

STRUCTURAL NOTES :

A. GENERAL

1. THE STRUCTURAL NOTES ARE INTENDED TO COMPLEMENT THE PROJECT SPECIFICATIONS WHICH ARE PART OF THE CONSTRUCTION DOCUMENTS. SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL GOVERN OVER THE STRUCTURAL NOTES AND TYPICAL DETAILS.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN ON CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS.
3. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
4. OBSERVATION VISITS TO THE SITE BY ARW ENGINEERS FIELD REPRESENTATIVES SHALL NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.
5. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS. SUBMITTALS SHALL BE MADE IN A TIMELY MANNER AS INDICATED IN SPECIFICATIONS. REVIEW OF SUBMITTALS BY ARW ENGINEERS IS FOR GENERAL COMPLIANCE ONLY AND IS NOT INTENDED AS APPROVAL. SUBMITTALS WHICH ARE UNCLEAR OR DIFFICULT TO READ SHALL BE REJECTED.
6. DURING AND AFTER CONSTRUCTION, BUILDER AND/OR OWNER SHALL KEEP LOADS ON STRUCTURE WITHIN THE LIMITS OF DESIGN LOADS.
7. TYPICAL DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN.
8. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ENGINEER FOR APPROVAL BEFORE PROCEEDING WITH ANY CHANGES, MODIFICATIONS OR SUBSTITUTIONS.
9. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY SHORING AND BRACING FOR ALL STRUCTURAL ELEMENTS UNTIL THE ENTIRE STRUCTURAL SYSTEM IS COMPLETED. CONTRACTOR IS RESPONSIBLE FOR DESIGN OF ALL SHORING.
10. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL LOCATIONS AND SIZES OF MECHANICAL EQUIPMENT OR OTHER EQUIPMENT BEFORE FABRICATING AND ERECTING STRUCTURAL ELEMENTS.

B. SPECIAL INSPECTIONS

1. SPECIAL INSPECTION OF ALL CONCRETE SHALL BE PROVIDED BY AN INDEPENDENT AGENCY EMPLOYED AS OUTLINED IN THE SPECIFICATIONS. CONTRACTOR SHALL COORDINATE AND COOPERATE WITH REQUIRED INSPECTIONS.

C. BASIS OF DESIGN

1. GOVERNING BUILDING CODE : ACI 318-14 / ACI 350 / ACI 350.3
 - a. SNOW LOAD = 93 PSF
 - b. DO NOT PLACE SOIL OVER LID

D. FOUNDATION

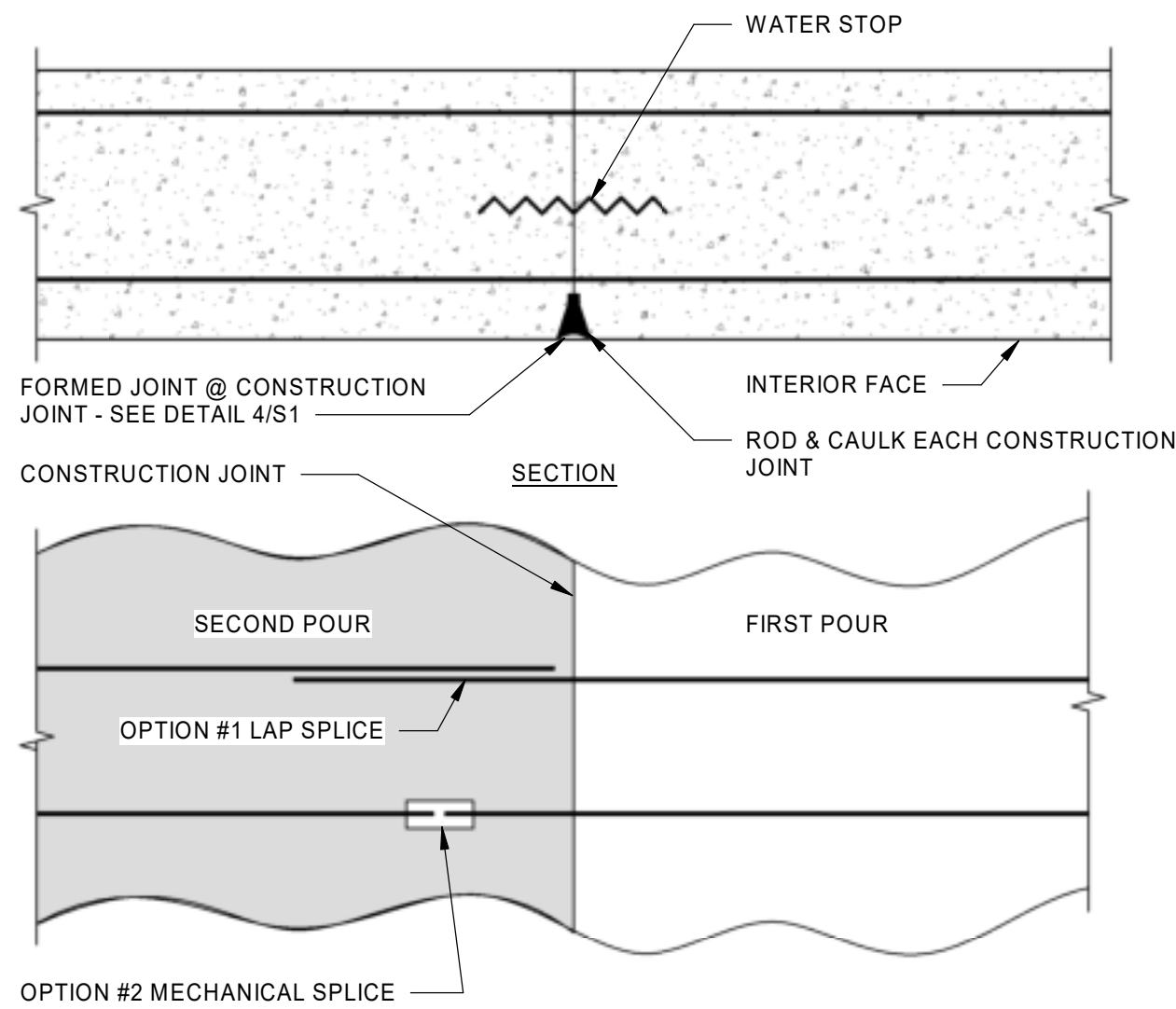
1. DESIGN SOIL PRESSURE : 3,000 PSF
2. SOILS REPORT BY : CHRISTENSEN GEOTECHNICAL REPORT # : 133-011 DATED : JANUARY 15, 2021
3. SOIL PREPARATION UNDER FOOTINGS AND SLABS-ON-GRADE SHALL BE IN ACCORDANCE WITH THE SOILS REPORT.
4. UNLESS NOTED OTHERWISE, ALL FOOTINGS AT COLUMNS TO BE CENTERED BELOW COLUMNS

