEDURES WITH THE SITE MANAGER.
19. CONTRACTOR SHALL ENGAGE A THIRD PARTY OR INDEPENDENT CERTIFIED ARBORIST TO EVALUATE / PROVIDE HAZARD ANALYSIS OF PROTECTED TREES AND THOSE IMMEDIATELY ADJACENT TO CONSTRUCTION AS REQUESTED BY THE LANDSCAPE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER. ANALYSIS MAY BE REQUESTED AT ANY POINT DURING CONSTRUCTION AND/OR IMMEDIATELY AFTER FINAL COMPLETION.
20. WHEN A TREE PROTECTION DEFICIENCY, AS DETERMINED BY THE LANDSCAPE ARCHITECT, IS IDENTIFIED, IT MUST BE REMEDIED WITHIN 24-HOURS OF NOTIFICATION.
21. TREES DESTROYED OR DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE ASSESSED BY AN ARBORIST REPRESENTING THE OWNER AT THE CONTRACTOR'S EXPENSE USING THE CURRENT GUIDE FOR PLANT APPRAISAL FROM THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS (CTLA) OR OTHER METHOD APPROVED BY THE LANDSCAPE ARCHITECT.
22. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND/OR REMEDY OF EXISTING TREES DAMAGED DURING CONSTRUCTION. DAMAGE INCLUDES, BUT IS NOT LIMITED TO, AESTHETIC DAMAGE TO THE CROWN OF THE TREE, DAMAGE TO BRANCHES, DAMAGE TO THE TRUNK, DAMAGE TO ROOTS LARGER THAN 1" IN DIAMETER, DAMAGE TO ROOTS FROM SOIL COMPACTION WITHIN THE TREE PROTECTION ZONE OR DRIPLINE OF THE TREE CANOPY.
23. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT A MINIMUM OF 48 HOURS IN ADVANCE OF ANY WORK ON OR IMPACTING EXISTING TREES, INCLUDING BUT NOT LIMITED TO TREE PROTECTION, PRUNING, TREE REMOVAL, EXCAVATIONS, DECOMPACTION, TOPSOIL, AND PLANTING WORK WITHIN THE TREE PROTECTION ZONES.
24. TREE PROTECTION FENCING MAY REQUIRE ADJUSTMENTS AS WORK PROGRESSES IN ORDER TO COMPLETE THE WORK SHOWN ON THE PLANS. ADJUSTMENTS TO TREE PROTECTION FENCING SHALL BE MADE BY REVISED TREE PROTECTION PLAN INDICATING PROPOSED CHANGES. PLANS SHALL BE REVIEWED AND APPROVED BY OWNER/ARBORIST AND SUBMITTED TO LANDSCAPE ARCHITECT FOR FINAL APPROVAL. TREE PROTECTION SHALL NOT BE REMOVED OR RELOCATED WITHOUT WRITTEN APPROVAL.
25. ALL EXISTING CONDITIONS INCLUDING, BUT NOT LIMITED TO, LANDSCAPES, LAWNS AND PLANTS TO REMAIN THAT ARE DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHOULD BE REPAIRED OR REPLACED IN KIND.

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HKLA

LICENSED LANDSCAPE ARCHITECT
HONGJOO KIM NO. 5087
Signature
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

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NO. C-014869
REN. 05-31-27

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03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

TREE PROTECTION AND TREE REMOVAL PLAN

5L0.01

SCALE: AS INDICATED

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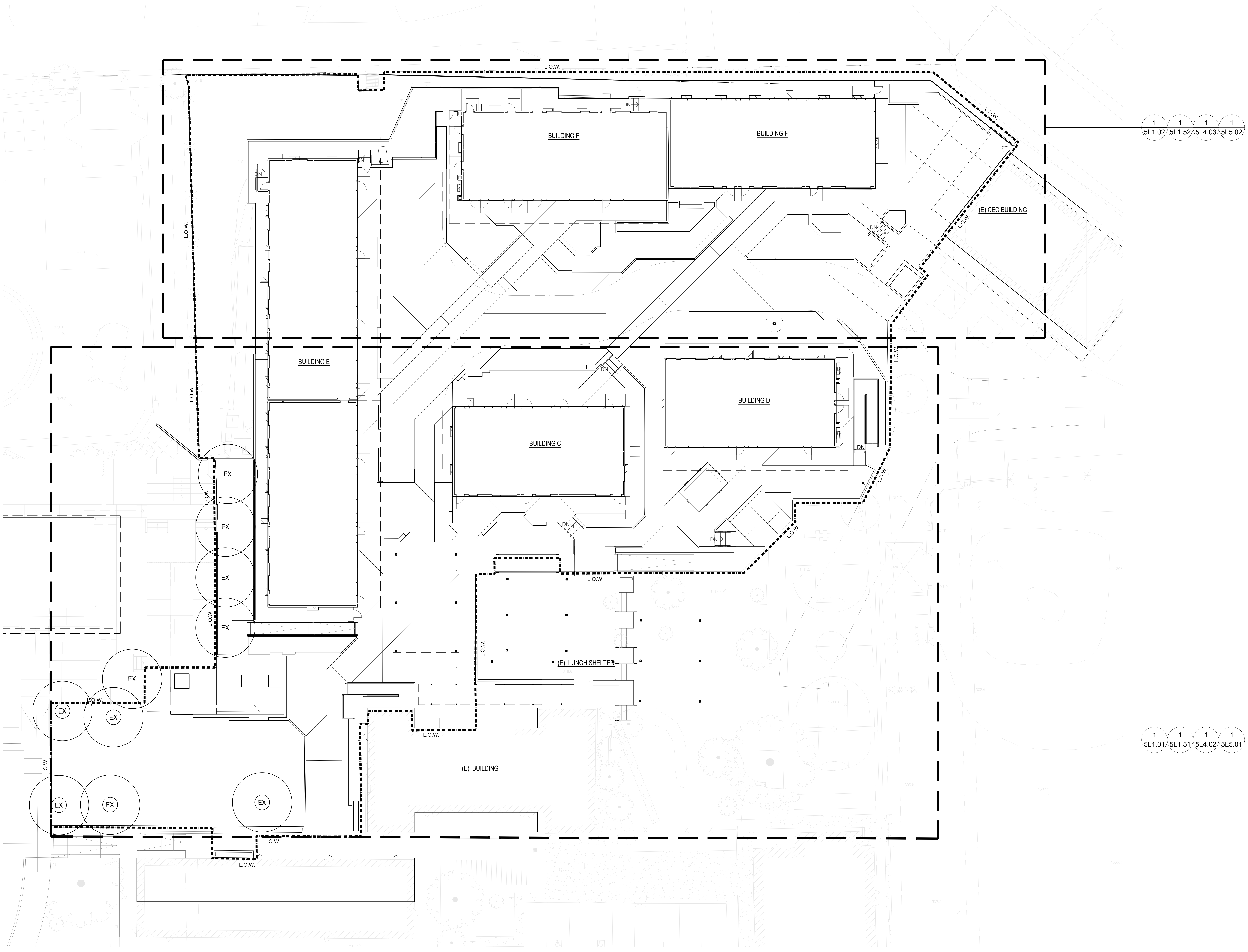
L.O.W.
BUILDING F
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LANDSCAPE REFERENCE PLAN 1/16" = 1'-0" 1

NORTH

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03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

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LANDSCAPE
REFERENCE
PLAN

5L0.02

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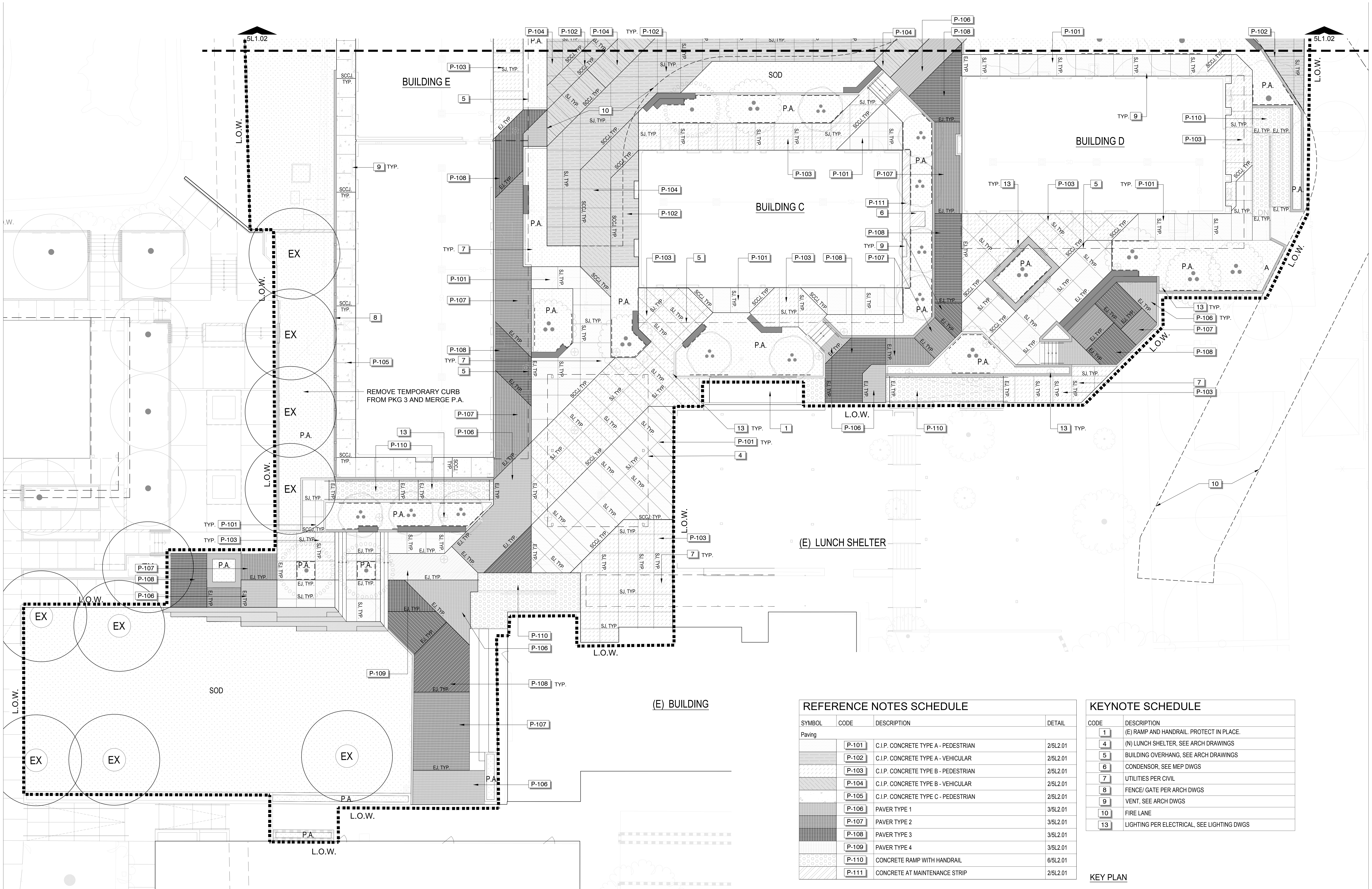


REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	DETAIL
Paving			
	P-101	C.I.P. CONCRETE TYPE A - PEDESTRIAN	2/5L2.01
	P-102	C.I.P. CONCRETE TYPE A - VEHICULAR	2/5L2.01
	P-103	C.I.P. CONCRETE TYPE B - PEDESTRIAN	2/5L2.01
	P-104	C.I.P. CONCRETE TYPE B - VEHICULAR	2/5L2.01
	P-105	C.I.P. CONCRETE TYPE C - PEDESTRIAN	2/5L2.01
	P-106	PAVER TYPE 1	3/5L2.01
	P-107	PAVER TYPE 2	3/5L2.01
	P-108	PAVER TYPE 3	3/5L2.01
	P-109	PAVER TYPE 4	3/5L2.01
	P-110	CONCRETE RAMP WITH HANDRAIL	6/5L2.01
	P-111	CONCRETE AT MAINTENANCE STRIP	2/5L2.01

KEYNOTE SCHEDULE

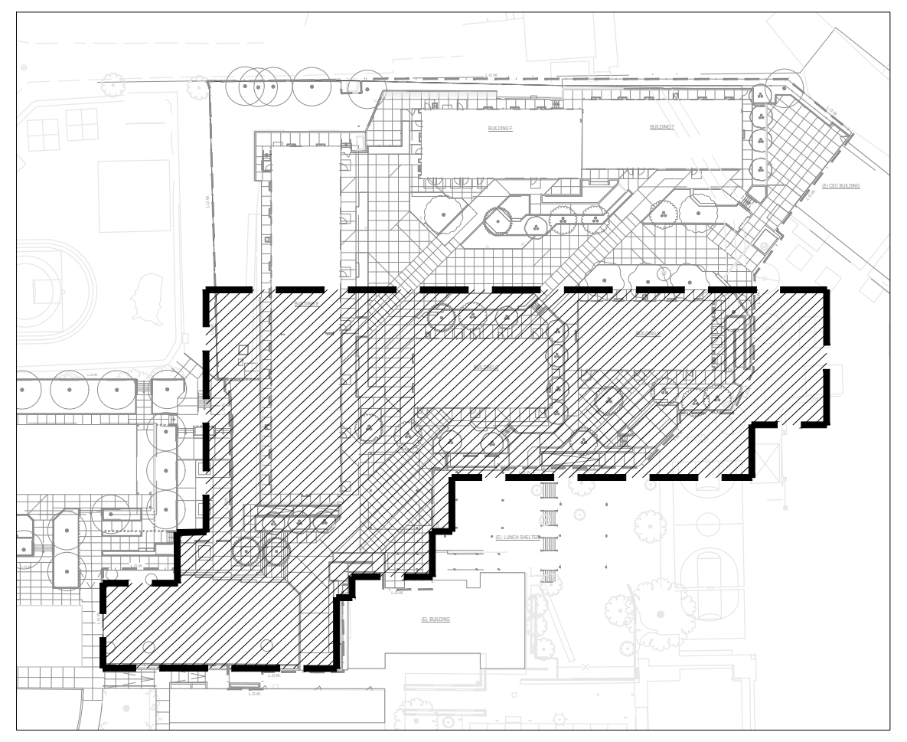
CODE	DESCRIPTION
1	(E) RAMP AND HANDRAIL. PROTECT IN PLACE.
4	(N) LUNCH SHELTER, SEE ARCH DRAWINGS
5	BUILDING OVERHANG, SEE ARCH DRAWINGS
6	CONDENSOR, SEE MEP DWGS
7	UTILITIES PER CIVIL
8	FENCE/ GATE PER ARCH DWGS
9	VENT, SEE ARCH DWGS
10	FIRE LANE
13	LIGHTING PER ELECTRICAL, SEE LIGHTING DWGS

SOD	NATURAL GRASS AREA, SEE PLANTING PLAN FOR DETAILS & LAYOUT
P.A.	GENERAL PLANTING AREA; SEE PLANTING PLAN FOR DETAILS & LAYOUT
SAWCUT JOINT	SJ
SAWCUT CONSTRUCTION JOINT	SCCJ
EXPANSION JOINT	EJ
ROOT BARRIER	— — — — — —

REFER TO 5L1.51 AND 5L1.52 FOR ALL VERTICAL AND EDGE CONDITIONS

REFER TO 5L1.01 AND 5L1.02 FOR ALL PAVING AND FLATWORK

KEY PLAN



N.T.S.

0 5 10 20

CONSTRUCTION PLAN

1" = 10'

1

NORTH

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HKLA

HONGJOO KIM NO. 5087
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

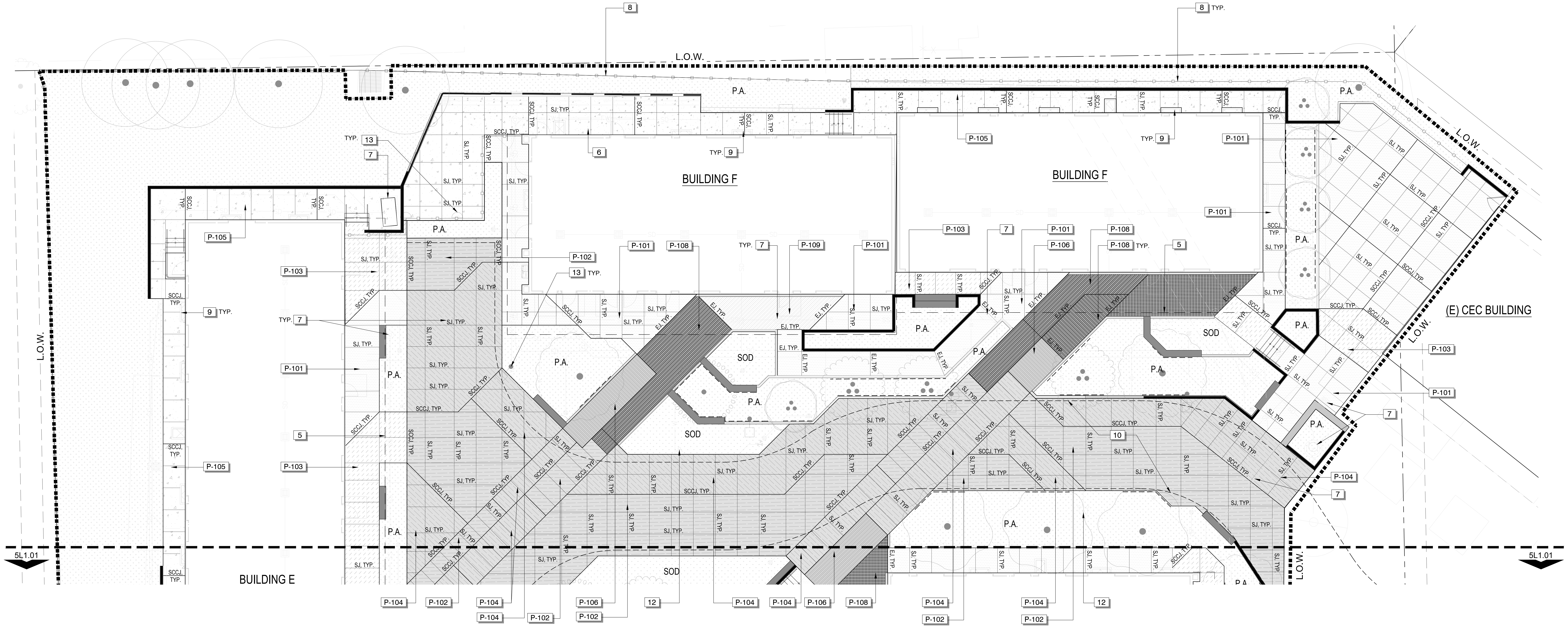
CONSTRUCTION PLAN

5L1.01

SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/07/2026



REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	DETAIL
Paving			
▨	P-101	C.I.P. CONCRETE TYPE A - PEDESTRIAN	2/5L2.01
▨	P-102	C.I.P. CONCRETE TYPE A - VEHICULAR	2/5L2.01
▨	P-103	C.I.P. CONCRETE TYPE B - PEDESTRIAN	2/5L2.01
▨	P-104	C.I.P. CONCRETE TYPE B - VEHICULAR	2/5L2.01
▨	P-105	C.I.P. CONCRETE TYPE C - PEDESTRIAN	2/5L2.01
▨	P-106	PAVER TYPE 1	3/5L2.01
▨	P-108	PAVER TYPE 3	3/5L2.01
▨	P-109	PAVER TYPE 4	3/5L2.01
▨	P-110	CONCRETE RAMP WITH HANDRAIL	6/5L2.01

SOD	NATURAL GRASS AREA, SEE PLANTING PLAN FOR DETAILS & LAYOUT
P.A.	GENERAL PLANTING AREA; SEE PLANTING PLAN FOR DETAILS & LAYOUT

SAWCUT JOINT	SJ
SAWCUT CONSTRUCTION JOINT	SCCJ
EXPANSION JOINT	EJ
ROOT BARRIER	- - - -

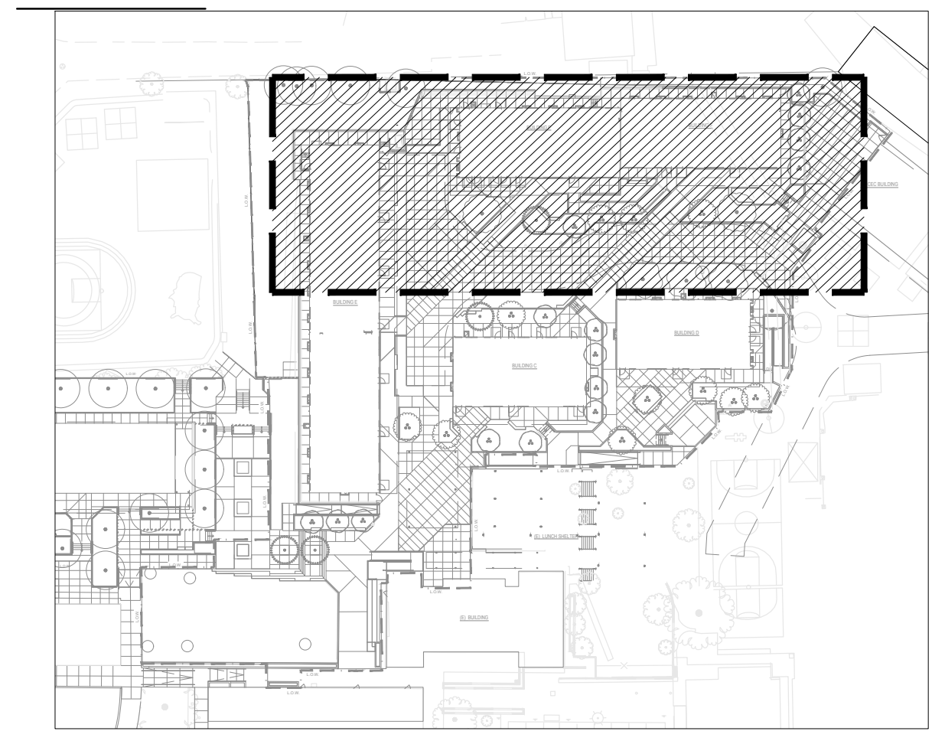
REFER TO 5L1.51 AND 5L1.52 FOR ALL VERTICAL AND EDGE CONDITIONS

REFER TO 5L1.01 AND 5L1.02 FOR ALL PAVING AND FLATWORK

SCHEDULE

CODE	DESCRIPTION
1	(E) RAMP AND HANDRAIL. PROTECT IN PLACE.
2	(E) CIP CONCRETE WALL. PROTECT IN PLACE.
3	(E) CANOPY. PROTECT IN PLACE.
4	(N) LUNCH SHELTER, SEE ARCH DRAWINGS
5	BUILDING OVERHANG, SEE ARCH DRAWINGS
6	CONDENSOR, SEE MEP DWGS
7	UTILITIES PER CIVIL
8	FENCE/ GATE PER ARCH DWGS
9	VENT, SEE ARCH DWGS
10	FIRE LANE
11	(E) WALL. PROTECT IN PLACE.
12	FIRE HYDRANT, SEE CIVIL DWGS
13	LIGHTING PER ELECTRICAL, SEE LIGHTING DWGS

KEY PLAN



N.T.S.

0 5 10 20

CONSTRUCTION PLAN 1" = 10' 1

NORTH

811

If this sheet is smaller than 30" high by 42" wide then it has been reduced.

Practice

135 W. Green St Suite 200 Pasadena, CA 91105 | 626.568.1248 | practice-la.com

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#	REVISION DATE	DESCRIPTION

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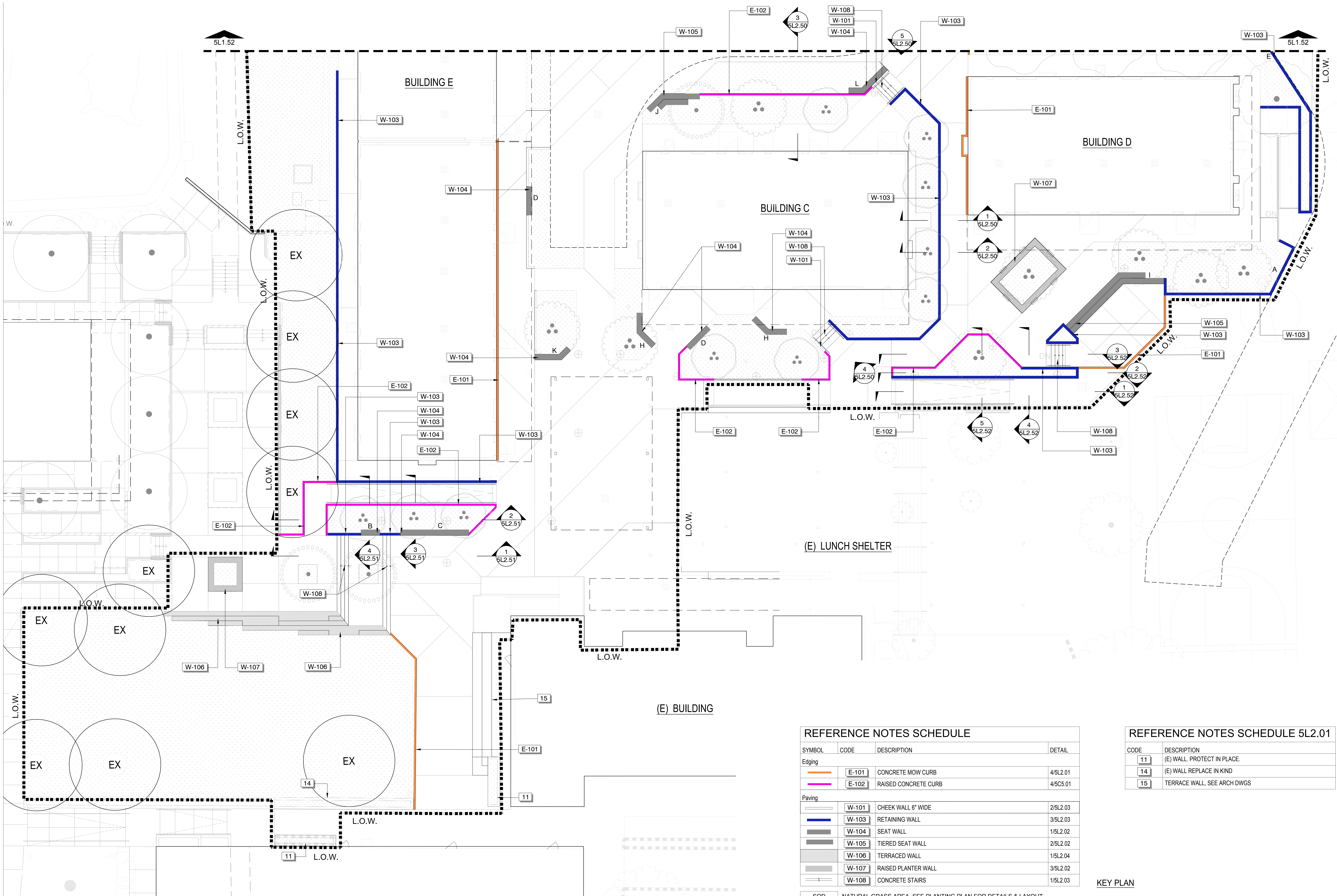
CONSTRUCTION PLAN

5L1.02

SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM


5L1.52
BUILDING E
BUILDING C
BUILDING D
(E) LUNCH SHELTER
(E) BUILDING
L.O.W.
EX
W-101
W-103
W-104
W-105
W-106
W-107
W-108
E-101
E-102
11
14
15
A
B
C
D
H
J
K
L
1 5L2.50
2 5L2.50
3 5L2.50
5 5L2.50
4 5L2.50
1 5L2.51
2 5L2.51
3 5L2.51
4 5L2.51
1 5L2.52
2 5L2.52
3 5L2.52
4 5L2.52
5 5L2.52

REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	DETAIL
Edging			
▬	E-101	CONCRETE MOW CURB	4/5L2.01
▬	E-102	RAISED CONCRETE CURB	4/5C5.01
Paving			
▭	W-101	CHEEK WALL 6" WIDE	2/5L2.03
▬	W-103	RETAINING WALL	3/5L2.03
▬	W-104	SEAT WALL	1/5L2.02
▬	W-105	TIERED SEAT WALL	2/5L2.02
▨	W-106	TERRACED WALL	1/5L2.04
▬	W-107	RAISED PLANTER WALL	3/5L2.02
═	W-108	CONCRETE STAIRS	1/5L2.03

SOD	NATURAL GRASS AREA, SEE PLANTING PLAN FOR DETAILS & LAYOUT
P.A.	GENERAL PLANTING AREA; SEE PLANTING PLAN FOR DETAILS & LAYOUT

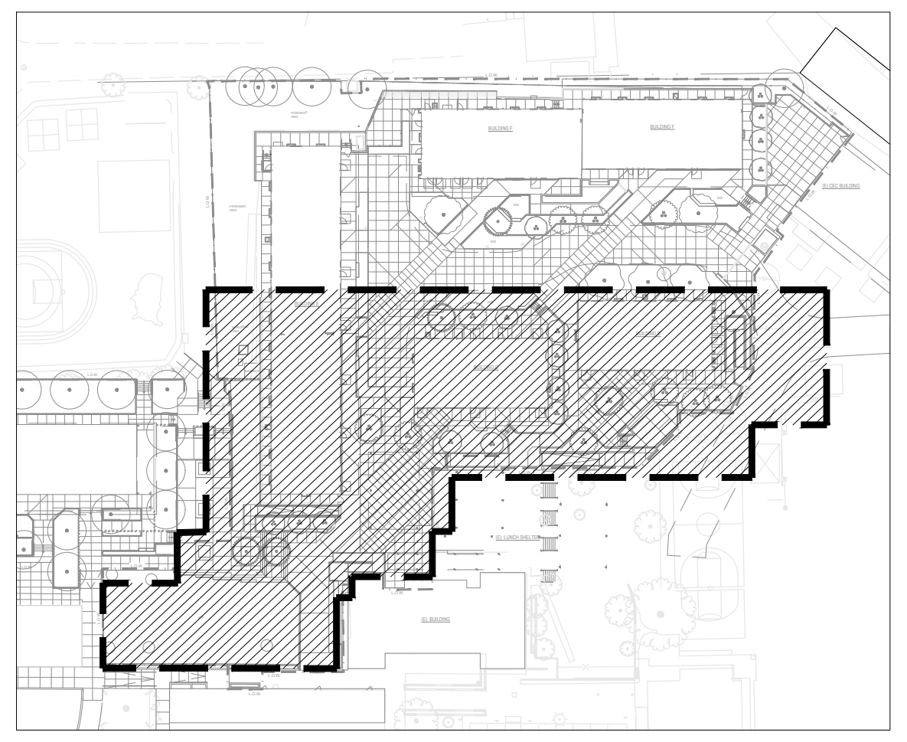
REFER TO 5L1.51 AND 5L1.52 FOR ALL VERTICAL AND EDGE CONDITIONS.
REFER TO 5L1.01 AND 5L1.02 FOR ALL PAVING AND FLATWORK.

A – L SEATWALL, SEE DETAIL 4/5L2.02 FOR LAYOUT.

REFERENCE NOTES SCHEDULE 5L2.01

CODE	DESCRIPTION
11	(E) WALL. PROTECT IN PLACE.
14	(E) WALL REPLACE IN KIND
15	TERRACE WALL, SEE ARCH DWGS

KEY PLAN



N.T.S.

0 5 10 20

WALLS, CURBS, AND EDGING PLAN 1" = 10' 1

NORTH

811

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#	REVISION DATE	DESCRIPTION

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WALLS, CURBS AND EDGING PLAN

5L1.51

SCALE: AS INDICATED

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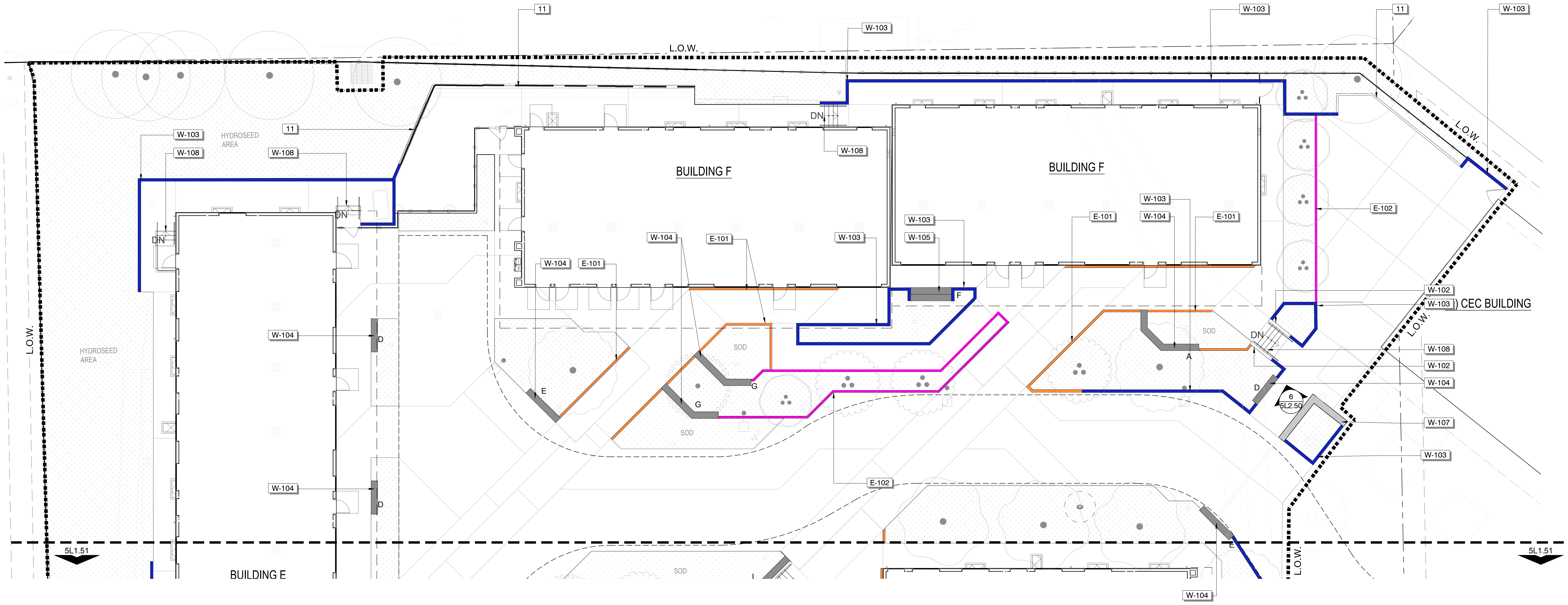


11
W-103
L.O.W.
W-103
11
W-103
HYDROSEED AREA
W-103
W-108
11
W-108
DN
W-108
BUILDING F
BUILDING F
L.O.W.
DN
DN
W-103
W-105
W-103
W-104
E-101
E-101
E-102
W-104
E-101
W-104
E-101
W-103
F
W-102
W-103
CEC BUILDING
L.O.W.
W-104
D
E
SOD
G
G
SOD
SOD
A
DN
D
6
5L2.50
W-108
W-102
W-104
W-107
W-103
HYDROSEED AREA
L.O.W.
W-104
D
E-102
5L1.51
5L1.51
E
BUILDING E
SOD
L.O.W.
W-104

REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	DETAIL
Edging			
🟧	E-101	CONCRETE MOW CURB	4/5L2.01
🟪	E-102	RAISED CONCRETE CURB	4/5C5.01
Wall			
▭	W-102	CHEEK WALL 8" WIDE	2/5L2.03
🟦	W-103	RETAINING WALL	3/5L2.03
▬	W-104	SEAT WALL	1/5L2.02
▨	W-107	RAISED PLANTER WALL	3/5L2.02
═	W-108	CONCRETE STAIRS	1/5L2.03

A – L SEATWALL, SEE DETAIL 4/5L2.02 FOR LAYOUT.

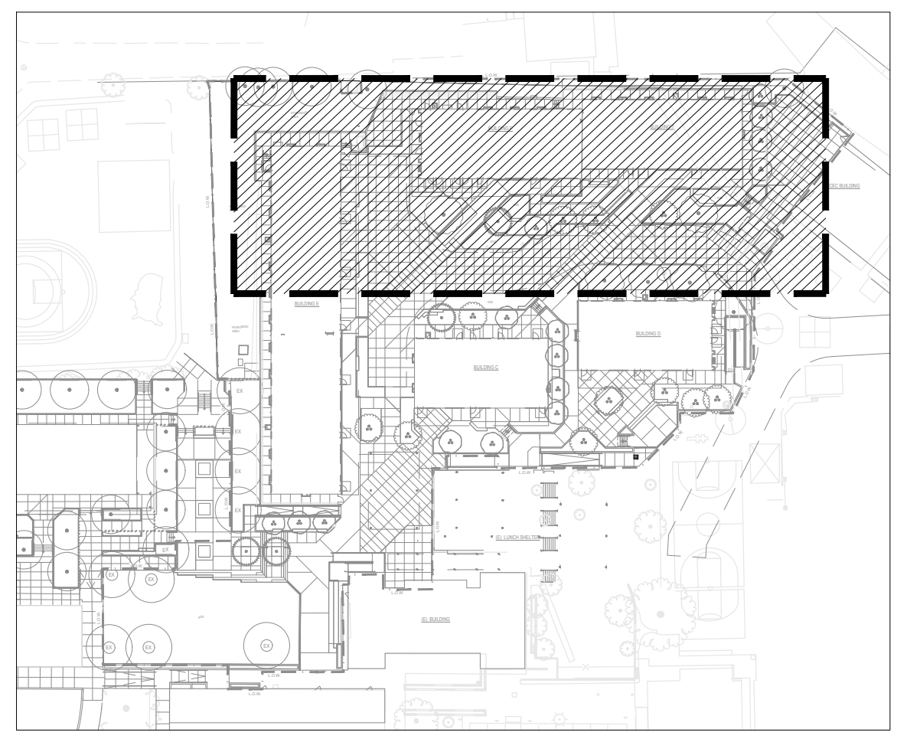
SOD	NATURAL GRASS AREA, SEE PLANTING PLAN FOR DETAILS & LAYOUT
P.A.	GENERAL PLANTING AREA; SEE PLANTING PLAN FOR DETAILS & LAYOUT

REFER TO 5L1.51 AND 5L1.52 FOR ALL VERTICAL AND EDGE CONDITIONS.
REFER TO 5L1.01 AND 5L1.02 FOR ALL PAVING AND FLATWORK.

KEY NOTE SCHEDULE

CODE	DESCRIPTION
11	(E) WALL. PROTECT IN PLACE.

KEY PLAN



N.T.S.

