

4. SPECIAL INSPECTIONS

- A. A STATEMENT FOR SPECIAL INSPECTION PREPARED BY THE SPECIAL INSPECTION AGENCY OF RECORD IN ACCORDANCE WITH 2016 CBC 1705A.1 MUST BE SUBMITTED PRIOR TO ISSUANCE OF PERMITS. THE SPECIAL INSPECTION AGENCY MUST BE CERTIFIED BY THE ICC (INTERNATIONAL CODE COUNCIL) AND APPROVED BY THE BUILDING OFFICIAL. THE PROPOSAL MUST INDICATE THAT SPECIAL INSPECTION WAS RETAINED BY THE OWNER, OR THE OWNER'S AGENT, BUT NOT THE CONTRACTOR OR THE PERSON RESPONSIBLE FOR THE WORK. THE PROPOSAL MUST IDENTIFY THE SCOPE OF REQUIRED INSPECTIONS, LIST THE INDIVIDUALS PERFORMING THE INSPECTIONS (INCLUDE CURRENT INDIVIDUAL CERTIFICATIONS AS WELL AS THE LABORATORY'S CERTIFICATION), AND MUST BE ATTACHED TO EACH SET OF PLANS.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL SPECIFIED INSPECTIONS AND TESTING WITH THE INSPECTION/TESTING AGENCY. SEE SPECIFICATIONS FOR REQUIRED INSPECTIONS AND TESTING REQUIRED.
- C. THE FOLLOWING ITEMS ARE SUBJECT TO "SPECIAL INSPECTION" IN CONFORMANCE WITH CBC SEC. 1701. (EXCEPTIONS MAY BE TAKEN WHERE APPLICABLE).
 1. CONCRETE WHEN DESIGN $f_c > 2000$ psi. (SEE CONCRETE MIX DESIGN SCHEDULE).
 2. SPECIAL GRADING, EXCAVATION AND FILLING.

5. ADDITIONAL SPECIAL INSPECTION ITEMS

SOILS PER CBC TABLE 1705A.6		
TASK	CONTINUOUS	PERIODIC
VERIFY MATERIAL BELOW SHALL OH FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		X
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL		X
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		X
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	
PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUB-GRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.		X

CONCRETE PER CBC TABLE 1705A.3		
TASK	CONTINUOUS	PERIODIC
1. INSPECT PLACEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT		X
2. REINFORCING BAR WELDING:		X
A) VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706		X
B) INSPECT SINGLE-PASS FILLET WELDS. MAXIMUM SIZE:		X
C) INSPECT ALL OTHER WELDS	X	
3. INSPECT ANCHORS CAST IN CONCRETE		X
4. INSPECT ANCHORS POST INSTALLED IN HARDENED CONCRETE MEMBERS		X
A) ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	X	
B) MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.		X
5. VERIFY USE OF REQUIRED DESIGN MIX.		X
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATIONS	X	
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES		X
9. INSPECT PRESTRESSED CONCRETE FOR:		
A) APPLICATION OF PRESTRESSING FORCES	X	
B) GROUTING OF BONDED PRESTRESSING TENDONS	X	
10. INSPECT EJECTION OF PRECAST CONCRETE MEMBERS		X
11. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS		X
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED		X

3. CONCRETE

A. GENERAL: ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI MANUAL OF CONCRETE PRACTICE AND THE C.B.C.

B. REINFORCING MATERIALS:

1. DEFORMED ASTM A615 OR A706 - GRADE 60
2. WELDED WIRE FABRIC: ASTM A106
3. WELDED REBAR (IF USED): ASTM A706

C. CONCRETE MIX DESIGNS: CONCRETE MIX SHALL BE LIMITED BY THE FOLLOWING. SEE SPECIFICATIONS FOR OTHER CONCRETE MIX INFORMATION.

LOCATION	COMP. STRENGTH (f_c)	MINIMUM SACKS/YD	MAX. WATER/CEMENT RATIO	AGGREGATE SIZE
TYPICAL INTERIOR SLAB ON GRADE	4,000 psi (DESIGN=2,500 psi)	6 1/2 (18% FLYASH SUBSTITUTE REQUIRED)	.45	ASTM C33 SIZE 57
FOOTINGS	3,000 psi (SPECIAL INSPECTION)	5 1/2	.60	ASTM C33 SIZE 57
EXTERIOR WALKWAYS & SITE WORK	SEE CIVIL	-	-	-

- D. ADMIXTURES: ONLY AS APPROVED BY THE ARCHITECT.
- E. NO WELDING OF REINFORCING STEEL SHALL BE ALLOWED.
- F. LAP SPLICES: SEE SCHEDULE BELOW.
- G. COVER TO BARS: SEE SCHEDULE BELOW.
- H. CONCRETE CURING: SEE SPECIFICATIONS.
- I. FORM REMOVAL: SIDE FORMS OF FOOTINGS SLABS ON GRADE, MINIMUM 2 DAYS.
- J. VIBRATION: VIBRATE ALL CONCRETE IN PLACE WITH A MECHANICAL VIBRATOR USED BY EXPERIENCED PERSONNEL.
- K. TESTING: IN ACCORDANCE WITH ACI-318, SECTION 28.12. SEE SPECIFICATIONS FOR TAKING OF TEST SAMPLES.
- L. DRILLED AND EPOXIED ANCHOR BOLTS: WHERE ANCHOR BOLTS OR HOLD-UP BOLTS ARE OMITTED, BOLTS SHALL BE SUBSTITUTED WITH DRILLED OR EPOXIED ANCHORS PER ENGINEERS WRITTEN DIRECTION.

CONCRETE REINFORCEMENT COVER

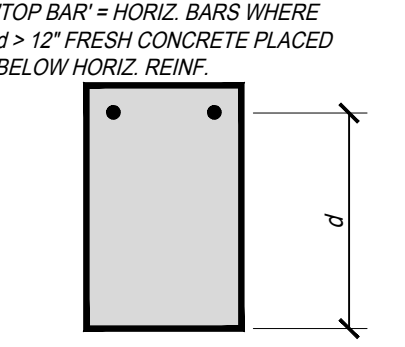
LOCATION	MINIMUM COVER
CONCRETE CAST AND PERMANENTLY EXPOSED TO EARTH:	3"
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#8 THROUGH #18 BAR	2"
#8 BAR, W31 OR D31, AND SMALLER	1 1/2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS, JOISTS:	1 1/2"
#14 AND #18 BAR	1 1/2"
#11 BAR AND SMALLER	1"