E. CONCRETE

1. ALL CONCRETE SHALL HAVE A DESIGN 28-DAY COMPRESSIVE STRENGTH AS FOLLOWS :
 - a. FOOTINGS, SLAB ON GRADE, COLUMNS, WALLS, AND ROOF SLAB : 4500psi
 - b. ALL CONCRETE SHALL HAVE AN AIR CONTENT OF 5% AND MAXIMUM WATER / CEMENT RATIO OF 0.40
2. NO PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED OR APPROVED BY STRUCTURAL ENGINEER. NO ALUMINUM PRODUCTS SHALL BE EMBEDDED IN CONCRETE. PENETRATIONS THRU WALLS WHEN APPROVED SHALL BE BUILT INTO THE WALL PRIOR TO PLACEMENT OF CONCRETE.
3. REFER TO OTHER (CIVIL, ETC.) DRAWINGS FOR EXTENT AND LOCATION OF DEPRESSIONS, CURBS, RAMPS, ETC.
4. AROUND OPENINGS IN SUSPENDED CONCRETE SLABS, ADD REINFORCING BARS EQUIVALENT TO BARS CUT BY OPENING WITH HALF ON EACH SIDE OF OPENING. BARS SHALL RUN FULL LENGTH OF SPAN. SEE DETAIL 3/S1.
5. CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS SHALL BE MADE AND LOCATED SO AS TO NOT IMPAIR THE STRENGTH OF THE STRUCTURE AND AS APPROVED BY THE STRUCTURAL ENGINEER. PROVIDE WATERSTOP IN ALL VERTICAL AND HORIZONTAL JOINTS. ALL STEEL REINFORCING SHALL BE CONTINUOUS THROUGH COLD JOINTS, WITH LAP SPLICES AS INDICATED, UNLESS NOTED OTHERWISE.
6. SEE PROJECT SPECIFICATION FOR WATERPROOFING ADMIXTURE.

F. REINFORCING STEEL

1. ALL REINFORCING BARS SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60 ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 315, TO MAINTAIN EXACT REQUIRED POSITION. ALL FIELD BENT DOWELS SHALL BE GRADE 40 WITH SPACINGS INDICATED REDUCED BY 1/3.
2. REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVERAGE:
 - a. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
 - b. EXPOSED TO EARTH, WATER OR WEATHER:
 1. #6 & LARGER 2"
 2. #5 & SMALLER 2" (1 3/4" FOR #3 COLUMN TIES)
 - c. SLAB ON GRADE
 1. PLACE REINFORCING AT CENTER OF SLAB UNLESS INDICATED OTHERWISE.
3. EXCEPT WHERE NOTED, CONTINUOUS REINFORCEMENT SHALL BE SPLICED WITH LAP SPLICES AT POINTS OF MINIMUM STRESS AS FOLLOWS:
 - a. IN RESERVOIR WALLS, SEE DETAILS 1/S1, 2/S1 AND 1/S4.
 - b. IN COLUMNS, USE 35 INCH LAP
 - c. IN SUSPENDED SLAB, USE 48 BAR DIAMETER LAP AND STAGGER ADJACENT BAR SPLICES 24" MIN.
 - d. IN SLAB-ON-GRADE, USE 30 BAR DIAMETER LAP.
4. ALL VERTICAL REINFORCING SHALL BE DOWELED TO FOOTINGS OR STRUCTURE BELOW WITH DOWELS TO MATCH. SPLICE LENGTHS SHALL COMPLY WITH NOTE F.3. DOWELS INTO FOOTINGS SHALL TERMINATE WITH A STANDARD HOOK, AND SHALL EXTEND TO WITHIN 4" OF THE BOTTOM OF THE FOOTING, BUT NOT MORE THAN 14" INTO FOOTING. SEE DETAILS FOR REQ'D. EMBEDMENT OR DOWELS.
5. DO NOT WELD REINFORCING.



- NOTES:
1. FOR OPTION #1 - SPLICE LENGTHS ARE
 - a. #5 BARS - 39"
 - b. #6 BARS - 46"
 2. FOR OPTION #2 - USE MECHANICAL CONNECTORS WHICH ACHIEVE 125% OF THE STRENGTH OF THE BARS BEING SPLICED. SUBMIT A CURRENT ICC RESEARCH REPORT FOR APPROVAL PRIOR TO CONSTRUCTION.