0 5 10 20

WALLS, CURBS, AND EDGING PLAN 1" = 10' 1

NORTH

CALL BEFORE YOU DIG 811

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03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

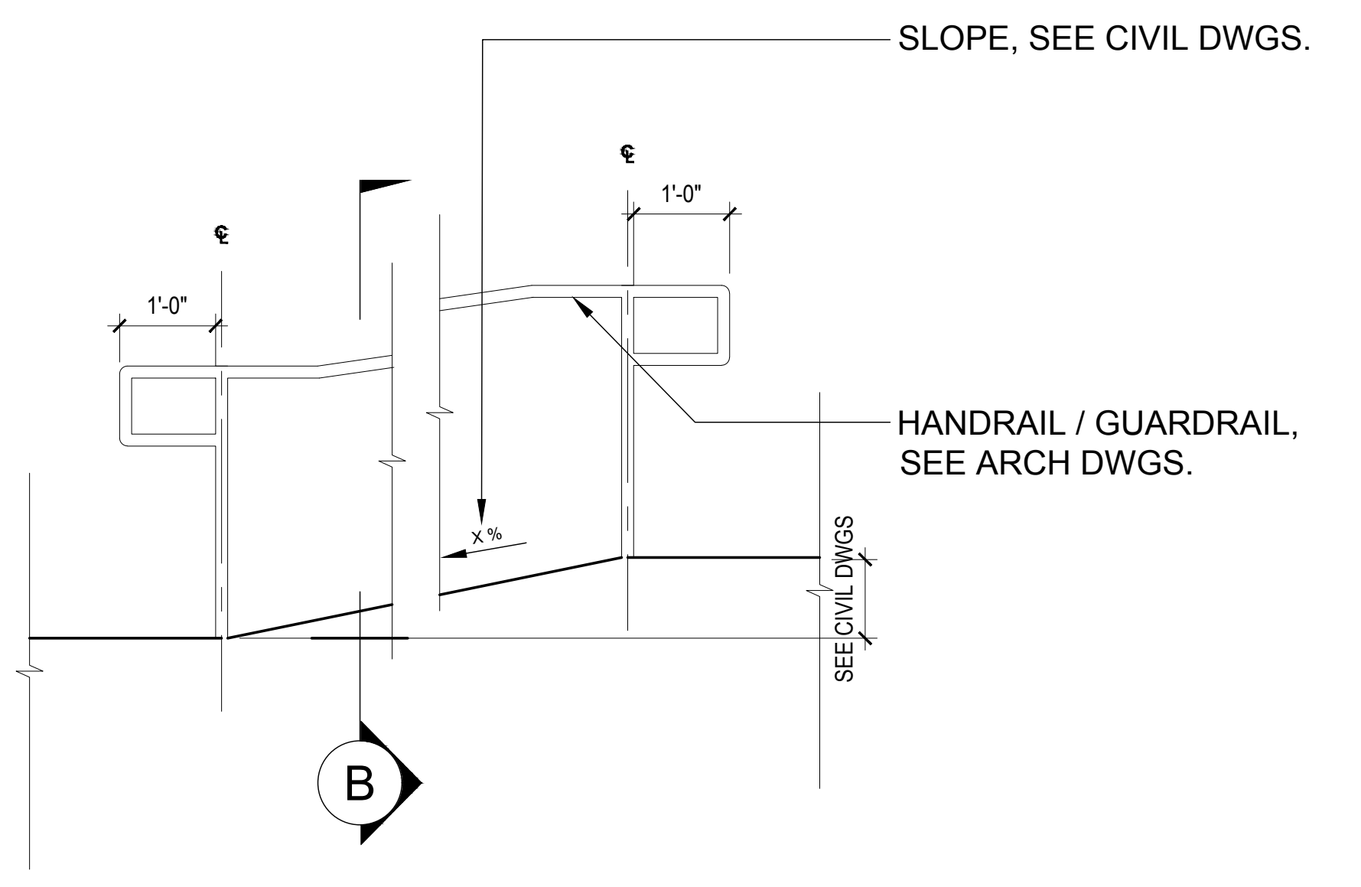
WALLS, CURBS AND EDGING PLAN

5L1.52

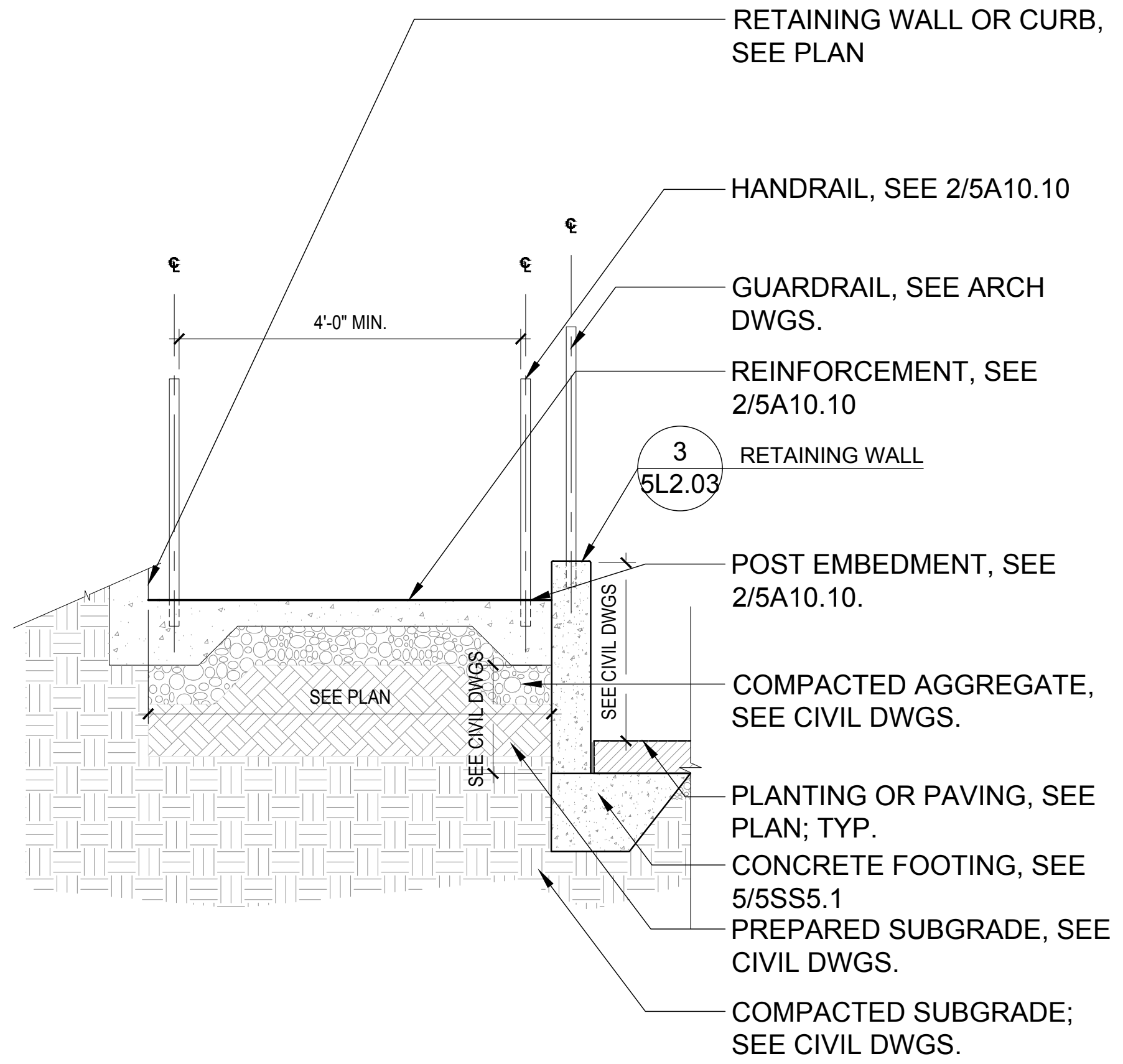
SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

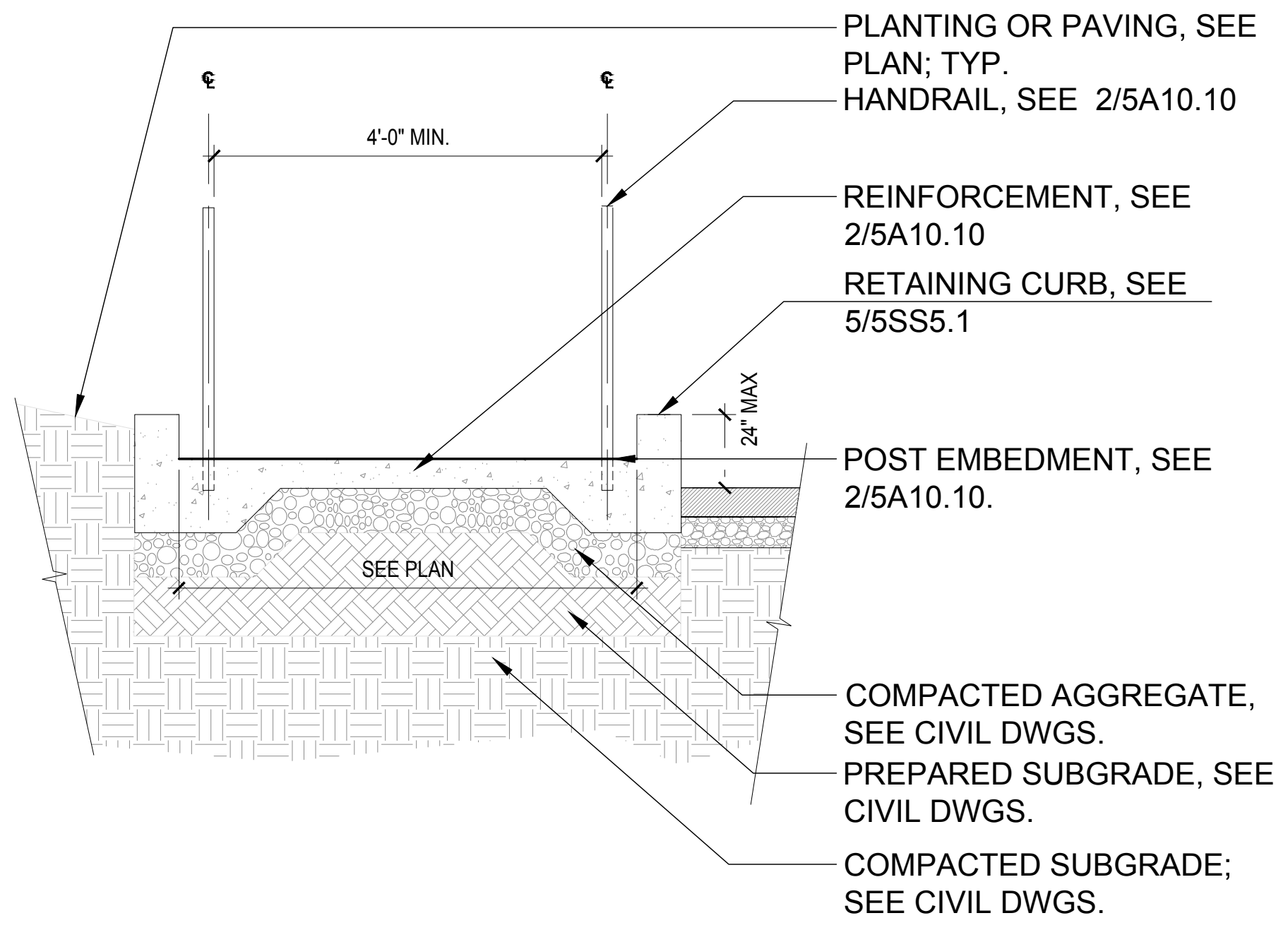
NOTE: CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2


SLOPE, SEE CIVIL DWGS.
1'-0"
1'-0"
X %
HANDRAIL / GUARDRAIL, SEE ARCH DWGS.
SEE CIVIL DWGS
B

A. ELEVATION


RETAINING WALL OR CURB, SEE PLAN
HANDRAIL, SEE 2/5A10.10
GUARDRAIL, SEE ARCH DWGS.
REINFORCEMENT, SEE 2/5A10.10
3
5L2.03
RETAINING WALL
4'-0" MIN.
SEE PLAN
SEE CIVIL DWGS
SEE CIVIL DWGS
POST EMBEDMENT, SEE 2/5A10.10.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
PLANTING OR PAVING, SEE PLAN; TYP.
CONCRETE FOOTING, SEE 5/5SS5.1
PREPARED SUBGRADE, SEE CIVIL DWGS.
COMPACTED SUBGRADE; SEE CIVIL DWGS.

B. SECTION - CONDITION 2

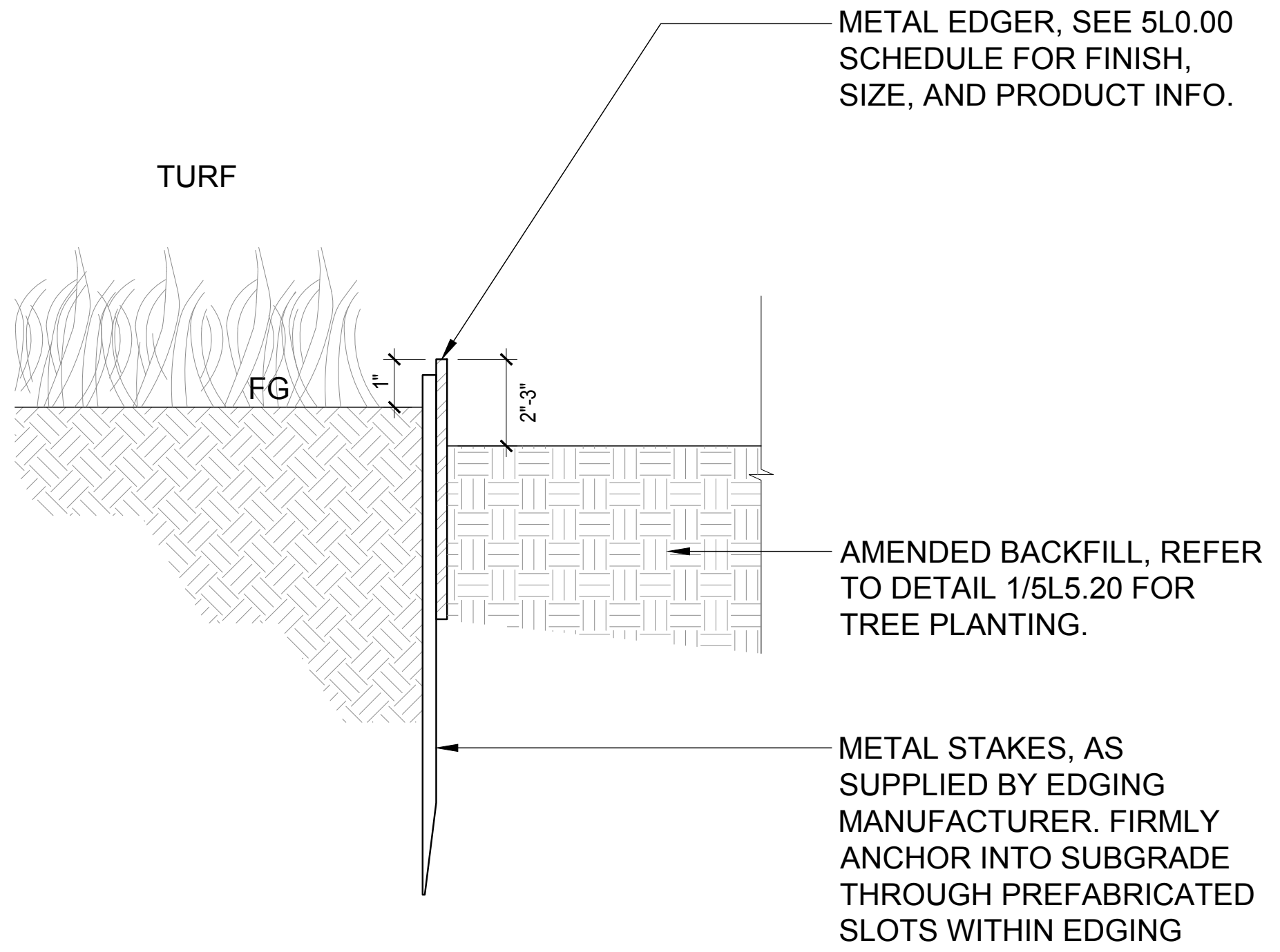

PLANTING OR PAVING, SEE PLAN; TYP.
HANDRAIL, SEE 2/5A10.10
REINFORCEMENT, SEE 2/5A10.10
RETAINING CURB, SEE 5/5SS5.1
4'-0" MIN.
24" MAX
SEE PLAN
POST EMBEDMENT, SEE 2/5A10.10.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
PREPARED SUBGRADE, SEE CIVIL DWGS.
COMPACTED SUBGRADE; SEE CIVIL DWGS.

B. SECTION - CONDITION 1

6 CONCRETE RAMP, TYP.

1/2" = 1'-0"

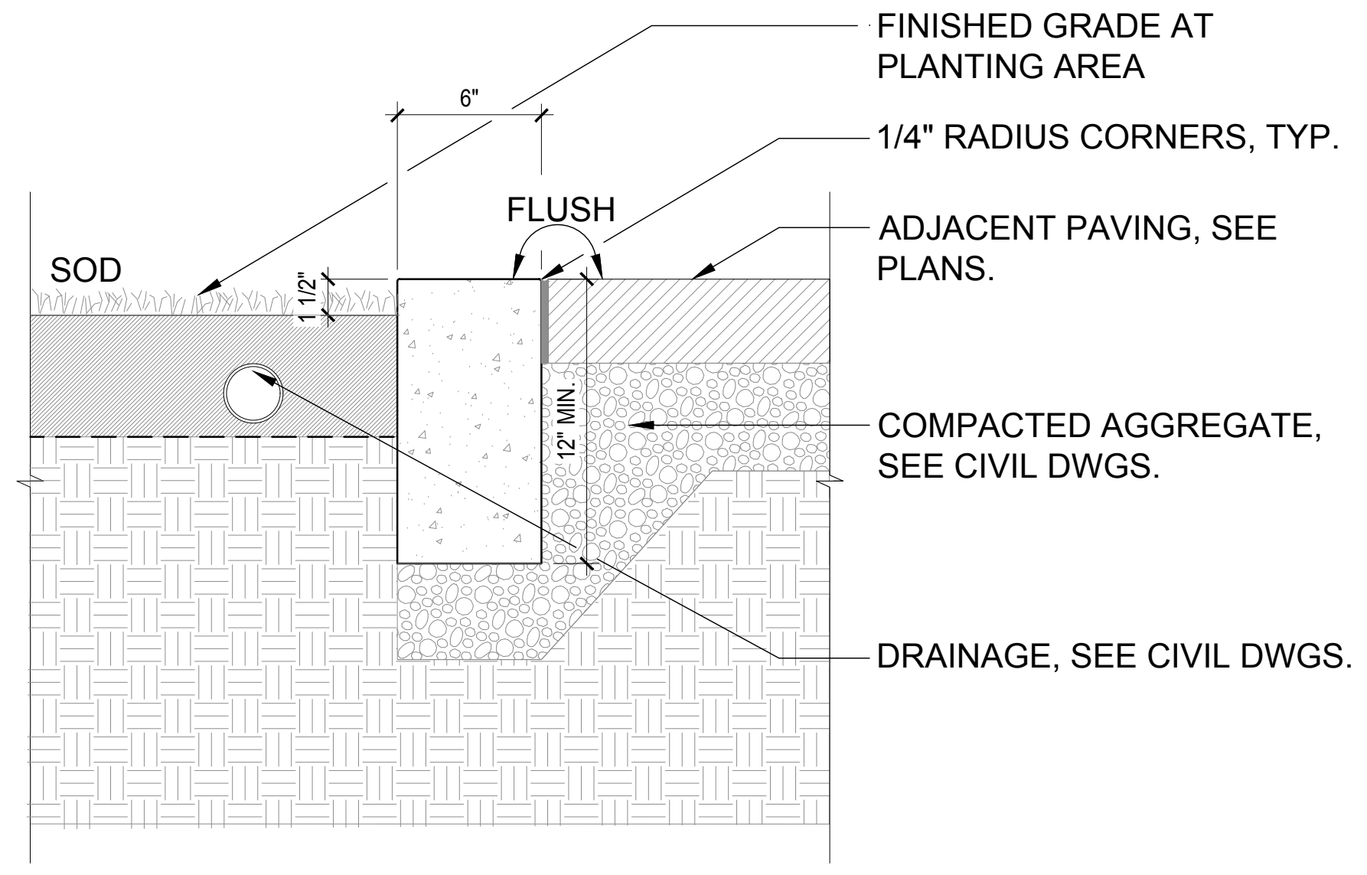
P-PCE5-71


TURF
FG
1"
2"-3"
METAL EDGER, SEE 5L0.00 SCHEDULE FOR FINISH, SIZE, AND PRODUCT INFO.
AMENDED BACKFILL, REFER TO DETAIL 1/5L5.20 FOR TREE PLANTING.
METAL STAKES, AS SUPPLIED BY EDGING MANUFACTURER. FIRMLY ANCHOR INTO SUBGRADE THROUGH PREFABRICATED SLOTS WITHIN EDGING SEGMENT.

5 METAL EDGER

3" = 1'-0"

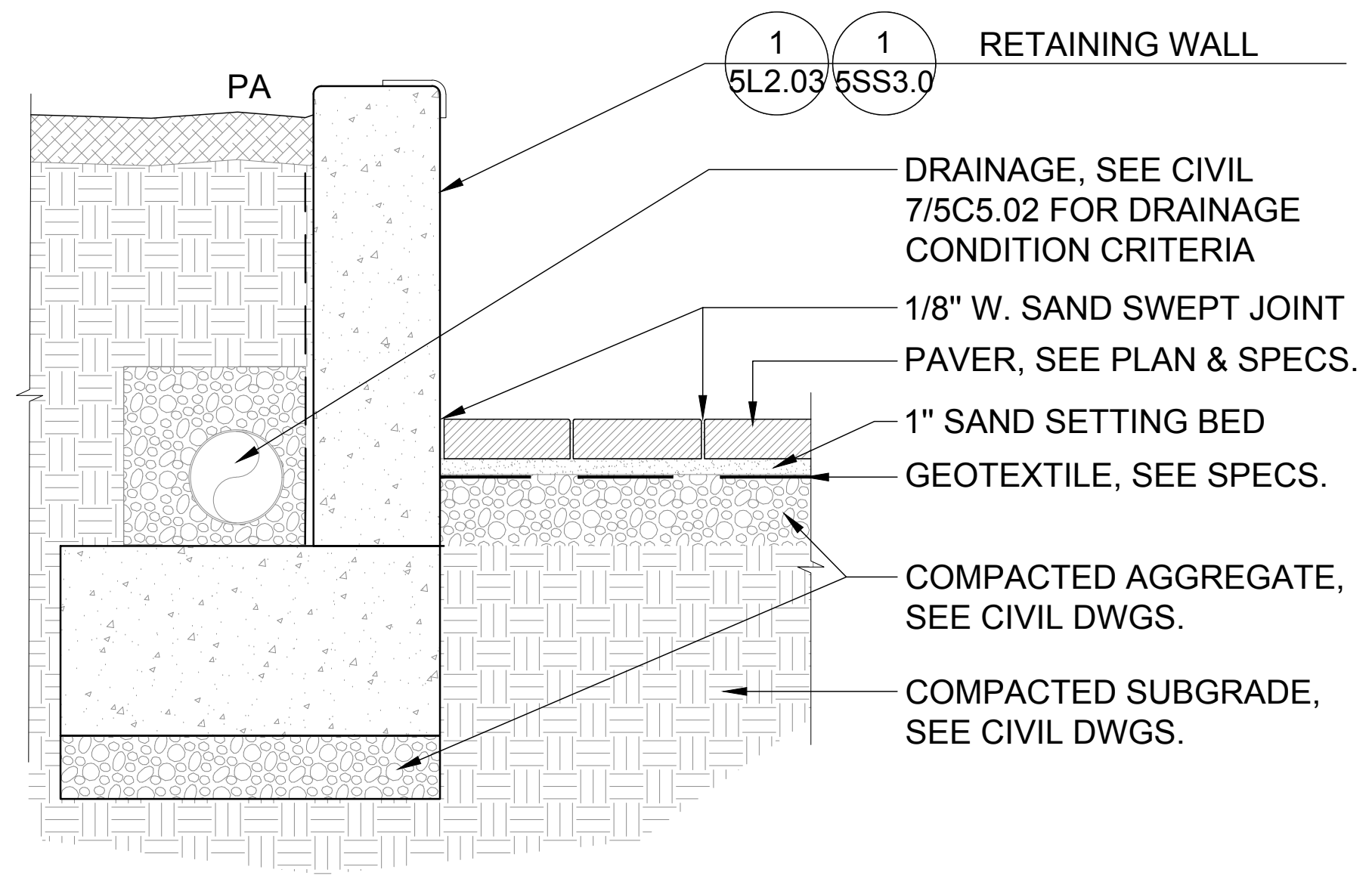
P-PCE5-31


FINISHED GRADE AT PLANTING AREA
1/4" RADIUS CORNERS, TYP.
6"
FLUSH
SOD
1 1/2"
12" MIN.
ADJACENT PAVING, SEE PLANS.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
DRAINAGE, SEE CIVIL DWGS.

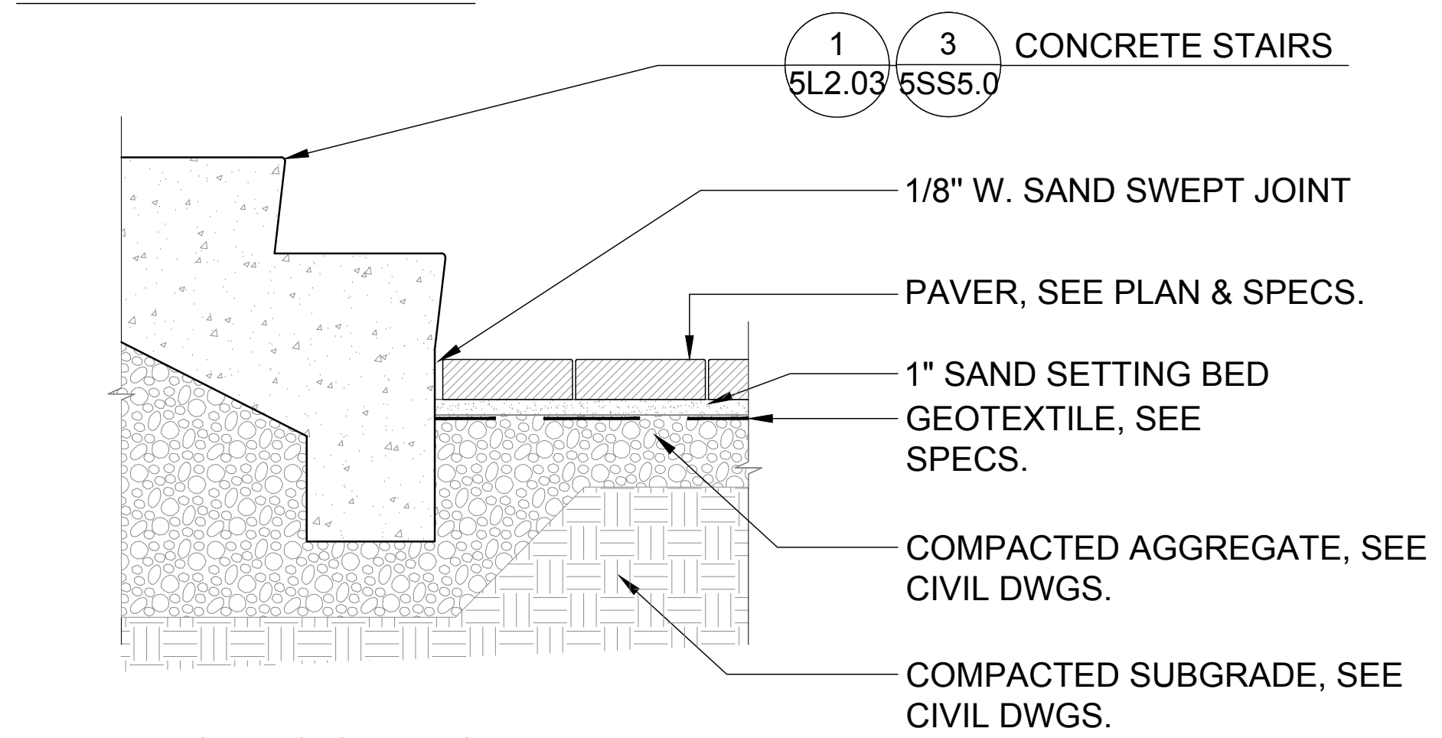
4 CONCRETE MOW CURB

1 1/2" = 1'-0"

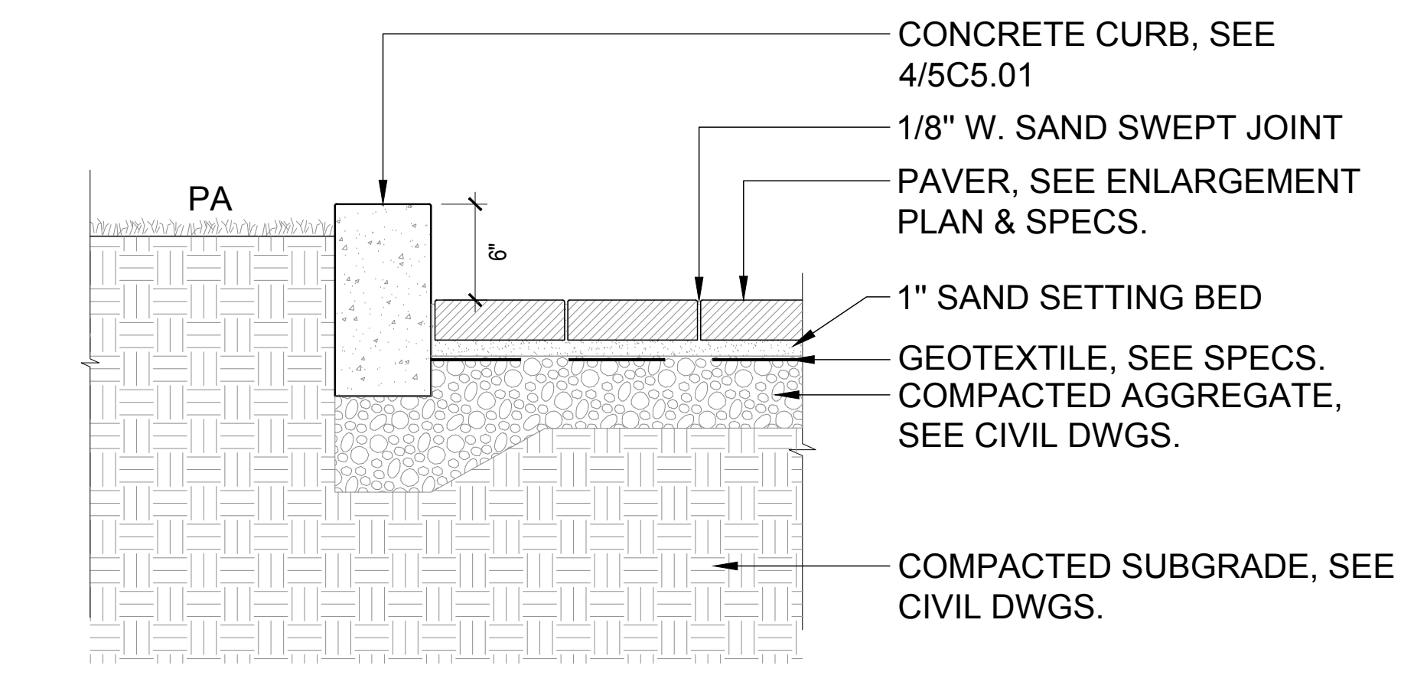
P-PCE5-07


1
5L2.03
1
5SS3.0
RETAINING WALL
PA
DRAINAGE, SEE CIVIL 7/5C5.02 FOR DRAINAGE CONDITION CRITERIA
1/8" W. SAND SWEPT JOINT
PAVER, SEE PLAN & SPECS.
1" SAND SETTING BED
GEOTEXTILE, SEE SPECS.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
COMPACTED SUBGRADE, SEE CIVIL DWGS.

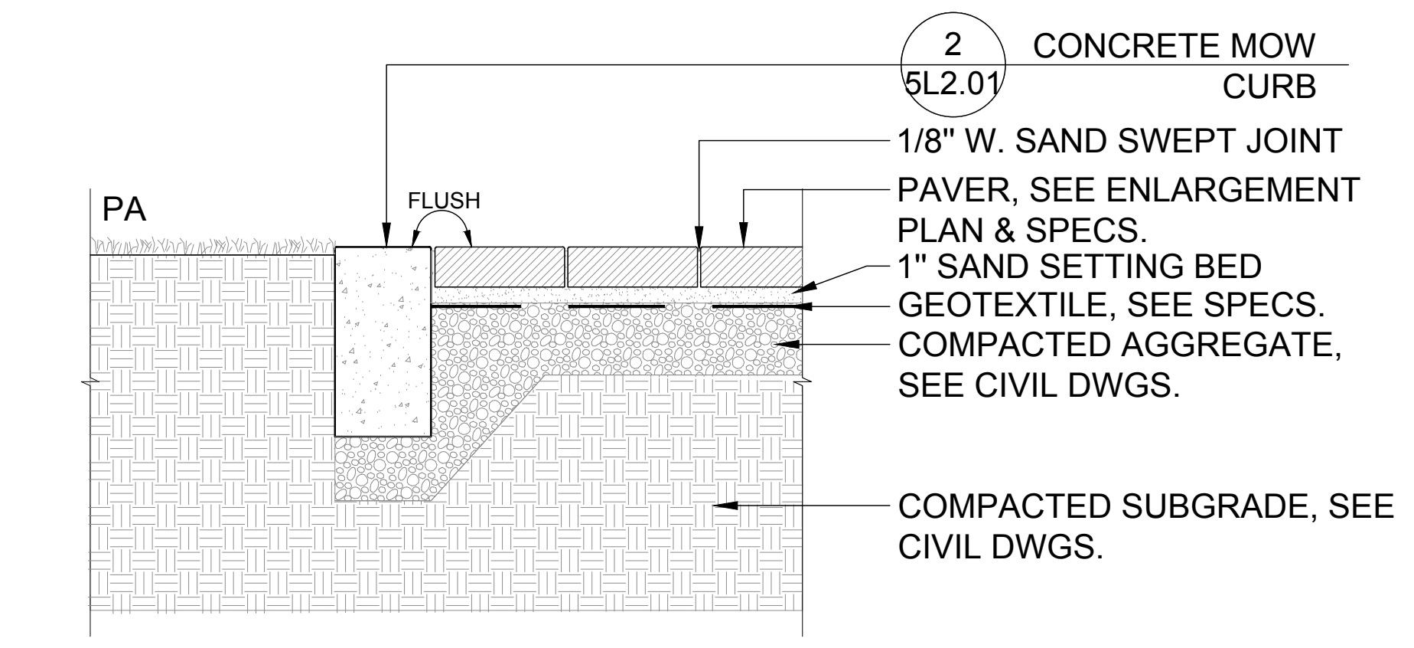
PAVER AT RETAINING WALL


1
5L2.03
3
5SS5.0
CONCRETE STAIRS
1/8" W. SAND SWEPT JOINT
PAVER, SEE PLAN & SPECS.
1" SAND SETTING BED
GEOTEXTILE, SEE SPECS.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
COMPACTED SUBGRADE, SEE CIVIL DWGS.

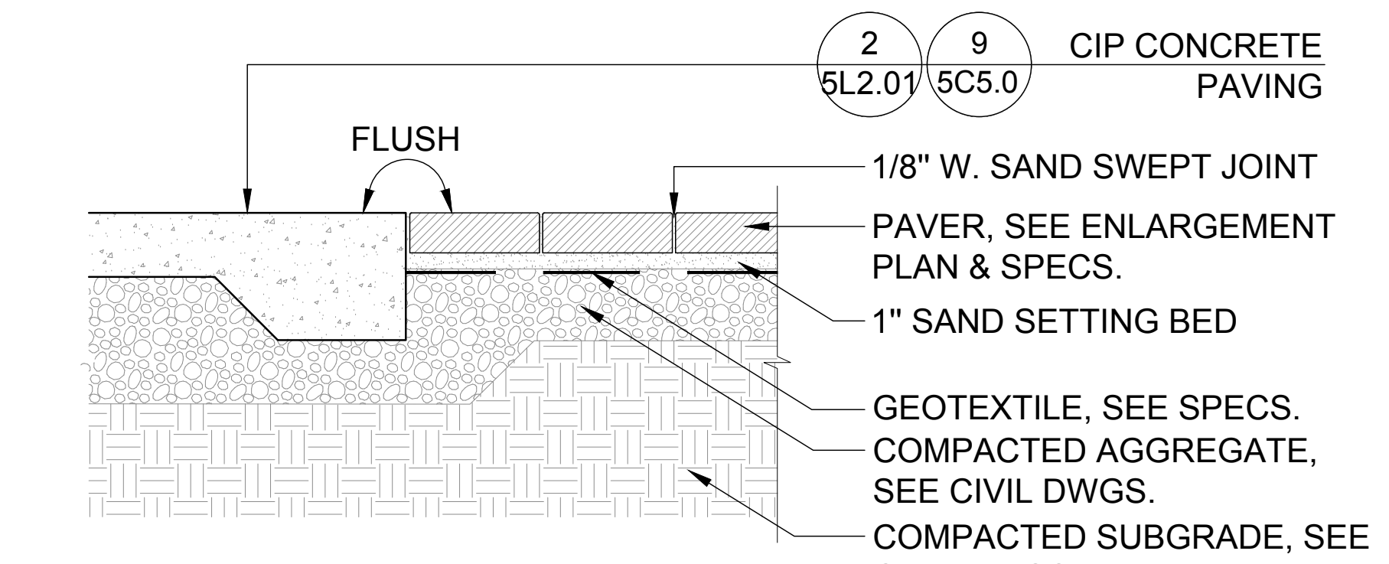
PAVER AT STAIRS/ SEATING


CONCRETE CURB, SEE 4/5C5.01
1/8" W. SAND SWEPT JOINT
PA
6"
PAVER, SEE ENLARGEMENT PLAN & SPECS.
1" SAND SETTING BED
GEOTEXTILE, SEE SPECS.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
COMPACTED SUBGRADE, SEE CIVIL DWGS.