CONCRETE REINFORCEMENT LAP SPLICES

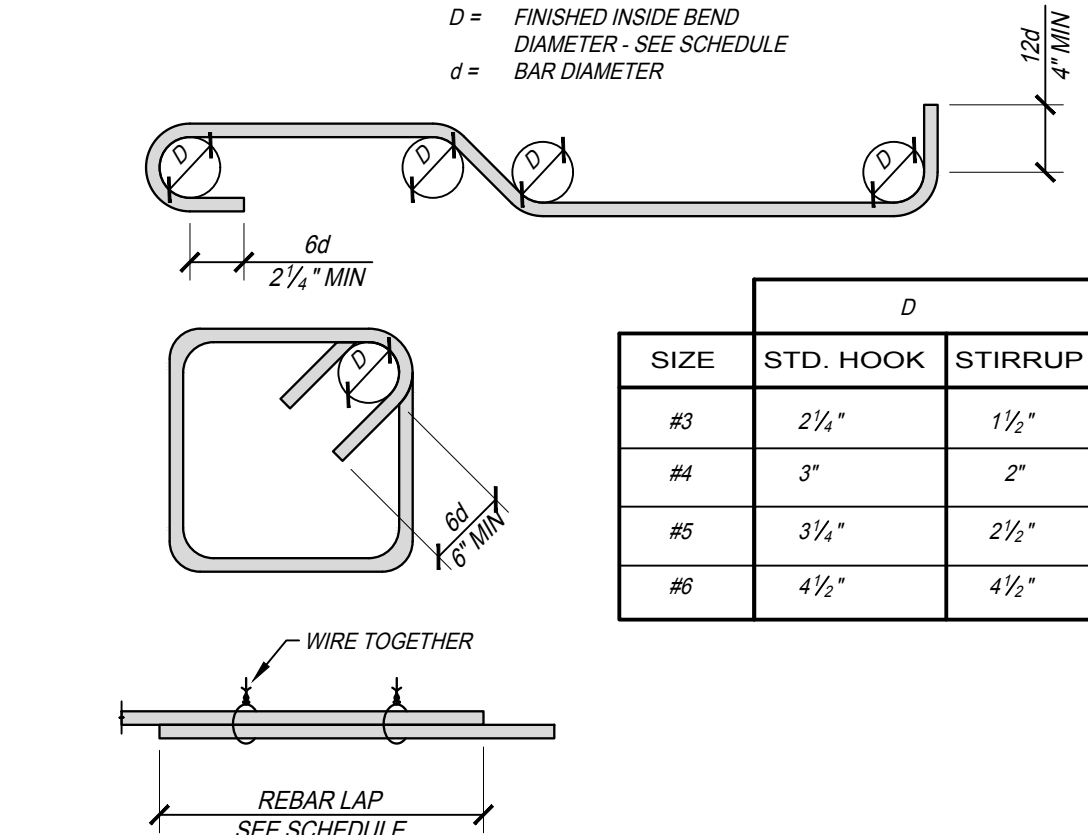
MIN. SPLICES UNLESS OTHERWISE DIMENSIONED ON DRAWINGS:

CONCRETE BAR TYPES	LAP TYPE
FOOTING BARS (OTHER THAN TOP BARS)	CL.1
HORIZ. & VERT. WALL BARS	CL.2
FOOTING TOP BARS	CL.2

BAR SIZE	CL.1	CL.2	CL.3
#4	24"	30"	48"
#5	30"	36"	60"
#6	40"	48"	72"



REINFORCEMENT BENDING REQUIREMENTS



1. GENERAL NOTES

- A. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE CALIFORNIA BUILDING CODE (CBC), 2016 EDITION, AND ALL OTHER PUBLICATIONS AND STANDARDS LISTED HEREIN.
- B. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND ALL OTHER CONTRACT DRAWINGS AND SPECIFICATIONS.
- C. DETAILS SHOWN ON STRUCTURAL DRAWINGS ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS.
- D. DIMENSIONS SHOWN SHALL TAKE PRECEDENCE OVER SCALE ON PLANS. SECTIONS AND DETAILS. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
- E. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
- F. FRAMING AND DETAIL CONDITIONS SPECIFIED BY THESE DRAWINGS SHALL NOT BE MODIFIED WITHOUT WRITTEN DOCUMENTATION FROM THE ENGINEER AND ARCHITECT.
- G. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FLOOR OR ROOF FRAMING MEMBERS. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD.
- H. DESIGN LOADING: PER CBC, 2016 EDITION.
- I. CONSTRUCTION DOCUMENTS SHALL CONSIST OF THE "APPROVED" DRAWINGS, SPECIFICATIONS AND ADDENDUM BEARING THE STAMP AND SIGNATURE OF THE ARCHITECT AND THE APPROVAL STAMP OF THE JURISDICTIONAL BUILDING DEPARTMENT. STRUCTURAL CALCULATIONS ARE NOT PART OF THE CONSTRUCTION DOCUMENTS AND SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.
- J. ALL WORK SHALL BE PERFORMED FROM THE "APPROVED" DOCUMENTS ONLY. A FULL SET OF APPROVED DOCUMENTS SHALL BE KEPT ON SITE DURING ALL CONSTRUCTION PHASES.
- K. DESIGN DATA CONDITIONS AS LISTED BELOW:

LOADING DATA	ENTRY TOWER	SEISMIC DESIGN DATA	ENTRY TOWER
ROOF DEAD LOAD	25 psf	SITE COORDINATES	36.753 N -119.673 W
ROOF LIVE LOAD	20 psf	SEISMIC IMPORTANCE FACTOR (I)	1.0
WIND DESIGN DATA	ENTRY TOWER	RISK CATEGORY	II
ULTIMATE WIND SPEED (3 SECOND GUST)	110 mph	MAPPED SPECTRAL RESPONSE	S ₁ = .593 S ₁ = .246
WIND EXPOSURE CATEGORY	C	SITE CLASS	D
RISK CATEGORY	II	SPECTRAL RESPONSE COEFFICIENTS	S ₁₁ = .524 S ₁₂ = .313
INTERNAL PRESSURE COEFFICIENT	± .18	SEISMIC DESIGN CATEGORY	D
ANALYSIS PROCEDURE	ASCE CHAPTER 28	SEISMIC RESISTING FORCE SYSTEM(S)	CANT. COL.
		SEISMIC RESPONSE COEFFICIENT(S) C _s	.420
		RESPONSE MODIFICATION FACTOR(S) R	1.25
		ANALYSIS PROCEDURE USED	ASCE 7.12.8 EQUIVALENT LATERAL FORCE

2. SITE PREP. & FOUNDATION

- A. FOUNDATION DESIGN: BASED ON ALLOWABLE SOIL BEARING PRESSURES AND OTHER REQUIREMENTS PER SOIL REPORT, YES NO. 190898.001 BY TECHNICON ENGINEERING SERVICES, DATED 11-01-2019.
 1. ALLOWABLE BEARING PRESSURES:
 - STATIC DEAD + LIVE) 3000 psf
 - COMBINED (DEAD + LIVE + SEISMIC) 3000 psf
 - ACTIVE PRESSURE 90 psf
 - AT-REST PRESSURE 90 psf
 - PASSIVE PRESSURE 128 psf STATIC
 - 172 psf COMBINED
 - 0.25 STATIC
 - 0.24 COMBINED
 5. FRICTION COEFFICIENT
- B. COMPACTION REQUIREMENTS: REFER TO THE SOILS REPORT.
- C. ENGINEERING FILL: REFER TO THE SPECIFICATIONS AND SOILS REPORT. ALL ENGINEERED FILL SHALL BE SUBJECT TO "SPECIAL INSPECTION" AS REQUIRED BY THE ARCHITECT AND THE LOCAL BUILDING OFFICIALS.
- D. REFER TO THE ARCHITECT'S DRAWINGS FOR FINISHED FLOOR ELEVATIONS.
- E. ALL FOOTINGS SHALL EXTEND TO FIRM BEARINGS. MINIMUM FOOTING EMBEDMENT = 18" BELOW LOWEST ADJACENT GRADE.
- F. SEE ARCHITECT'S & CIVIL DRAWINGS FOR SIZE AND LOCATION OF NON-BEARING PARTITIONS.
- G. SEE ARCHITECT'S DRAWINGS FOR EXTENT OF EXTERIOR WALKWAYS.
- H. THE LOCATIONS OF CONSTRUCTION AND CONTROL JOINTS (C.J.) ARE THE CONTRACTOR'S RESPONSIBILITY FOR THE CONTROL OF CONCRETE SLAB CRACKING WITHIN THE RECOMMENDED LIMITATIONS AS FOLLOWS:
 1. JOINTS (C.J.) ARE TO BE PROVIDED TO BREAK THE FLOOR INTO WORKING AREAS NOT LARGER THAN 600 SQ. FT.
 2. JOINTS SHALL BE SPACED NOT MORE THAN 25' O.C. WHERE POSSIBLE.
 3. JOINTS SHALL BE LOCATED SO AS TO NOT EXCEED A LENGTH TO WIDTH RATIO OF 1:25 WITHIN JOINTED AREAS.
 4. JOINTS SHALL BE LOCATED WITH CONSIDERATION OF THE CRACK POTENTIAL OF INSIDE CORNERS AT SLAB EDGES.
 5. JOINTS SHALL BE LOCATED BELOW INTERIOR PARTITION WALLS UNLESS NOTED OTHERWISE.
 6. JOINT LOCATIONS SHALL BE REVIEWED AND ACCEPTED BY THE ARCHITECT PRIOR TO POURING SLABS.
- I. ALL ANCHOR BOLTS, INSERTS, REINFORCING STEEL, DOVELS, AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED PRIOR TO POURING CONCRETE.