TYPICAL CONST. JOINT IN WALL DETAIL

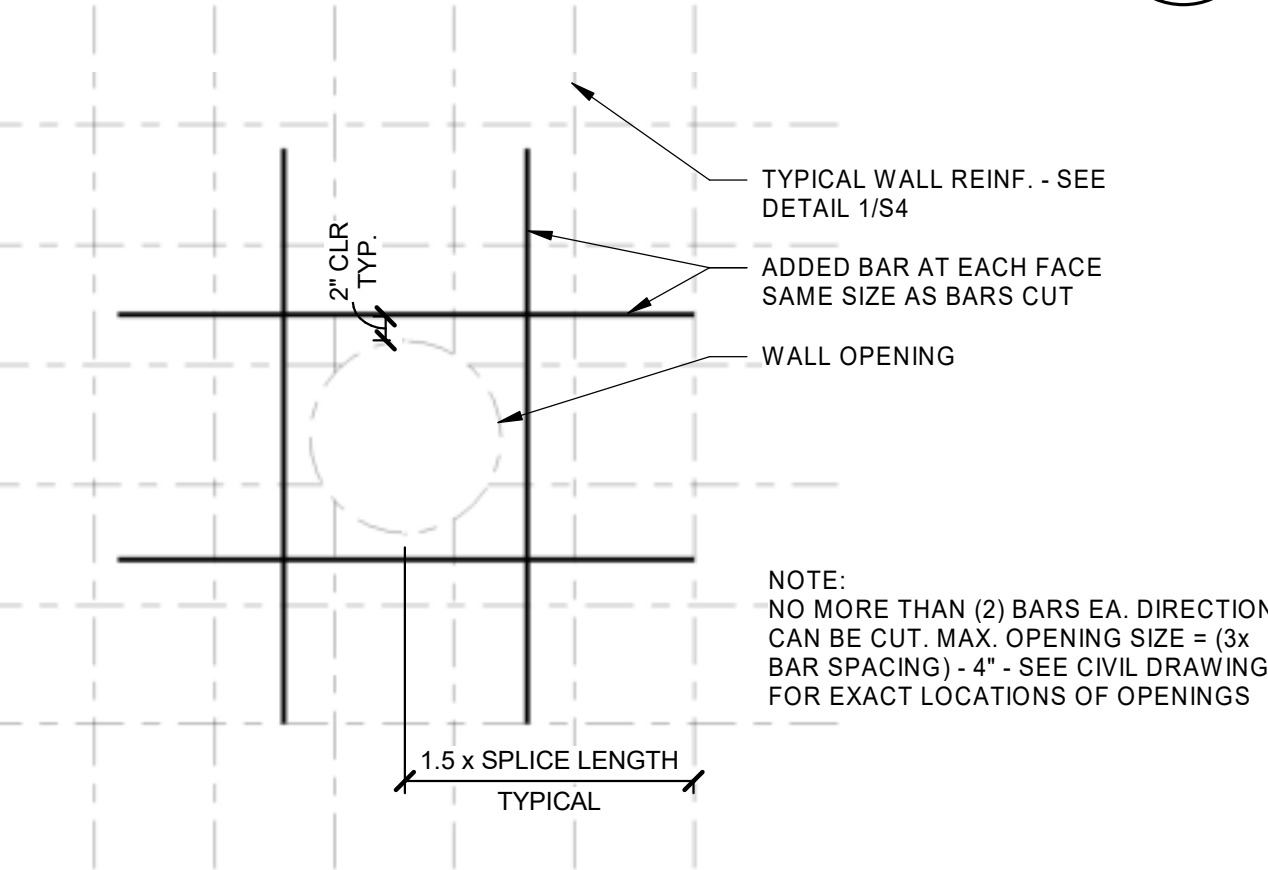
SCALE : NONE

1
S1

TYPICAL HORIZONTAL REINF. BAR SPLICE DETAIL

SCALE : NONE

2
S1



TYPICAL WALL OPENING DETAIL

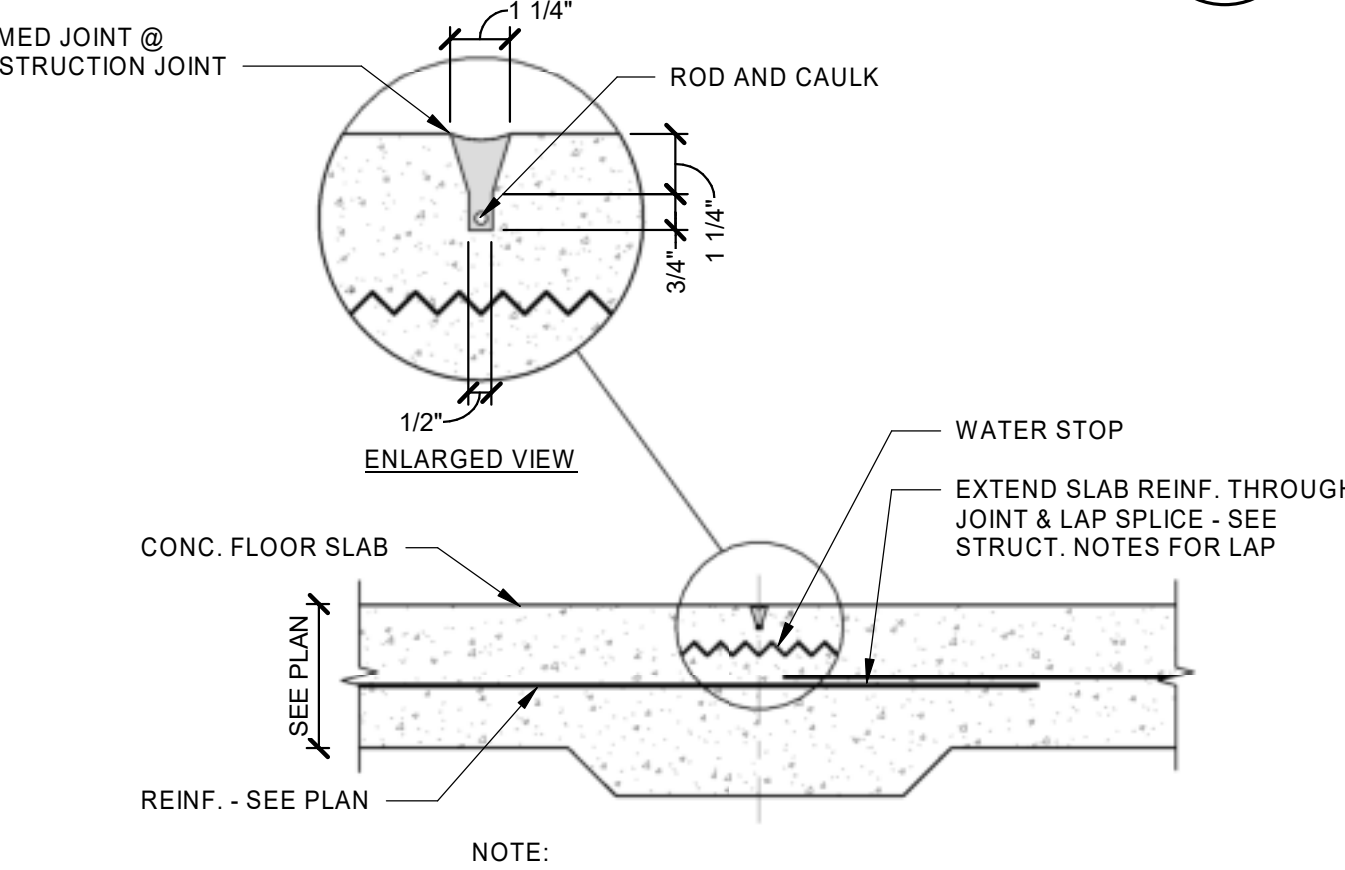
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5
S1