PAVER AT RAISED CONCRETE CURB


2
5L2.01
CONCRETE MOW CURB
1/8" W. SAND SWEPT JOINT
PA
FLUSH
PAVER, SEE ENLARGEMENT PLAN & SPECS.
1" SAND SETTING BED
GEOTEXTILE, SEE SPECS.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
COMPACTED SUBGRADE, SEE CIVIL DWGS.

PAVER AT MOW CURB


2
5L2.01
9
5C5.0
CIP CONCRETE PAVING
FLUSH
1/8" W. SAND SWEPT JOINT
PAVER, SEE ENLARGEMENT PLAN & SPECS.
1" SAND SETTING BED
GEOTEXTILE, SEE SPECS.
COMPACTED AGGREGATE, SEE CIVIL DWGS.
COMPACTED SUBGRADE, SEE CIVIL DWGS.

PAVER AT CONCRETE PAVING

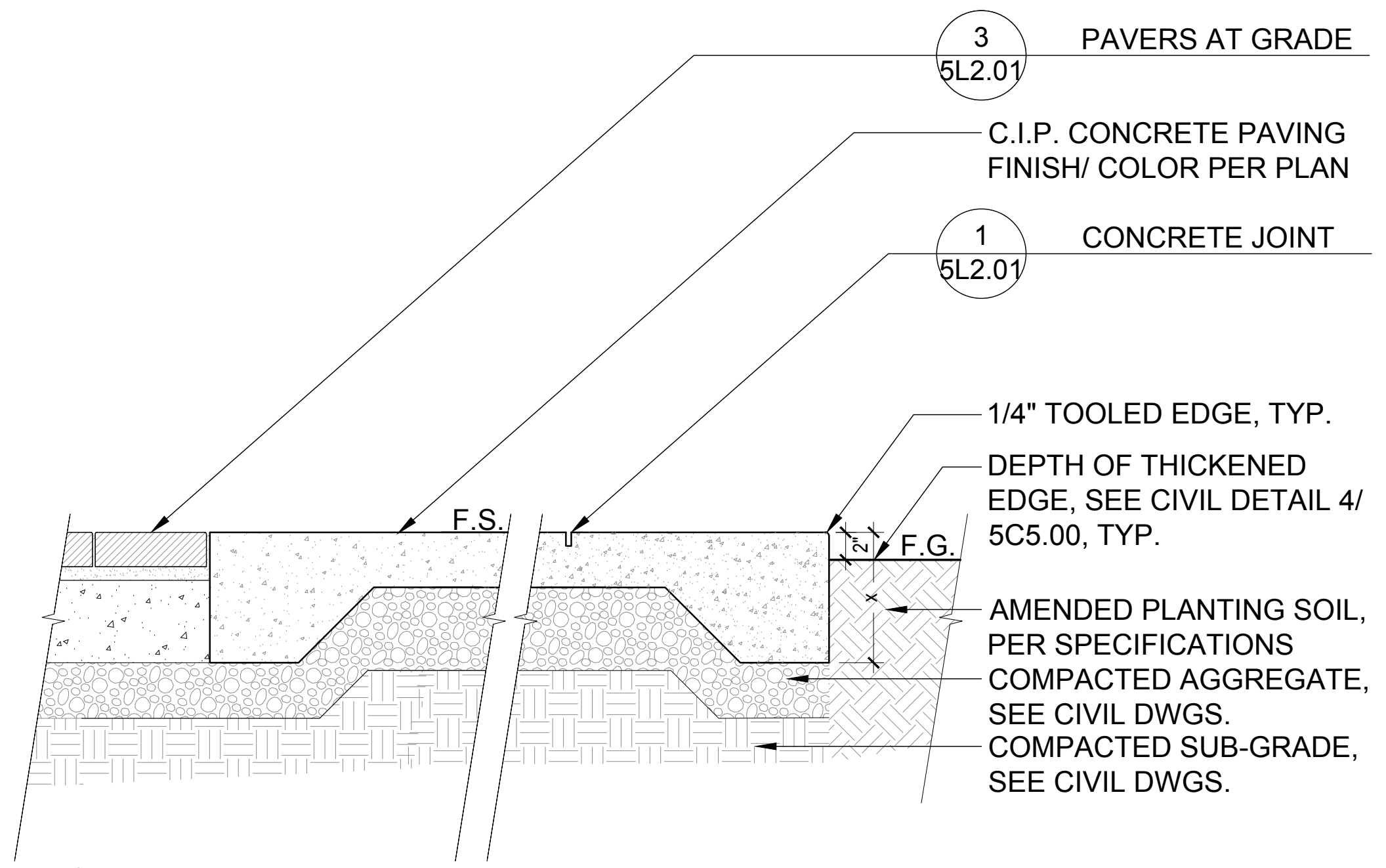
NOTE:

1. SEE CONSTRUCTION SCHEDULE FOR PAVER FINISH AND COLOR
2. CONCTRACTOR TO PROVIDE SHOP DRAWINGS SHOWING POINT OF BEGINNING FOR PAVER LAYOUT AND ANY ODD CUTS AND ANGLES.
3. SEE PLANS FOR EDGE CONDITIONS

3 PAVERS AT GRADE

1" = 1'-0"

P-PCE5-05


3
5L2.01
PAVERS AT GRADE
C.I.P. CONCRETE PAVING FINISH/ COLOR PER PLAN
1
5L2.01
CONCRETE JOINT
F.S.
2"
F.G.
1/4" TOOLED EDGE, TYP.
DEPTH OF THICKENED EDGE, SEE CIVIL DETAIL 4/ 5C5.00, TYP.
AMENDED PLANTING SOIL, PER SPECIFICATIONS
COMPACTED AGGREGATE, SEE CIVIL DWGS.
COMPACTED SUB-GRADE, SEE CIVIL DWGS.

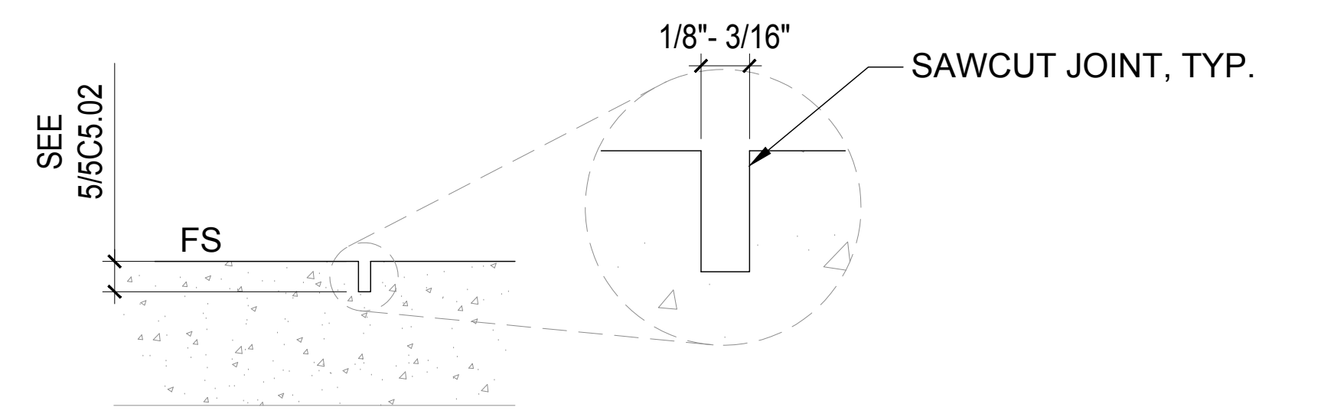
NOTE:

A. REFER TO PAVING SCHEDULE FOR ALL COLORS, TYPES, AND FINISHES.
B. REFER TO CONSTRUCTION PLAN FOR ALL JOINTING LOCATIONS.
C. REFER TO CIVIL DWGS FOR GRADING, THICKNESS, REINFORCEMENT, BASE COURSE, AND SUBGRADE PREPARATION.
D. FOR FIRE LANE VEHICULAR DEPTH, REFER TO CIVIL

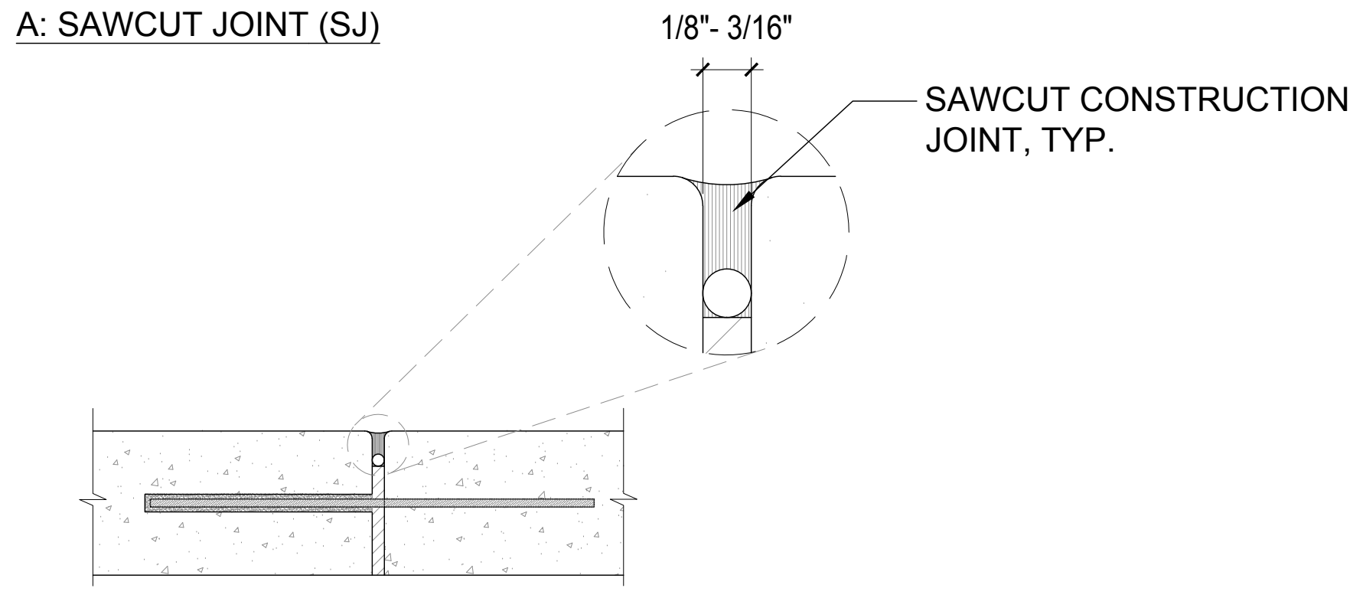
2 C.I.P. CONCRETE PAVING

1" = 1'-0"

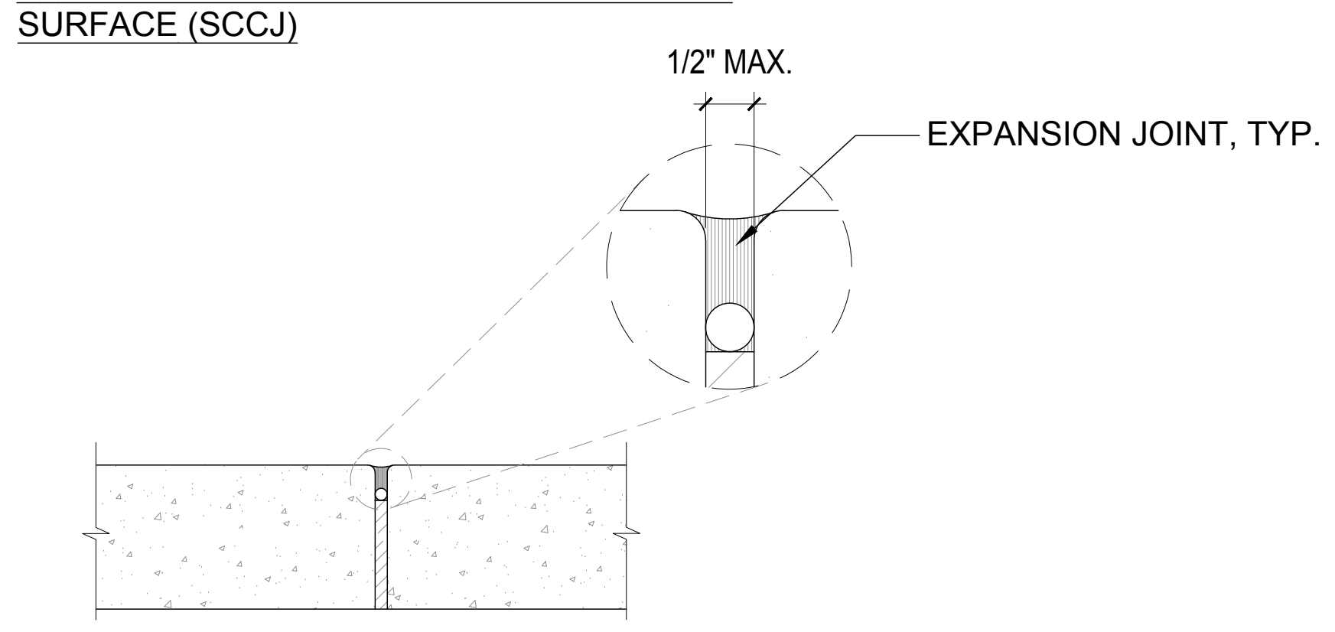
P-PCE5-04


SEE 5/5C5.02
FS
1/8"- 3/16"
SAWCUT JOINT, TYP.

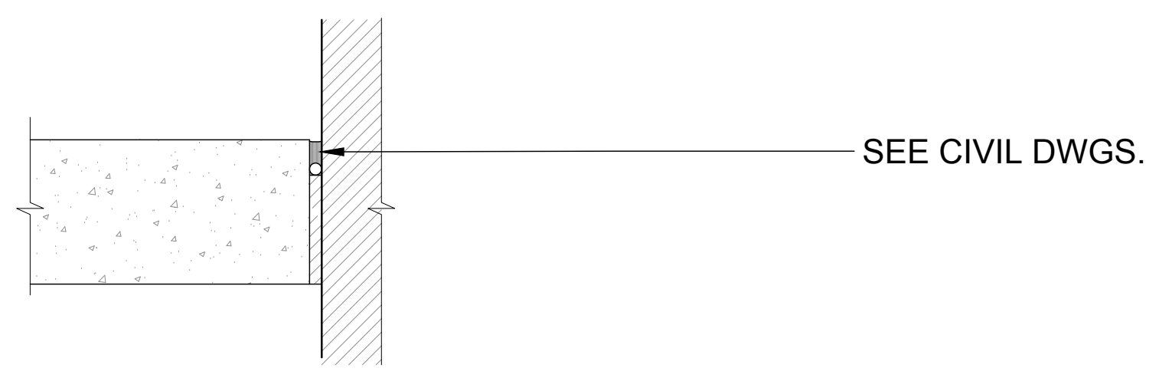
A: SAWCUT JOINT (SJ)


1/8"- 3/16"
SAWCUT CONSTRUCTION JOINT, TYP.

B: SAWCUT CONSTRUCTION JOINT AT FLAT SURFACE (SCCJ)


1/2" MAX.
EXPANSION JOINT, TYP.

C: EXPANSION JOINT AT FLAT SURFACE


SEE CIVIL DWGS.

D: EXPANSION JOINT AT VERTICAL SURFACE

NOTES

1. REFER TO CONSTRUCTION PLAN FOR ALL JOINTING LOCATIONS.
2. REFER TO CIVIL DETAILS FOR ALL CONCRETE PAVING APPLICATIONS, FOR THICKNESS, REINFORCEMENT, BASE COURSE, SUBGRADE PREPARATION, AND CALCULATIONS.

1 CONCRETE JOINT

1 1/2" = 1'-0"

P-PCE5-03

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/07/2026

Practice

135 W. Green St Suite 200 Pasadena, CA 91105 | 626.568.1248 | practice-la.com

HKLA

HONGJOO KIM NO. 5087
Signature
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

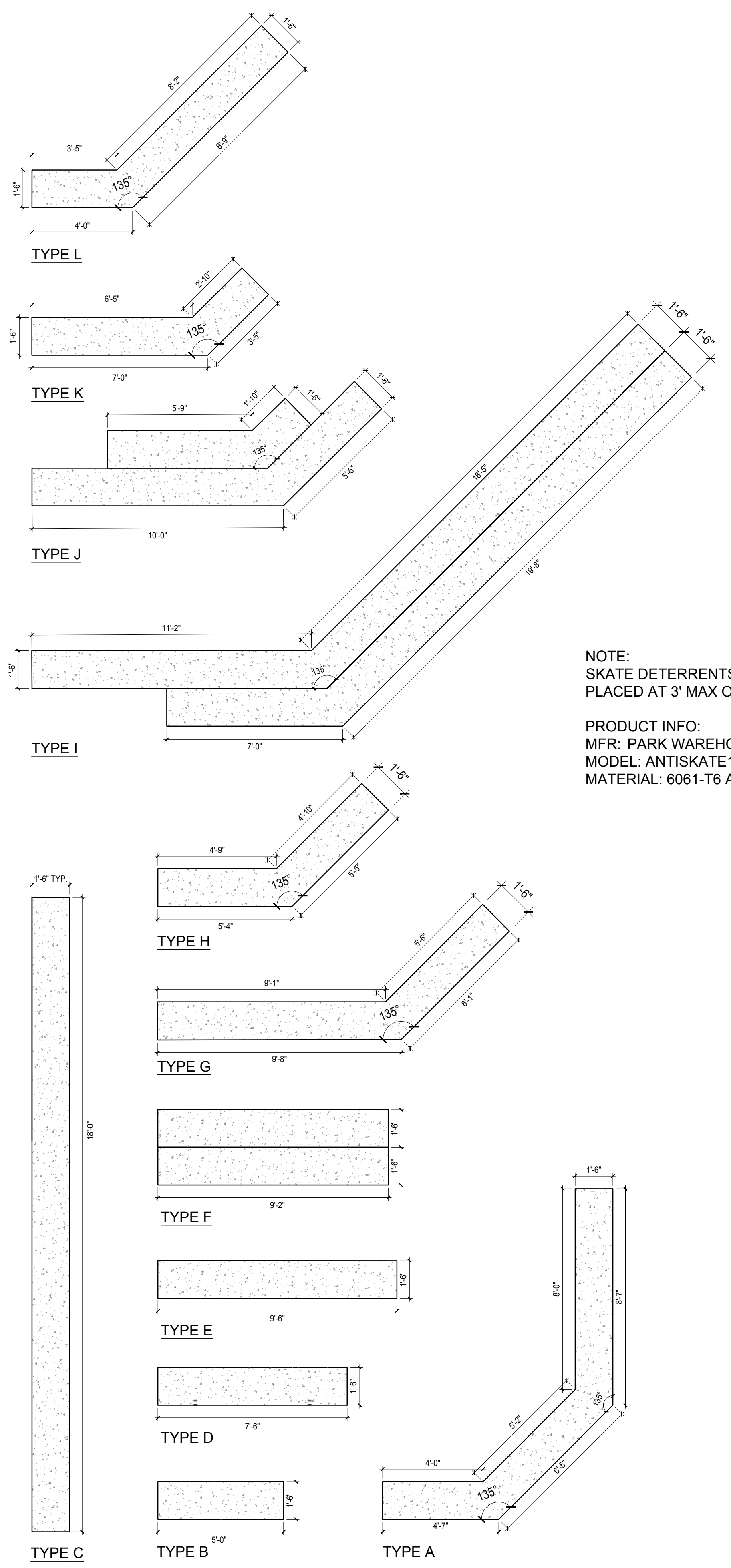
CONSTRUCTION DETAILS

5L2.01

SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

NOTE: CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2


1'-6"
8'-2"
3'-5"
8'-9"
135°
4'-0"
TYPE L
6'-5"
2'-10"
3'-5"
7'-0"
TYPE K
5'-9"
1'-10"
1'-6"
5'-6"
10'-0"
TYPE J
18'-5"
19'-8"
11'-2"
7'-0"
TYPE I
4'-9"
4'-10"
5'-5"
5'-4"
TYPE H
9'-1"
5'-6"
6'-1"
9'-8"
TYPE G
9'-2"
TYPE F
9'-6"
TYPE E
7'-6"
TYPE D
5'-0"
TYPE B
1'-6" TYP.
18'-0"
TYPE C
8'-0"
8'-7"
5'-2"
6'-5"
4'-0"
4'-7"
TYPE A

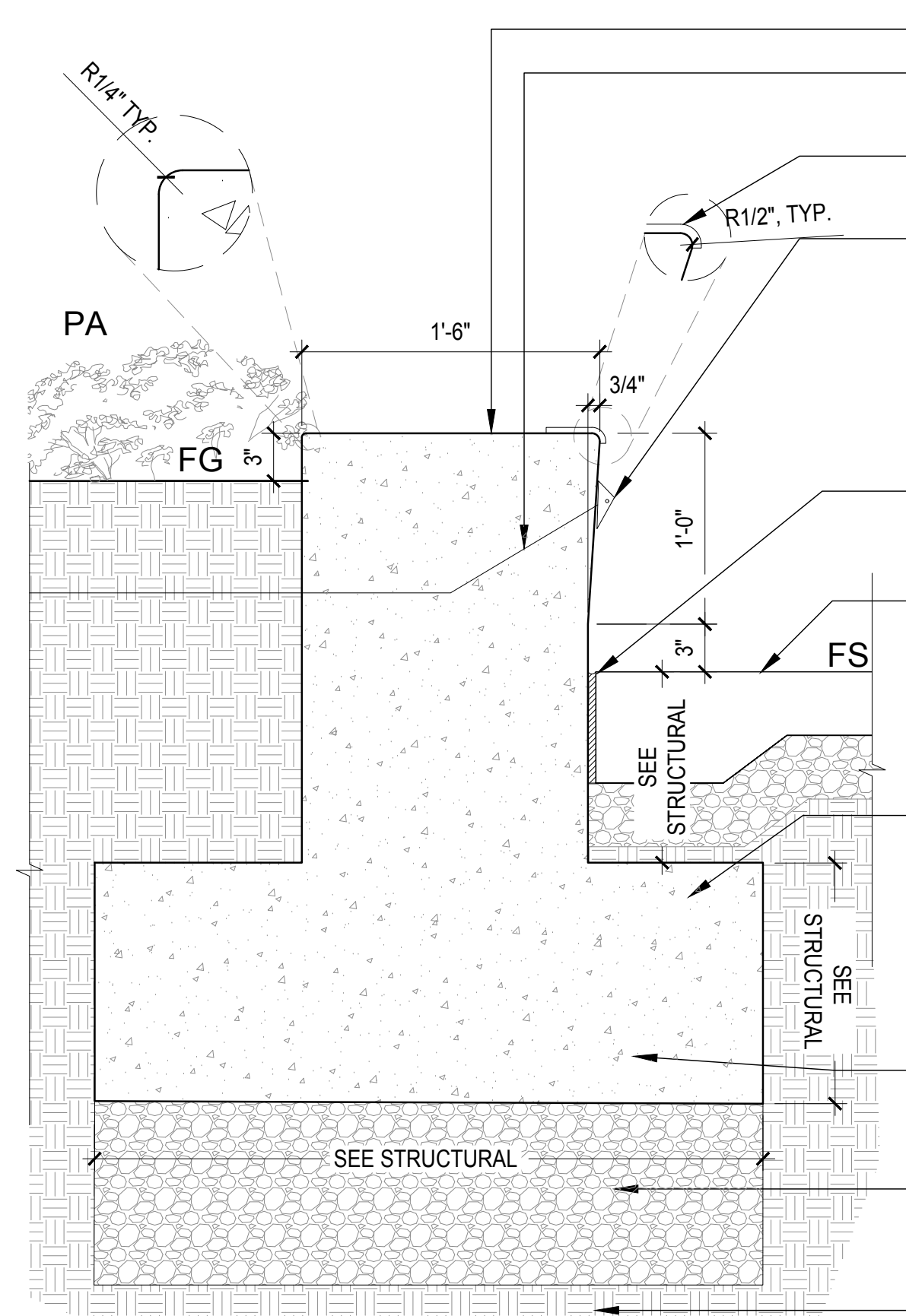
NOTE:
SKATE DETERRENTS TO BE EQUALLY
PLACED AT 3' MAX O.C. SPACING

PRODUCT INFO:
MFR: PARK WAREHOUSE 888-321-5334
MODEL: ANTISKATE1002/FR0.5
MATERIAL: 6061-T6 ALUMINUM

4 SEATWALL LAYOUT PLAN

1/4" = 1'-0"

P-PCE5-77


R1/4" TYP.
R1/2", TYP.
PA
FG
1'-6"
3/4"
3"
1'-0"
3"
FS
SEE STRUCTURAL
SEE STRUCTURAL
SEE STRUCTURAL

C.I.P. CONCRETE SEAT WALL

CONDUIT, SEE ELECTRICAL DRAWINGS

SKATE DETERRENT

SEMI-RECESSED LIGHTING, SEE ELECTRICAL DRAWINGS, MOUNDING HEIGHT, REFER TO EXISTING CONDITIONS AT THE CAMPUS.

1/5L2.01 CONCRETE JOINT EXPANSION JOINT

2/5L2.01 C.I.P. CONCRETE PAVING

CONCRETE FOOTING, SEE 2/5SS3.0

REINFORCEMENT, SEE 2/5SS3.0

COMPACTED AGGREGATE BASE, SEE CIVIL DWGS

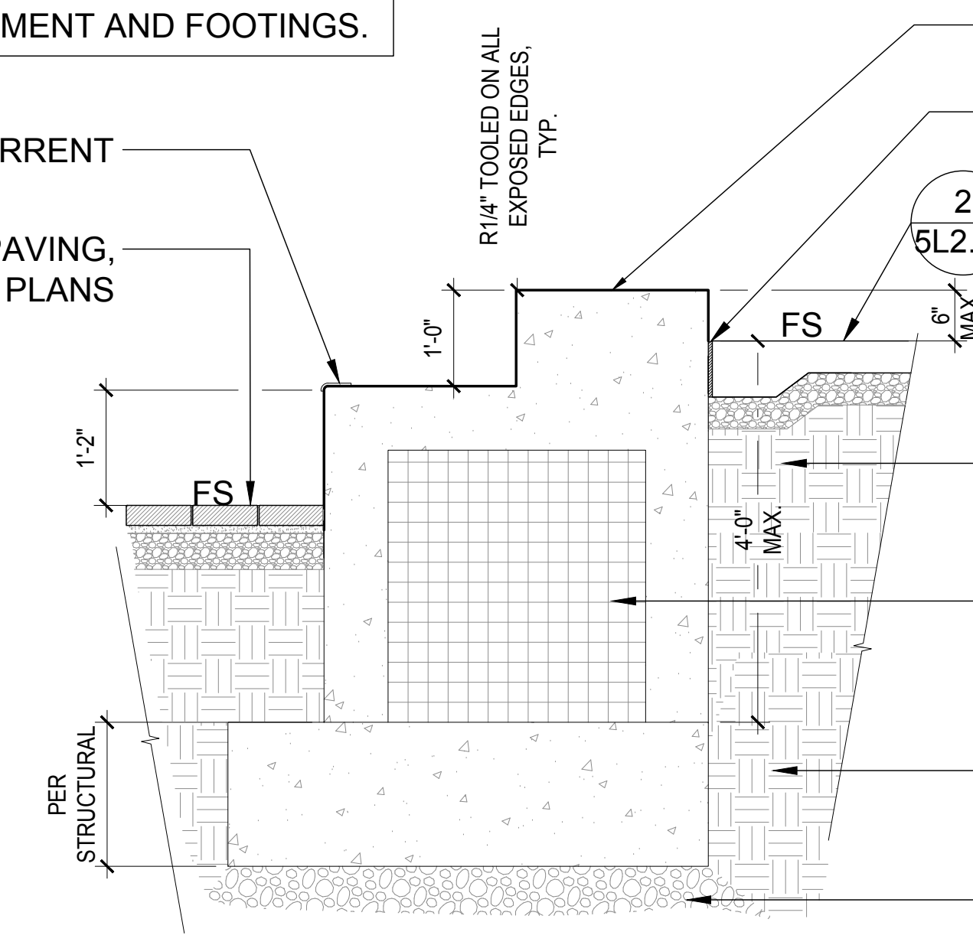
COMPACTED SUBGRADE, SEE CIVIL DWGS

3 RAISED PLANTER WALL

1" = 1'-0"

P-PCE5-75

NOTE: REFER TO STRUCTURAL DETAIL 3/5SS3.0 FOR ALL REINFORCEMENT AND FOOTINGS.


R1/4" TOOLED ON ALL EXPOSED EDGES, TYP.
1'-0"
6" MAX.
FS
FS
1'-2"
4'-0" MAX.
PER STRUCTURAL

SKATE DETERRENT

ADJACENT PAVING, SEE PLANS

C.I.P. CONC. TIERED SEAT WALL

CONCRETE EXPANSION JOINT

2/5L2.01 C.I.P. CONCRETE PAVING

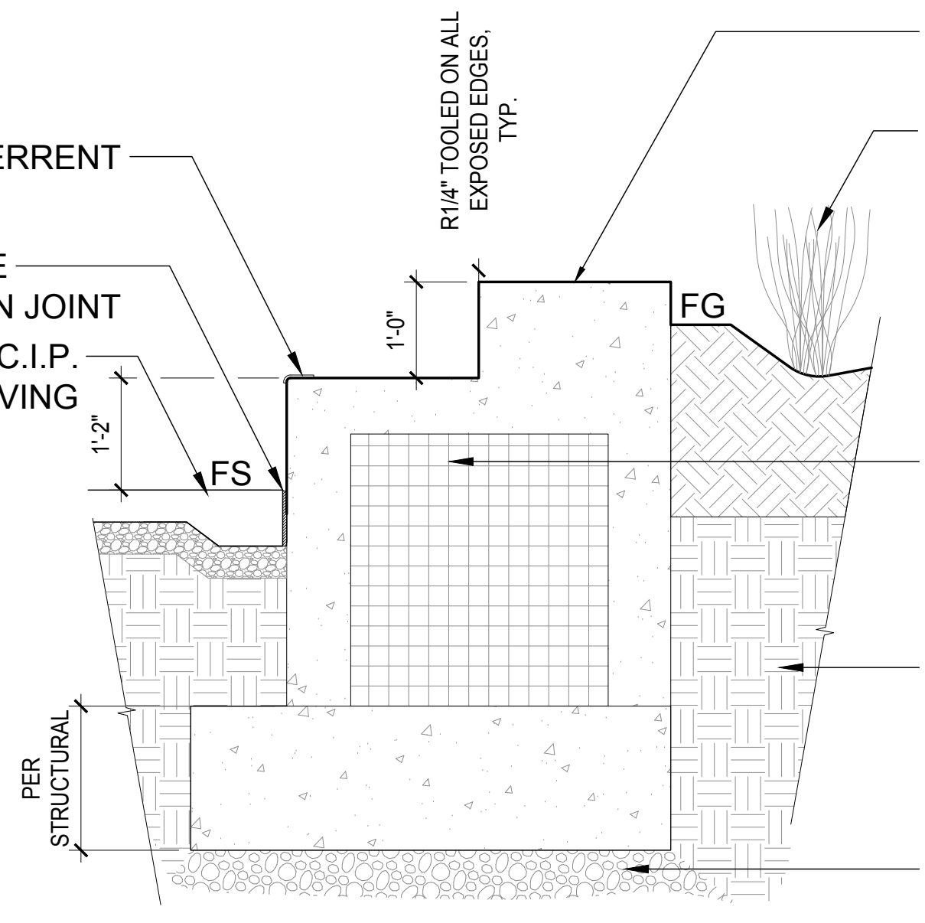
COMPACTED AGGREGATE BASE, SEE CIVIL DWGS

EXPANDEDPOLYSTYRENE GEOFORM FILLER BETWEEN WALLS, REFER TO STRUCTURAL DETAIL 3/5SS3.0

PREPARED SUBGRADE PER GEOTECHNICAL RECOMMENDATIONS, SEE CIVIL.

COMPACTED AGGREGATE BASE COURSE PER GEOTECHNICAL RECOMMENDATIONS, SEE CIVIL.

C.I.P. CONCRETE TIERED SEAT WALL TYPE A


R1/4" TOOLED ON ALL EXPOSED EDGES, TYP.
1'-0"
FG
1'-2"
FS
PER STRUCTURAL

SKATE DETERRENT

CONCRETE EXPANSION JOINT

ADJACENT C.I.P. CONCRETE PAVING

C.I.P. CONC. TIERED SEAT WALL

ADJACENT PLANTING. SEE PLANTING PLANS

EXPANDED POLYSTYRENE GEOFORM FILLER BETWEEN WALLS, REFER TO CIVIL DETAIL 3/5SS3.0

PREPARED SUBGRADE SEE GEOTECHNICAL REPORT AND PLANTING SOIL SPECS

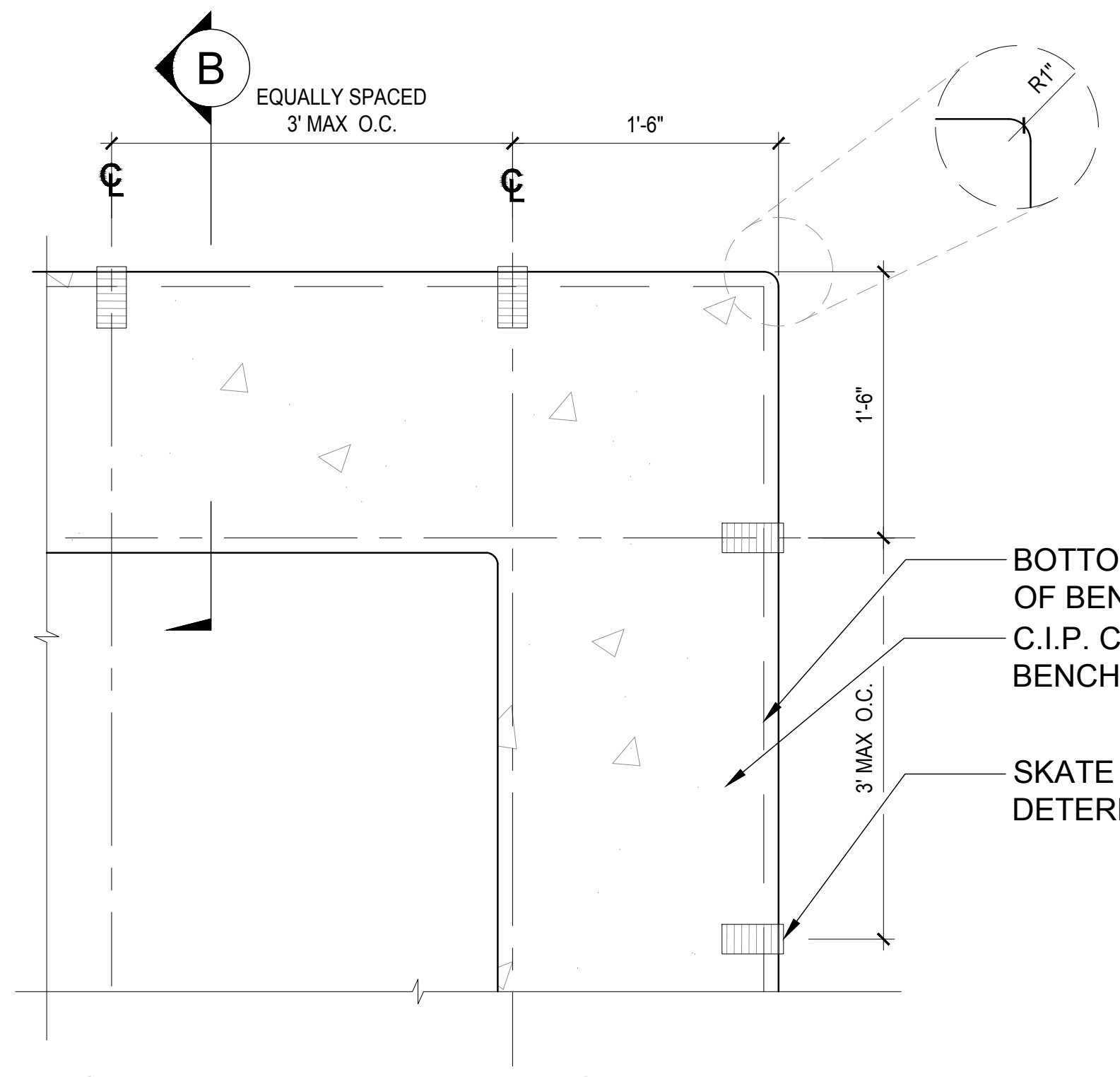
COMPACTED AGGREGATE BASE COURSE PER GEOTECHNICAL RECOMMENDATIONS, SEE CIVIL.

C.I.P. CONCRETE TIERED SEAT WALL TYPE B

2 C.I.P. TIERED SEAT WALL TYPES

1/2" = 1'-0"

P-PCE5-33


B
EQUALLY SPACED 3' MAX O.C.
1'-6"
℄
℄
R1"
1'-6"
3' MAX O.C.