Project:
 Sheriff Area 2 Sub-Station Storage
 1129 N. Armstrong Ave., Fresno, CA
 APN: 310-133-04, .05, and .06
 ISSUE DATE: 06.17.2020
 PROJECT NO.: 180293 | 19003
 FILE NAME: S1.0 - Storage

Sheet Content:
GENERAL NOTES

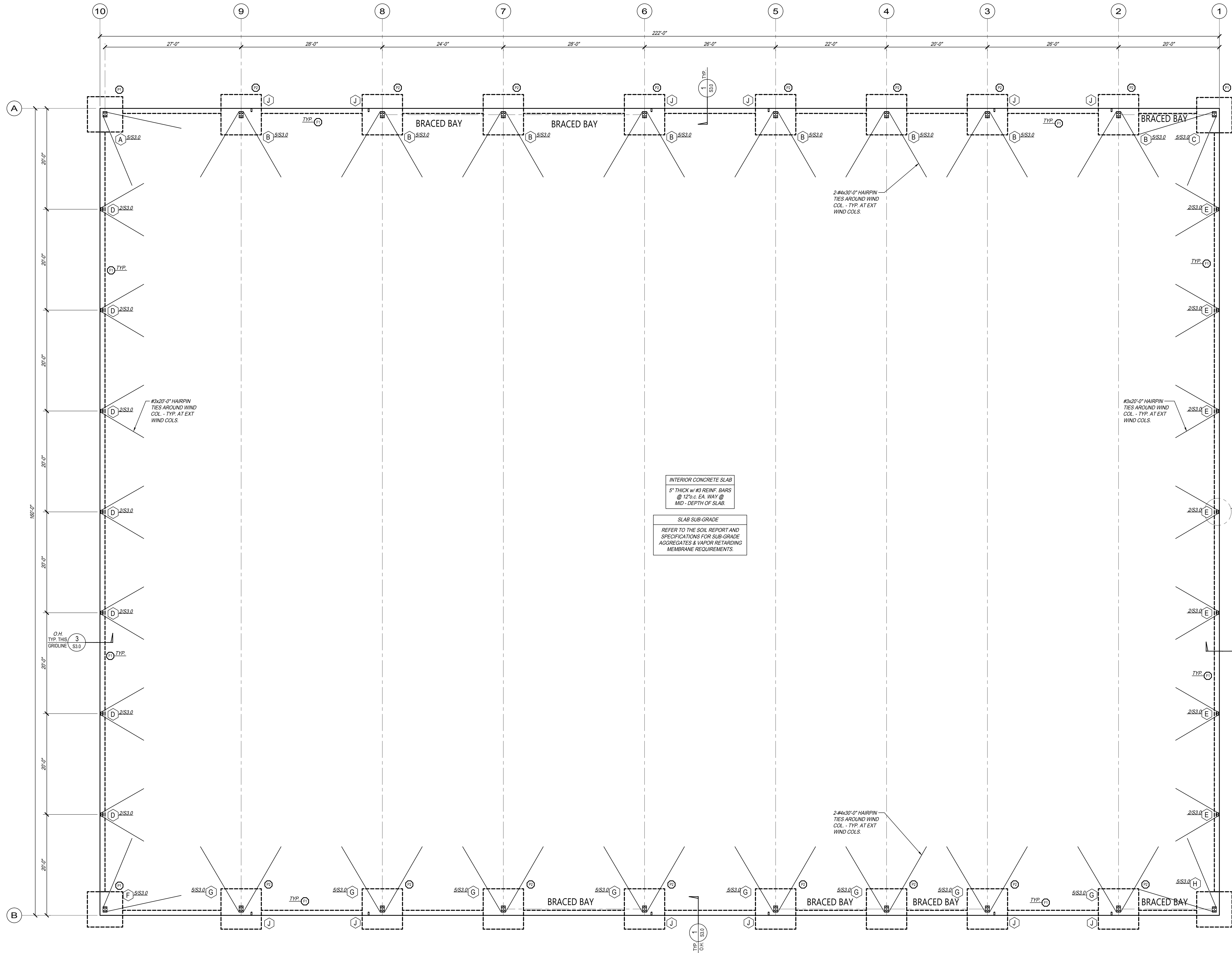
Fresno County Department of Public Works and Planning
 Capital Projects
 2220 Tulare Street, 8th Floor
 Fresno, California 93721

Sheet No.
S1.0

Drawn by: SMP Plot date: 06.17.2020



THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS IT BEARS THE STAMPS AND SIGNATURES OF THE ARCHITECT AND ENGINEER AND THE APPROVAL STAMP OF THE JURISDICTIONAL BUILDING DEPARTMENT



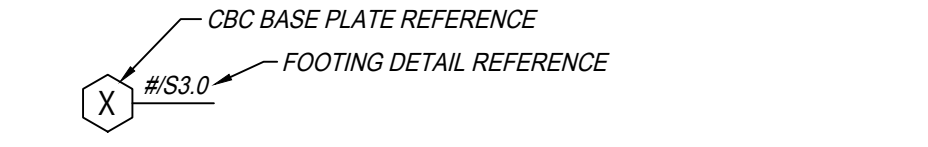
FOUNDATION NOTES

- REFER TO GENERAL NOTES AND TYPICAL DETAILS ON S1.0.
- ALL EMBEDDED ITEMS SHALL BE IN PLACE & SECURED PRIOR TO POURING OF CONCRETE.
- ⊙ = FOOTING TYPE - SEE "FOOTING SCHEDULE"
- OR H = STEEL COLUMN

FOOTING SCHEDULE		
TYPE	SIZE	REINFORCEMENT
⊙	1'-0" WIDE x 1'-6" DEEP CONT.	2-#6 CONT. TOP 2-#6 CONT. BOTTOM
⊙	7'-0" SQUARE x 3'-0" DEEP	7-#6 EA. WAY (TOP & BOTTOM)
⊙	8'-0" SQUARE x 3'-0" DEEP	8-#6 EA. WAY (TOP & BOTTOM)

NOTES:

- ALL FOOTINGS SHALL EXTEND A MINIMUM OF 1'-6" INTO NATIVE SOIL.
- SEE DETAILS FOR FOOTING SIZE AND REINF. REQUIRED AT ALL RETAINING WALLS.
- FOOTING ARE TYPE ⊙ UNLESS NOTED OTHERWISE.



INTERIOR CONCRETE SLAB
5" THICK w/ #3 REINF. BARS @ 12" c. EA. WAY @ MID-DEPTH OF SLAB.

SLAB SUB-GRADE
REFER TO THE SOIL REPORT AND SPECIFICATIONS FOR SUB-GRADE AGGREGATES & VAPOR RETARDING MEMBRANE REQUIREMENTS.