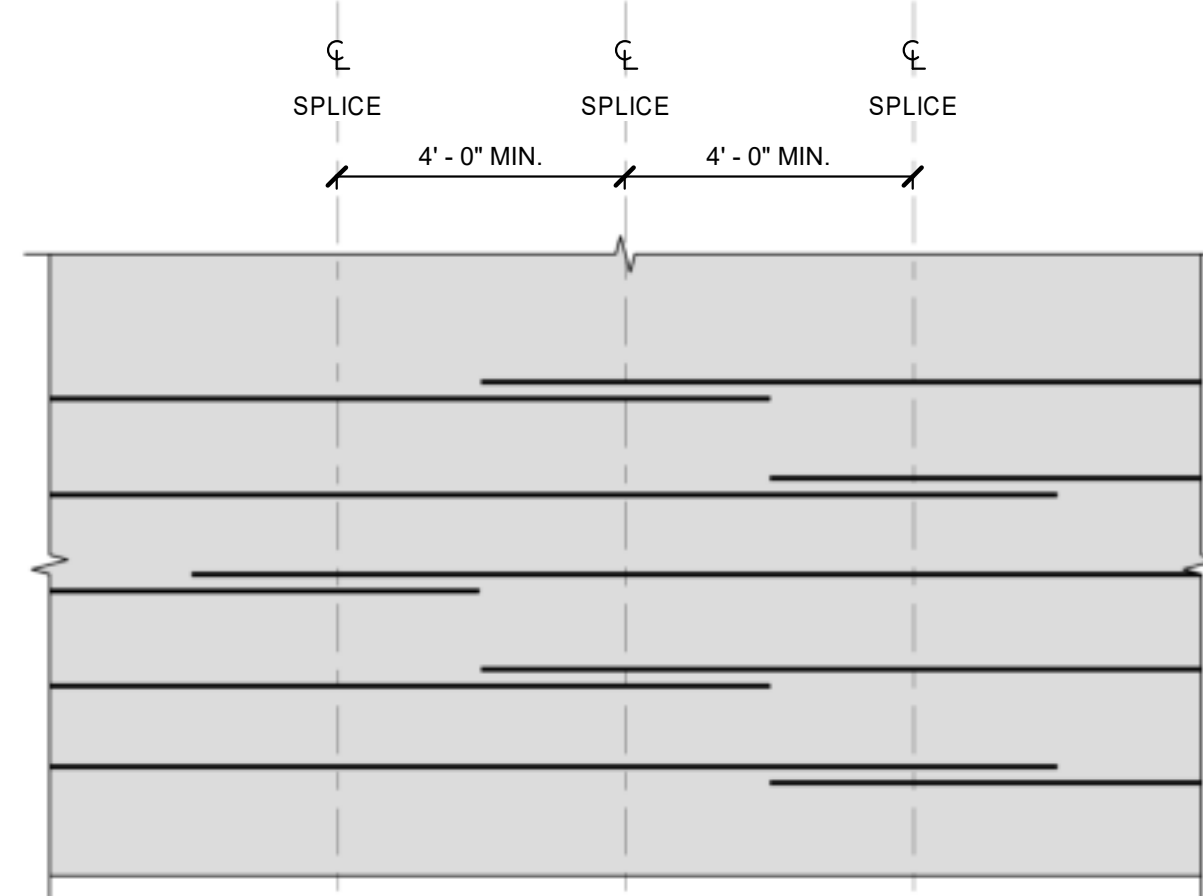
TYP. CONST. JOINT IN FLOOR SLAB DETAIL

SCALE : NONE

4
S1

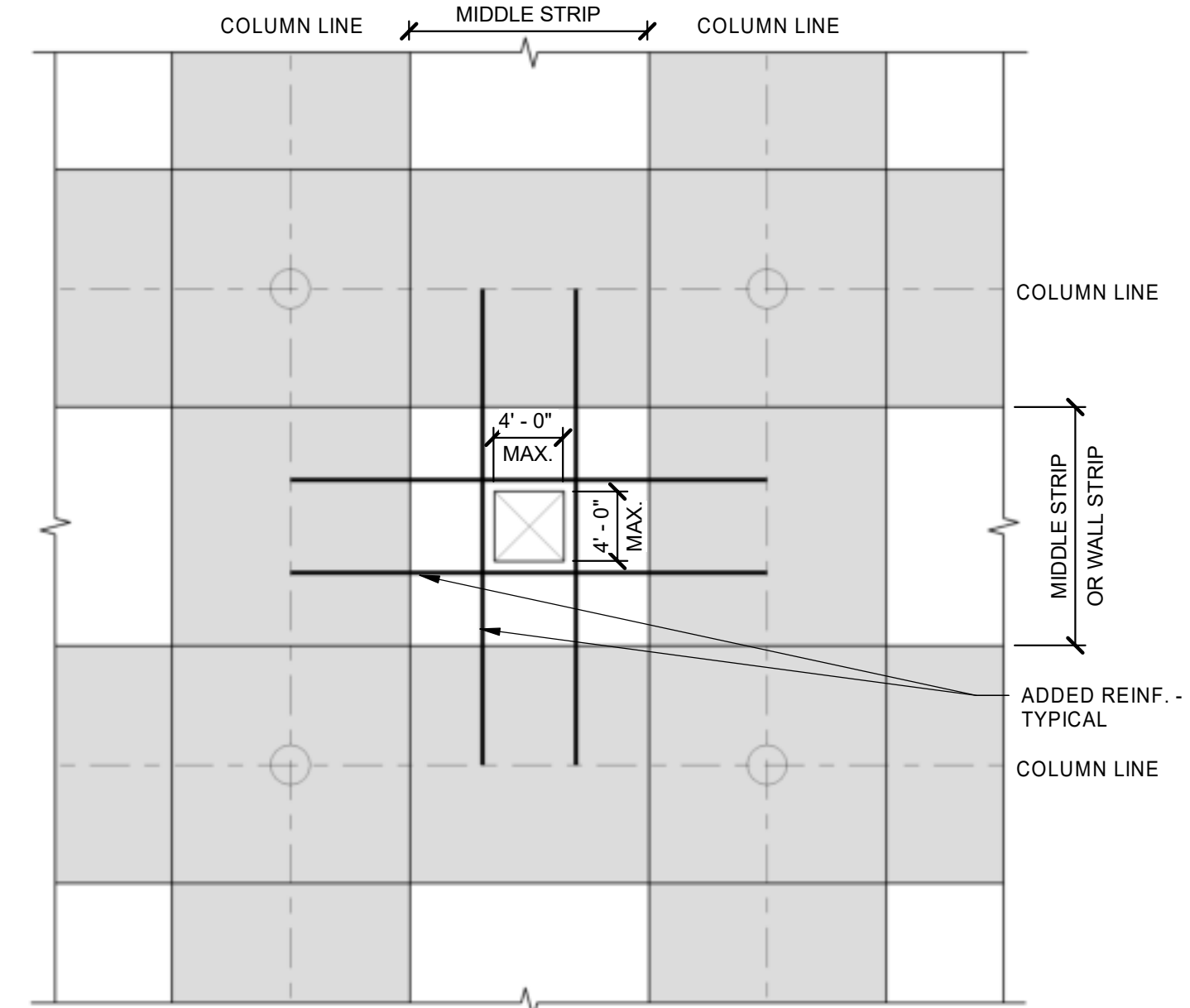


NOTE:
IT IS NOT ANTICIPATED THAT THIS DETAIL WILL BE REQ'D. IT IS ONLY PROVIDED TO GIVE THE CONTRACTOR THE OPTION OF POURING THE FLOOR WITH MULTIPLE POURS



NOTES:
SPLICES SHALL NOT COINCIDE VERTICALLY MORE FREQUENTLY THAN EVERY THIRD BAR.

#5 BARS - 39"	SPLICE LENGTHS
#6 BARS - 46"	



TYPICAL ROOF OPENING DETAIL

SCALE : NONE

3
S1

- NOTES:
1. ADD REINFORCING ON ALL SIDES OF OPENING EQUAL TO 1/2 THE AMOUNT CUT IN THAT DIRECTION. ADDED BARS TO EXTEND TO COLUMN LINES AS SHOWN.
 2. OPENINGS MAY ONLY OCCUR @ INTERSECTIONS OF MIDDLE STRIPS (OR INTERSECTION OF MIDDLE STRIP WITH WALL STRIP) AS SHOWN.