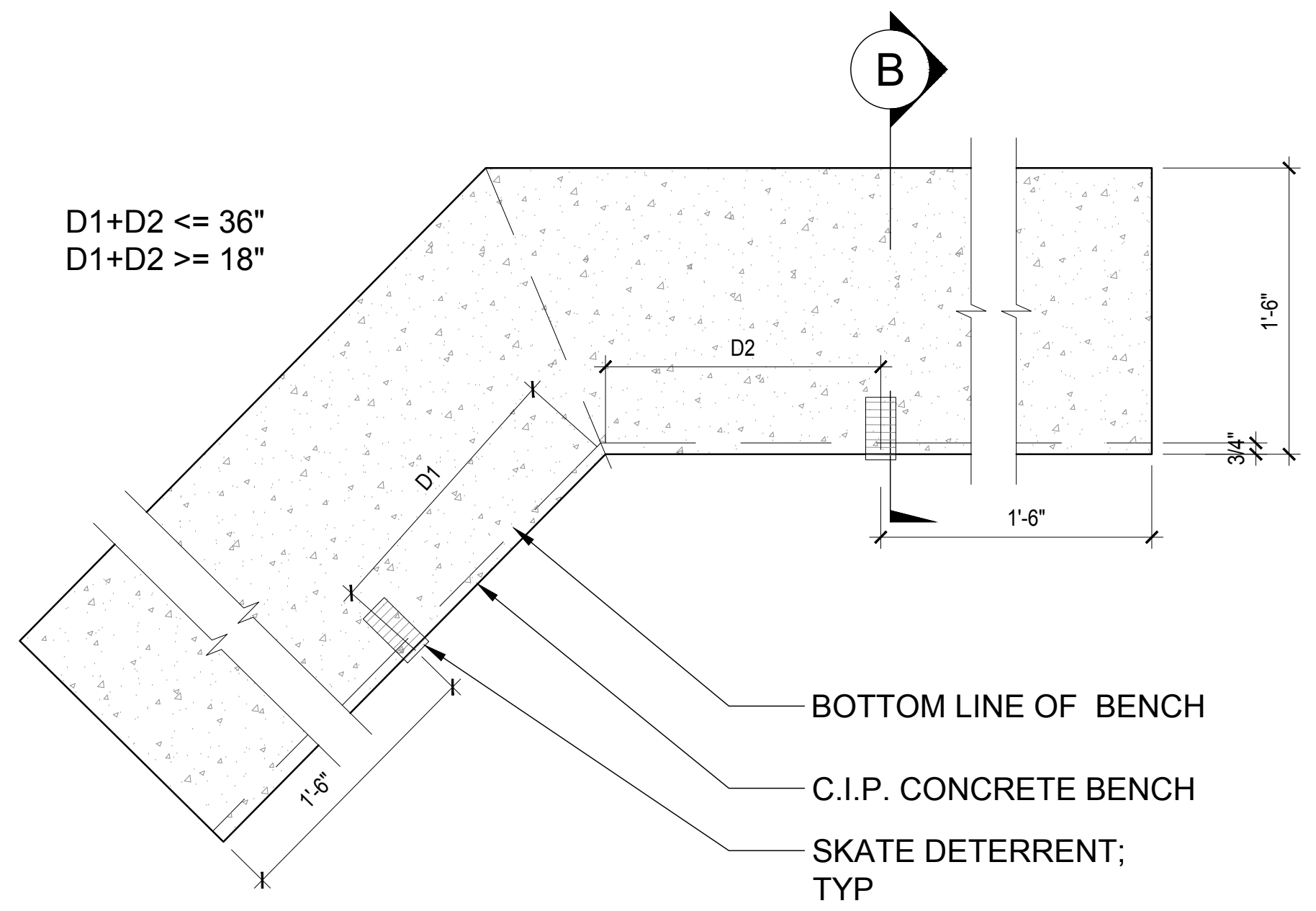
BOTTOM LINE OF BENCH

C.I.P. CONCRETE BENCH

SKATE DETERRENT, TYP.

RAISED PLANTER WALL - PERPENDICULAR

D1+D2 <= 36"
D1+D2 >= 18"

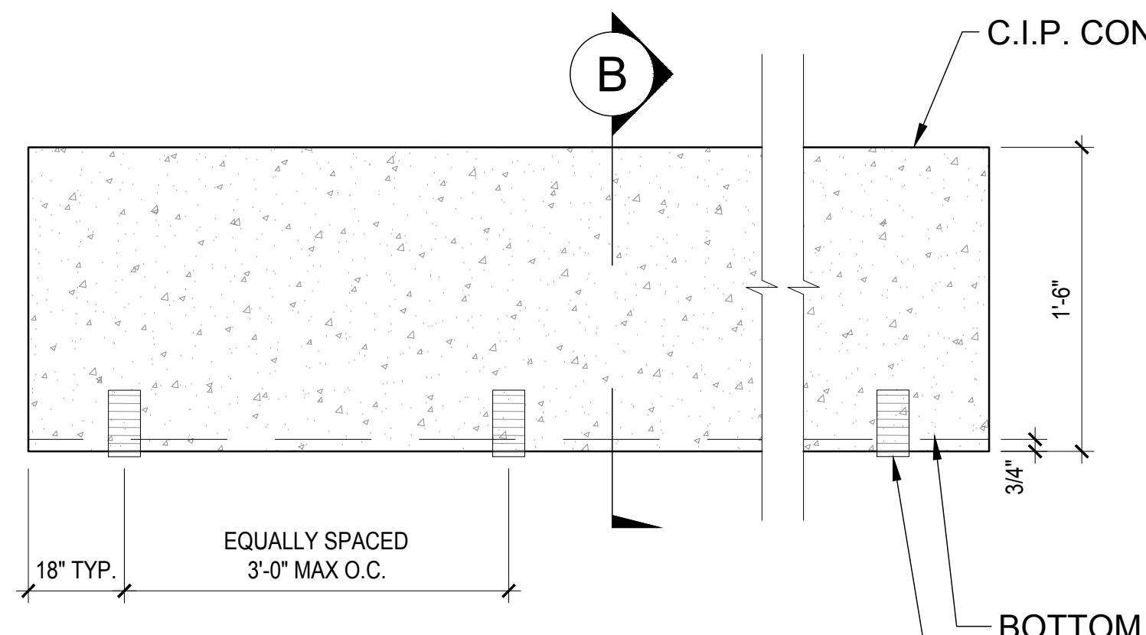

B
D2
D1
1'-6"
3/4"
1'-6"
1'-6"

BOTTOM LINE OF BENCH

C.I.P. CONCRETE BENCH

SKATE DETERRENT; TYP

CONCRETE BENCH - ANGLED


B
1'-6"
3/4"
18" TYP.
EQUALLY SPACED 3'-0" MAX O.C.

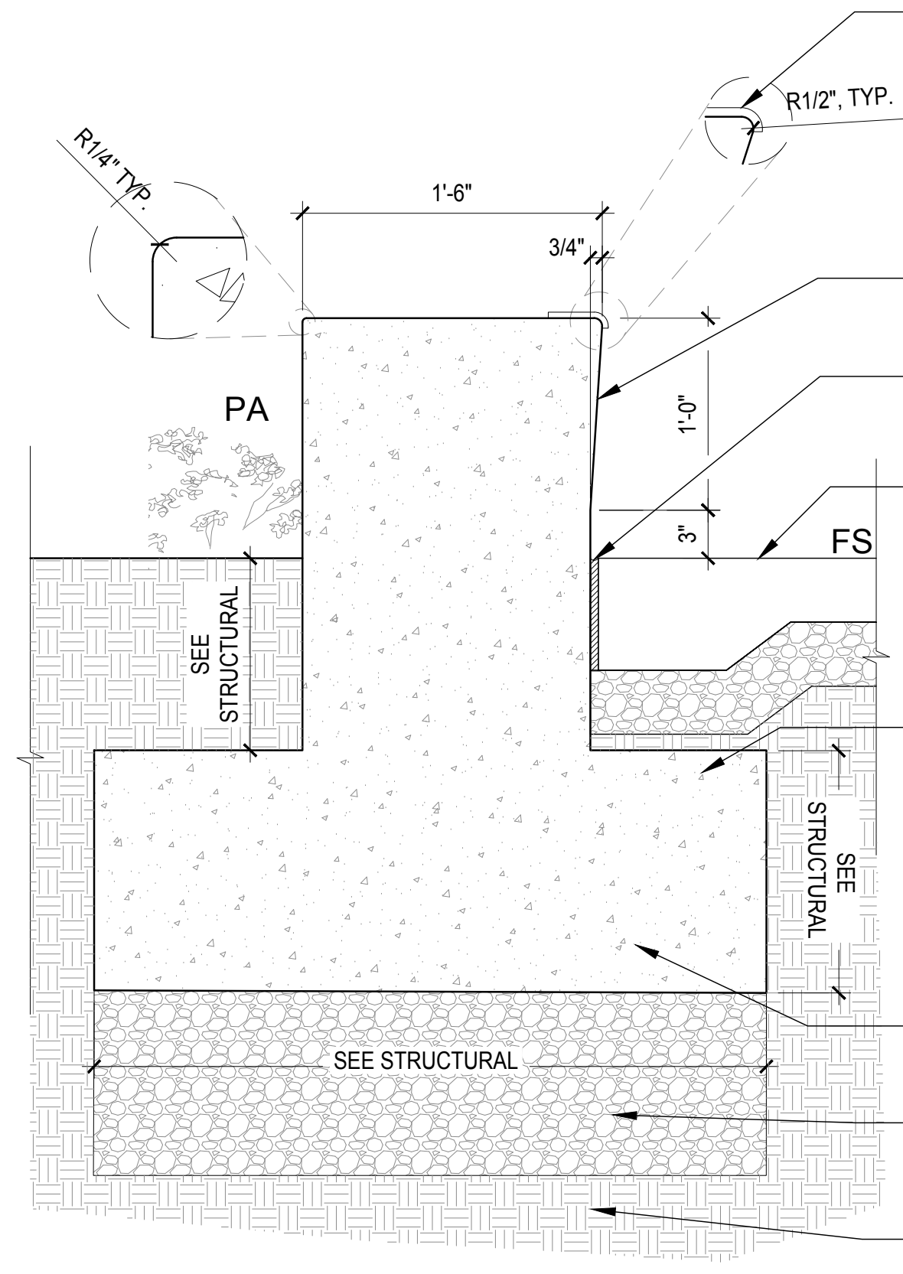
C.I.P. CONCRETE BENCH

BOTTOM LINE OF BENCH

SKATE DETERRENT; TYP

CONCRETE SEATWALL - STRAIGHT

A. PLAN VIEW


R1/4" TYP.
R1/2", TYP.
1'-6"
3/4"
PA
1'-0"
3"
FS
SEE STRUCTURAL
SEE STRUCTURAL
SEE STRUCTURAL

SKATE DETERRENT

C.I.P. CONCRETE SEAT WALL

1/5L2.01 CONCRETE JOINT EXPANSION JOINT

2/5L2.01 C.I.P. CONCRETE PAVING

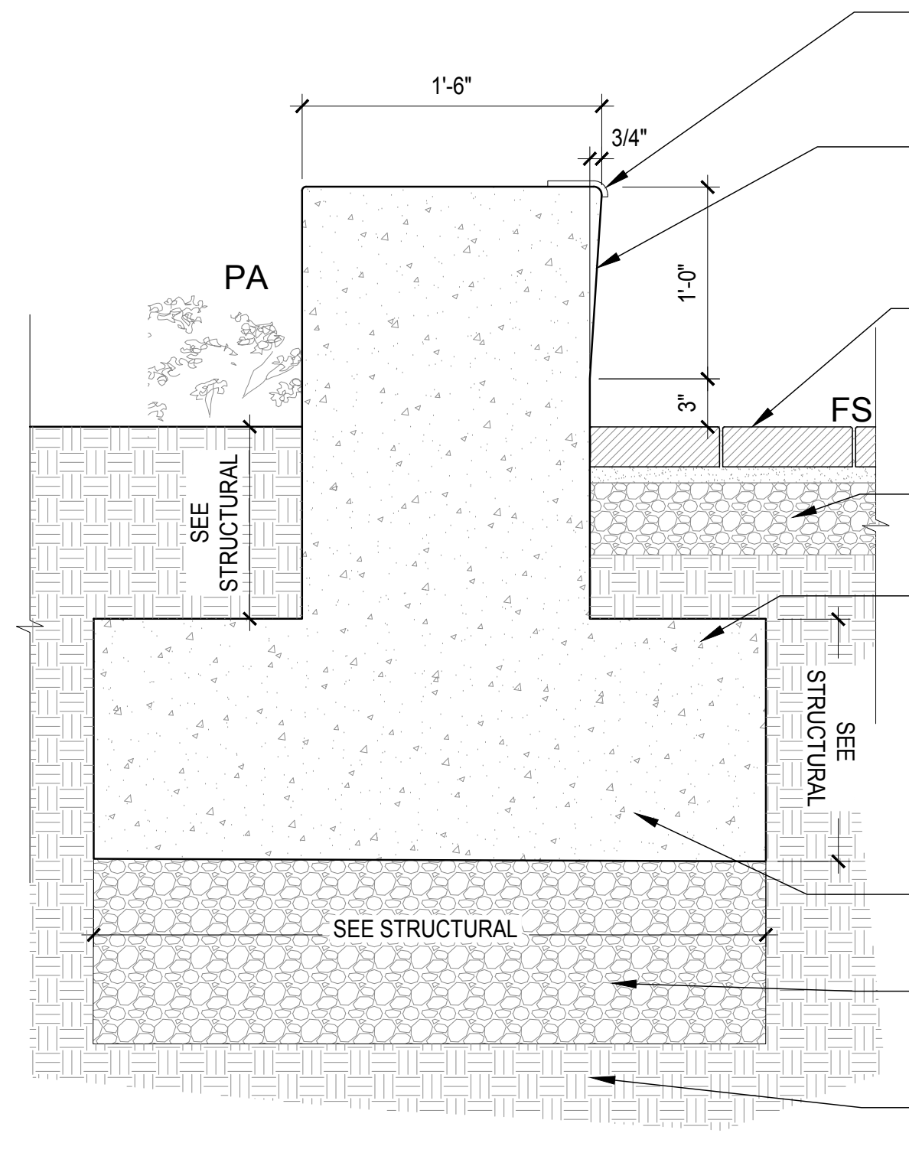
CONCRETE FOOTING, SEE 2/5SS3.0

REINFORCEMENT, SEE 2/5SS3.0

COMPACTED AGGREGATE BASE, SEE CIVIL DWGS

COMPACTED SUBGRADE, SEE CIVIL DWGS

AT CONCRETE PAVING


1'-6"
3/4"
PA
1'-0"
3"
FS
SEE STRUCTURAL
SEE STRUCTURAL
SEE STRUCTURAL

SKATE DETERRENT, 18" FROM THE EDGE AND 36" MAX. O. C.

C.I.P. CONCRETE SEAT WALL

3/5L2.01 PAVERS AT GRADE

COMPACTED AGGREGATE BASE, SEE CIVIL DWGS

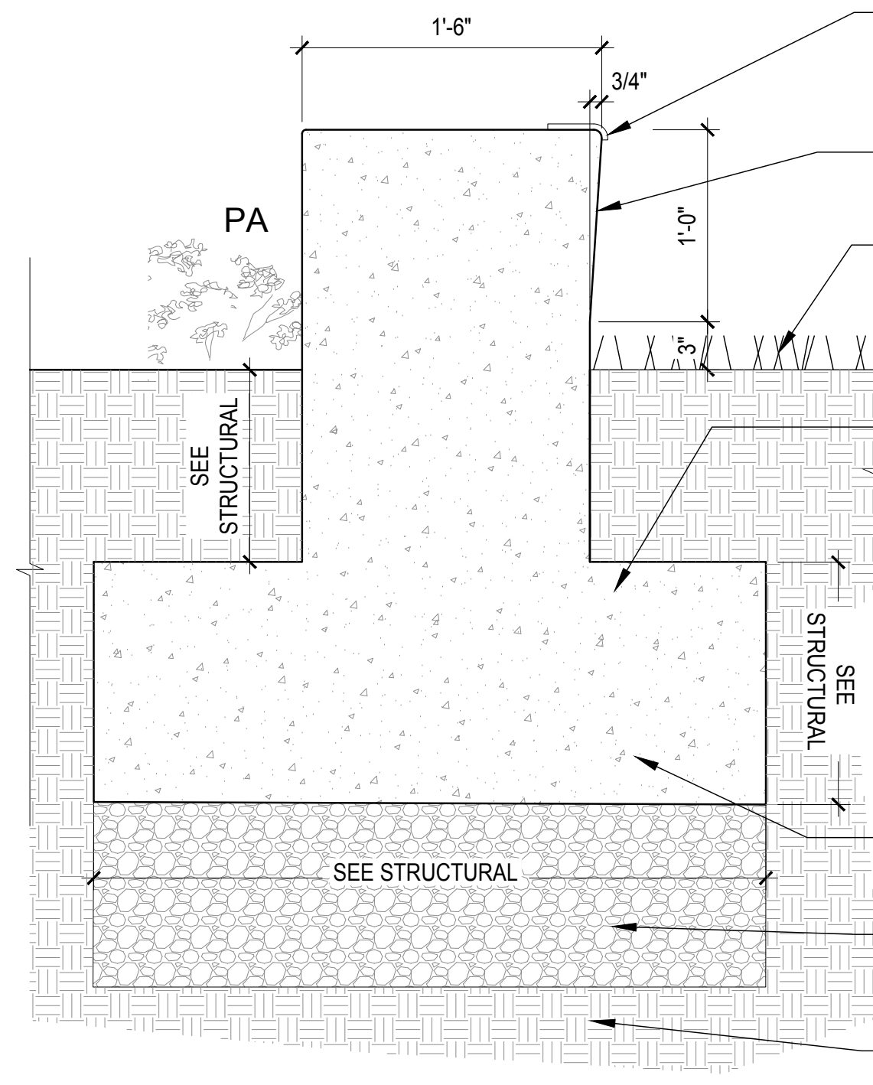
CONCRETE FOOTING, SEE 2/5SS3.0

REINFORCEMENT, SEE 2/5SS3.0

COMPACTED AGGREGATE BASE, SEE CIVIL DWGS

COMPACTED SUBGRADE, SEE CIVIL DWGS

AT CONCRETE PAVER


1'-6"
3/4"
PA
1'-0"
3"
SEE STRUCTURAL
SEE STRUCTURAL
SEE STRUCTURAL

SKATE DETERRENT, 18" FROM THE EDGE AMD 36" MAX. O. C.

C.I.P. CONCRETE SEAT WALL

SOD

CONCRETE FOOTING, SEE 2/5SS3.0

REINFORCEMENT, SEE 2/5SS3.0

COMPACTED AGGREGATE BASE, SEE CIVIL DWGS

COMPACTED SUBGRADE, SEE CIVIL DWGS

AT TURF

NOTE:
SKATE DETERRENT PRODUCT INFO:
MFR: PARK WAREHOUSE 888-321-5334
MODEL: ANTISKATE1002/FR0.5
MATERIAL: 6061-T6 ALUMINUM

B. SECTION VIEW

1 C.I.P. CONCRETE SEAT WALL

1" = 1'-0"

P-PCE5-34

If this sheet is smaller than 30" high by 42" wide then it has been reduced.

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DATE: 05/07/2026

Practice
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HKLA

HONGJOO KIM NO. 5087
12/31/26 Renewal Date
03/20/26 Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

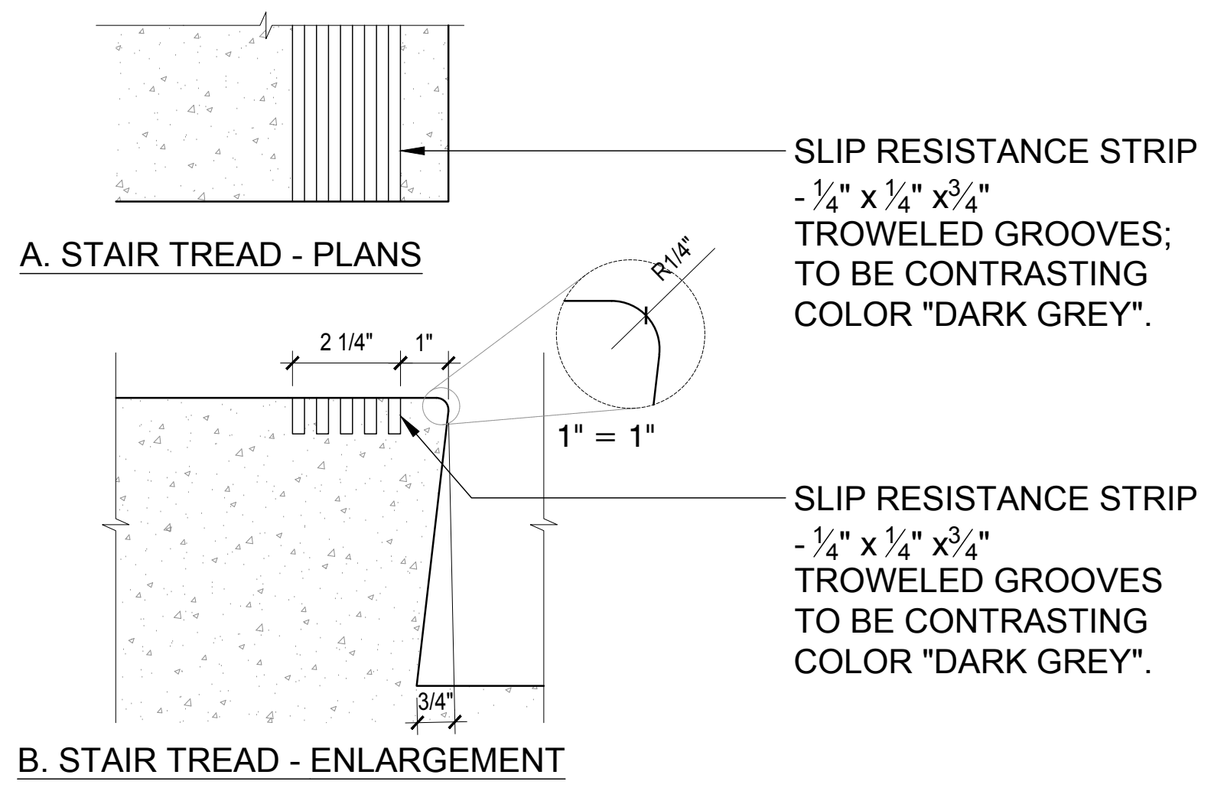
CONSTRUCTION DETAILS

5L2.02

SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

NOTE: CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2


A. STAIR TREAD - PLANS
SLIP RESISTANCE STRIP - ¼" x ¼" x¾" TROWELED GROOVES; TO BE CONTRASTING COLOR "DARK GREY".
R1/4"
2 1/4"
1"
1" = 1"
SLIP RESISTANCE STRIP - ¼" x ¼" x¾" TROWELED GROOVES TO BE CONTRASTING COLOR "DARK GREY".
3/4"
B. STAIR TREAD - ENLARGEMENT

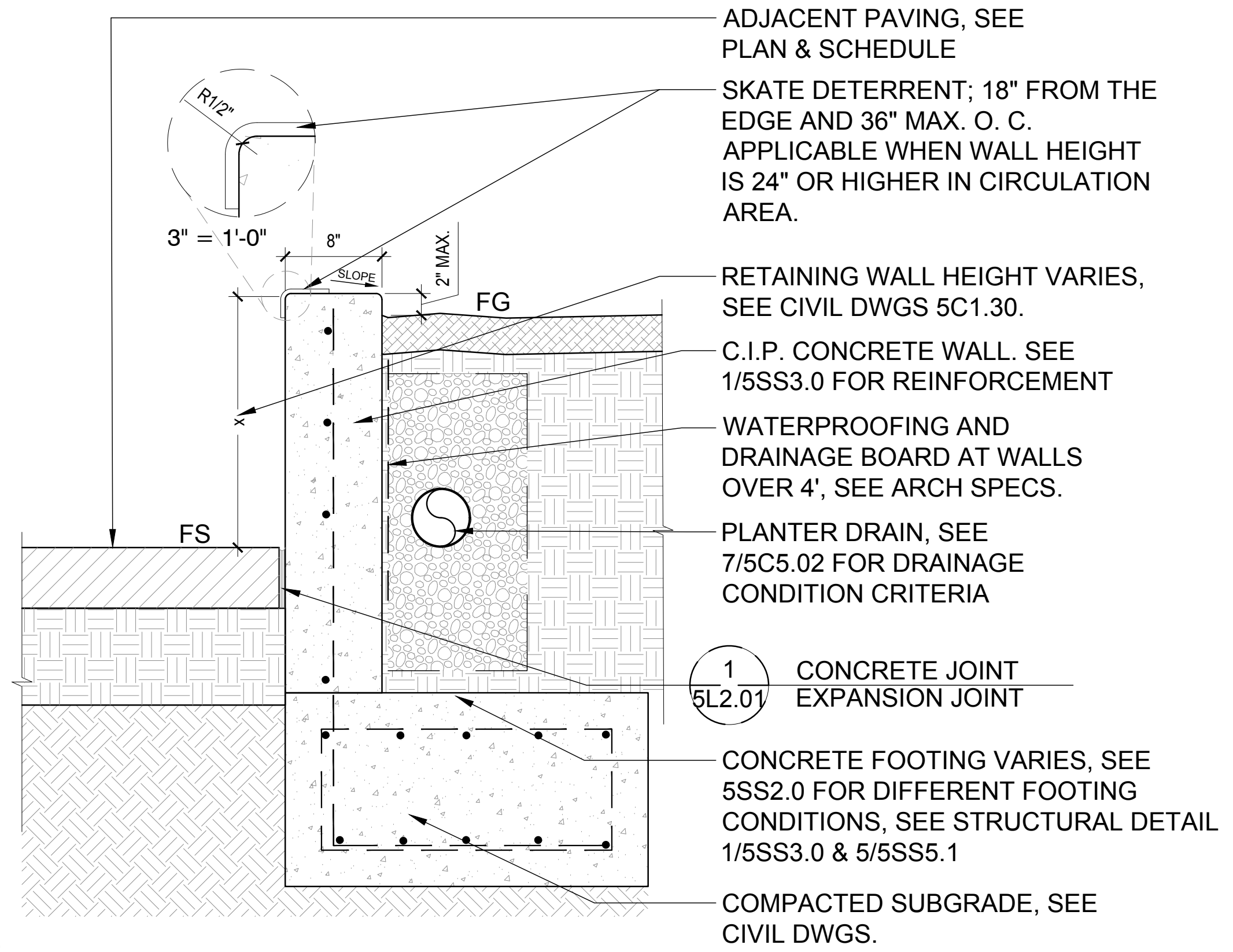
NOTE

A. GROOVES REQUIRED AT EACH TOP APPROACH AND EACH TREAD OF ALL EXTERIOR STAIRS.
B. PROVIDE CONCRETE STAIN WITHIN GROOVES AS DIRECTED BY LANDSCAPE ARCHITECT TO ALLOW FOR CONTRASTING COLOR. PROVIDE FIELD MOCK UP FOR REVIEW. PROVIDE COLOR CHART FOR REVIEW PRIOR TO CONSTRUCTION FIELD MOCKUP.

4 STAIR WARNING STRIP

3" 1'-0"d

P-PCE5-08

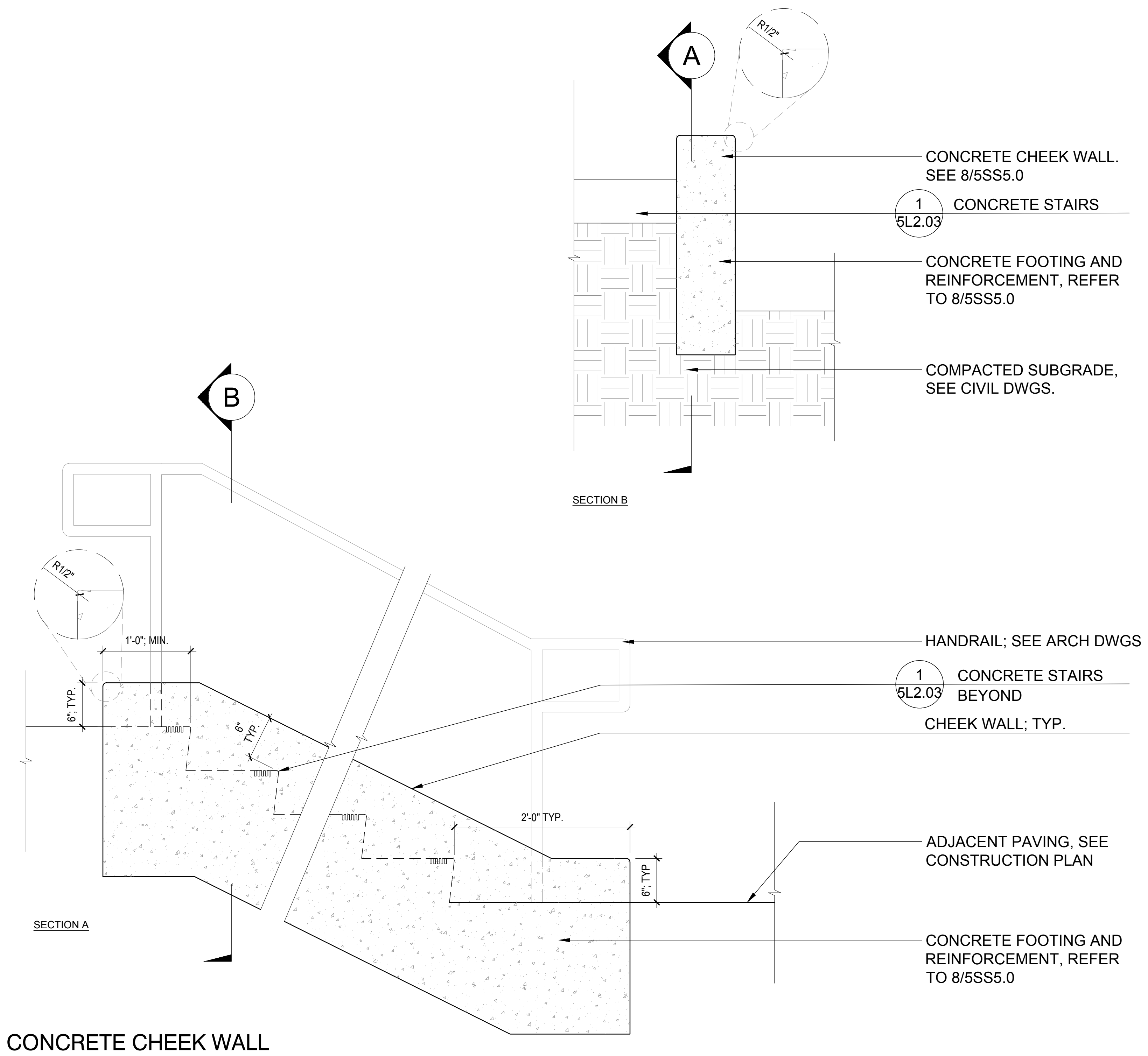

ADJACENT PAVING, SEE PLAN & SCHEDULE
SKATE DETERRENT; 18" FROM THE EDGE AND 36" MAX. O. C. APPLICABLE WHEN WALL HEIGHT IS 24" OR HIGHER IN CIRCULATION AREA.
R1/2"
3" = 1'-0"
8"
SLOPE
2" MAX.
FG
FS
RETAINING WALL HEIGHT VARIES, SEE CIVIL DWGS 5C1.30.
C.I.P. CONCRETE WALL. SEE 1/5SS3.0 FOR REINFORCEMENT
WATERPROOFING AND DRAINAGE BOARD AT WALLS OVER 4', SEE ARCH SPECS.
PLANTER DRAIN, SEE 7/5C5.02 FOR DRAINAGE CONDITION CRITERIA
1 5L2.01 CONCRETE JOINT EXPANSION JOINT
CONCRETE FOOTING VARIES, SEE 5SS2.0 FOR DIFFERENT FOOTING CONDITIONS, SEE STRUCTURAL DETAIL 1/5SS3.0 & 5/5SS5.1
COMPACTED SUBGRADE, SEE CIVIL DWGS.

NOTE:
SKATE DETERRENT PRODUCT INFO:
MFR: PARK WAREHOUSE 888-321-5334
MODEL: ANTISKATE 1005/FA902-5
MATERIAL: 6061-T6 ALUMINUM

3 RETAINING WALL

1" 1'-0"d

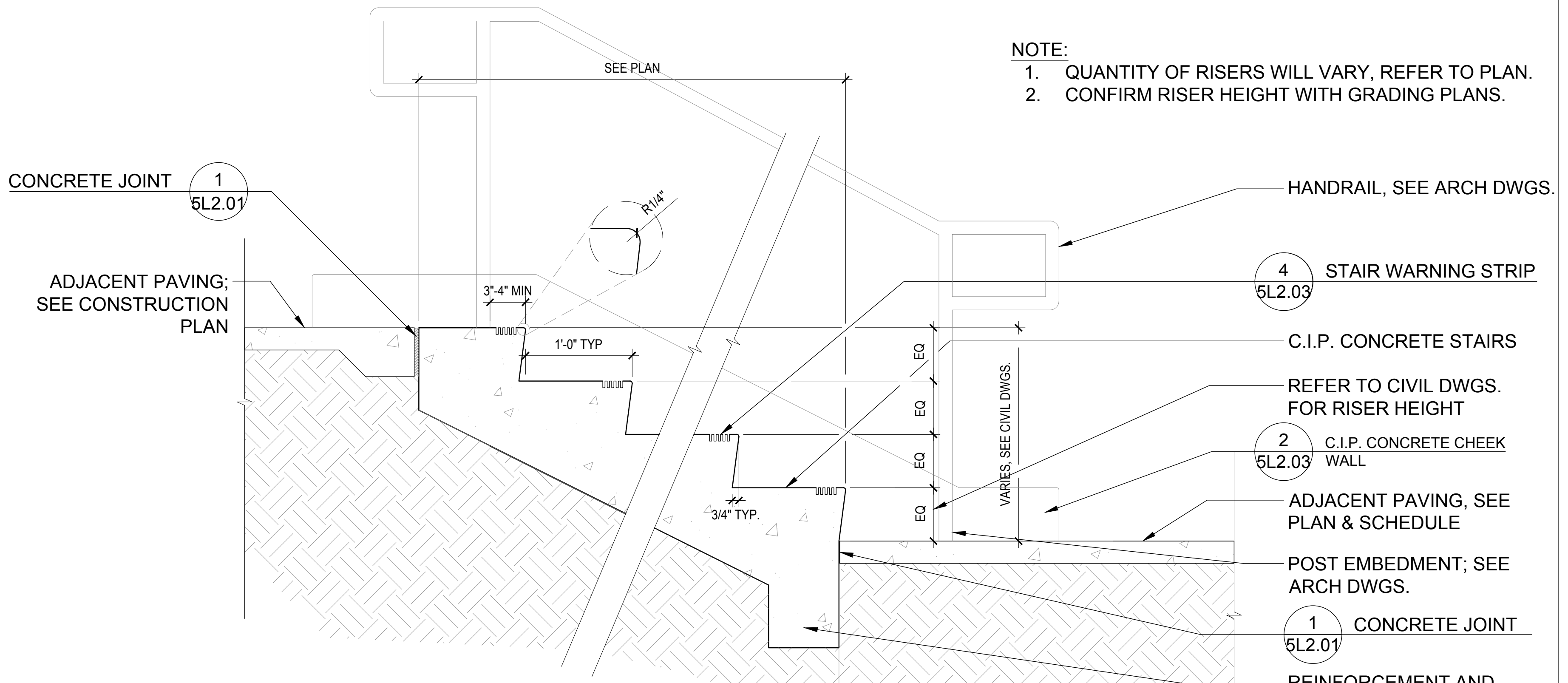
P-PCE5-99


A
R1/2"
CONCRETE CHEEK WALL. SEE 8/5SS5.0
1 5L2.03 CONCRETE STAIRS
CONCRETE FOOTING AND REINFORCEMENT, REFER TO 8/5SS5.0
COMPACTED SUBGRADE, SEE CIVIL DWGS.
SECTION B
B
R1/2"
1'-0"; MIN.
6"; TYP.
6" TYP.
2'-0" TYP.
6"; TYP
HANDRAIL; SEE ARCH DWGS
1 5L2.03 CONCRETE STAIRS BEYOND
CHEEK WALL; TYP.
ADJACENT PAVING, SEE CONSTRUCTION PLAN
CONCRETE FOOTING AND REINFORCEMENT, REFER TO 8/5SS5.0
SECTION A

2 C.I.P. CONCRETE CHEEK WALL

1" 1'-0"d

P-PCE5-43


SEE PLAN
CONCRETE JOINT 1 5L2.01
ADJACENT PAVING; SEE CONSTRUCTION PLAN
R1/4"
3"-4" MIN
1'-0" TYP
3/4" TYP.
EQ
EQ
EQ
EQ
VARIES, SEE CIVIL DWGS.
HANDRAIL, SEE ARCH DWGS.
4 5L2.03 STAIR WARNING STRIP
C.I.P. CONCRETE STAIRS
REFER TO CIVIL DWGS. FOR RISER HEIGHT
2 5L2.03 C.I.P. CONCRETE CHEEK WALL
ADJACENT PAVING, SEE PLAN & SCHEDULE
POST EMBEDMENT; SEE ARCH DWGS.
1 5L2.01 CONCRETE JOINT
REINFORCEMENT AND FOOTING, SEE 3/5SS5.0

NOTE:
1. QUANTITY OF RISERS WILL VARY, REFER TO PLAN.
2. CONFIRM RISER HEIGHT WITH GRADING PLANS.

1 CONCRETE STAIRS

1" 1'-0"d

P-PCE5-35

If this sheet is smaller than 30" high by 42" wide then it has been reduced.