FOUNDATION PLAN (STORAGE)
SCALE: 1/8" = 1'-0"

REGISTERED ARCHITECT
NOEL ROGER DAVIDSON
STATE OF CALIFORNIA
C. 27818
REIN. 10-31-19

ARCHITECT:
Noel Roger Davidson, A.I.A., Architect
California Licensed Architect No. C-27818
Rein. 10-31-2019
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2220 Tulare Street, Eighth Floor
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Project:
Sheriff Area 2 Sub-Station Storage
1129 N. Armstrong Ave., Fresno, CA
APN: 310-133-04_05 and 06
ISSUE DATE: 06.17.2020
PROJECT NO.: 180293 | 19003
FILE NAME: S2.0 - Storage

Sheet Content:
FOUNDATION PLAN

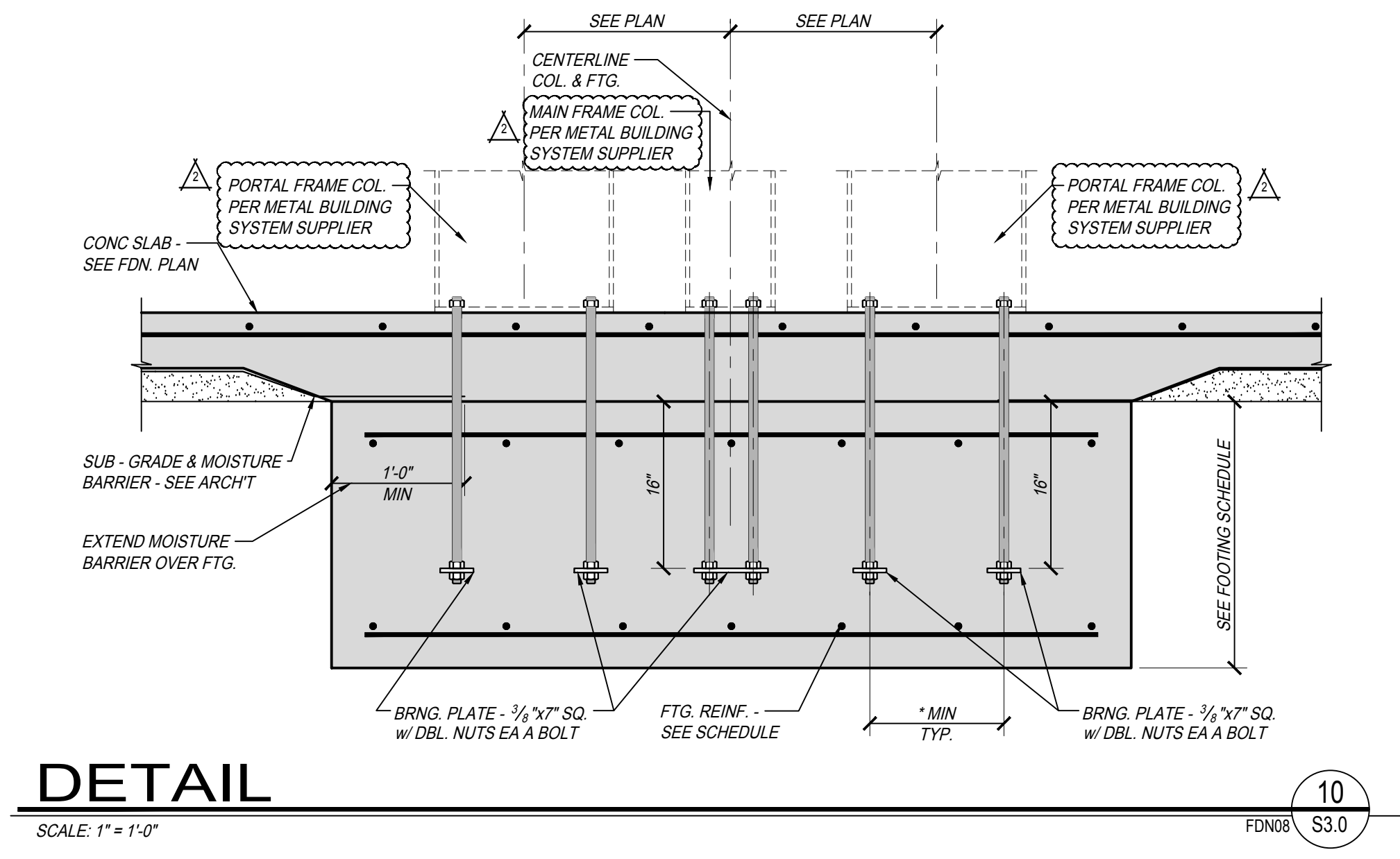
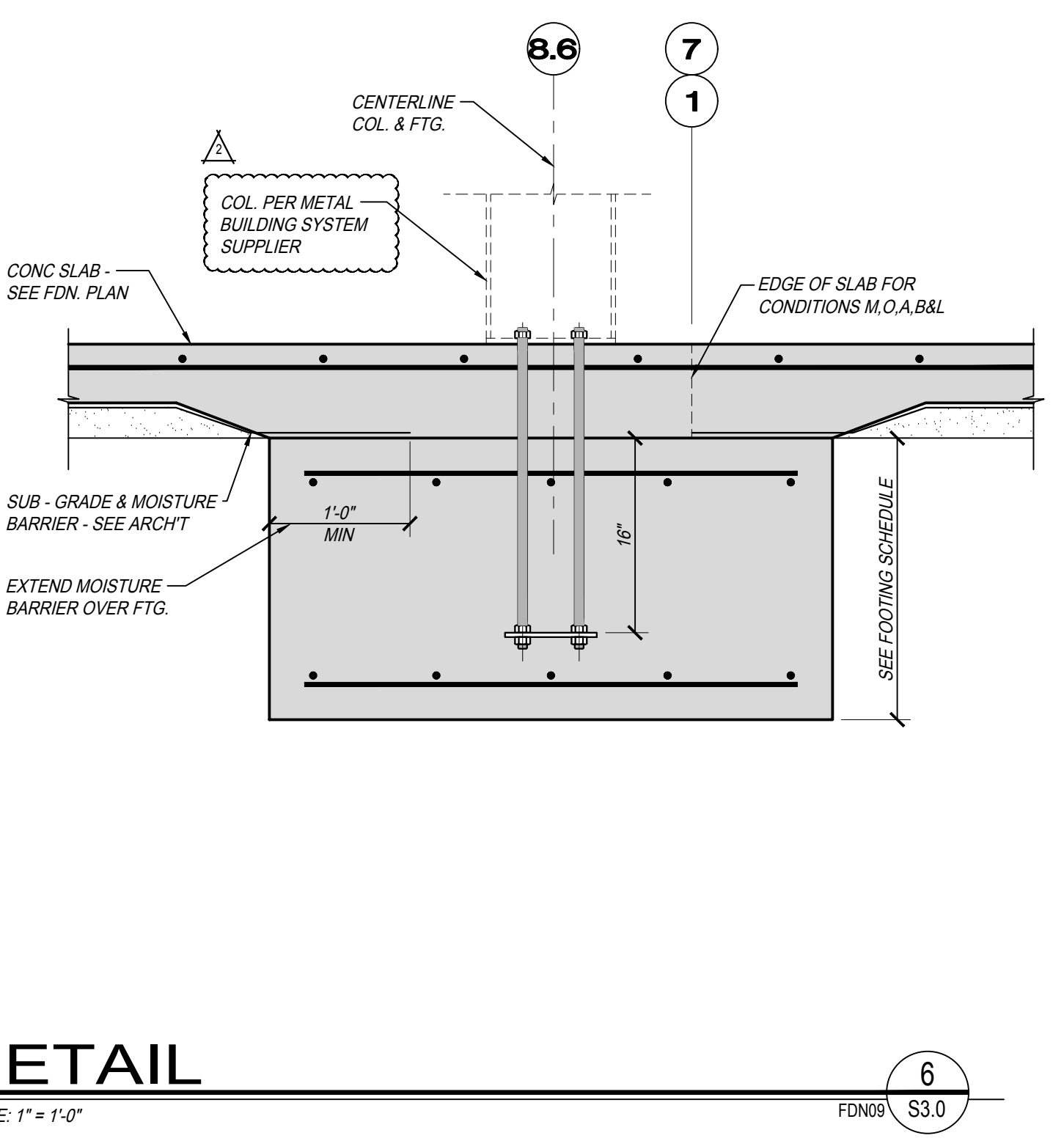
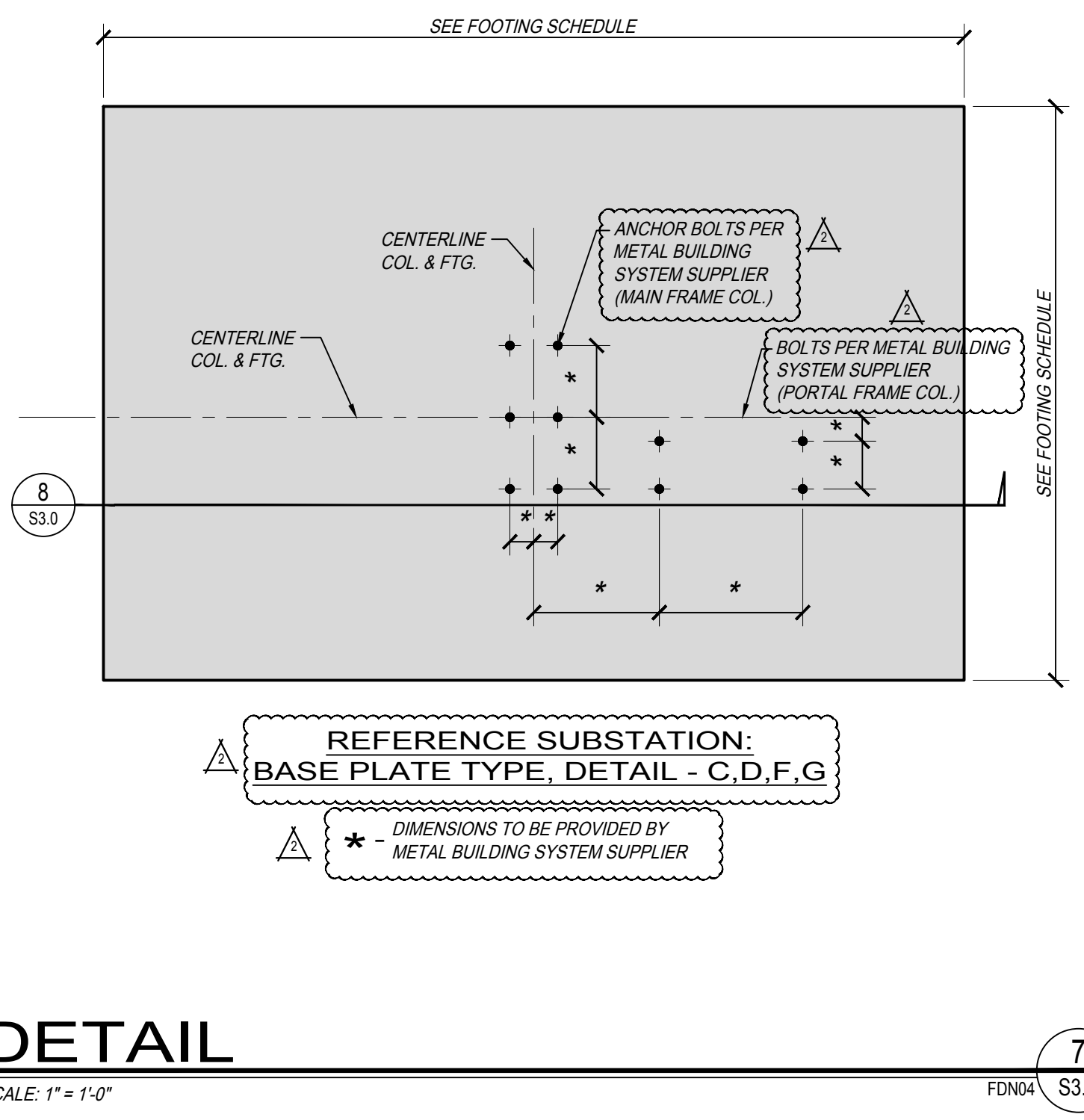