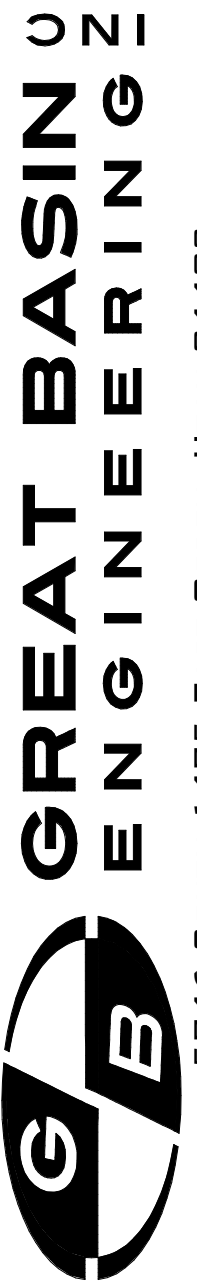
Structural Sheet Index	
SHEET NUMBER	SHEET NAME
S1	STRUCTURAL NOTES
S2	FOOTING & FOUNDATION PLAN
S3	ROOF FRAMING PLAN
S4	DETAILS

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STRUCTURAL NOTES

Legacy Mountain

9400 South State Street
Sandy City, Salt Lake County, Utah
A part of Section ??, T?N, R?W, SLB&M, U.S. Survey



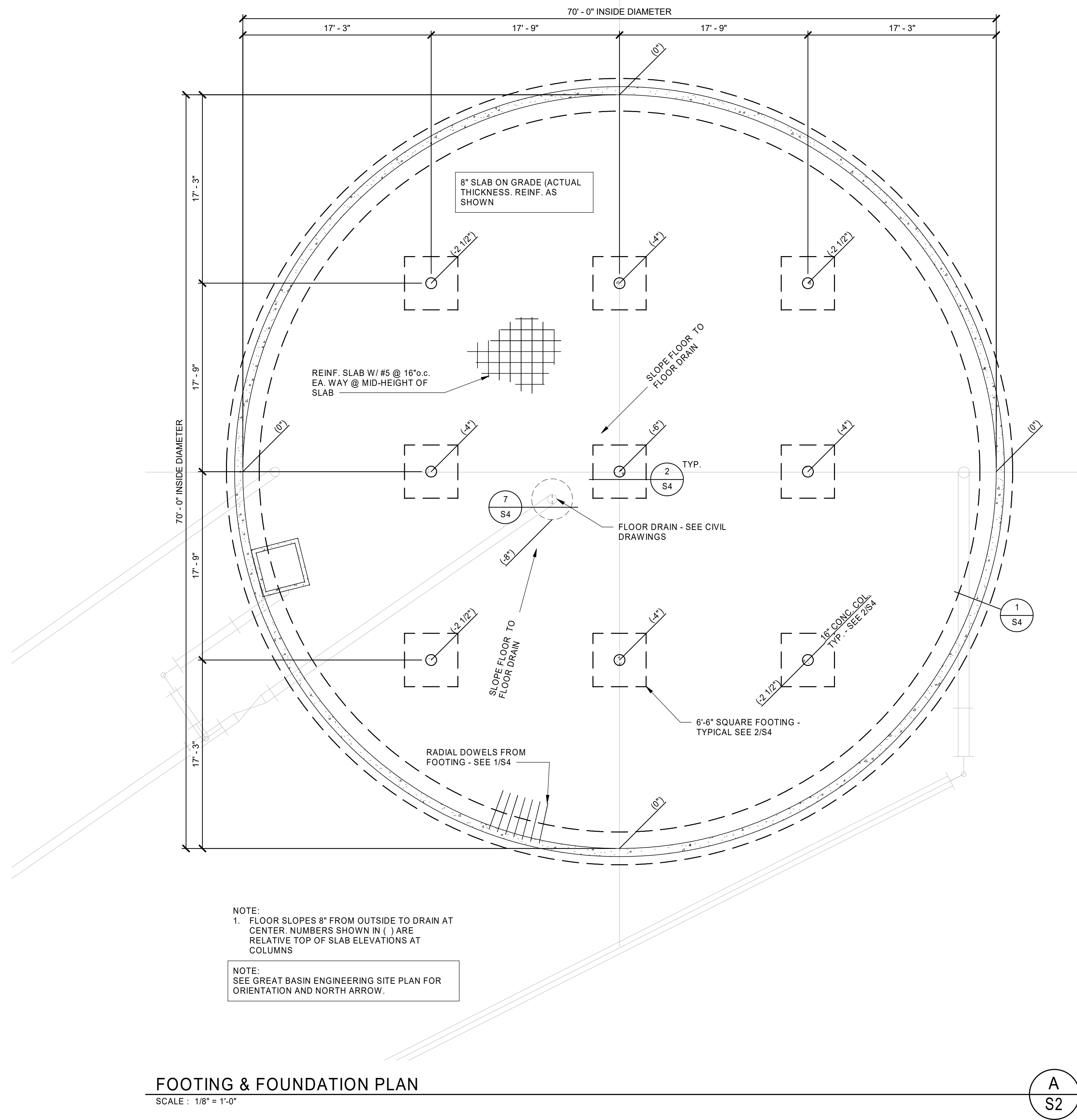
5746 SOUTH 1475 EAST OGDEN, UTAH 84403
MAIN (801)394-4515 S.L.C. (801)521-0222 FAX
(801)392-7544 WWW.GREATBASINENGINEERING.COM

JANUARY 2021

SHEET NO.

S1

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FOOTING & FOUNDATION PLAN

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

A
S2

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FOOTING & FOUNDATION PLAN

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Sandy City, Salt Lake County, Utah
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JANUARY 2021

SHEET NO.