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DATE: 05/07/2026

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HKLA

HONGJOO KIM NO. 5087
12/31/26
Renewal Date
03/20/26
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PARADISE CANYON E.S.
PACKAGE 5 - NEW NORTH BUILDINGS
471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

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ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
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08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

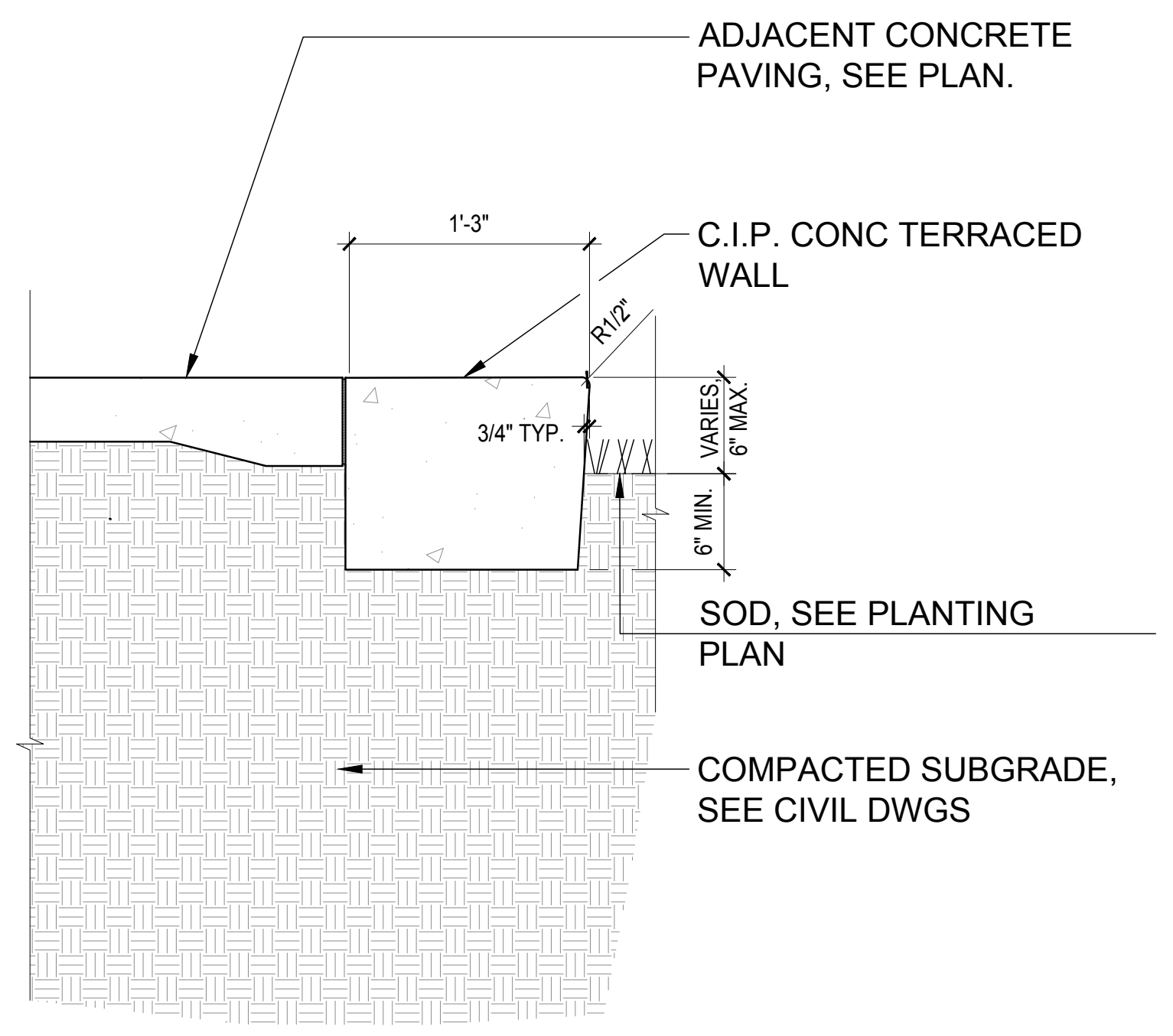
CONSTRUCTION DETAILS

5L2.03

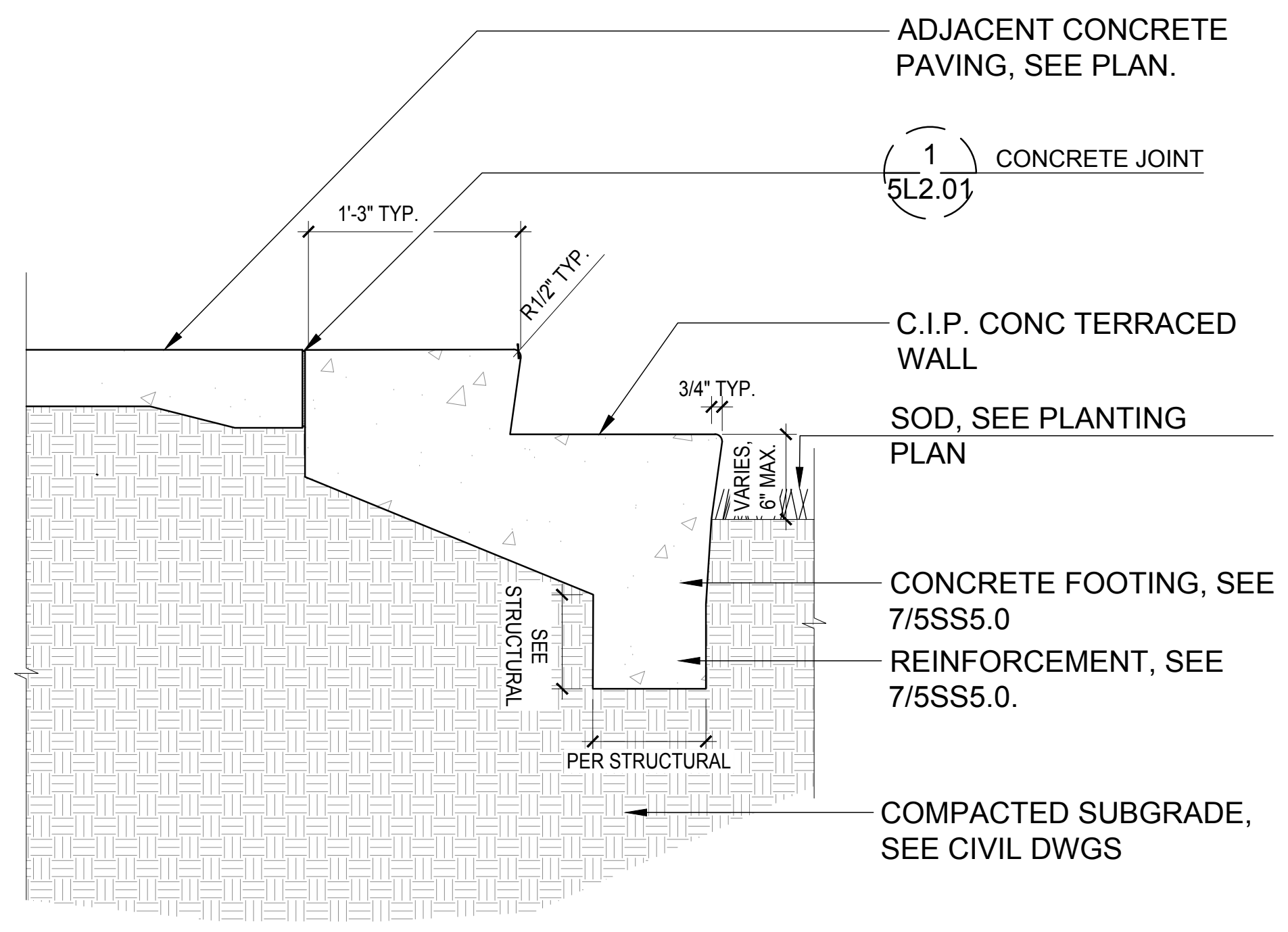
SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

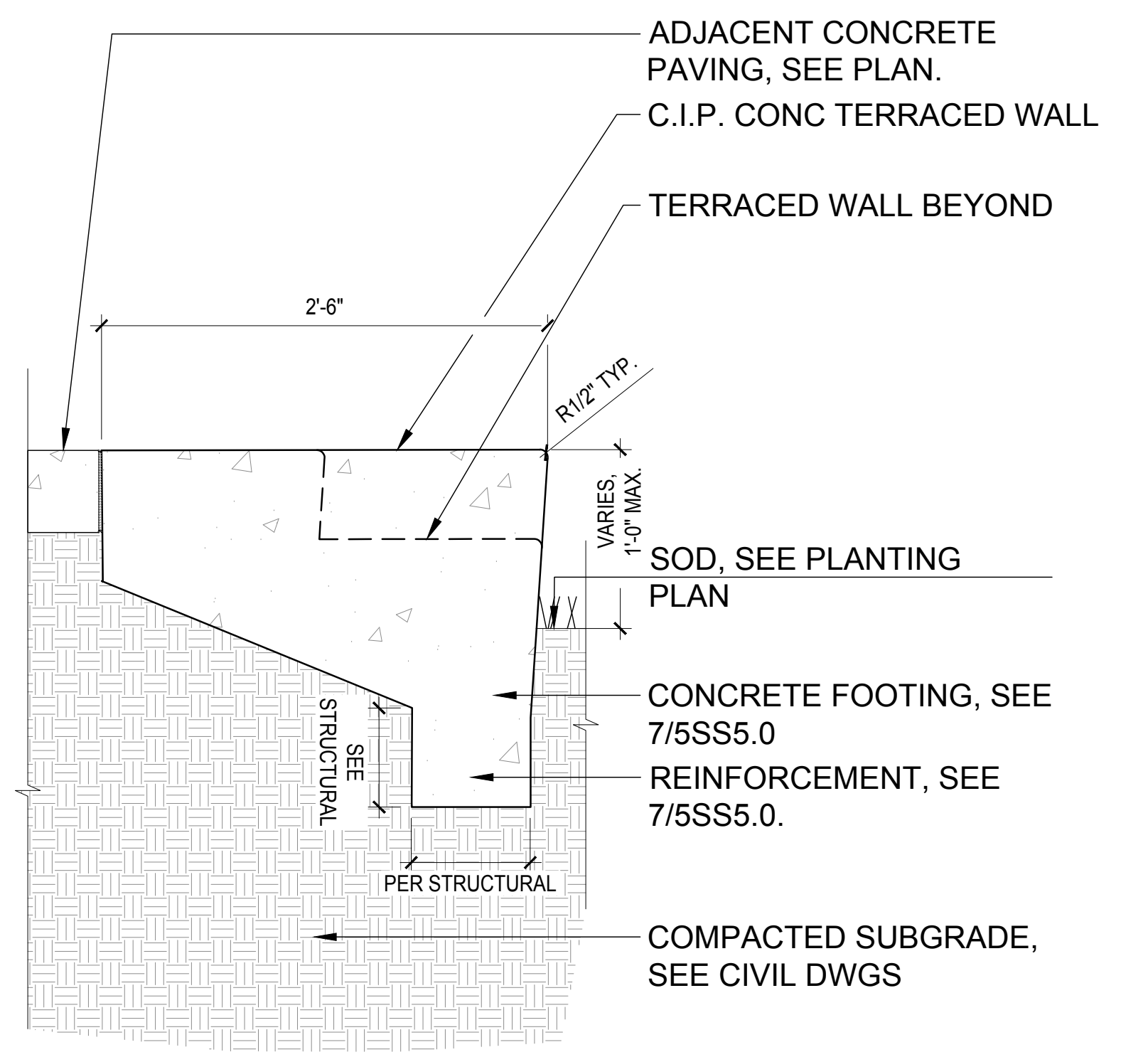
NOTE: CONCRETE SHOWN IS EXEMPT FROM BATCH PLANT INSPECTION PER CBC SECTION 1705A.3.3.2


ADJACENT CONCRETE PAVING, SEE PLAN.
1'-3"
C.I.P. CONC TERRACED WALL
R1/2"
3/4" TYP.
VARIES, 6" MAX.
6" MIN.
SOD, SEE PLANTING PLAN
COMPACTED SUBGRADE, SEE CIVIL DWGS

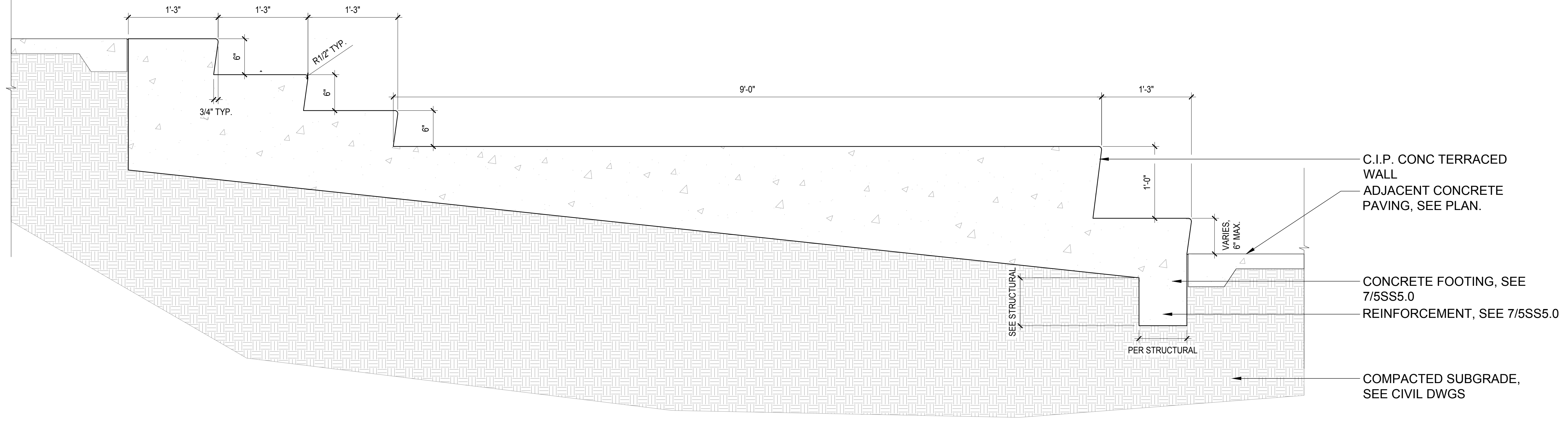
SECTION F
1" = 1'-0"


ADJACENT CONCRETE PAVING, SEE PLAN.
1 5L2.01 CONCRETE JOINT
1'-3" TYP.
R1/2" TYP.
C.I.P. CONC TERRACED WALL
3/4" TYP.
SOD, SEE PLANTING PLAN
VARIES, 6" MAX.
SEE STRUCTURAL
CONCRETE FOOTING, SEE 7/5SS5.0
REINFORCEMENT, SEE 7/5SS5.0.
PER STRUCTURAL
COMPACTED SUBGRADE, SEE CIVIL DWGS

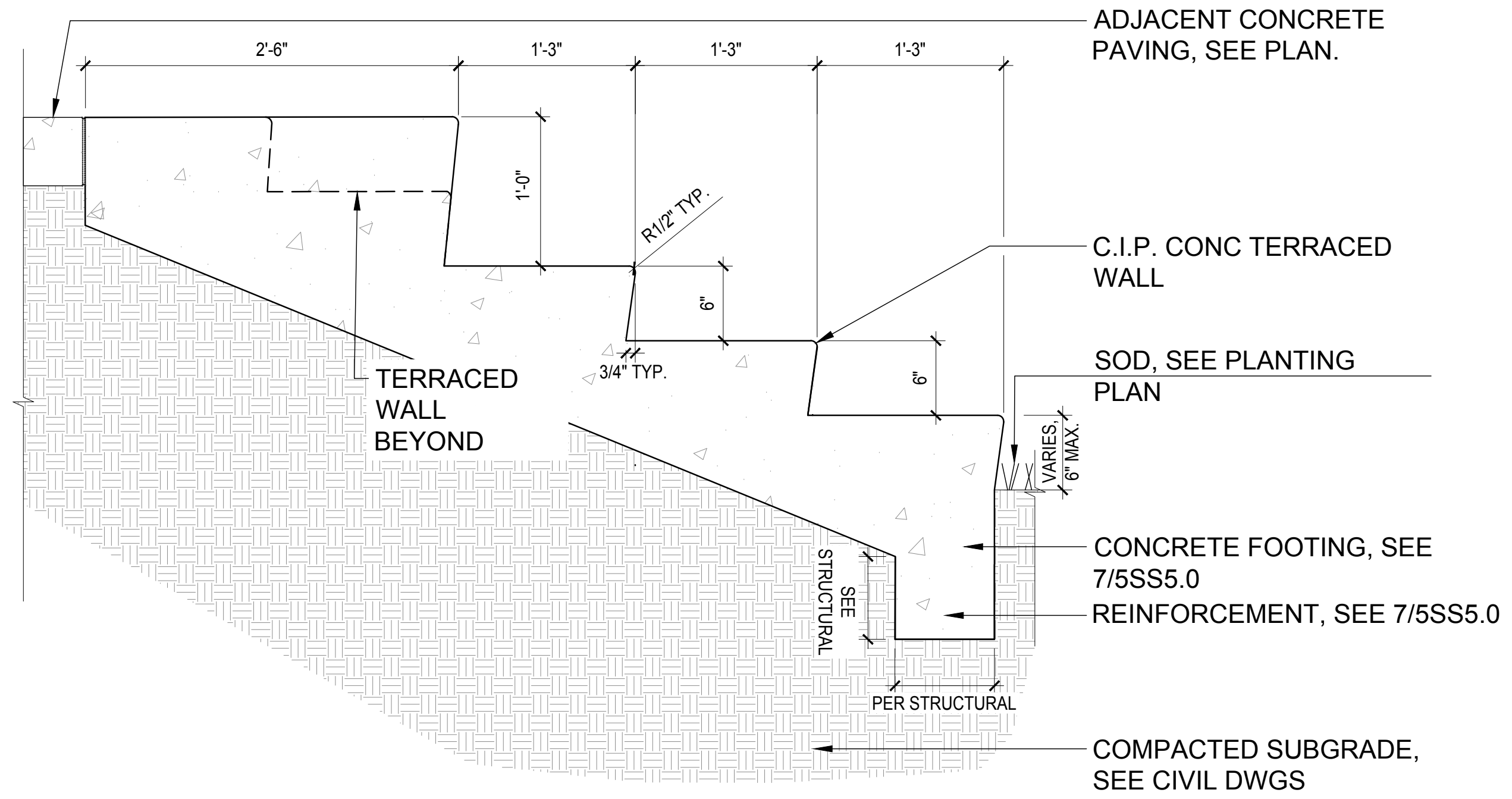
SECTION E
1" = 1'-0"


ADJACENT CONCRETE PAVING, SEE PLAN.
C.I.P. CONC TERRACED WALL
TERRACED WALL BEYOND
2'-6"
R1/2" TYP.
VARIES, 1'-0" MAX.
SOD, SEE PLANTING PLAN
SEE STRUCTURAL
CONCRETE FOOTING, SEE 7/5SS5.0
REINFORCEMENT, SEE 7/5SS5.0.
PER STRUCTURAL
COMPACTED SUBGRADE, SEE CIVIL DWGS

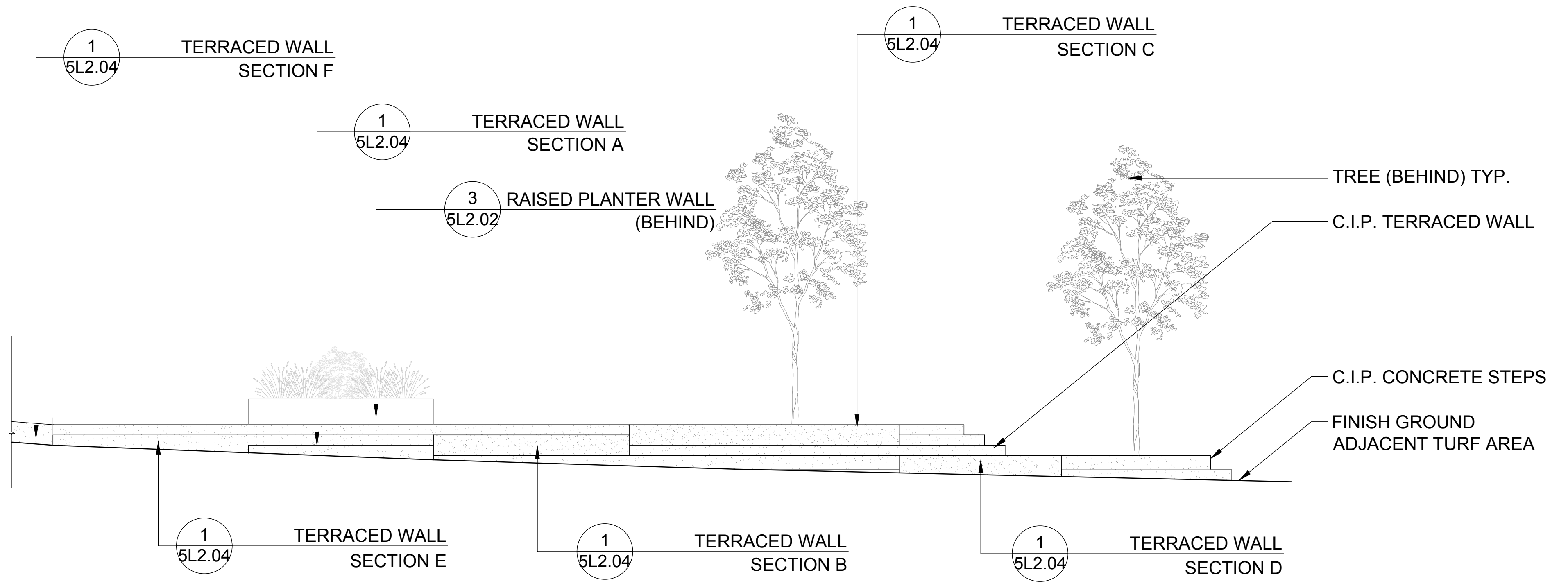
SECTION D
1" = 1'-0"


1'-3"
1'-3"
1'-3"
6"
R1/2" TYP.
6"
3/4" TYP.
6"
9'-0"
1'-3"
C.I.P. CONC TERRACED WALL
ADJACENT CONCRETE PAVING, SEE PLAN.
1'-0"
VARIES, 6" MAX.
SEE STRUCTURAL
CONCRETE FOOTING, SEE 7/5SS5.0
REINFORCEMENT, SEE 7/5SS5.0
PER STRUCTURAL
COMPACTED SUBGRADE, SEE CIVIL DWGS

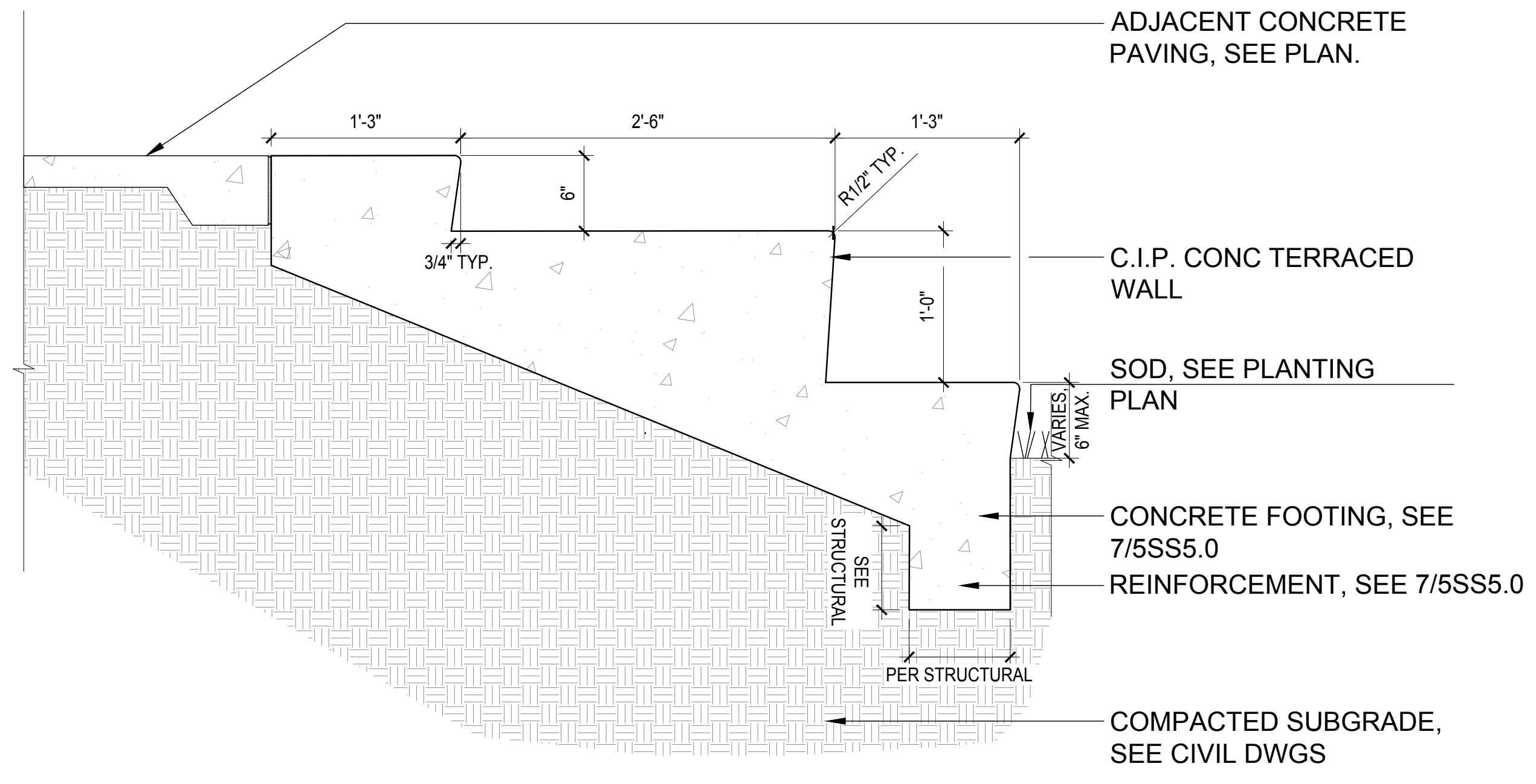
SECTION H
1" = 1'-0"


ADJACENT CONCRETE PAVING, SEE PLAN.
2'-6"
1'-3"
1'-3"
1'-3"
1'-0"
R1/2" TYP.
6"
3/4" TYP.
6"
TERRACED WALL BEYOND
C.I.P. CONC TERRACED WALL
SOD, SEE PLANTING PLAN
VARIES, 6" MAX.
SEE STRUCTURAL
CONCRETE FOOTING, SEE 7/5SS5.0
REINFORCEMENT, SEE 7/5SS5.0
PER STRUCTURAL
COMPACTED SUBGRADE, SEE CIVIL DWGS

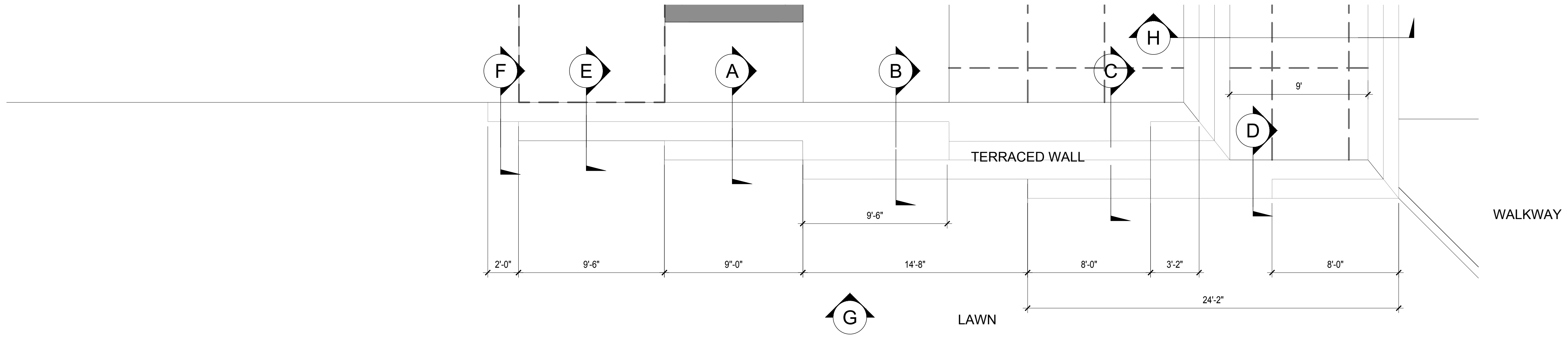
SECTION C
1" = 1'-0"


1 5L2.04 TERRACED WALL SECTION F
1 5L2.04 TERRACED WALL SECTION C
1 5L2.04 TERRACED WALL SECTION A
3 5L2.02 RAISED PLANTER WALL (BEHIND)
TREE (BEHIND) TYP.
C.I.P. TERRACED WALL
C.I.P. CONCRETE STEPS
FINISH GROUND ADJACENT TURF AREA
1 5L2.04 TERRACED WALL SECTION E
1 5L2.04 TERRACED WALL SECTION B
1 5L2.04 TERRACED WALL SECTION D

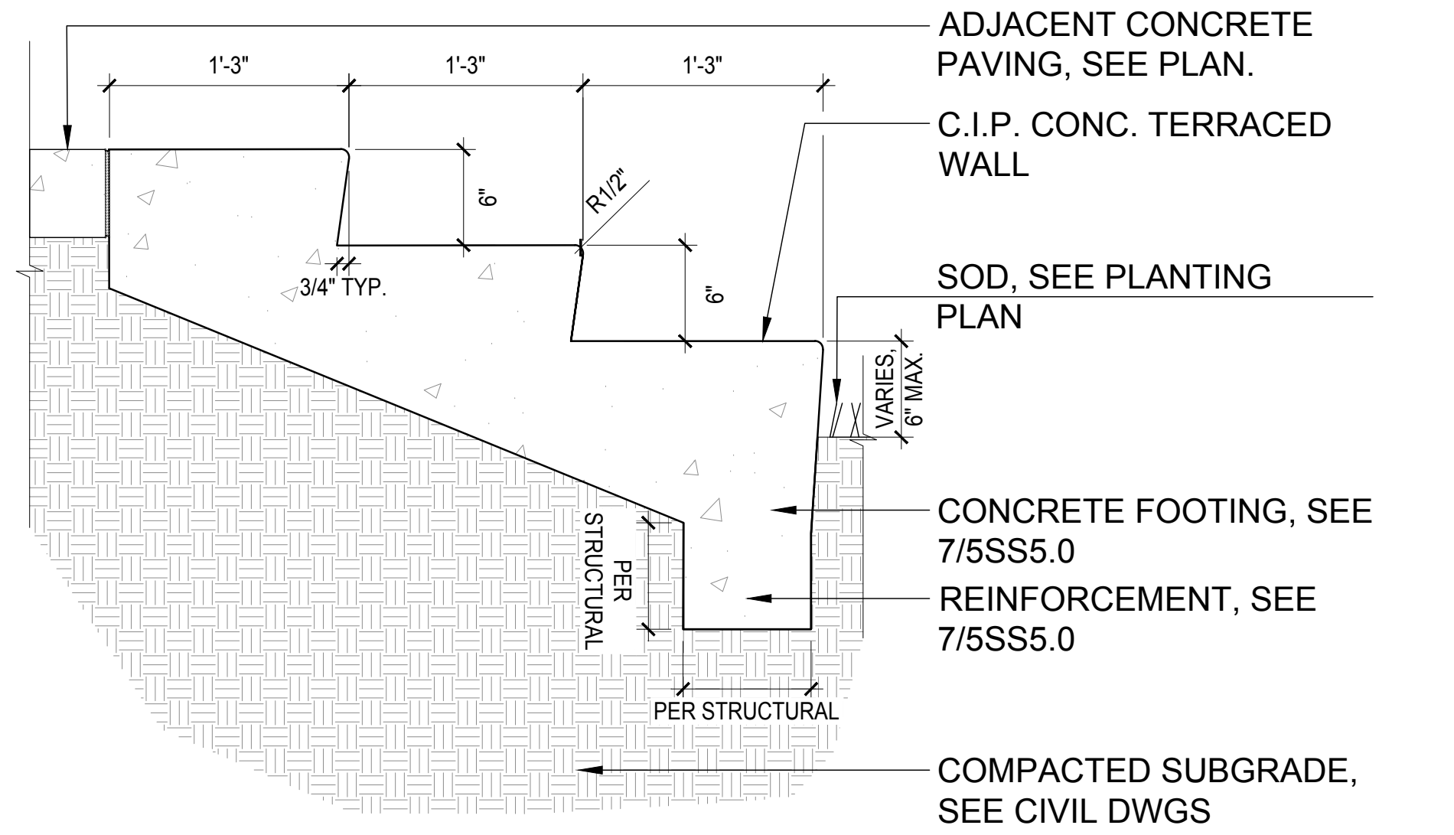
ELEVATION G
1" = 5'-0"


ADJACENT CONCRETE PAVING, SEE PLAN.
1'-3"
2'-6"
1'-3"
6"
R1/2" TYP.
3/4" TYP.
1'-0"
C.I.P. CONC TERRACED WALL
SOD, SEE PLANTING PLAN
VARIES, 6" MAX.
SEE STRUCTURAL
CONCRETE FOOTING, SEE 7/5SS5.0
REINFORCEMENT, SEE 7/5SS5.0
PER STRUCTURAL
COMPACTED SUBGRADE, SEE CIVIL DWGS

SECTION B
1" = 1'-0"


H
F
E
A
B
C
D
9'
TERRACED WALL
9'-6"
WALKWAY
2'-0"
9'-6"
9'-0"
14'-8"
8'-0"
3'-2"
8'-0"
24'-2"
G
LAWN

REFERENCE PLAN
1" = 10'-0"


ADJACENT CONCRETE PAVING, SEE PLAN.
1'-3"
1'-3"
1'-3"
6"
R1/2"
3/4" TYP.
6"
C.I.P. CONC. TERRACED WALL
SOD, SEE PLANTING PLAN
VARIES, 6" MAX.
PER STRUCTURAL
CONCRETE FOOTING, SEE 7/5SS5.0
REINFORCEMENT, SEE 7/5SS5.0
PER STRUCTURAL
COMPACTED SUBGRADE, SEE CIVIL DWGS

SECTION A
1" = 1'-0"

1 TERRACED WALL

VARIES

P-PCE5-66

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HONGJOO KIM NO. 5087
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
04/19/2024	100% SCHEMATIC DESIGN
07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

# REVISION DATE	DESCRIPTION

DRAWING TITLE

CONSTRUCTION DETAILS

5L2.04

SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

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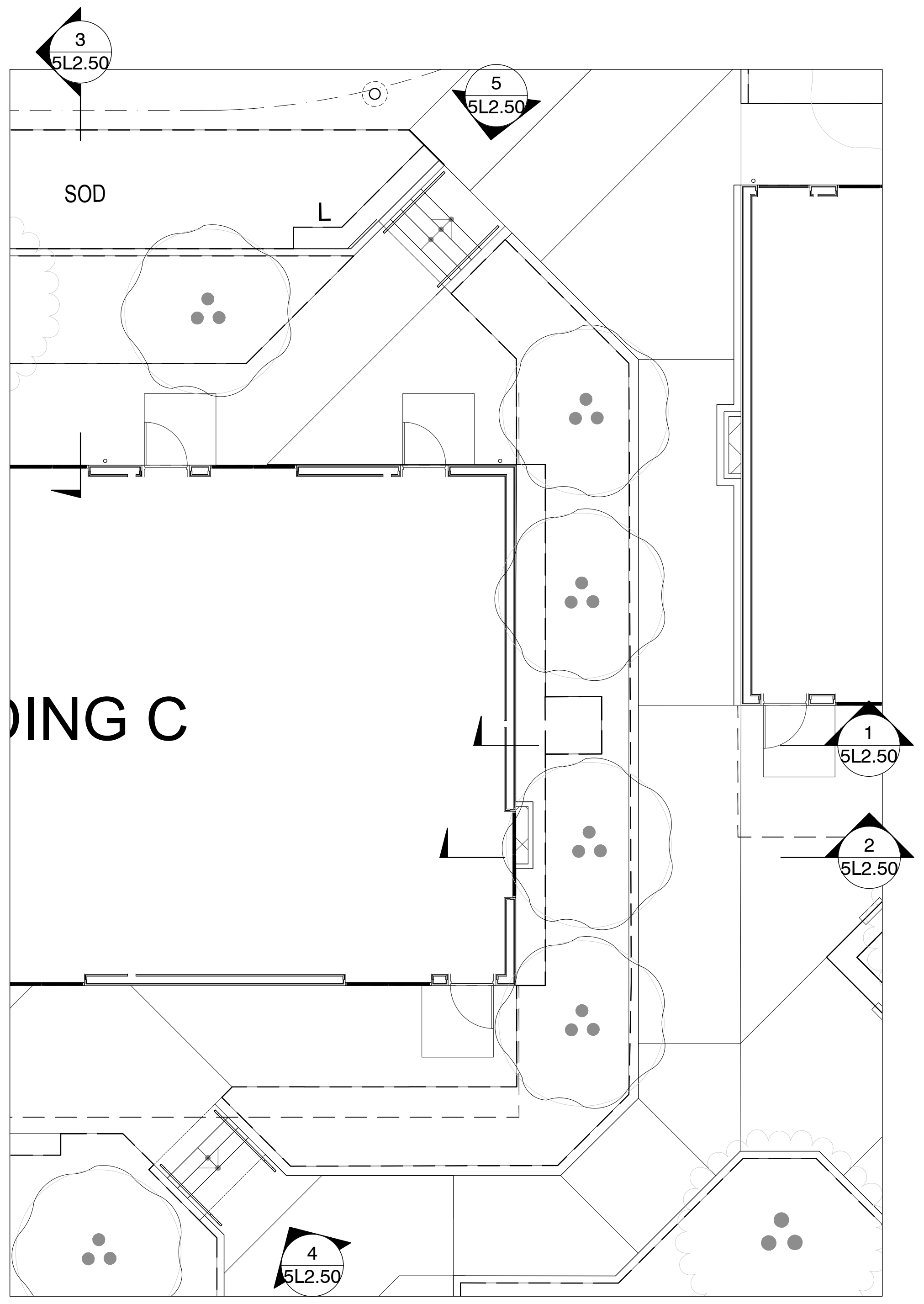
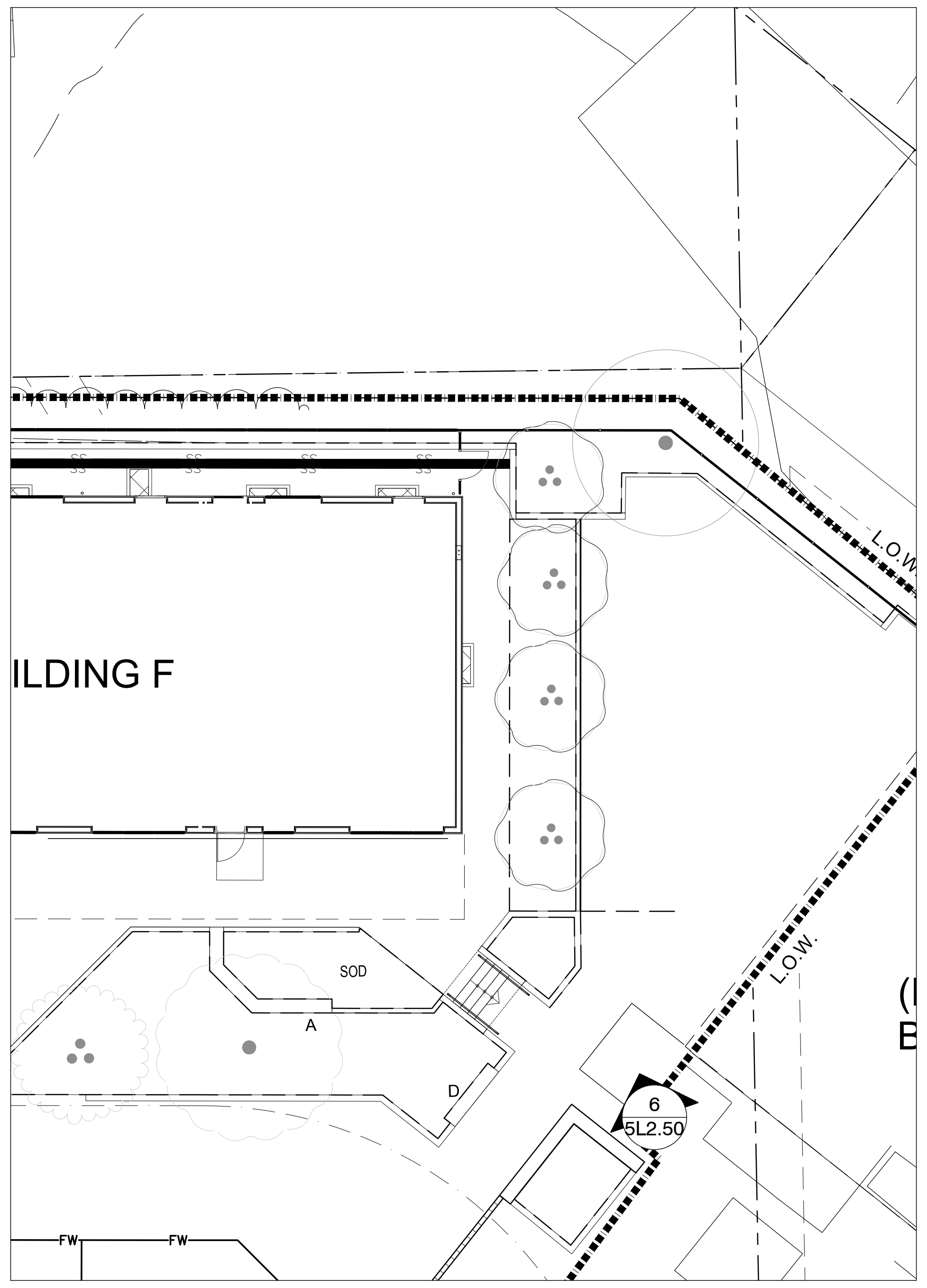
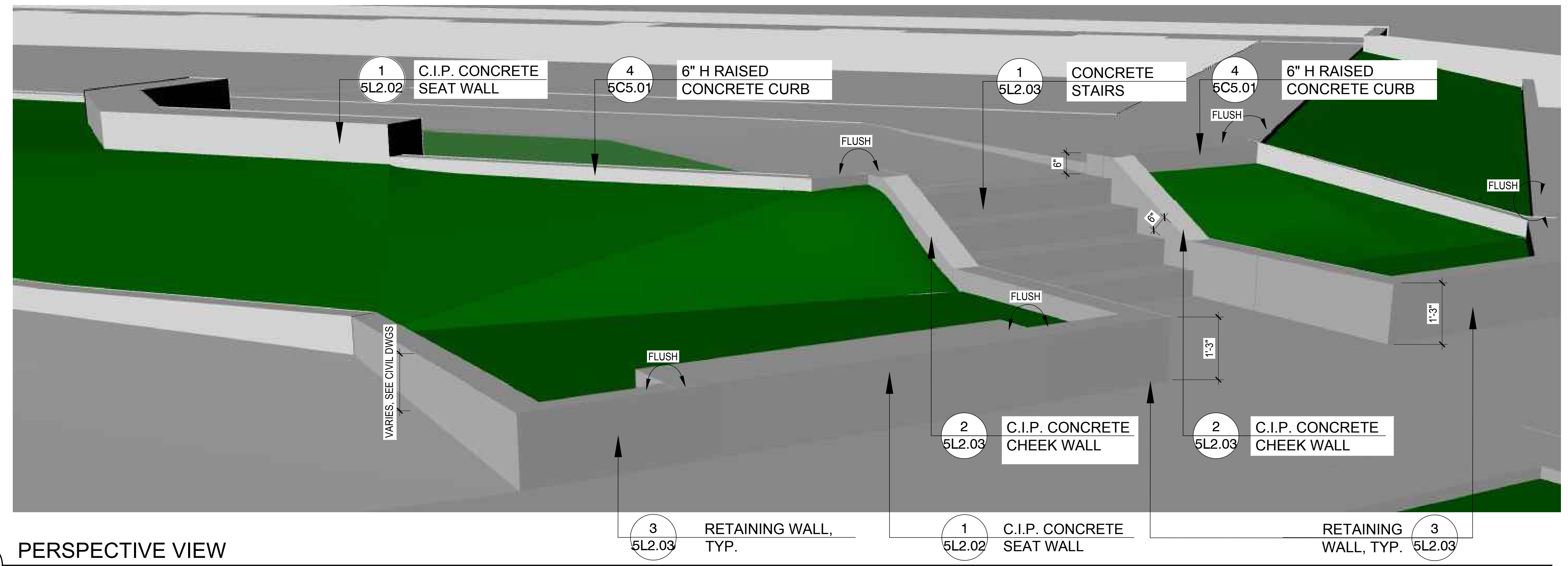