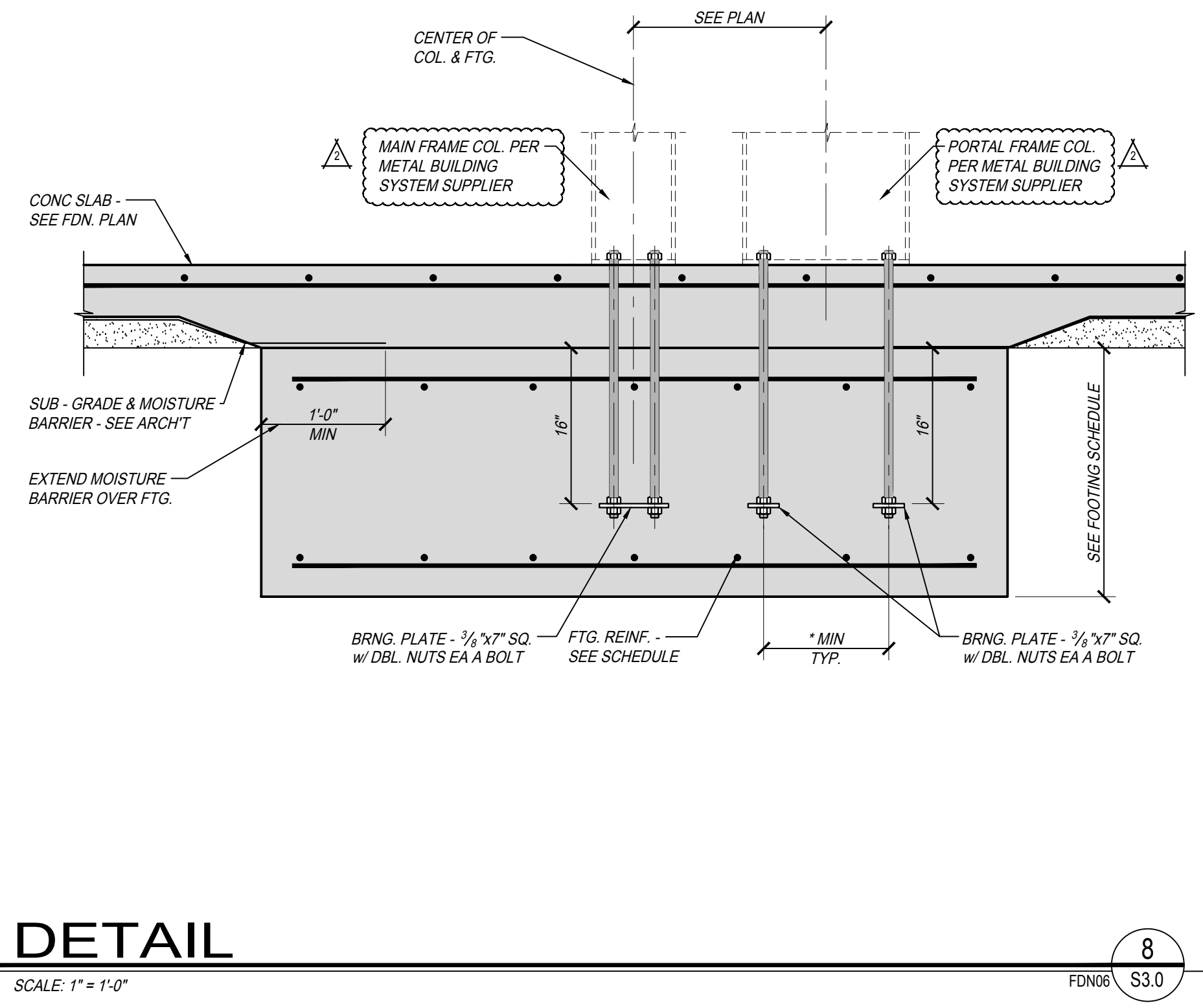
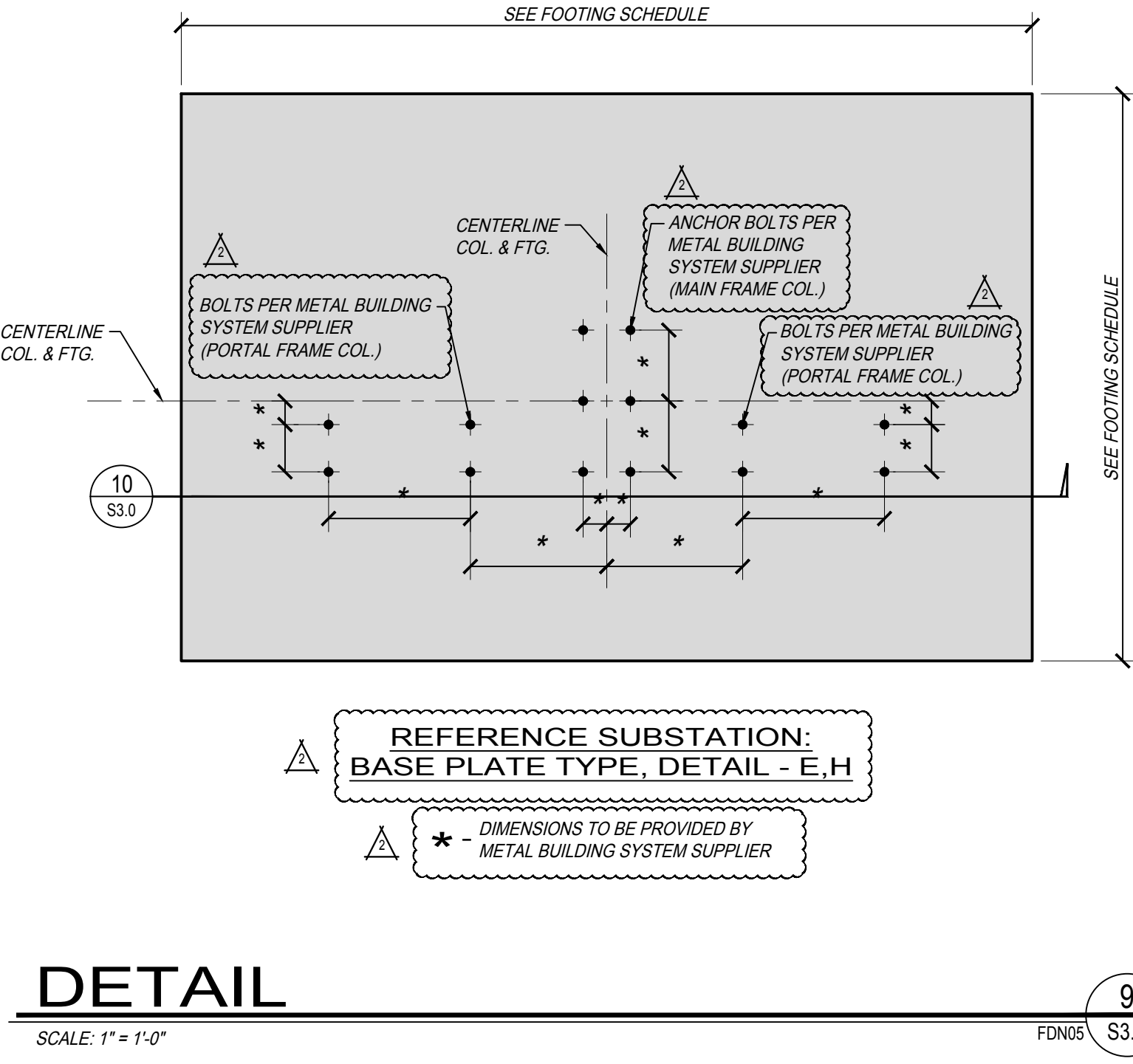
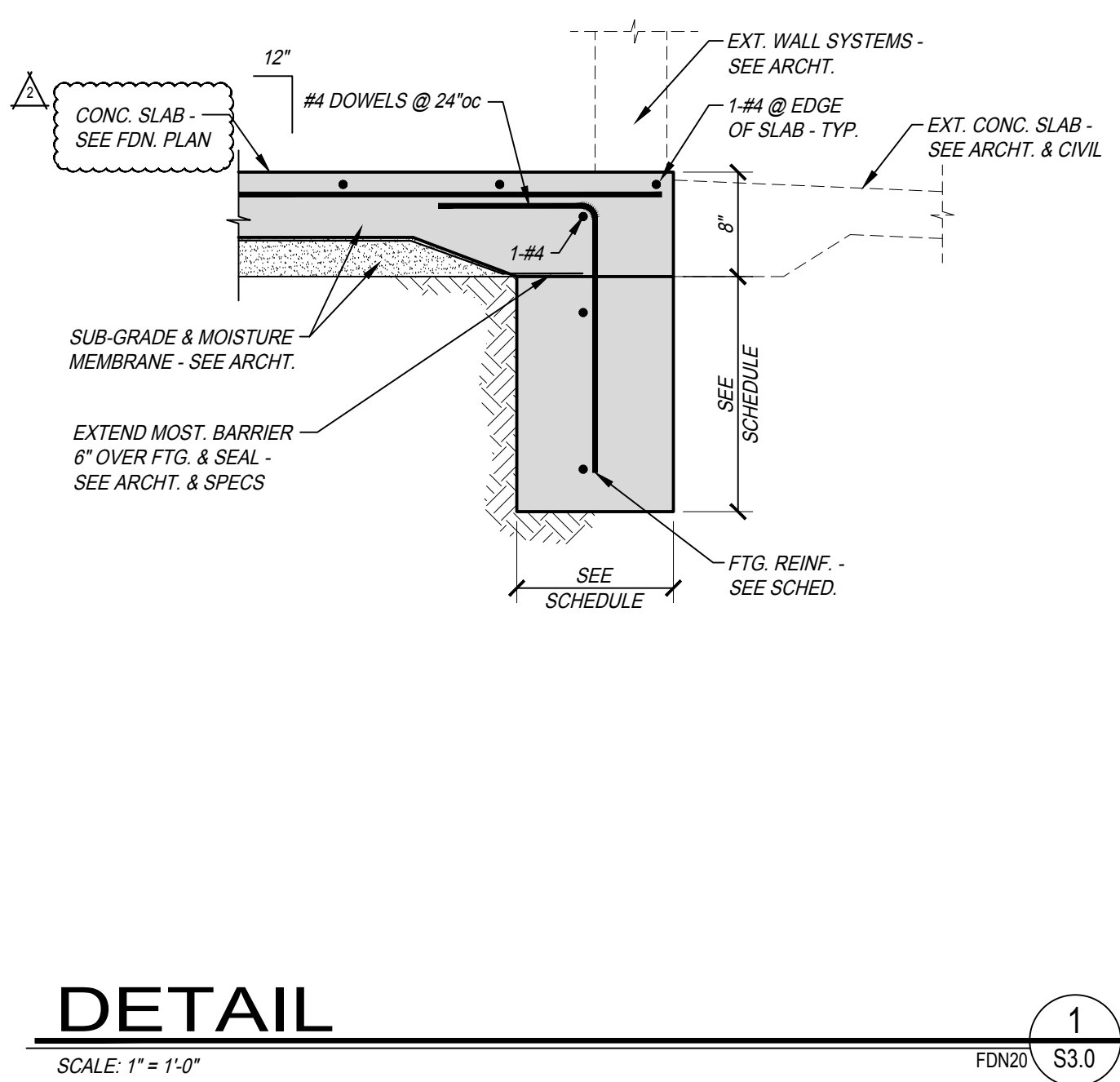
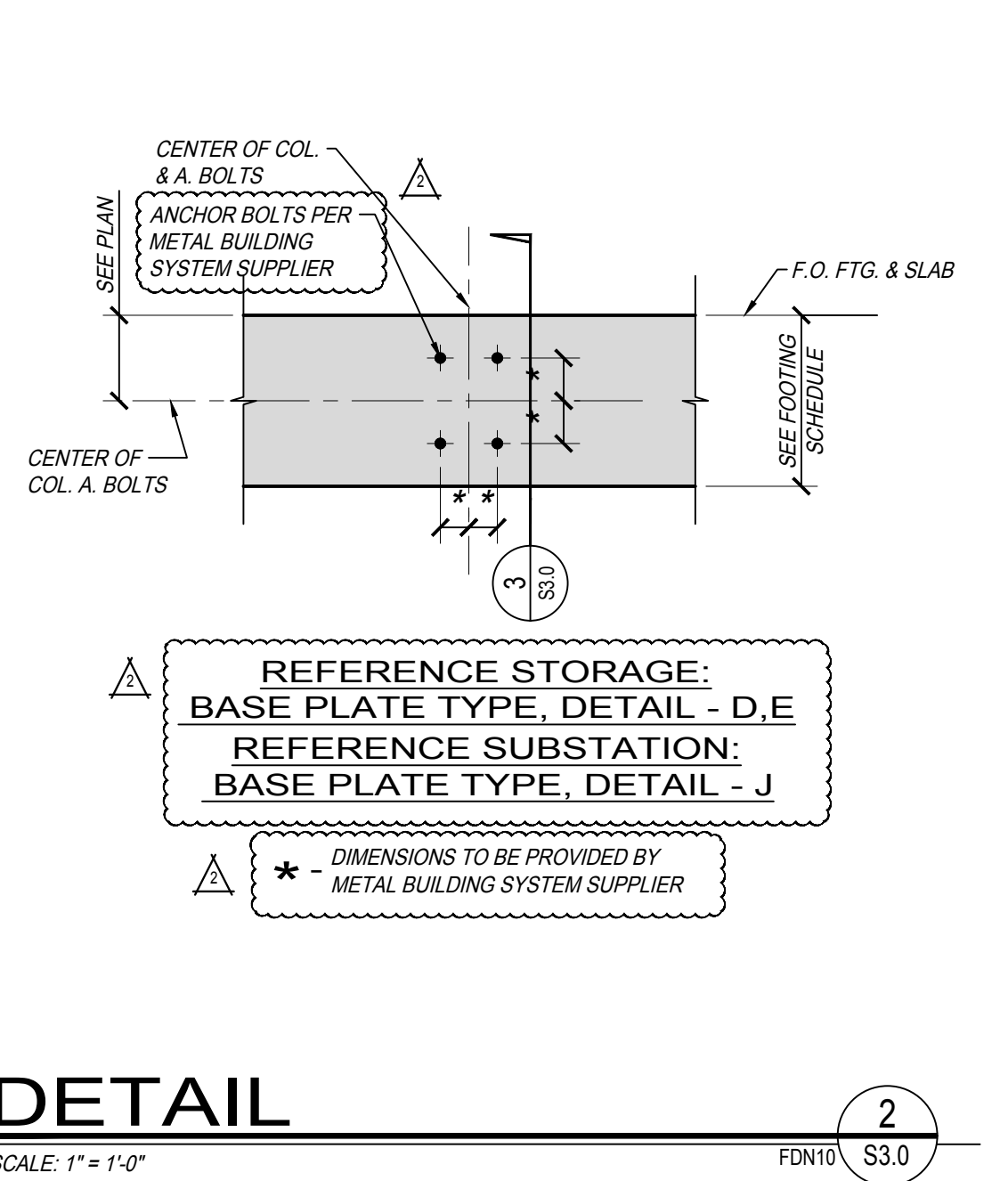
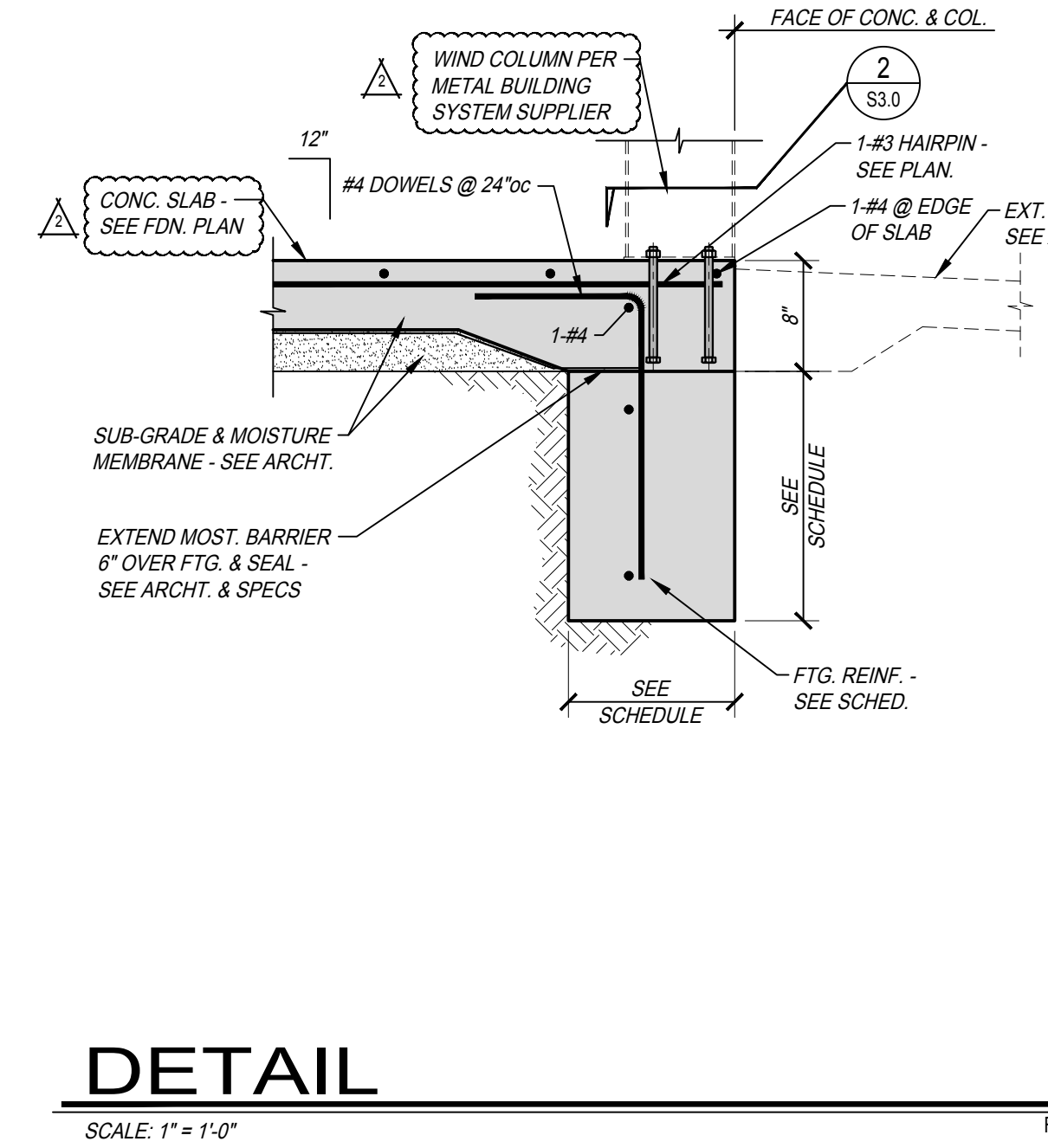
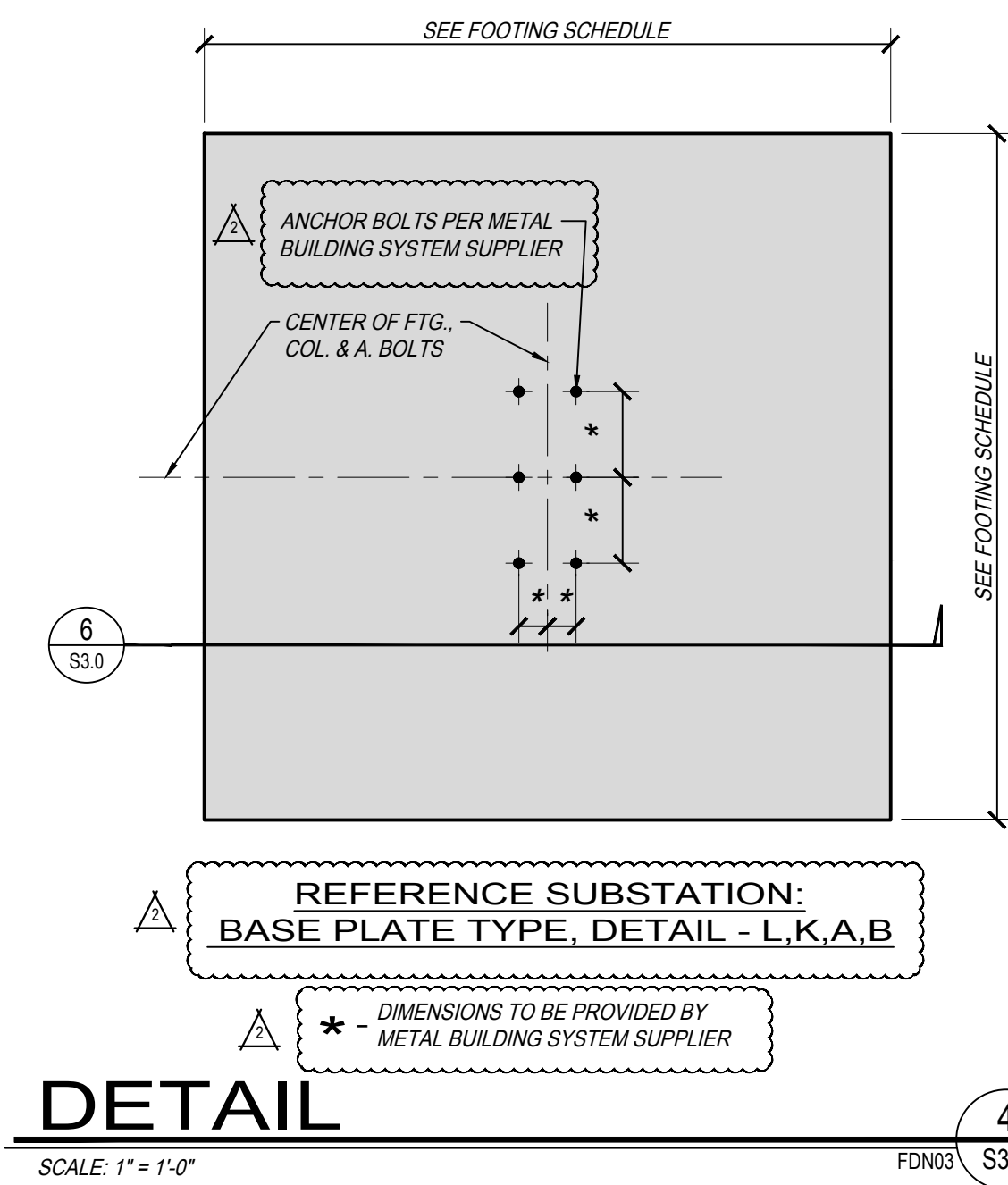
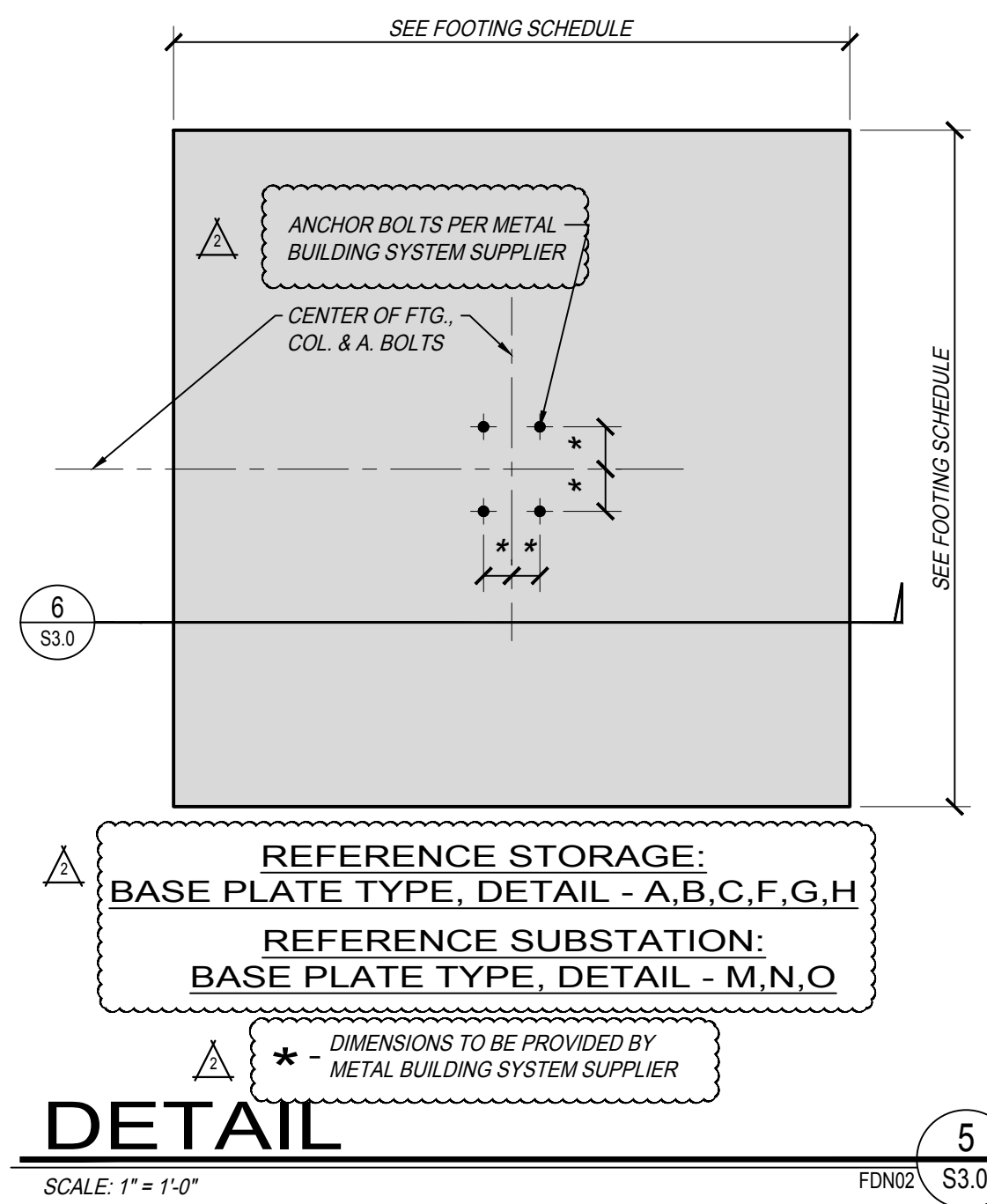
REGISTERED PROFESSIONAL ENGINEER
PROPERTY S. PARRISH
STATE OF CALIFORNIA
No. 52331
Exp. 3/21
R. 11/15/20
STRUCTURAL

PARRISH HANSEN
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A division of Provost & Pritchard Consulting Group
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S2.0

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6-16-2020



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Sheet Content:
 FOUNDATION DETAILS

Fresno County Department of Public Works and Planning
 Capital Projects
 2220 Tulare Street, 8th Floor
 Fresno, California 93721

Sheet No.

S3.0

Drawn by: SMP Plot date: 06.17.2020



REGISTERED PROFESSIONAL ENGINEER
 No. S2331
 Exp. 3/21
 4/17/2021
 STRUCTURAL
 STATE OF CALIFORNIA

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