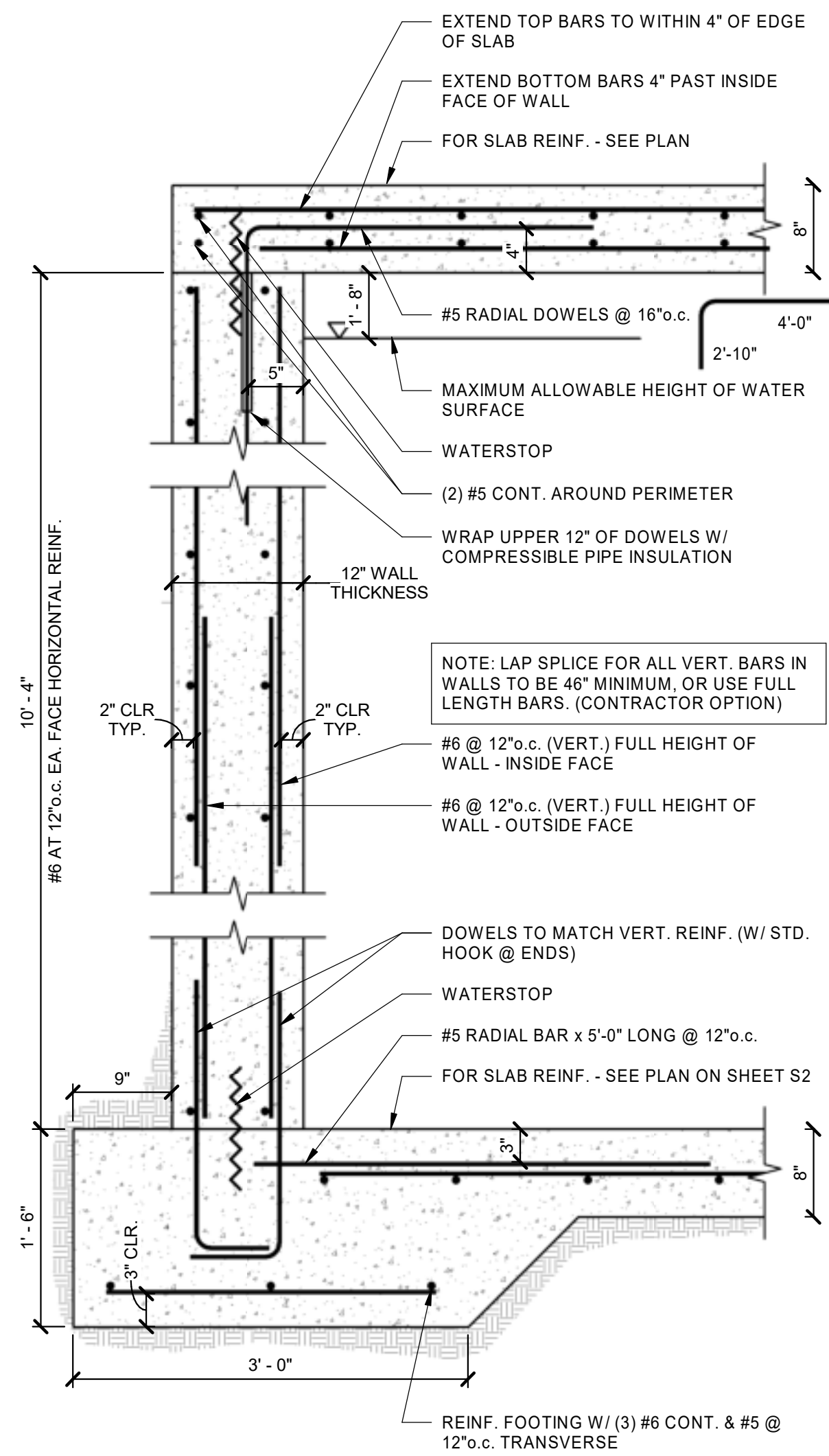
S2

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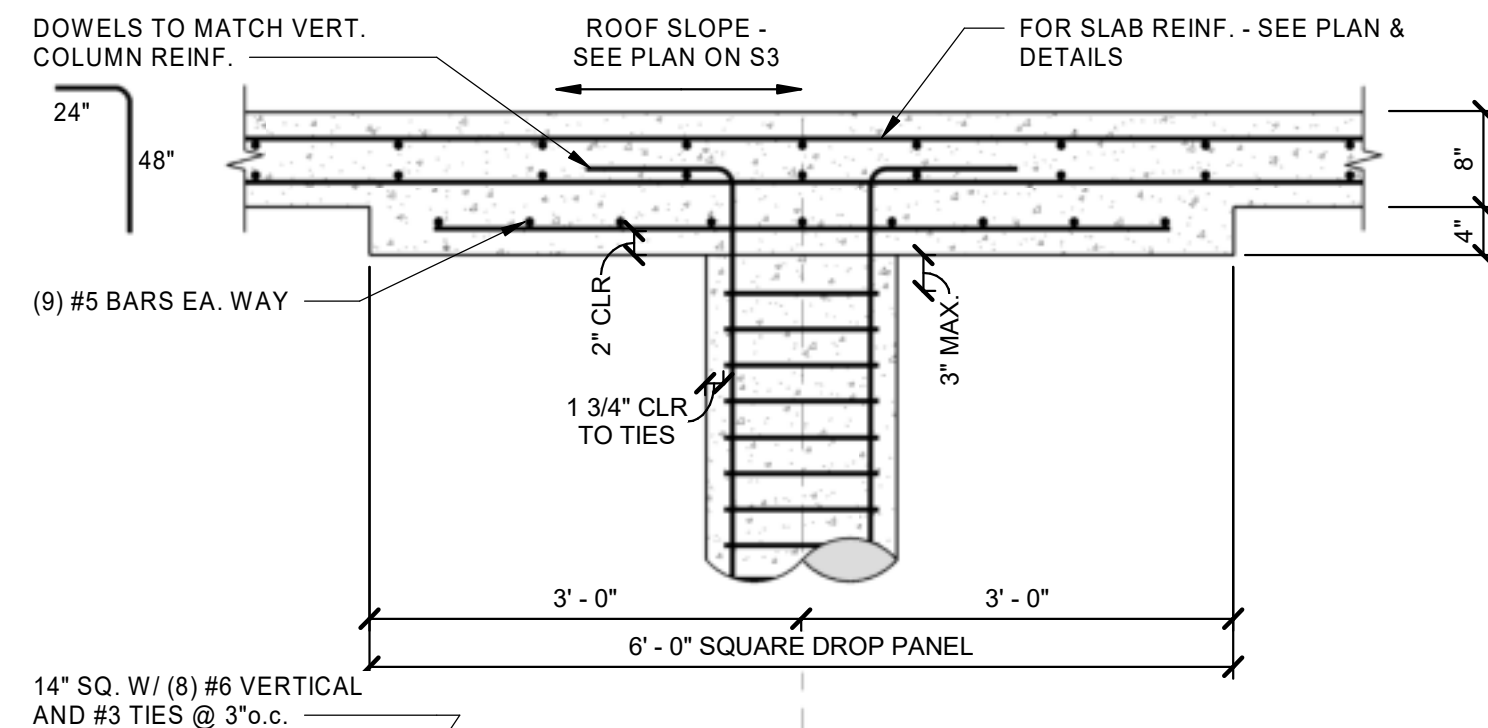
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REV DATE DESCRIPTION



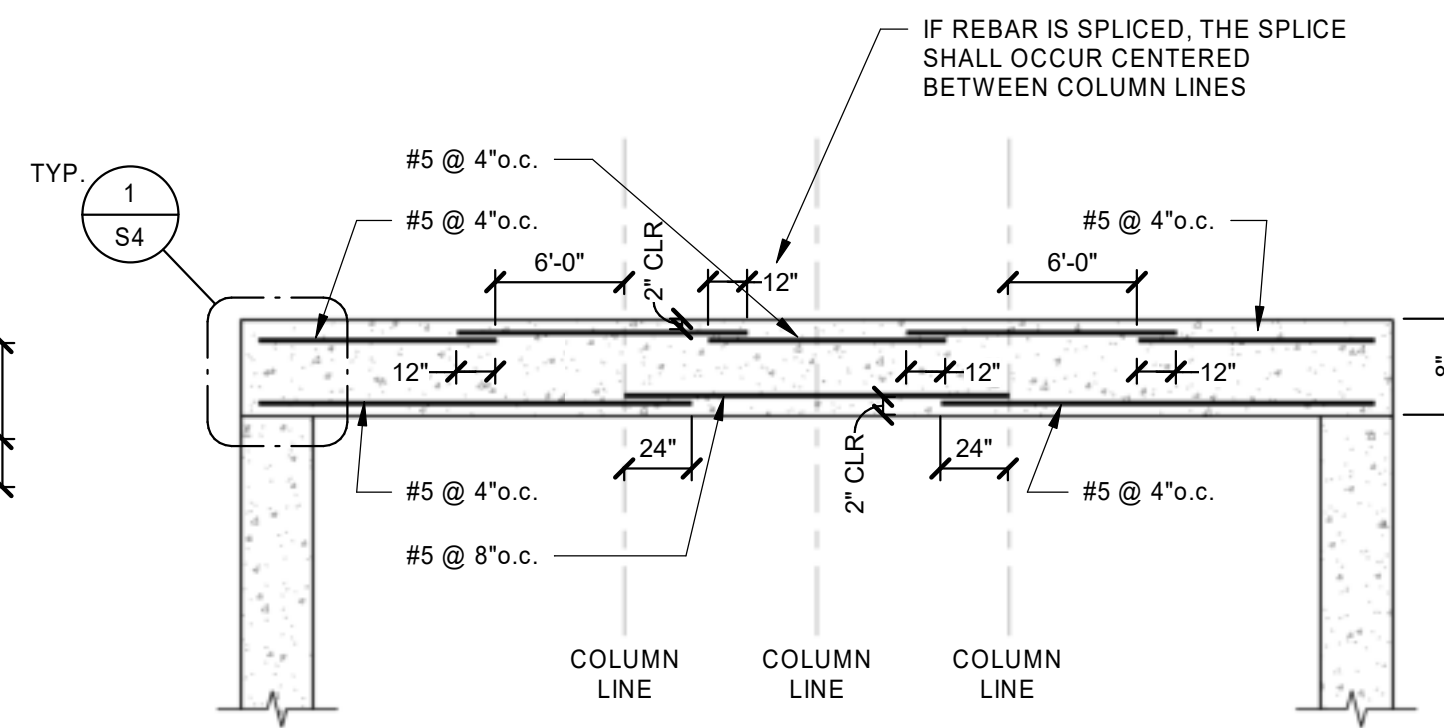
TYPICAL RESERVOIR WALL SECTION
 SCALE: NONE