3
5L2.50
5
5L2.50
SOD
L
DING C
1
5L2.50
2
5L2.50
4
5L2.50

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

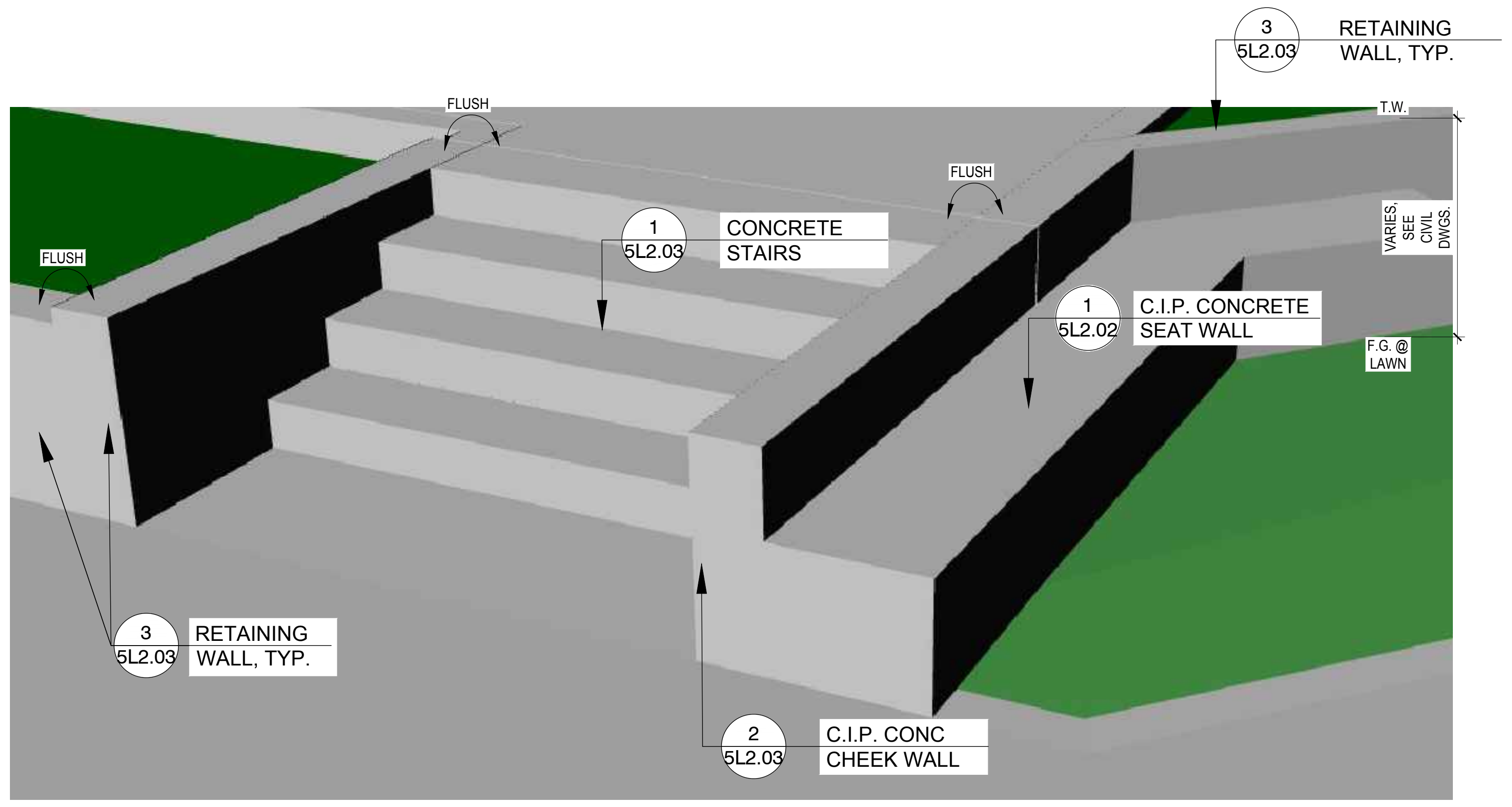

ILDING F
LOW
L.O.W.
SOD
A
D
6
5L2.50
FW
FW

KEY PLAN 2 SCALE: 1/8" = 1'-0"

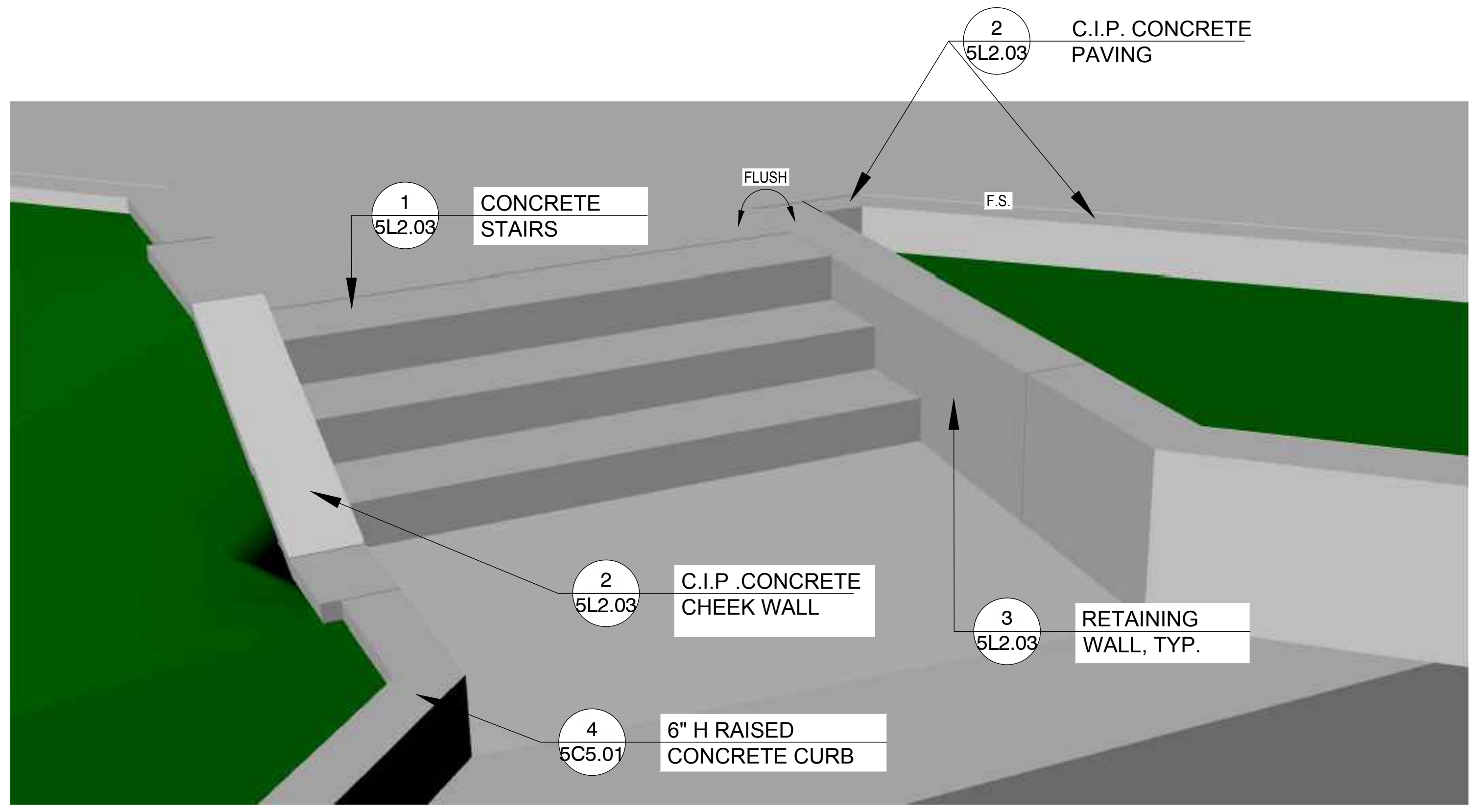
NOTES:
1. SECTIONS ARE INTENDED TO SHOW DESIGN INTENT ONLY.
2. 3D VIEWS ARE NOT INTENDED FOR CONSTRUCTION. 3D VIEWS ARE INTENDED TO COMMUNICATE DESIGN INTENT ONLY.


1
5L2.02
C.I.P. CONCRETE
SEAT WALL
4
5C5.01
6" H RAISED
CONCRETE CURB
1
5L2.03
CONCRETE
STAIRS
4
5C5.01
6" H RAISED
CONCRETE CURB
FLUSH
FLUSH
FLUSH
FLUSH
FLUSH
VARIES, SEE CIVIL DWGS
1'-3"
1'-3"
2
5L2.03
C.I.P. CONCRETE
CHEEK WALL
2
5L2.03
C.I.P. CONCRETE
CHEEK WALL
3
5L2.03
RETAINING WALL,
TYP.
1
5L2.02
C.I.P. CONCRETE
SEAT WALL
RETAINING
WALL, TYP.
3
5L2.03

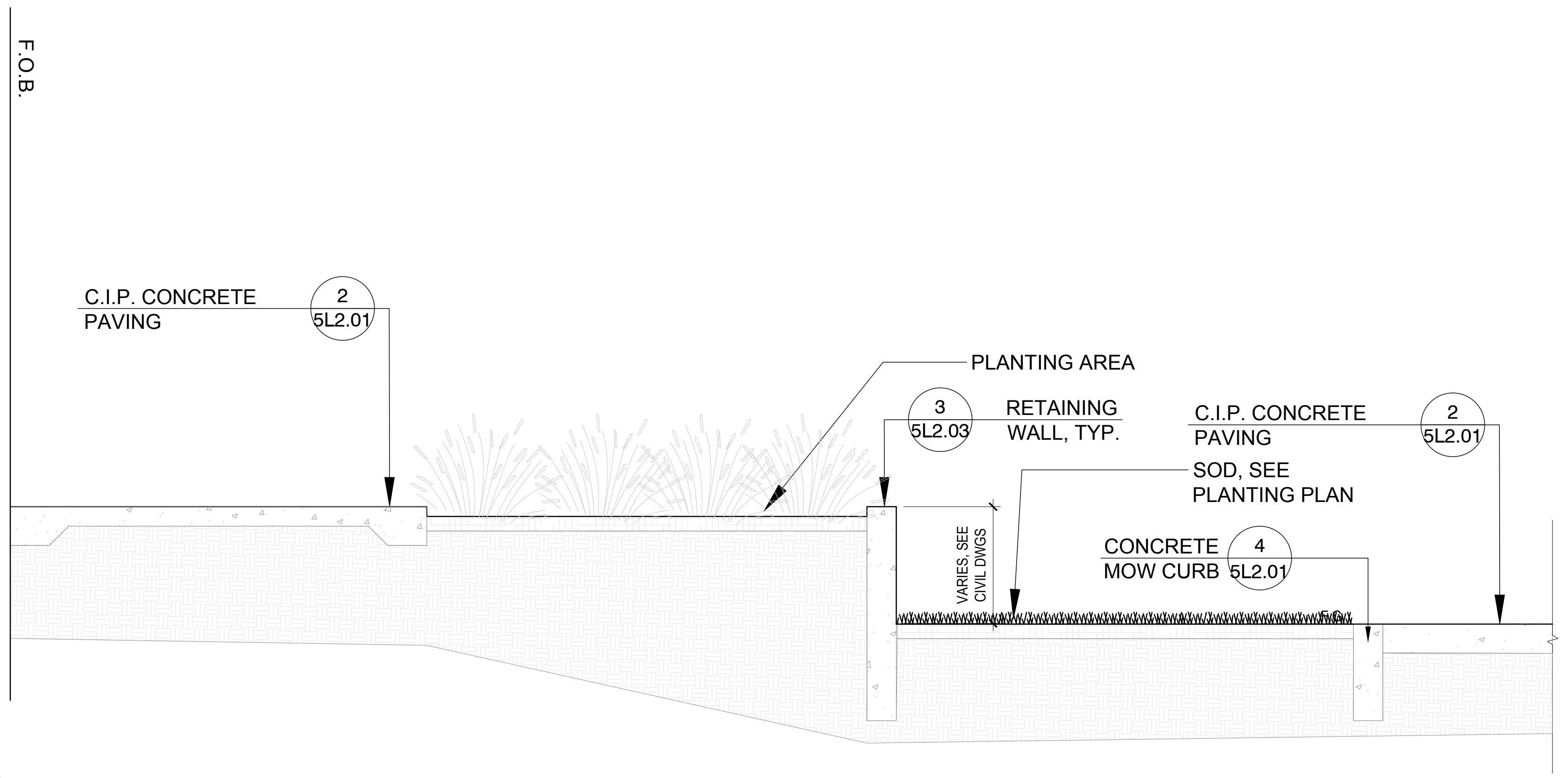
6 PERSPECTIVE VIEW
NTS
P-PCE5-83


3
5L2.03
RETAINING
WALL, TYP.
T.W.
FLUSH
FLUSH
FLUSH
1
5L2.03
CONCRETE
STAIRS
1
5L2.02
C.I.P. CONCRETE
SEAT WALL
VARIES SEE CIVIL DWGS
F.G. @ LAWN
3
5L2.03
RETAINING
WALL, TYP.
2
5L2.03
C.I.P. CONC
CHEEK WALL

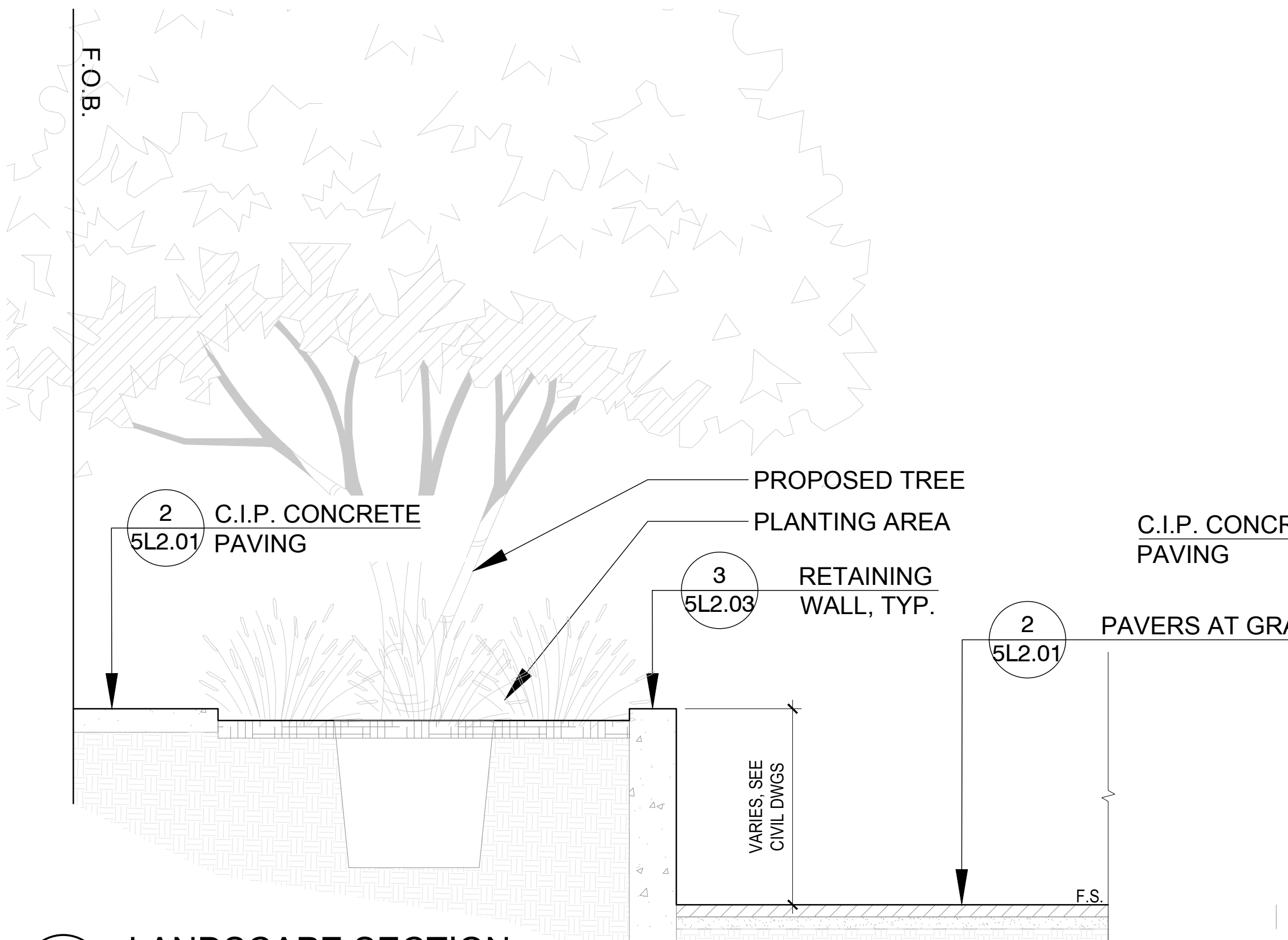
5 PERSPECTIVE VIEW
NTS
P-PCE5-82


2
5L2.03
C.I.P. CONCRETE
PAVING
1
5L2.03
CONCRETE
STAIRS
FLUSH
F.S.
2
5L2.03
C.I.P. CONCRETE
CHEEK WALL
3
5L2.03
RETAINING
WALL, TYP.
4
5C5.01
6" H RAISED
CONCRETE CURB

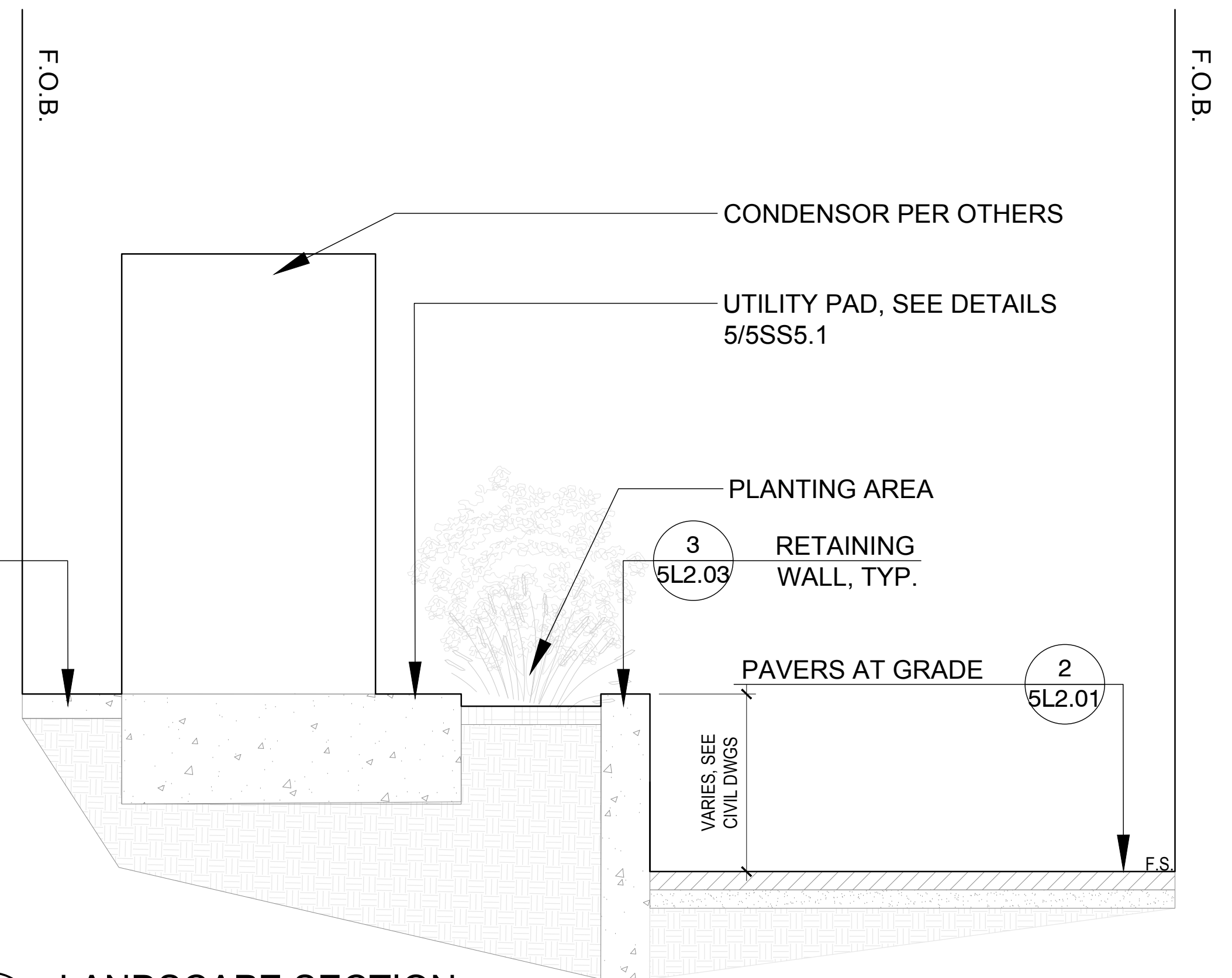
4 PERSPECTIVE VIEW
NTS
P-PCE5-81


F.O.B.
C.I.P. CONCRETE
PAVING
2
5L2.01
PLANTING AREA
3
5L2.03
RETAINING
WALL, TYP.
C.I.P. CONCRETE
PAVING
2
5L2.01
SOD, SEE
PLANTING PLAN
CONCRETE
MOW CURB
4
5L2.01
VARIES, SEE CIVIL DWGS

3 LANDSCAPE SECTION
1/2" = 1'-0"
P-PCE5-80


F.O.B.
2
5L2.01
C.I.P. CONCRETE
PAVING
PROPOSED TREE
PLANTING AREA
3
5L2.03
RETAINING
WALL, TYP.
C.I.P. CONCRETE
PAVING
2
5L2.01
2
5L2.01
PAVERS AT GRADE
VARIES, SEE CIVIL DWGS
F.S.

2 LANDSCAPE SECTION
1/2" = 1'-0"
P-PCE5-79


F.O.B.
F.O.B.
CONDENSOR PER OTHERS
UTILITY PAD, SEE DETAILS
5/5SS5.1
PLANTING AREA
3
5L2.03
RETAINING
WALL, TYP.
PAVERS AT GRADE
2
5L2.01
VARIES, SEE CIVIL DWGS
F.S.

1 LANDSCAPE SECTION
1/2" = 1'-0"
P-PCE5-78

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LICENSED LANDSCAPE ARCHITECT
HONGJOO KIM NO. 5087
Signature
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

LICENSED ARCHITECT
HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
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08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

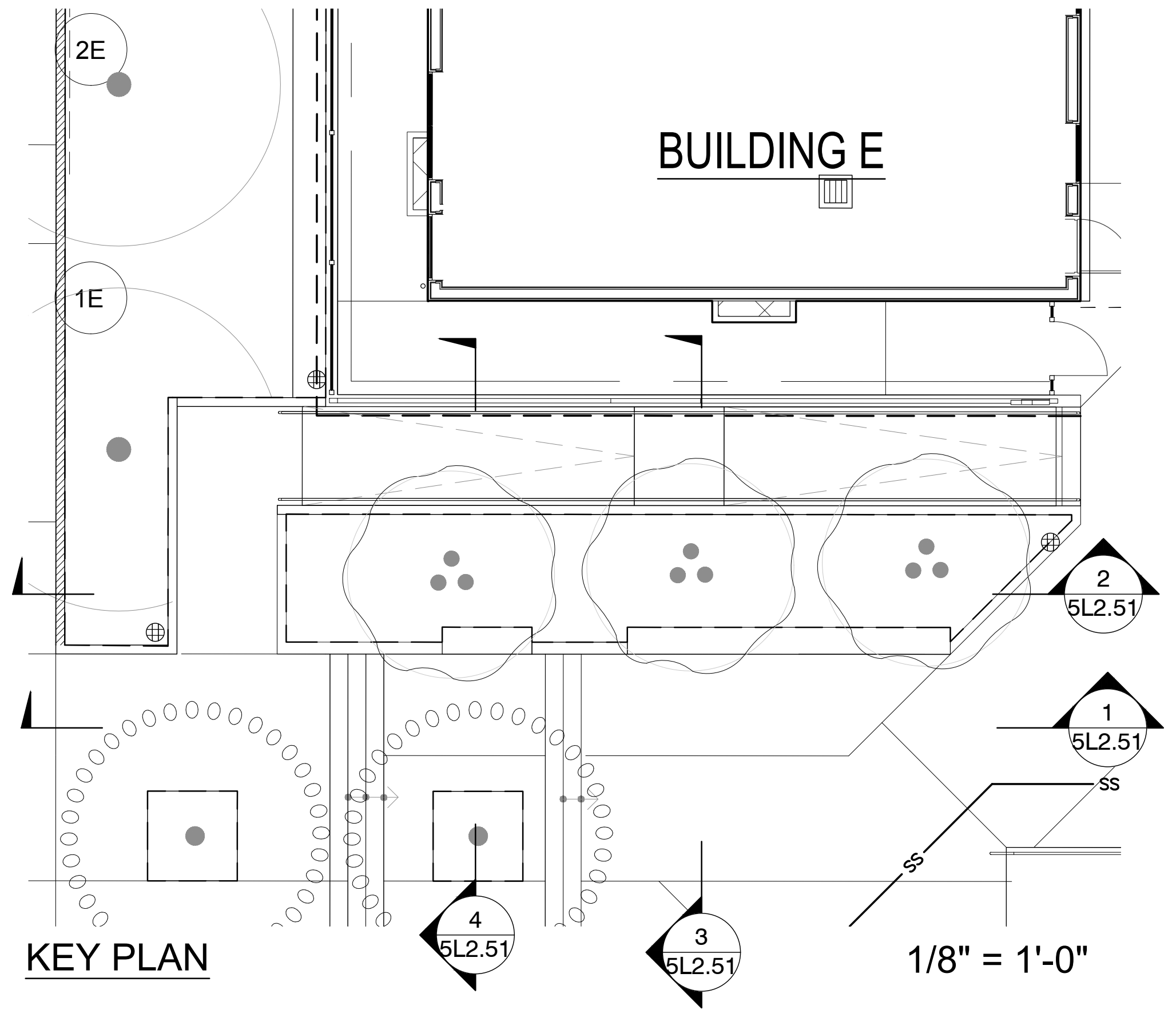
DRAWING TITLE

SITE SECTIONS AND ELEVATIONS

5L2.50

SCALE: AS INDICATED

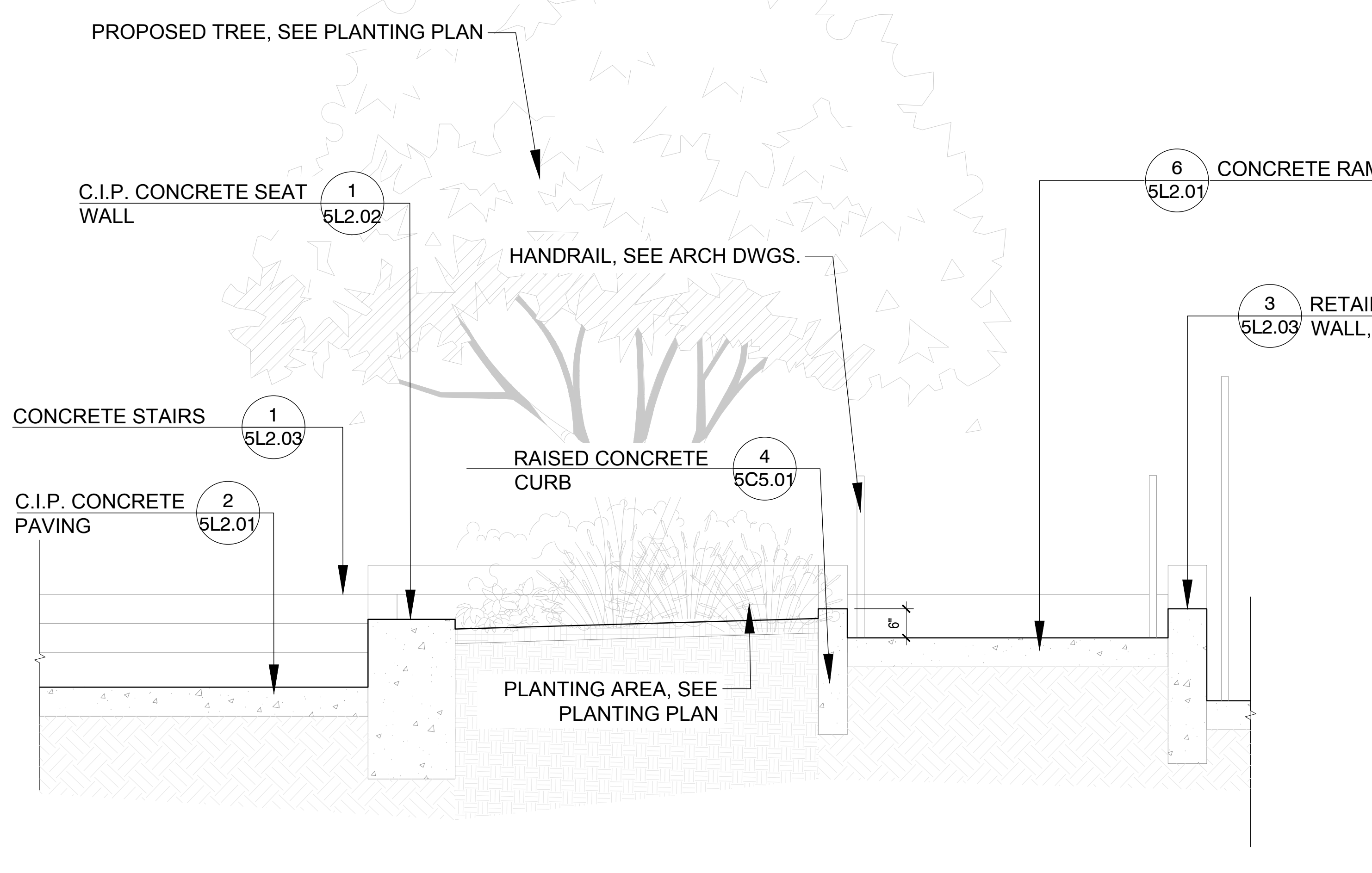
PLOT DATE 7/25/2025 9:23 AM


2E
1E
BUILDING E
2
5L2.51
1
5L2.51
SS
4
5L2.51
3
5L2.51

KEY PLAN

1/8" = 1'-0"

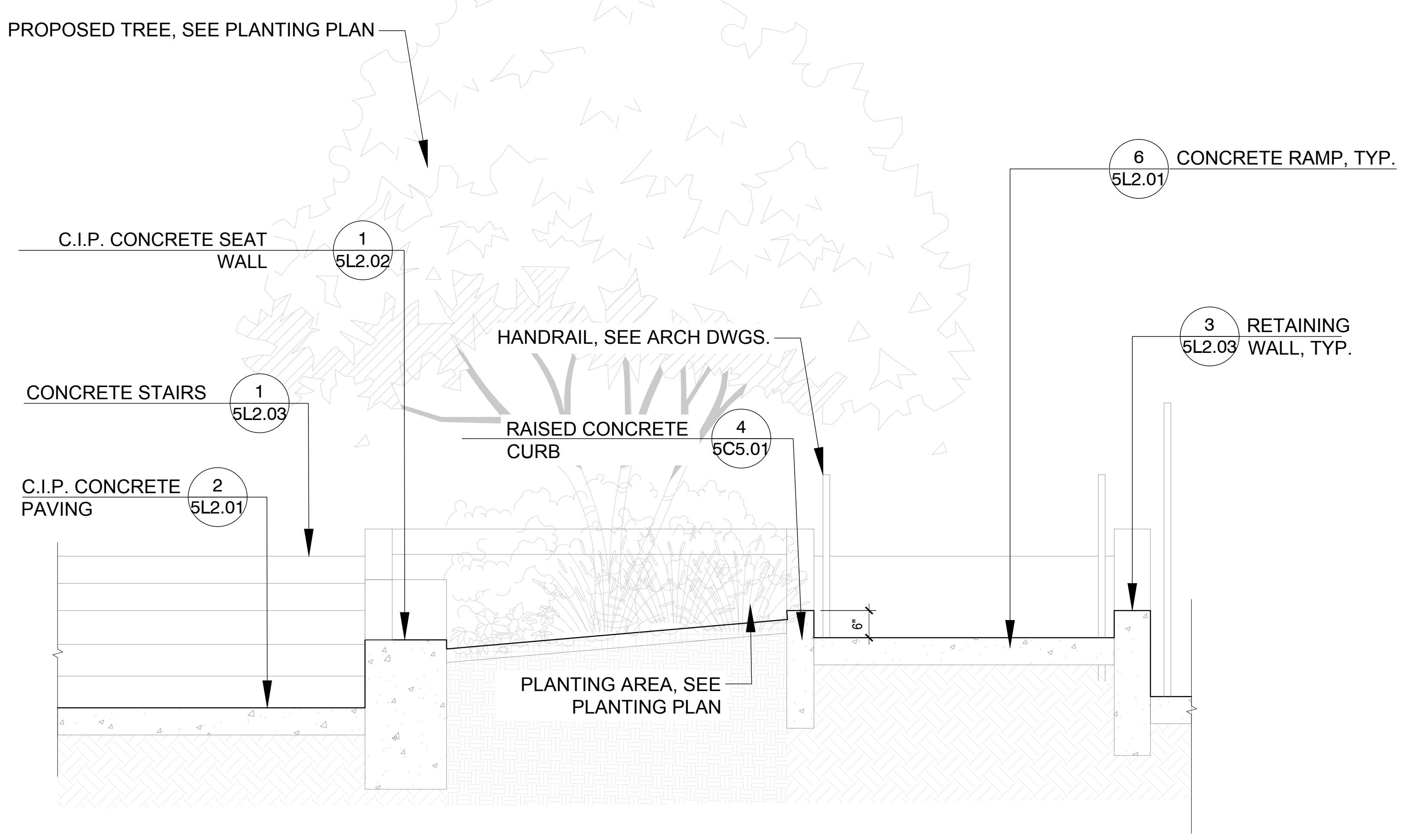
NOTES:
1. SECTIONS ARE INTENDED TO SHOW DESIGN INTENT ONLY.


PROPOSED TREE, SEE PLANTING PLAN
C.I.P. CONCRETE SEAT WALL 1 5L2.02
CONCRETE RAMP, TYP. 6 5L2.01
HANDRAIL, SEE ARCH DWGS.
RETAINING WALL, TYP. 3 5L2.03
CONCRETE STAIRS 1 5L2.03
RAISED CONCRETE CURB 4 5C5.01
C.I.P. CONCRETE PAVING 2 5L2.01
PLANTING AREA, SEE PLANTING PLAN
6"

④ SECTION ELEVATION

1/2" = 1'-0"

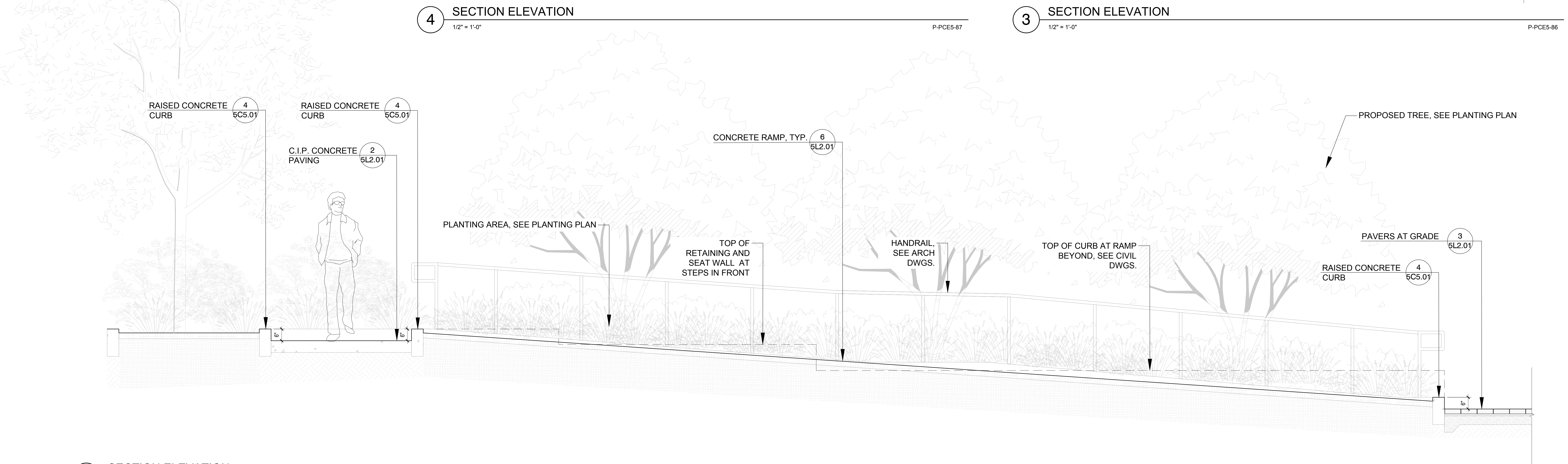
P-PCE5-87


PROPOSED TREE, SEE PLANTING PLAN
CONCRETE RAMP, TYP. 6 5L2.01
C.I.P. CONCRETE SEAT WALL 1 5L2.02
RETAINING WALL, TYP. 3 5L2.03
HANDRAIL, SEE ARCH DWGS.
CONCRETE STAIRS 1 5L2.03
RAISED CONCRETE CURB 4 5C5.01
C.I.P. CONCRETE PAVING 2 5L2.01
PLANTING AREA, SEE PLANTING PLAN
6"

③ SECTION ELEVATION

1/2" = 1'-0"

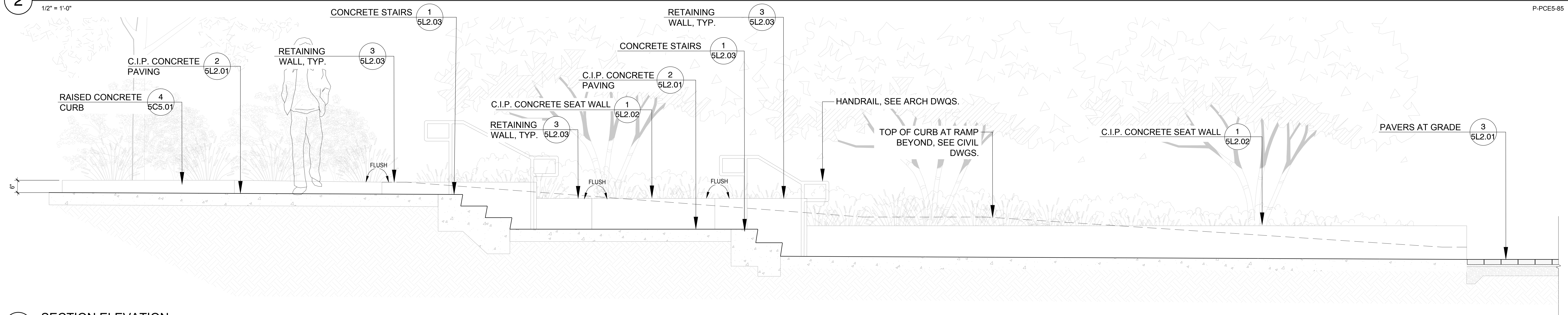
P-PCE5-86


RAISED CONCRETE CURB 4 5C5.01
RAISED CONCRETE CURB 4 5C5.01
C.I.P. CONCRETE PAVING 2 5L2.01
CONCRETE RAMP, TYP. 6 5L2.01
PROPOSED TREE, SEE PLANTING PLAN
PLANTING AREA, SEE PLANTING PLAN
TOP OF RETAINING AND SEAT WALL AT STEPS IN FRONT
HANDRAIL, SEE ARCH DWGS.
TOP OF CURB AT RAMP BEYOND, SEE CIVIL DWGS.
PAVERS AT GRADE 3 5L2.01
RAISED CONCRETE CURB 4 5C5.01
6"
6"
6"

② SECTION ELEVATION

1/2" = 1'-0"

P-PCE5-85


CONCRETE STAIRS 1 5L2.03
RETAINING WALL, TYP. 3 5L2.03
C.I.P. CONCRETE PAVING 2 5L2.01
RETAINING WALL, TYP. 3 5L2.03
CONCRETE STAIRS 1 5L2.03
RAISED CONCRETE CURB 4 5C5.01
C.I.P. CONCRETE PAVING 2 5L2.01
C.I.P. CONCRETE SEAT WALL 1 5L2.02
HANDRAIL, SEE ARCH DWGS.
RETAINING WALL, TYP. 3 5L2.03
TOP OF CURB AT RAMP BEYOND, SEE CIVIL DWGS.
C.I.P. CONCRETE SEAT WALL 1 5L2.02
PAVERS AT GRADE 3 5L2.01
FLUSH
FLUSH
FLUSH
6"

① SECTION ELEVATION

1/2" = 1'-0"

P-PCE5-84

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HONGJOO KIM NO. 5087
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Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
REN. 05-31-27

ISSUE DATE	DESCRIPTION
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07/05/2024	50% DESIGN DEVELOPMENT
08/16/2024	100% DESIGN DEVELOPMENT
04/11/2025	50% CONSTRUCTION DOCUMENTS
07/18/2025	100% CONSTRUCTION DOCUMENTS
08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

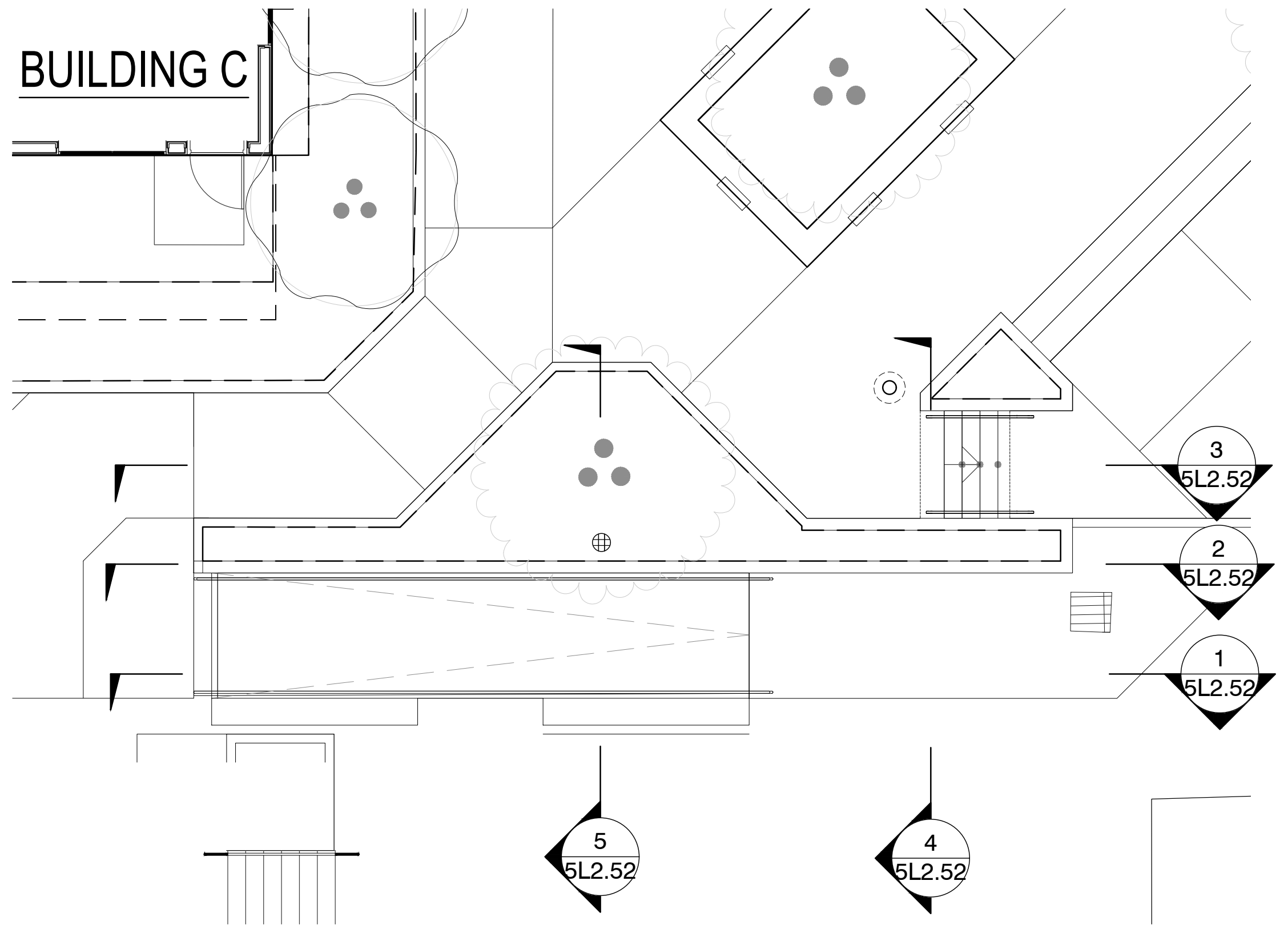
DRAWING TITLE

SITE SECTIONS

5L2.51

SCALE: AS INDICATED

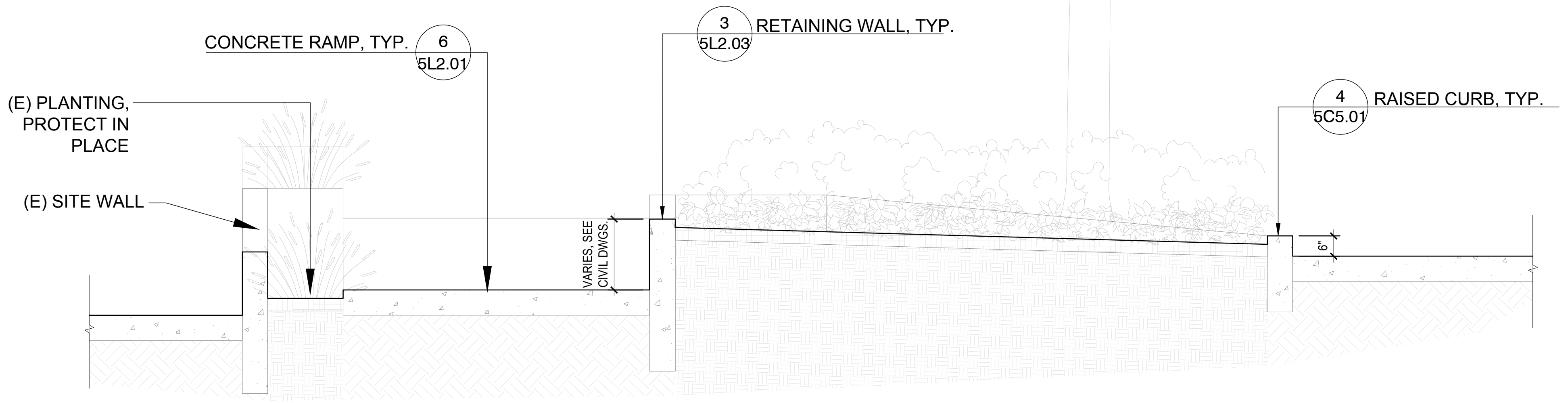
PLOT DATE 7/25/2025 9:23 AM


BUILDING C
3
5L2.52
2
5L2.52
1
5L2.52
5
5L2.52
4
5L2.52

KEY PLAN

1/8" = 1'-0"

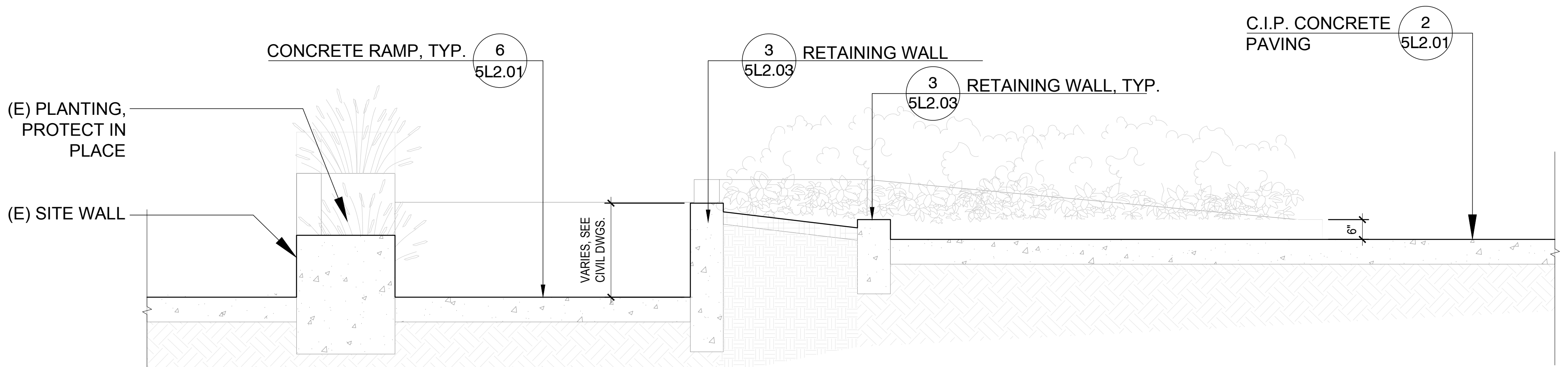
NOTES:
1. SECTIONS ARE INTENDED TO SHOW DESIGN INTENT ONLY.


CONCRETE RAMP, TYP.
6
5L2.01
3
5L2.03
RETAINING WALL, TYP.
(E) PLANTING, PROTECT IN PLACE
(E) SITE WALL
VARIES, SEE CIVIL DWGS.
4
5C5.01
RAISED CURB, TYP.
6"

5 SECTION ELEVATION

1/2" = 1'-0"

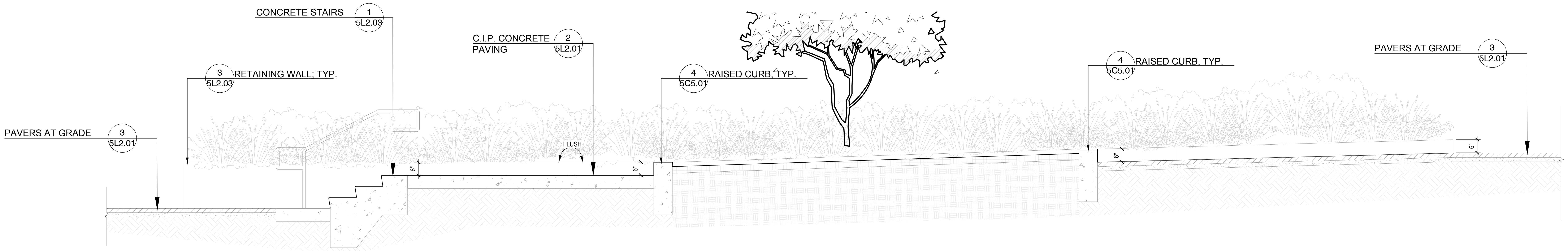
P-PCE5-92


CONCRETE RAMP, TYP.
6
5L2.01
3
5L2.03
RETAINING WALL
3
5L2.03
RETAINING WALL, TYP.
C.I.P. CONCRETE PAVING
2
5L2.01
(E) PLANTING, PROTECT IN PLACE
(E) SITE WALL
VARIES, SEE CIVIL DWGS.
6"

4 SECTION ELEVATION

1/2" = 1'-0"

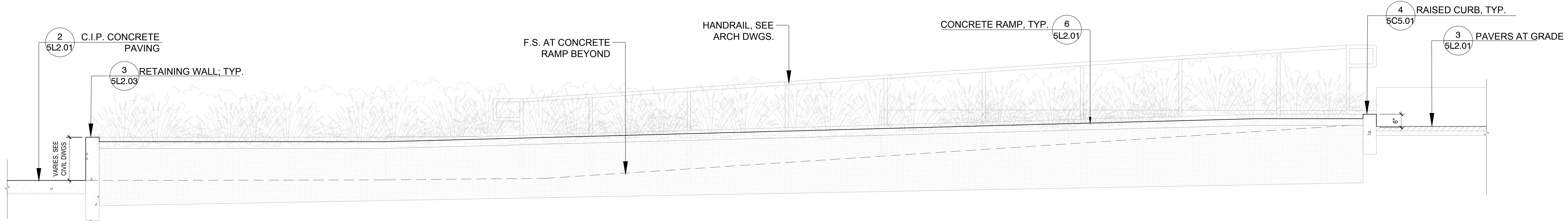
P-PCE5-91


CONCRETE STAIRS
1
5L2.03
C.I.P. CONCRETE PAVING
2
5L2.01
3
5L2.03
RETAINING WALL; TYP.
4
5C5.01
RAISED CURB, TYP.
4
5C5.01
RAISED CURB, TYP.
PAVERS AT GRADE
3
5L2.01
PAVERS AT GRADE
3
5L2.01
FLUSH
6"
6"
6"
6"

3 SECTION ELEVATION

1/2" = 1'-0"

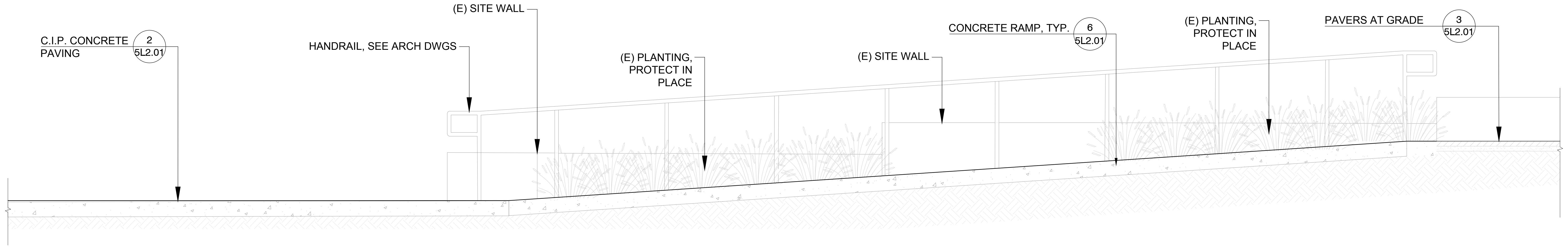
P-PCE5-90


2
5L2.01
C.I.P. CONCRETE PAVING
3
5L2.03
RETAINING WALL; TYP.
F.S. AT CONCRETE RAMP BEYOND
HANDRAIL, SEE ARCH DWGS.
CONCRETE RAMP, TYP.
6
5L2.01
4
5C5.01
RAISED CURB, TYP.
3
5L2.01
PAVERS AT GRADE
VARIES, SEE CIVIL DWGS
6"

2 SECTION ELEVATION

1/2" = 1'-0"

P-PCE5-89


C.I.P. CONCRETE PAVING
2
5L2.01
HANDRAIL, SEE ARCH DWGS
(E) SITE WALL
(E) PLANTING, PROTECT IN PLACE
(E) SITE WALL
CONCRETE RAMP, TYP.
6
5L2.01
(E) PLANTING, PROTECT IN PLACE
PAVERS AT GRADE
3
5L2.01

1 SECTION ELEVATION

1/2" = 1'-0"

P-PCE5-88

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PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

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REN. 05-31-27

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08/06/2025	DSA V1
12/05/2025	DSA V2
03/20/2026	DSA V3

#	REVISION DATE	DESCRIPTION

DRAWING TITLE

SITE SECTIONS

5L2.52

SCALE: AS INDICATED

PLOT DATE 7/25/2025 9:23 AM

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IRRIGATION COORDINATION

1. IRRIGATION SYSTEM WATER AND 2WIRE POINT OF CONNECTION FROM STUB UP AND 2WIRE PULL BOX. SEE PLAN FOR EXACT LOCATION.
2. PROPOSED IRRIGATION SYSTEM WILL HAVE EXISTING BACKFLOW, MASTER VALVE AND FLOW SENSOR.
3. EXISTING CONTROLLER FROM IS A SMART IRRIGATION CONTROLLER.
4. PROPOSED IRRIGATION VALVES TO BE ADDED AND PROGRAMMED TO EXISTING CONTROLLER PER OVERALL PLAN.
5. 2WIRE WIRING BETWEEN THE VALVES AND EXISTING CONTROLLER. EACH VALVE TO GET A SINGLE STATION DECODER. SEE CONTROLLER INFORMATION NOTES THIS PAGE FOR MODEL AND MANUFACTURER.
6. THE IRRIGATION CONTROL VALVES SHALL BE INSTALLED WITHIN THE PLANTER AREA AS INDICATED ON THE PLAN.
7. CONTROLLER REMOTE ACCESSIBLE THROUGH CENTRALUS CLOUD SOFTWARE.
8. CONTRACTOR TO FIELD VERIFY LOCATIONS WHERE PROPOSED MAINLINE TO RECONNECT TO EXISTING MAINLINE OUTSIDE OF LIMIT WORK. EXISTING IRRIGATION OUTSIDE OF LIMIT OF WORK TO REMAIN OPERATIONAL DURING CONSTRUCTION.

HYDROZONE TABLE

VALVE #	EMISSION TYPE	FLOW RATE	APPLICATION RATE	OPERATING PRESSURE	HYDROZONE	AREA	RUN TIMES
41	DRIP	1 GPM	.96 in/hr	30	MED	96 SQFT	16 min
42	MP ROTATOR	7 GPM	.80 in/hr	40	HIGH/SLA	1528 SQFT	20 min
43	MP ROTATOR	28 GPM	.80 in/hr	40	HIGH/SLA	1528 SQFT	20 min
44	MP ROTATOR	16 GPM	.80 in/hr	40	HIGH/SLA	1528 SQFT	20 min
45	BUBBLER	3 GPM	-	30	LOW	12 SQFT	3 min
46	DRIP	4 GPM	.96 in/hr	30	LOW	418 SQFT	13 min
47	DRIP	4 GPM	.96 in/hr	30	LOW	434 SQFT	13 min
48	DRIP	6 GPM	.96 in/hr	30	LOW	550 SQFT	13 min
49	DRIP	3 GPM	.96 in/hr	30	MED	301 SQFT	16 min
50	BUBBLER	6 GPM	-	30	LOW	24 SQFT	3 min
51	DRIP	4 GPM	.96 in/hr	30	MED	443 SQFT	16 min
52	DRIP	4 GPM	.96 in/hr	30	MED	424 SQFT	16 min
53	BUBBLER	4 GPM	-	30	LOW	16 SQFT	3 min
54	DRIP	4 GPM	.96 in/hr	30	MED	440 SQFT	16 min
55	DRIP	4 GPM	.96 in/hr	30	MED	351 SQFT	16 min
56	BUBBLER	7 GPM	-	30	LOW	28 SQFT	3 min
57	DRIP	4 GPM	.96 in/hr	30	MED	369 SQFT	13 min
58	DRIP	4 GPM	.96 in/hr	30	MED	413 SQFT	16 min
59	DRIP	4 GPM	.96 in/hr	30	HIGH/SLA	366 SQFT	20 min
60	DRIP	3 GPM	.96 in/hr	30	HIGH/SLA	317 SQFT	20 min
61	DRIP	3 GPM	.96 in/hr	30	MED	306 SQFT	16 min
62	BUBBLER	3 GPM	-	30	LOW	12 SQFT	3 min
63	DRIP	2 GPM	.96 in/hr	30	MED	224 SQFT	16 min
64	BUBBLER	3 GPM	-	30	LOW	12 SQFT	3 min
65	DRIP	1 GPM	.96 in/hr	30	HIGH/SLA	115 SQFT	20 min
66	BUBBLER	5 GPM	-	30	MED	63 SQFT	5 min
67	DRIP	9 GPM	.96 in/hr	30	MED	901 SQFT	16 min
68	DRIP	5 GPM	.96 in/hr	30	LOW	463 SQFT	13 min
69	BUBBLER	3 GPM	-	30	LOW	12 SQFT	3 min
70	DRIP	6 GPM	.96 in/hr	30	MED	646 SQFT	16 min
71	DRIP	3 GPM	.96 in/hr	30	MED	324 SQFT	16 min
72	BUBBLER	3 GPM	-	30	LOW	12 SQFT	3 min
73	DRIP	3 GPM	.96 in/hr	30	MED	328 SQFT	16 min
74	ROTOR	16 GPM	.6 in/hr	45	LOW	2096 SQFT	18 min
75	ROTOR	19 GPM	.6 in/hr	45	LOW	2096 SQFT	18 min
76	DRIP	9 GPM	.96 in/hr	30	MED	858 SQFT	16 min

WATER EFFICIENT LANDSCAPE WORKSHEET

DATE:	12/2/2025	WUCOLS ZONE:	South Coastal	LA Sq. Ft. :	21,840
PROJECT:	PCYES Package 05				
CITY:	La Canada Flintridge	CIMIS ETo REF. CITY:	La Canada Flintridge	SLA Sq. Ft. :	4,584
CLIENT:	Paradise Canyon Elementary				
PREPARED BY:	Hongjoo Kim Landscape Architects	Annual Eto:	51.7		

Point of Connection - 1

MAXIMUM APPLIED WATER ALLOWANCE

	ETo				Total Area			SLA Area					MAWA
Landscape Irrigation MAWA	51.7	x	0.62	x (	17,256	x	0.45 +	4,584	x	0.6	)	=	329,720

ESTIMATED APPLIED WATER USE

	ETo				Area		PF	/	IE			ETWU
Special Landscaped Area	51.7	x	0.62	x (	4,584	x	1.0	/	1.00	)	=	146,936
A41 - Low Shrubs - Drip	51.7	x	0.62	x (	96	x	0.4	/	0.81	)	=	1,520
A42 - High Turf - MP Rotators See Above	51.7	x	0.62	x (	0	x	0.3	/	0.81	)	=	0
A43 - High Turf - MP Rotators See Above	51.7	x	0.62	x (	0	x	0.3	/	0.75	)	=	0
A44 - High Turf - MP Rotators See Above	51.7	x	0.62	x (	0	x	0.3	/	0.75	)	=	0
A45 - Low Trees - Bubbler	51.7	x	0.62	x (	12	x	0.3	/	0.81	)	=	142
A46 - Low Shrubs - Drip	51.7	x	0.62	x (	418	x	0.3	/	0.81	)	=	4,962
A47 - Low Shrubs - Drip	51.7	x	0.62	x (	434	x	0.3	/	0.81	)	=	5,152
A48 - Low Shrubs - Drip	51.7	x	0.62	x (	550	x	0.3	/	0.81	)	=	6,530
A49 - Med Shrubs - Drip	51.7	x	0.62	x (	301	x	0.4	/	0.81	)	=	4,765
A50 - Low Trees - Bubbler	51.7	x	0.62	x (	24	x	0.3	/	0.81	)	=	285
A51 - Med Shrubs - Drip	51.7	x	0.62	x (	443	x	0.4	/	0.81	)	=	7,012
A52 - Med Shrubs - Drip	51.7	x	0.62	x (	424	x	0.4	/	0.81	)	=	6,712
A53 - Low Trees - Bubbler	51.7	x	0.62	x (	16	x	0.3	/	0.81	)	=	190
A54 - Med Shrubs - Drip	51.7	x	0.62	x (	440	x	0.4	/	0.81	)	=	6,965
A55 - Med Shrubs - Drip	51.7	x	0.62	x (	351	x	0.4	/	0.81	)	=	5,556
A56 - Low Trees - Bubbler	51.7	x	0.62	x (	28	x	0.3	/	0.81	)	=	332
A57 - Med Shrubs - Drip	51.7	x	0.62	x (	369	x	0.4	/	0.81	)	=	5,841
A58 - Med Shrubs - Drip	51.7	x	0.62	x (	413	x	0.4	/	0.81	)	=	6,537
A59 - High Turf - Drip SLA See Above	51.7	x	0.62	x (	0	x	0.3	/	0.81	)	=	0
A60 - High Turf - Drip SLA See Above	51.7	x	0.62	x (	0	x	0.3	/	0.81	)	=	0
A61 - Med Shrubs - Drip	51.7	x	0.62	x (	306	x	0.4	/	0.81	)	=	4,844
A62 - Low Trees - Bubbler	51.7	x	0.62	x (	12	x	0.3	/	0.81	)	=	142
A63 - Med Shrubs - Drip	51.7	x	0.62	x (	224	x	0.4	/	0.81	)	=	3,546
A64 - Low Trees - Bubbler	51.7	x	0.62	x (	12	x	0.3	/	0.81	)	=	142
A65 - High Turf - Drip SLA See Above	51.7	x	0.62	x (	0	x	0.3	/	0.81	)	=	0
A66 - Med Trees - Bubbler	51.7	x	0.62	x (	63	x	0.4	/	0.81	)	=	997
A67 - Med Shrubs - Drip	51.7	x	0.62	x (	901	x	0.4	/	0.81	)	=	14,262
A68 - Low Shrubs - Drip	51.7	x	0.62	x (	463	x	0.3	/	0.81	)	=	5,497
A69 - Low Trees - Bubbler	51.7	x	0.62	x (	12	x	0.3	/	0.81	)	=	142
A70 - Med Shrubs - Drip	51.7	x	0.62	x (	646	x	0.4	/	0.81	)	=	10,226
A71 - Med Shrubs - Drip	51.7	x	0.62	x (	324	x	0.4	/	0.81	)	=	5,129
A72 - Low Trees - Bubbler	51.7	x	0.62	x (	12	x	0.3	/	0.81	)	=	142
A73 - Med Shrubs - Drip	51.7	x	0.62	x (	328	x	0.4	/	0.81	)	=	5,192
A74 - Low Shrubs - Rotors	51.7	x	0.62	x (	2,096	x	0.3	/	0.75	)	=	26,874
A75 - Low Shrubs - Rotors	51.7	x	0.62	x (	2,096	x	0.3	/	0.75	)	=	26,874
A76 - Med Shrubs - Drip	51.7	x	0.62	x (	858	x	0.4	/	0.81	)	=	13,581
					17,256				**TOTAL ETWU**		=	**327,028**

ETWU is less than MAWA

RUN TIMES ARE SET FOR THE HOTTEST DAY OF THE YEAR. DISABLE VIRTUAL SOLAR SYNC FUNCTION FOR FIRST 60 DAYS OF ESTABLISHMENT PERIOD. ENABLE SOLAR SYNC FUNCTION IN HYDRAWISE APP. SMART CONTROLLER WILL MAKE RUN TIME ADJUSTMENTS PER LIVE WEATHER DATA FROM INTERNET.

PROGRAM START TIMES:
RUN ALL STATIONS EVERY DAY FOR THE FIRST 30 DAYS.
ADJUST PROGRAM START TIMES FOR EVERY OTHER DAY FOR FOLLOWING 60 DAYS. AFTER 90 DAY MAINTENANCE PERIOD, ADJUST PROGRAM START TIMES TO THE FOLLOWING

SHRUB ZONES : MONDAY, WEDNESDAY, FRIDAY.

CONTRACTOR TO CONFIRM WITH FACILITIES MANAGER FINAL START TIMES FOR IRRIGATION PROGRAMS AT THE COMPLETION OF PROJECT.

GENERAL IRRIGATION NOTES

1. The irrigation contractor shall be responsible for familiarizing themselves with all differences in grade, location of seatwalls, location of retaining walls, etc. The contractor shall be responsible for coordinating all irrigation work with the general contractor, electrical contractor, and all other subcontractors for the location and the installation of irrigation related sleeves through walls, structures, under roadways, paving, etc.
2. The irrigation design presented in these documents is intended to be diagrammatic. All irrigation equipment, piping and valve locations, etc. shown within paved areas are for design clarification and shall only be installed in planting areas. Irrigation contractor shall install all remote control valves, quick couplers, and gate valves, in shrub planting areas or as approved by owner's representative & the landscape irrigation designer. Avoid any conflicts between the sprinkler system, planting and architectural features.
3. The irrigation system design is based upon the minimum operating pressure and the maximum flow demand shown on the irrigation drawings at each point of connection. The irrigation contractor shall verify water pressure prior to construction. Any difference between the water pressure indicated on the drawings and the actual pressure reading at the irrigation point of connection shall be immediately reported in writing to the owner's authorized representative. If the pressure differences are not immediately reported prior to beginning construction, the irrigation contractor shall assume full responsibility for all revisions to the irrigation system deemed necessary by the owner's representative and all costs associated with those revisions.
4. When it is apparent to the landscape contractor in the field that obstructions, grade differences, or differences in the calculated area dimensions exist that may have not been considered in the design of the system, the irrigation contractor shall not willfully install the irrigation system as indicated on the construction drawings. The owner's authorized representative shall be notified in writing of any such obstructions or differences prior to beginning any irrigation installation. If notification is not received prior to beginning installation, the irrigation contractor shall assume full responsibility for all revisions to the irrigation system as deemed necessary by owner's representative and all costs associated with those revisions.
5. The irrigation contractor shall be responsible for installing all control wire sleeving of sufficient size, under all paved areas in addition to the control wire sleeving shown on the drawings.
6. All piping and equipment shall be installed per the irrigation details. Teflon tape or Teflon pipe dope shall be applied to all male PVC pipe threads on all irrigation valve assemblies.
7. All pop-up style irrigation heads located in in shrub or groundcover areas shall be installed so the top of the irrigation head is 1" above finish grade.
8. All pop-up style irrigation heads to be located in turf areas shall initially be installed so the top of the irrigation heads are flush with the adjacent sidewalk or curb. Within 10 days of being notified by the owner's representative, the irrigation contractor shall be responsible for adjusting all turf irrigation heads so the top of the irrigation head is 1/2" above finish grade.
9. The irrigation contractor shall be responsible for flushing and adjusting all irrigation heads for optimum performance and to prevent over spray onto areas not intended for irrigation. This shall include throttling the flow control at each valve to obtain the optimum operating pressure for each system.
10. The irrigation contractor shall be responsible for adjusting the pressure regulator on each electric control valve so the irrigation head farthest and highest in elevation from its associated control valve functions within the operating pressure shown on the irrigation legend (not to exceed 5 PSI above the indicated operating pressure).
11. When installing spray nozzles that require arc patterns other than the standard arc patterns (e.g., 360°, 180°, and 90°), the contractor shall use the appropriate fixed arc pattern (e.g. 120°, 240°, 270°). The contractor shall use Hunter Pro Adjustable nozzles when installing irrigation heads on Pro Spray Bodies only when required pattern is not one of the fixed arc patterns. Select the radius of van nozzles to match site conditions.
12. The irrigation contractor shall be responsible for making field adjustments to the irrigation system by installing a quarter circle or half circle sprinkler head on each side of any vertical element (props, street lights, trees, etc.) which prevents proper coverage by interfering with the spray pattern of the irrigation head. All adjustments shall be made at no additional costs to the owner.
13. Drainage of irrigation water through spray head will not be allowed. Hunter check valve feature shall be used to prevent spray head drainage. During construction, the contractor shall change spray bodies with Hunter Check Valve features for spray heads showing signs of draining after the irrigation system has operated from an ON to OFF position. Installation of Hunter Check Valve feature shall be included in the Bid Price of the irrigation system.
14. The irrigation contractor shall be responsible for making the final connection between the power source and the automatic controller. 120 volt electrical power source shall be provided by others at the automatic controller location.
15. Adhesives, sealants and caulks shall meet local or regional air pollution control or south coast AQMD rule 1168 VOC and statewide VOC standards.

OBSERVATION SCHEDULING

The landscape contractor shall be schedule an irrigation site observation by the irrigation designer, and/or the owner's representative, which shall not occur without at least 48 hours prior notification. The following items shall be reviewed:

1. Pre-job/kick-off meeting with contractor, general contractor, and irrigation designer.
2. Mainline, basket strainers, master valves, flow sensors, booster pump installation and operation, installation review prior to backfilling trenches, irrigation mainline pressure test, etc.
3. Finalizing the location for the controller assemblies - landscape contractor shall coordinate with the irrigation designer to verify connection of flow sensors and associated equipment to each controller assembly and for certification/warranty of equipment.
4. Irrigation coverage test - a dynamic pressure test shall be performed by the landscape contractor and shall be observed by the owner (or the owner's representative) and the irrigation designer for each valve during the irrigation coverage test.

POINT OF CONNECTION NOTES

1. CONTRACTOR TO CONNECT TO EXISTING 3" STUB UP. INSTALL ISOLATION BALL VALVE AND MAINLINE AS CONTINUATION OF PROPOSED IRRIGATION SYSTEM. SOURCE OF WATER IS FROM DEDICATED LANDSCAPE METER WITH EXISTING BACKFLOW, MASTER VALVE AND FLOW SENSOR. VERIFY PRESSURE AT POINT OF CONNECTION IN THE FIELD PRIOR TO COMMENCE OF WORK. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWINGS IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION, ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

- STATIC WATER PRESSURE 80 PSI (ON SITE READING)
- DESIGN WATER PRESSURE 79
- MAXIMUM SYSTEM DEMAND 19 GPM
- RESIDUAL WATER PRESSURE 1 PSI

CONTROLLER INFORMATION

1. PROPOSED IRRIGATION ZONES SHALL BE ADDED TO EXISTING 2WIRE PATH FROM EXISTING PEDESTAL MOUNTED CONTROLLER SHOWN ON OVERALL PLAN. REFER TO LEGEND FOR MODEL AND STATION COUNT. THE CONTROLLER IS A SMART WEATHER BASED CONTROLLER.
2. WEATHER DATA AND RAIN SHUT OFF FROM EXISTING WIRELESS WEATHER/RAIN SENSOR MOUNTED OUTSIDE IN AN OPEN AREA OPEN TO THE SKY AND FREE FROM ANY OBSTRUCTIONS.
3. **INSTALLATION OF COLORED JACKETED 2 WIRE SHALL FOLLOW MAINLINE ROUTING. MODEL: HUNTER ID1ORG ORANGE JACKETED 2WIRE**
4. THE SYSTEM IS DESIGNED FOR THE OPERATION OF ONE VALVE AT A TIME PER CONTROLLER. THE SYSTEM HAS BEEN DESIGNED FOR ONE VALVE OPENING AND ONE VALVE CLOSING.