1
 S4



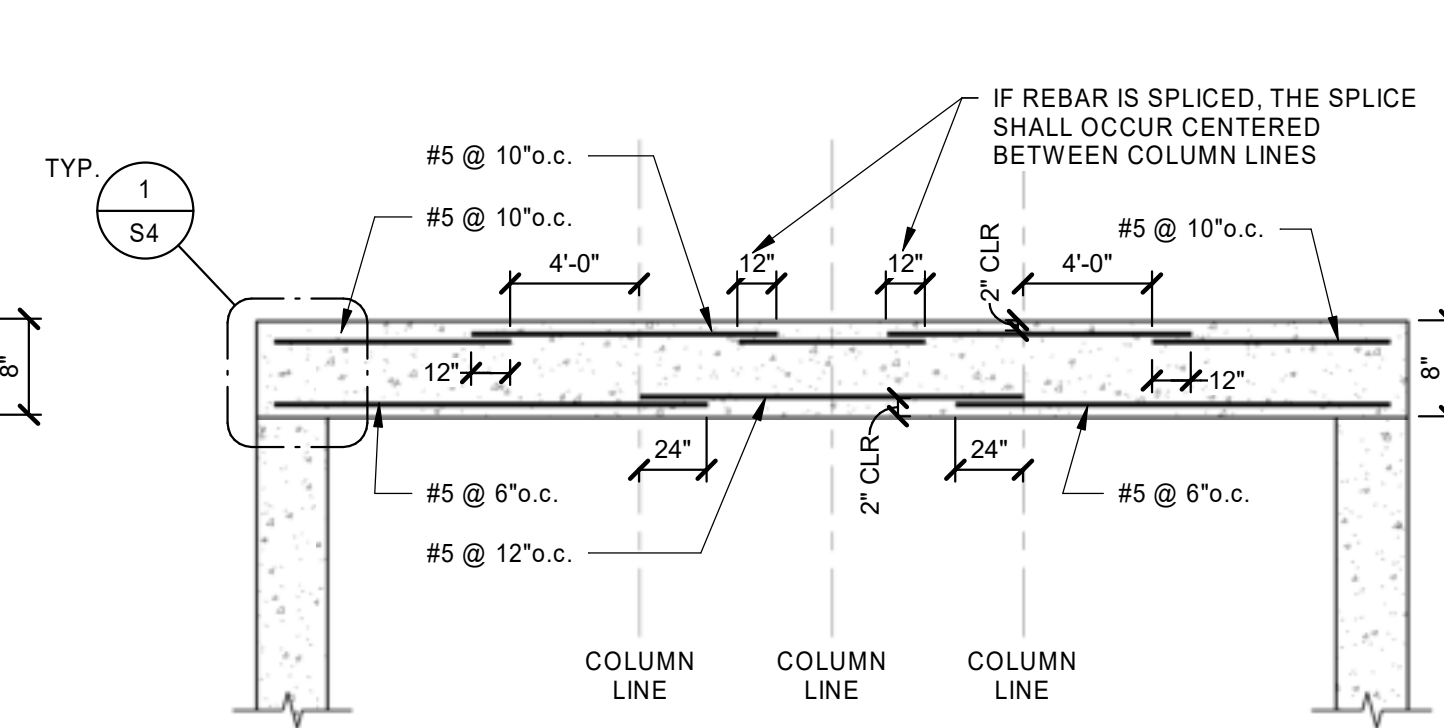
TYPICAL INTERIOR COLUMN
 SCALE: NONE

2
 S4



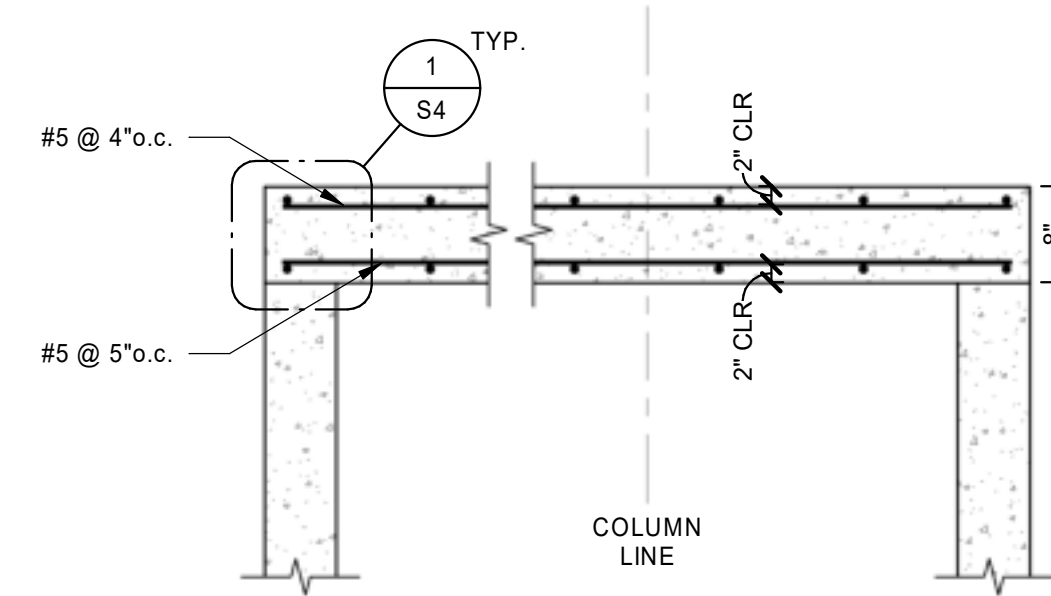
COLUMN STRIP (EACH DIRECTION)
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3
 S4