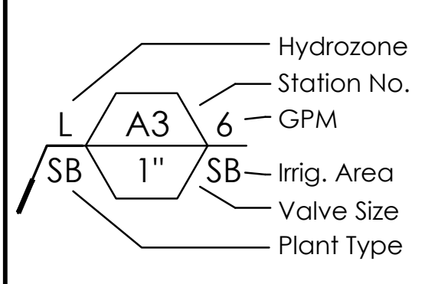
DRIP ZONE IRRIGATION NOTES

1. DRIP ZONES SHALL CONSIST OF SUPPLY AND EXHAUST HEADERS AND DRIP LINES TO BE SPACED PER MASTER IRRIGATION LEGEND. SNAKE PATTERN LAYOUT METHOD NOT ALLOWED.
2. ONE AIR RELIEF VALVE PER ZONE. LOCATION ON PLAN IS DIAGRAMMATIC AND TRUE LOCATION TO BE PLACED AT HIGHEST ELEVATION ON ZONE.
3. ONE MANUAL FLUSH VALVE PER SECTION IN ZONE. LOCATION ON PLAN IS DIAGRAMMATIC AND TRUE LOCATION TO BE PLACED AT LOWEST ELEVATION ON ZONE.
4. ONE DRIP OPERATION INDICATOR PER ZONE. LOCATION TO BE PLACED IN VISIBLE AREA FOR MAINTENANCE CREWS TO SPOT WHILE PERFORMING SCHEDULED MAINTENANCE CHECKS.
5. MAX DISTANCES FOR DRIP LINE PER DRIP LINE MANUFACTURER SPECIFICATIONS.
6. SECTIONS OF DRIP ZONES EXCEEDING 4' IN ELEVATION TO BE SPLIT INTO DIFFERENT SECTIONS. LATERAL LINES USED TO CONNECT THESE SECTION TO USE INLINE CHECK VALVES.

IRRIGATION LEGEND

SYMBOL F H Q	RAD.	MANF.	MODEL NO. WITH NOZZLE SIZE & TYPE	DESCRIPTION	PSI	FLOW RATE IN GPM F	H	Q		DETAIL
⊕	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-360	6" Pop-Up Turf Spray Head	40	.78	-	-	-	E,F/5L4.11
◓	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-90	6" Pop-Up Turf Spray Head	40	-	.42	-	-	E,F/5L4.11
▽	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-90	6" Pop-Up Turf Spray Head	40	-	-	.23	-	E,F/5L4.11
◎	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-360	6" Pop-Up Turf Spray Head	40	1.87	-	-	-	E,F/5L4.11
○	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-90	6" Pop-Up Turf Spray Head	40	-	.93	-	-	E,F/5L4.11
○	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-90	6" Pop-Up Turf Spray Head	40	-	-	.49	-	E,F/5L4.11
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 360	6" Pressure Regulated Rotor	45	3.82	-	-	-	A/5L4.11
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 180	6" Pressure Regulated Rotor	45	-	1.98	-	-	A/5L4.11
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 90	6" Pressure Regulated Rotor	45	-	-	1	-	A/5L4.11
●	-	Hunter	RZWS-18-CV	Bubbler in Sleeve with Grate	30	.50	-	-	-	G/5L4.10
▨		Hunter	Irrigation Dripline - HDL-06-12-COP	Space lateral rows at 12". Dripper spacing at 12". Install 3" Below Grade and Staked at 3' O.C. Use Hunter PLD-LOC fittings. Application rate: 0.96 in/hr. Time to apply 1/4": 15 minutes.	30	0.6 GPH Flow Rate				I,H/5L4.10
⊠		Hunter	Sub Surface Drip Mat ECO-MAT-17	Install 3" Below Grade and Staked at 8' O.C. Use Hunter PLD-LOC fittings. CONTRACTOR TO HAND WATER AND ESTABLISH TURF ROOTS TO MAT DEPTH.	30	0.6 GPH Flow Rate				B,C,D/5L4.11
✱		Hunter	AVR-075 - Air Relief Valve	Install in a Hunter - Multi Purpose Box MB-0811						K/5L4.10
✚		Hunter	ECO-ID - Drip Operation Indicator	Install in a visible area.						L/5L4.10
▶■		Hunter	PLD-BV - Manual Flush Valve	Install in a Hunter - Multi Purpose Box MB-0811						J/5L4.10
∫		Hunter	PLD-LOC- 050 - Drip Connector	Install per manufacturers specifications.						-
Ⓜ		-	Existing Potable 2" Water Meter	Existing 2" Potable Water Meter with 80 static PSI						-
◪		Febco	Backflow Preventer | 825YA - Size Per Main Line | Existing from Package 03	Existing from Package 03						-
⋈		Nibco	Gate Valve | T-111 Line Size 2 1/2" and smaller.	For mainline sizes 3" and larger, use Nibco F-619-SON, epoxy coated. Assemble with stainless steel hardware. Install in a 10" round valve box.						B/5L4.10
(SM)		Hunter	Sub Meter | HC-200-FLOW | Existing	Existing refer to overall plan for location.						-
(MV)		Superior	Master Valve | 3300 Series - Normally Open - Existing	Existing refer to overall plan for location.						-
(FS)		Flomec	Flow Sensor | QS-200 - Size Per Mainline | Existing	Existing refer to overall plan for location.						-
◐		Hunter	Quick Coupler Valve | HQ33D-RC	Install with stabilizing stake.						C/5L4.10
◕		Hunter	Brass Remote Control Valve | IBV-FS w/AS-ADJ Size Per Callout on Plan w/ (1) ICD-100 and (1)DCSTAKE10	Self cleaning remote control valve with adjustable pressure dial. Install in rectangle valve box per detail with decoder and decoder stake						D/5L4.10
●		Hunter	Brass Drip Control Zone Kit | IBZ-101-LF-40 for .5-15 GPM or IBZ-151-40-XL for 20-50 GPM w/ (1) ICD-100 and (1)DCSTAKE10	Remote control valve kit with pressure regulating filter. Install in rectangle valve box per detail with decoder and decoder stake						F/5L4.10
⊘		King Bros.	Line Size Check Valve	Provide swing check valve when direction of water flow is uphill. Provide spring check valve when direction of flow is downhill.						-
(WS)		Hunter	Wireless Solar Sync Sensor | WSS-SEN | Existing from Package 03	Weather/Rain Sensor. Locate in location with most sun. Open to air and free from any obstructions. Verify location in field.						-
Ⓐ		Hunter	Existing. REFER TO OVERALL PLAN FOR EXACT LOCATION | Smart Controller on Pedestal | A2C-75D-SS w/PED-SS **ADD (1) A2C-D75 Expansion Module**	Smart 2 Wire irrigation controller with automatic time adjustments through on site ET Data provided by solar sync sensor. Controller to be hard wired with Internet for central control capable. Existing.						-
▬ ▬ ▬ ▬ ▬			Existing Mainline	Protect in place.						-
━ ━ ━ ━ ━			Mainline	Irrigation Mainline - PVC SCH. 40 IPS white pipe. PVC SCH. 40 IPS for mainline sizes 1" to 2" PVC Class 315 IPS for mainline sizes 2 1/2" to 3" Sleeve mainline per notes and details.						E/5L4.10
———			Lateral Line	Lateral Pipe - PVC SCH. 40 IPS white pipe. Minimum pipe size shall be 3/4" - size laterals per plan. PVC SCH. 40 IPS for sizes 3/4" to 2 1/2" PVC Class 315 IPS for sizes 3" and larger						E/5L4.10
═ ═ ═ ═ ═			PVC Sleeves	PVC SCH. 40 IPS white pipe - sleeves shall be installed for any mainline, lateral, or wires crossing under hardscape per irrigation construction notes. Size to be two times the pipe diameter or wire bundle.						A/5L4.10

IRRIGATION VALVE CALLOUT:



LATERAL LINE SIZING CHART

———	3/4"
—+—	1"
—++—	1 1/4"
—+++—	1 1/2"
—⊥—	2"
—I—	2 1/2"
—II—	3"

NOTE:
THE LATERAL SIZE BETWEEN TWO IDENTICAL TICK MARKS SHALL BE SIZED THE SAME. MINIMUM PIPE SIZE IS 3/4".

LATERAL CAPACITY CHART

———	3/4"	1-7 GPM
—+—	1"	7-11 GPM
—++—	1 1/4"	11-20 GPM
—+++—	1 1/2"	20-28 GPM
—⊥—	2"	28-48 GPM
—I—	2 1/2"	48-65 GPM
—II—	3"	65-100 GPM

AT ANY POINT WHEN GPM CAPACITY EXCEEDS THE FOLLOWING BETWEEN TWO IDENTICAL TICK MARKS. PLEASE UPSIZE LATERAL LINE.

PLANT MATERIAL ABBREVIATIONS:

Plant Type:
- TF Turf
- SB Shrub/Ground cover
- TR Trees
- PT Pots
- DP Drip

Hydrozone:
- H High
- M Medium
- L Low

PRESSURE CALCULATIONS FOR DOMESTIC IRRIGATION

Project Name and/or Tract#: PCYES Package 05
Date and Source of Information: 06.26.25
Name of Contact Person and Phone Number: -
P.O.C. Water Meter #: -
Water Meter Size and Type: Potable 2"
Hydraulic Grade Level: - FT
Water Meter Elevation: - FT
Highest Head Elevation on the System: - FT
Basis for Calculations: Largest Furthest Capacity

Remote Control Valve#: A75

Size of Remote Control Valve: 1"
Demand at Remote Control Valve: 19 GPM

QUANTITY	SIZE	DESCRIPTION	FLOW (GPM)	LOSS (PSI)
1	2"	Water Meter	19	1
1	2"	Backflow RP	19	12
-	-	Pressure Regulator	-	-
7	2"	Gate Valve(s)	19	7
-	-	Gate Valve(s)	-	-
1	2"	Master Valve	19	1
1	2"	Flow Sensor	19	1
426'	3"	Mainline	19	1
238'	2.5"	Mainline	19	1
233'	2"	Mainline	19	1
-	-	Mainline	-	-
1	1"	Remote Control Valve	19	3
		Lateral Line Losses (10%)		3
		Other Losses (10%)		3
		Elevation Loss or Gain	-	-
		Total		34

PRESSURE (PSI)

Pressure Required to Operate Irrigation Head	45
Sub-Total Pressure Required for Irrigation System	79
Total Pressure Required for Irrigation System (Sub-Total Pressure +)	79
Static Pressure Available	80
Residual Pressure (Subtract Total Pressure from Static Pressure)	1

COMPLIANCE NOTE

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

SIGN______________ ______________
DATE______________

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125476 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 05/07/2026

Practice
135 W. Green St Suite 200 Pasadena, CA 91105 | 626.568.1248 | practice-la.com

HKLA

HONGJOO KIM NO. 5087
Signature
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R. DRAKE
NO. C-014869
REN. 05-31-27

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Section 4216/4217 of the government code requires a dig alert identification number be issued before a "permit to excavate" will be valid.
1-800-227-2600
Call (2) working days before you dig.

△	REVISION DATE	DESCRIPTION

DRAWING TITLE

MASTER IRRIGATION LEGEND, NOTES AND CALCS

5L4.00

SCALE

PLOT DATE 7/25/2025 9:23 AM

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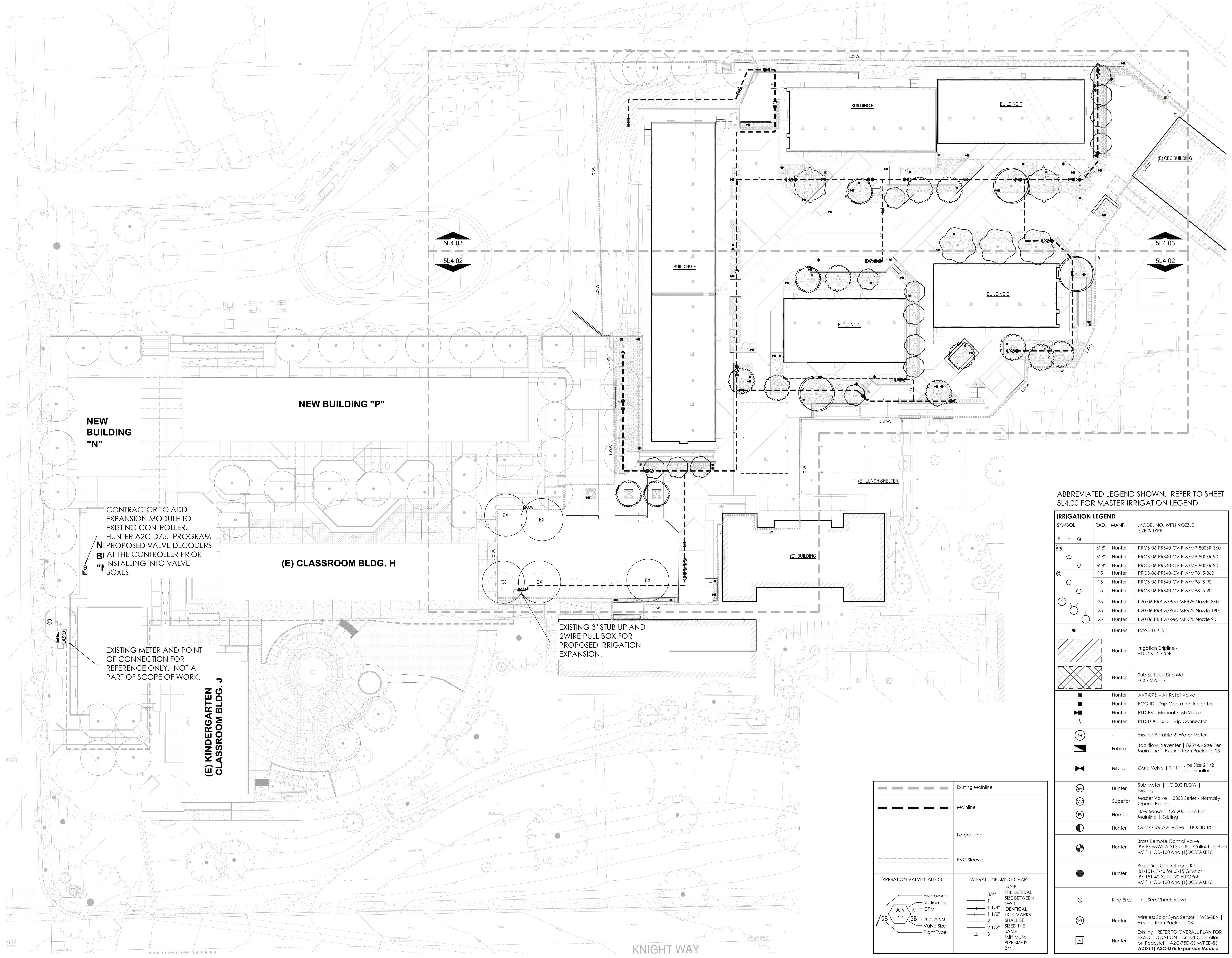

CONTRACTOR TO ADD EXPANSION MODULE TO EXISTING CONTROLLER. HUNTER A2C-D75. PROGRAM PROPOSED VALVE DECODERS AT THE CONTROLLER PRIOR INSTALLING INTO VALVE BOXES.

EXISTING METER AND POINT OF CONNECTION FOR REFERENCE ONLY. NOT A PART OF SCOPE OF WORK.

EXISTING 3" STUB UP AND 2WIRE PULL BOX FOR PROPOSED IRRIGATION EXPANSION.

ABBREVIATED LEGEND SHOWN. REFER TO SHEET 5L4.00 FOR MASTER IRRIGATION LEGEND

IRRIGATION LEGEND

SYMBOL F H Q	RAD.	MANF.	MODEL NO. WITH NOZZLE SIZE & TYPE
⊕	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-360
◓	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-90
▽	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-90
◎	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-360
○	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-90
○	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-90
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 360
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 180
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 90
●	-	Hunter	RZWS-18-CV
▨		Hunter	Irrigation Dripline - HDL-06-12-COP
▩		Hunter	Sub Surface Drip Mat ECO-MAT-17
⊗		Hunter	AVR-075 - Air Relief Valve
■		Hunter	ECO-ID - Drip Operation Indicator
⋈		Hunter	PLD-BV - Manual Flush Valve
∫		Hunter	PLD-LOC- 050 - Drip Connector
M		-	Existing Potable 2" Water Meter
◪		Febco	Backflow Preventer | 825YA - Size Per Main Line | Existing from Package 03
⋈		Nibco	Gate Valve | T-111 Line Size 2 1/2" and smaller.
SM		Hunter	Sub Meter | HC-200-FLOW | Existing
MV		Superior	Master Valve | 3300 Series - Normally Open - Existing
FS		Flomec	Flow Sensor | QS-200 - Size Per Mainline | Existing
◐		Hunter	Quick Coupler Valve | HQ33D-RC
◑		Hunter	Brass Remote Control Valve | IBV-FS w/AS-ADJ Size Per Callout on Plan w/ (1) ICD-100 and (1)DCSTAKE10
●		Hunter	Brass Drip Control Zone Kit | IBZ-101-LF-40 for .5-15 GPM or IBZ-151-40-XL for 20-50 GPM w/ (1) ICD-100 and (1)DCSTAKE10
⊘		King Bros.	Line Size Check Valve
WS		Hunter	Wireless Solar Sync Sensor | WSS-SEN | Existing from Package 03
A		Hunter	Existing. REFER TO OVERALL PLAN FOR EXACT LOCATION | Smart Controller on Pedestal | A2C-75D-SS w/PED-SS **ADD (1) A2C-D75 Expansion Module**

▬ ▬ ▬ ▬ ▬	Existing Mainline
▬ ▬ ▬ ▬ ▬	Mainline
———	Lateral Line
= = = = = =	PVC Sleeves

IRRIGATION VALVE CALLOUT:

L A3 6
SB 1" SB
Hydrozone
Station No.
GPM
Irrig. Area
Valve Size
Plant Type

LATERAL LINE SIZING CHART

3/4"
1"
1 1/4"
1 1/2"
2"
2 1/2"
3"

NOTE: THE LATERAL SIZE BETWEEN TWO IDENTICAL TICK MARKS SHALL BE SIZED THE SAME. MINIMUM PIPE SIZE IS 3/4".

0 10 20 40

OVERALL IRRIGATION PLAN
1" = 20'
1

NORTH

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

471 KNIGHT WAY, LA CAÑADA FLINTRIDGE, CA 91011

PROJECT NUMBER 20911

HARRY R DRAKE
NO. C-014869
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△# REVISION DATE DESCRIPTION

DRAWING TITLE

OVERALL IRRIGATION PLAN

5L4.01

SCALE

PLOT DATE 7/25/2025 9:23 AM

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Call (2) working days before you dig.

NOTE

The irrigation design presented in these documents is intended to be diagrammatic. All irrigation equipment, piping and valve locations, etc. shown within paved areas are for design clarification and shall only be installed in planting areas. Irrigation Contractor shall install all remote control valves, quick couplers, and gate valves, in shrub planting areas or as approved by owner's representative & the landscape irrigation designer. Avoid any conflicts between the sprinkler system, planting and architectural features.

COMPLIANCE NOTE

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SIGN______________ ___________________________
DATE_______________

CONTROL WIRE CONDUIT SIZING CHART

SLEEVE SIZE	2" MIN.	2-1/2"	3"	4"
WIRES IN SLEEVE	0-16	17-24	25-40	41-48

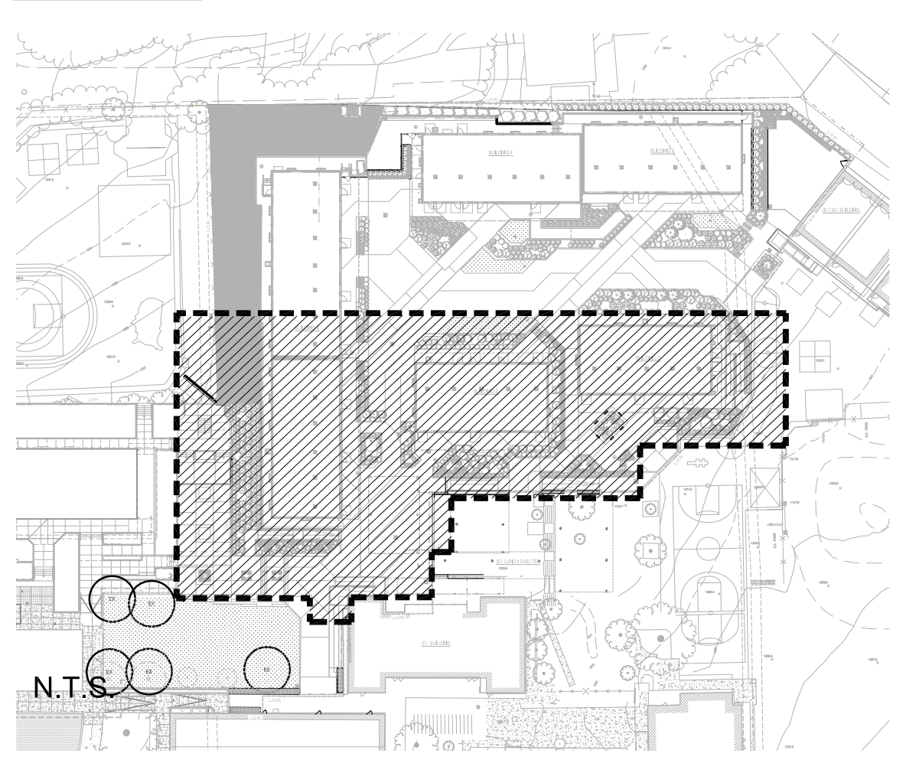
IRRIGATION SLEEVE SIZING CHART

PIPE SIZE	3/4"	1"	1-1/4	1-1/2"	2"	2-1/2"	3"
SLEEVE SIZE	3"	3"	3"	4"	4"	4"	6"

IRRIGATION SLEEVE AND CONDUIT NOTES

1. Sleeves are required for all irrigation pipe and control wire conduit under paving (typical). Refer to Irrigation Sleeve Sizes and Control Wire Conduit Charts for appropriate sleeve and conduit sizing.
2. For drawing clarity, not all irrigation sleeves are sized but shall be installed and included as part of the contractor's bid. Also, for drawing clarity, not all conduits and irrigation sleeves are shown. Contractor is responsible for installation for sleeves and conduits of appropriate size under all paved areas as well as all sleeve pipes and conduits that are shown on the drawings.
3. The irrigation contractor shall be responsible for familiarizing themselves with all differences in grade, location of seatwalls, location of retaining walls, etc. The contractor shall be responsible for coordinating all irrigation work with the general contractor, electrical contractor, and all other subcontractors for the location and the installation of irrigation related sleeves through walls, structures, under roadways, paving, etc.

KEY PLAN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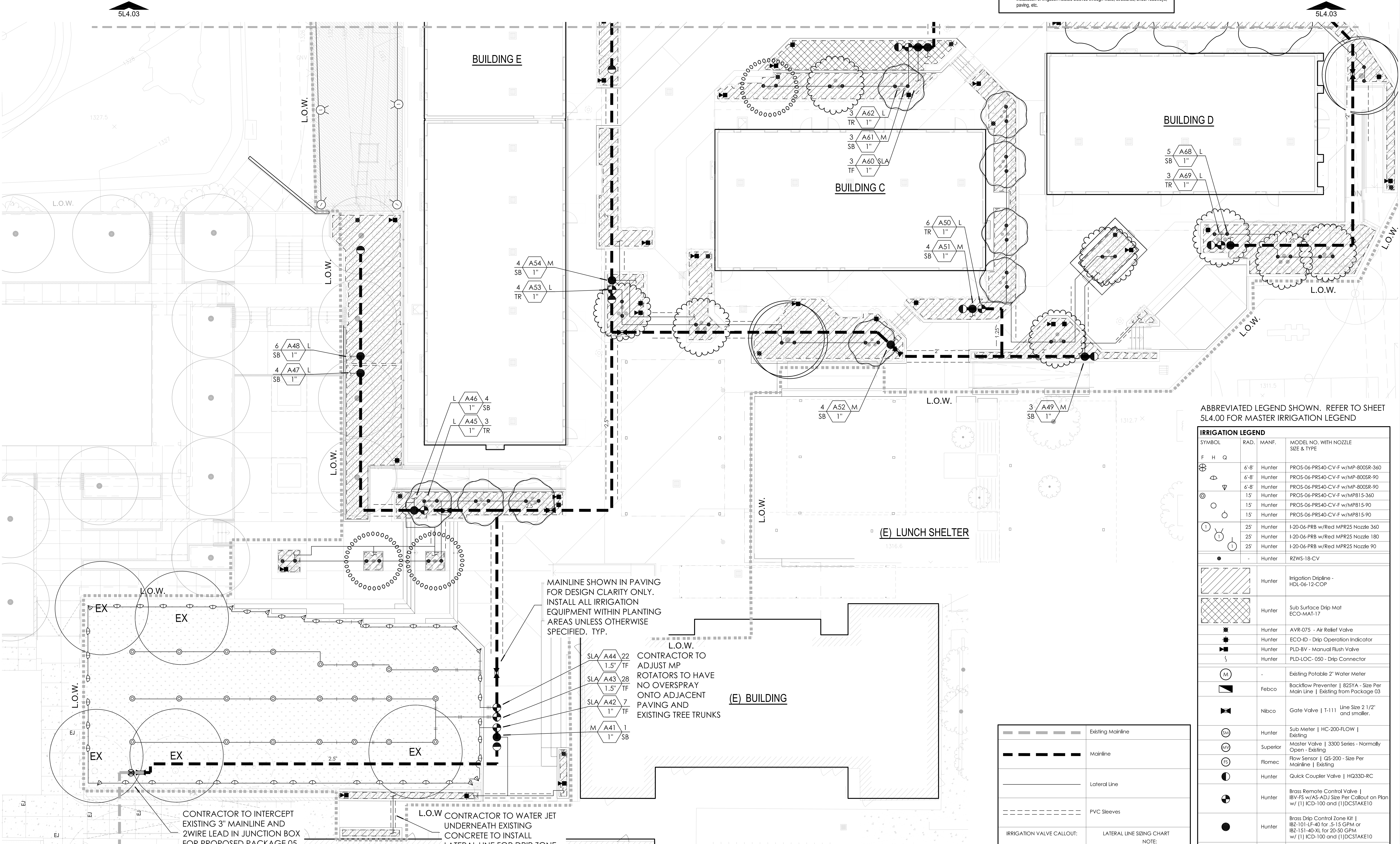


MAINLINE SHOWN IN PAVING FOR DESIGN CLARITY ONLY. INSTALL ALL IRRIGATION EQUIPMENT WITHIN PLANTING AREAS UNLESS OTHERWISE SPECIFIED. TYP.

CONTRACTOR TO ADJUST MP ROTATORS TO HAVE NO OVERSPRAY ONTO ADJACENT PAVING AND EXISTING TREE TRUNKS

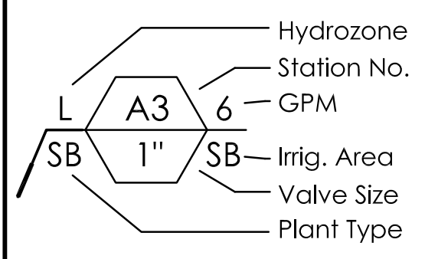
CONTRACTOR TO INTERCEPT EXISTING 3" MAINLINE AND 2WIRE LEAD IN JUNCTION BOX FOR PROPOSED PACKAGE 05 IRRIGATION

CONTRACTOR TO WATER JET UNDERNEATH EXISTING CONCRETE TO INSTALL LATERAL LINE FOR DRIP ZONE

IRRIGATION PLAN - LOWER CORRIDOR 1" = 10' 1

▬ ▬ ▬	Existing Mainline
▬ ▬ ▬	Mainline
───	Lateral Line
═ ═ ═	PVC Sleeves

IRRIGATION VALVE CALLOUT:



LATERAL LINE SIZING CHART

───	3/4"
─┼─	1"
─╫─	1 1/4"
─╫┼─	1 1/2"
─┴─	2"
─┼─	2 1/2"
─╪─	3"

NOTE:
THE LATERAL SIZE BETWEEN TWO IDENTICAL TICK MARKS SHALL BE SIZED THE SAME. MINIMUM PIPE SIZE IS 3/4".

ABBREVIATED LEGEND SHOWN. REFER TO SHEET 5L4.00 FOR MASTER IRRIGATION LEGEND

IRRIGATION LEGEND

SYMBOL F H Q	RAD.	MANF.	MODEL NO. WITH NOZZLE SIZE & TYPE
⊕	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-360
◓	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-90
▽	6'-8'	Hunter	PROS-06-PRS40-CV-F w/MP-800SR-90
◎	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-360
○	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-90
○	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-90
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 360
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 180
①	25'	Hunter	I-20-06-PRB w/Red MPR25 Nozzle 90
●	-	Hunter	RZWS-18-CV
▨		Hunter	Irrigation Dripline - HDL-06-12-COP
▩		Hunter	Sub Surface Drip Mat ECO-MAT-17
⊗		Hunter	AVR-075 - Air Relief Valve
■		Hunter	ECO-ID - Drip Operation Indicator
▶■		Hunter	PLD-BV - Manual Flush Valve
⌇		Hunter	PLD-LOC- 050 - Drip Connector
Ⓜ		-	Existing Potable 2" Water Meter
◪		Febco	Backflow Preventer | 825YA - Size Per Main Line | Existing from Package 03
⋈		Nibco	Gate Valve | T-111 Line Size 2 1/2" and smaller.
SM		Hunter	Sub Meter | HC-200-FLOW | Existing
MV		Superior	Master Valve | 3300 Series - Normally Open - Existing
FS		Flomec	Flow Sensor | QS-200 - Size Per Mainline | Existing
◐		Hunter	Quick Coupler Valve | HQ33D-RC
◑		Hunter	Brass Remote Control Valve | IBV-FS w/AS-ADJ Size Per Callout on Plan w/ (1) ICD-100 and (1)DCSTAKE10
●		Hunter	Brass Drip Control Zone Kit | IBZ-101-LF-40 for .5-15 GPM or IBZ-151-40-XL for 20-50 GPM w/ (1) ICD-100 and (1)DCSTAKE10
⦸		King Bros.	Line Size Check Valve
WS		Hunter	Wireless Solar Sync Sensor | WSS-SEN | Existing from Package 03
A		Hunter	Existing. REFER TO OVERALL PLAN FOR EXACT LOCATION | Smart Controller on Pedestal | A2C-75D-SS w/PED-SS **ADD (1) A2C-D75 Expansion Module**

HONGJOO KIM NO. 5087
Signature
12/31/26
Renewal Date
03/20/26
Date

PARADISE CANYON E.S.

PACKAGE 5 - NEW NORTH BUILDINGS

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NO. C-014869
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08/06/2025	DSA V1
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03/20/2026	DSA V3

REVISION DATE	DESCRIPTION

DRAWING TITLE

IRRIGATION PLAN

5L4.02

SCALE

PLOT DATE 7/25/2025 9:23 AM

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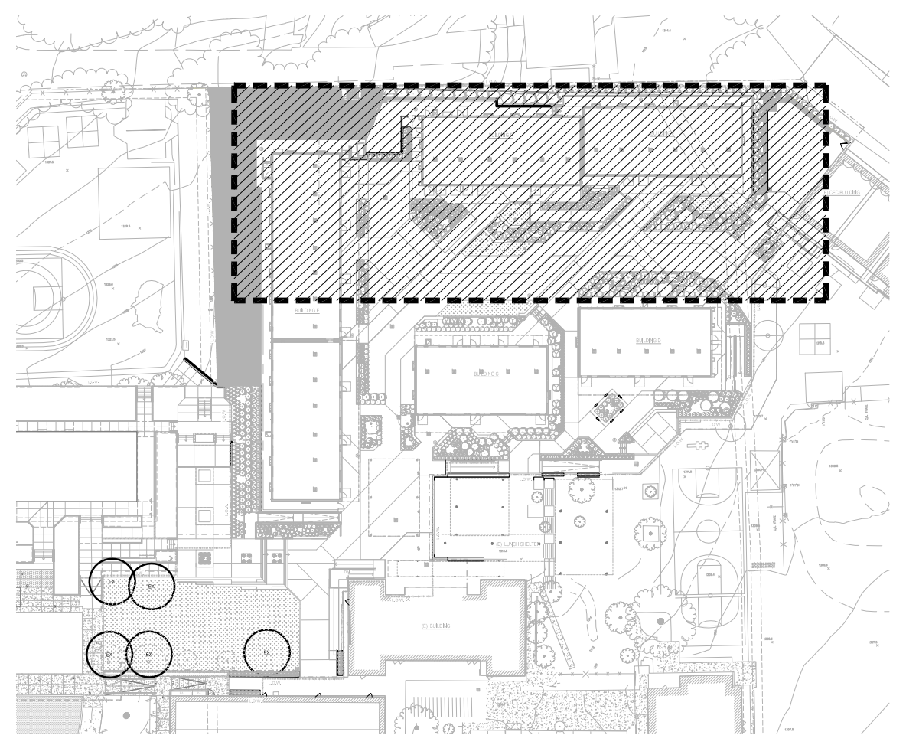
KEY PLAN



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HKLA

LICENSED LANDSCAPE ARCHITECT
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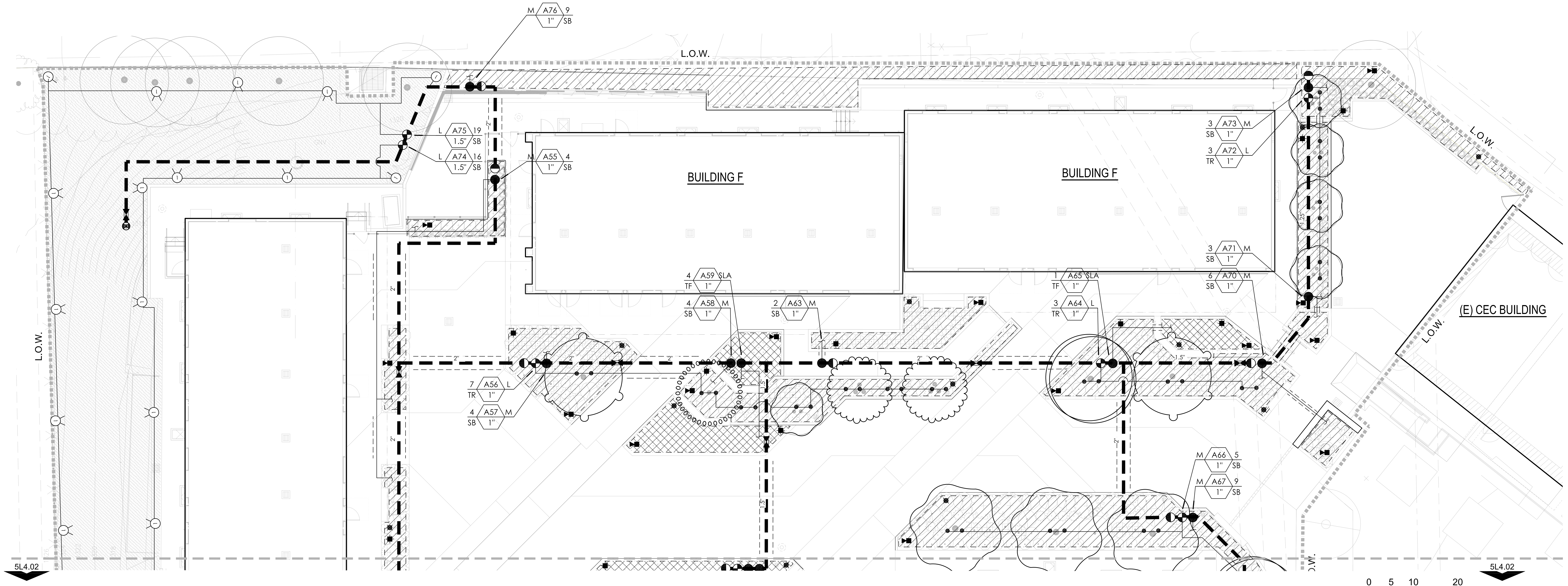

0 5 10 20

IRRIGATION PLAN - UPPER COURTYARD

1" = 10'

1

NORTH

ABBREVIATED LEGEND SHOWN. REFER TO SHEET 5L4.00 FOR MASTER IRRIGATION LEGEND

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DATE_________________

CONTROL WIRE CONDUIT SIZING CHART

SLEEVE SIZE	2" MIN.	2-1/2"	3"	4"
WIRES IN SLEEVE	0-16	17-24	25-40	41-48

IRRIGATION SLEEVE SIZING CHART

PIPE SIZE	3/4"	1"	1-1/4	1-1/2"	2"	2-1/2"	3"
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◕	Hunter	Brass Remote Control Valve | IBV-FS w/AS-ADJ Size Per Callout on Plan w/ (1) ICD-100 and (1)DCSTAKE10
●	Hunter	Brass Drip Control Zone Kit | IBZ-101-LF-40 for .5-15 GPM or IBZ-151-40-XL for 20-50 GPM w/ (1) ICD-100 and (1)DCSTAKE10
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WS	Hunter	Wireless Solar Sync Sensor | WSS-SEN | Existing from Package 03
A	Hunter	Existing. REFER TO OVERALL PLAN FOR EXACT LOCATION | Smart Controller on Pedestal | A2C-75D-SS w/PED-SS **ADD (1) A2C-D75 Expansion Module**
▬ ▬ ▬		Existing Mainline
▬ ▬ ▬		Mainline
───		Lateral Line
═ ═ ═		PVC Sleeves

IRRIGATION VALVE CALLOUT:

L A3 6
SB 1" SB
Hydrozone
Station No.
GPM
Irrig. Area
Valve Size
Plant Type

LATERAL LINE SIZING CHART

3/4"
1"
1 1/4"
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○	15'	Hunter	PROS-06-PRS40-CV-F w/MP815-90
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FS		Flomec	Flow Sensor | QS-200 - Size Per Mainline | Existing
◐		Hunter	Quick Coupler Valve | HQ33D-RC

DRAWING TITLE

IRRIGATION PLAN

5L4.03

SCALE

PLOT DATE 7/25/2025 9:23 AM

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