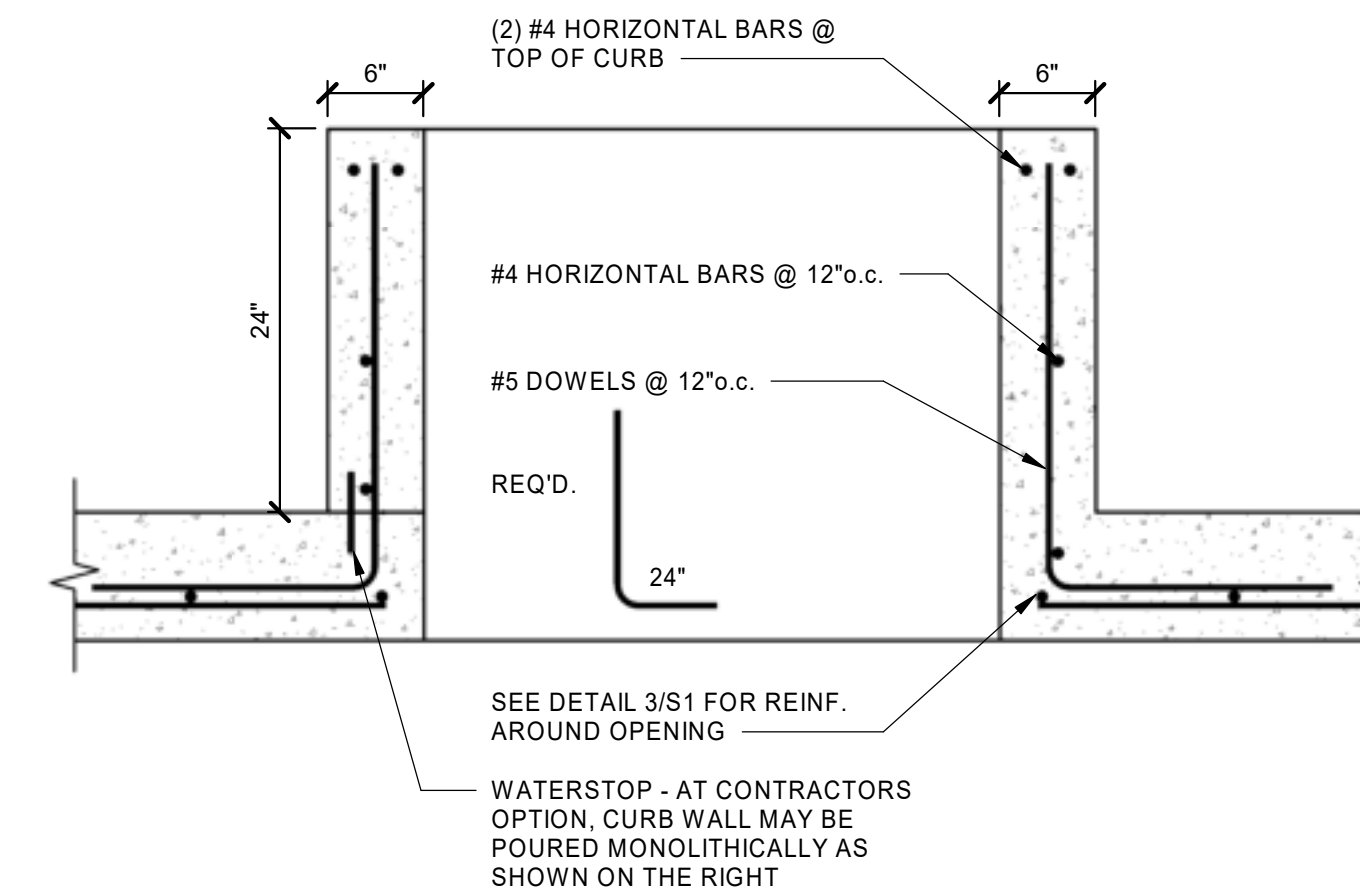
MIDDLE STRIP (EACH DIRECTION)
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4
 S4



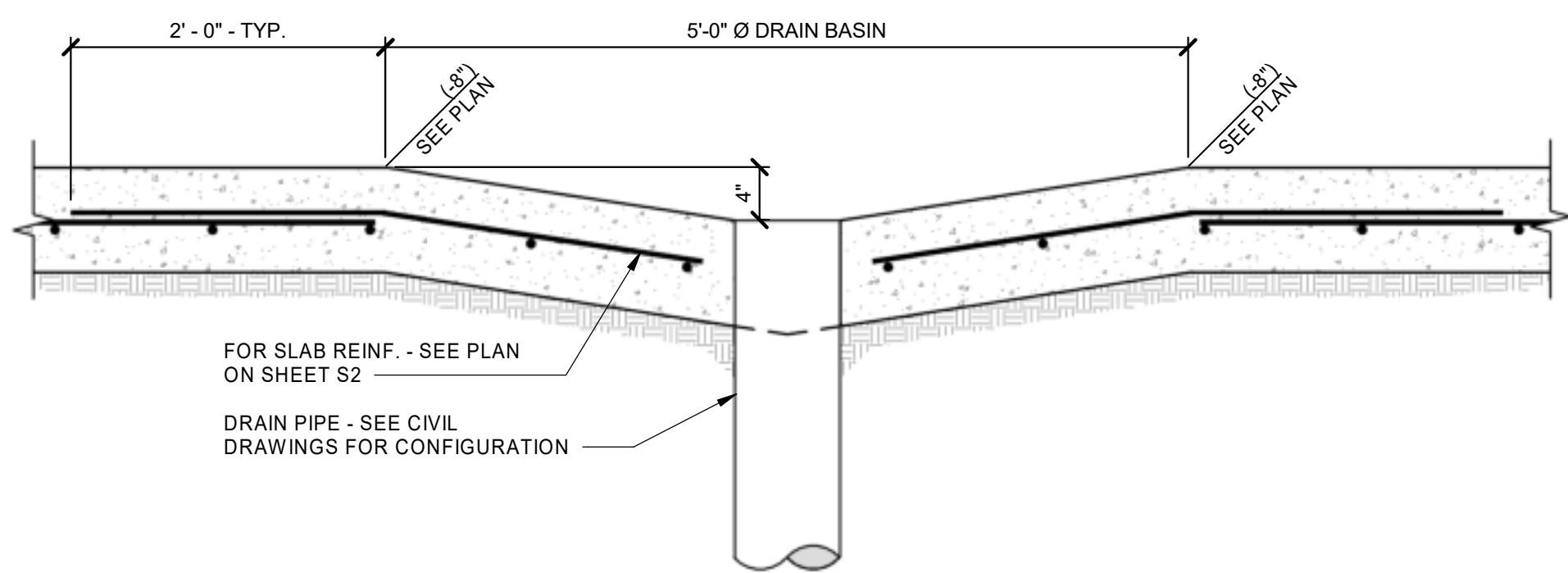
WALL STRIP (EACH DIRECTION)
 SCALE: NONE

5
 S4



CURB WALL SECTION
 SCALE: NONE

6
 S4



DRAIN BASIN
 SCALE: NONE

7
 S4

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DETAILS

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SHEET NO. S4

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