

GENERAL NOTES:

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.
- ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.
- THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING (AND ACCOMPANYING FOOTINGS), GUYS OR TIEDOWNS.

DESIGN CODES:

2018 NORTH CAROLINA STATE BUILDING CODE.

ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY.

DESIGN LOADS:

THE FOUNDATION SYSTEM FOR THIS BUILDING HAS BEEN DESIGNED WITH THE FOLLOWING SUPERIMPOSED LOADINGS:

COLUMN REACTIONS PROVIDED BY PEMB MANUFACTURER (PRELIMINARY PENDING)

WIND:
BASIC WIND SPEED (3 SEC GUST) 148 mph
EXPOSURE CATEGORY C
RISK CATEGORY IV

COMPONENT & CLADDING:
ALL BUILDING COMPONENTS AND CLADDING ENGINEERED BY THE COMPONENT MANUFACTURER ARE TO BE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR WIND LOADS DETERMINED PER THE NORTH CAROLINA STATE BUILDING CODE FOR THE BASIC DESIGN WIND VELOCITY, IMPORTANCE FACTOR AND EXPOSURE LISTED ABOVE.

FOUNDATIONS:

FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 psf. ON EXISTING SOILS. BEFORE CONSTRUCTION COMMENCES, SOIL BEARING CAPACITY SHALL BE VERIFIED BY A SUBSURFACE INVESTIGATION, A CERTIFIED TESTING LABORATORY, WHOSE REPORT SHALL INCLUDE ANALYSIS AND RECOMMENDATIONS FOR SITE PREPARATION IN ORDER TO BEAR THE FOUNDATION LOADS. ABOVE REPORT SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW BEFORE FOUNDATION CONSTRUCTION BEGINS.

CONCRETE MATERIAL SPECIFICATIONS:

CONCRETE COMPRESSIVE STRENGTH: 4000 psi (28 DAY STRENGTH)
CEMENT: TYPE III
AIR ENTRAINMENT: 5% - 7% IF EXPOSED TO WEATHER OR EARTH
REINFORCING STEEL: ASTM A615, GRADE 60
WELDED WIRE FABRIC: ASTM A185
ANCHOR BOLTS: GRADE A36
CLASS B SPLICE LENGTH: GREATER OF 48 BAR DIAMETERS OR 24 INCHES

SPECIAL INSPECTION AND TESTING:

- SPECIAL INSPECTION AND MINIMUM TESTING SHALL BE PERFORMED IN ACCORDANCE WITH 2018 NCSCB, TABLES 1704.4 (CONCRETE)
- INSPECTION & TESTING SHALL BE PROVIDED BY AN INDEPENDENT TESTING AGENCY HIRED AT THE OWNER'S EXPENSE. AGENCY INSPECTION PERSONNEL SHALL MEET THE INSPECTOR QUALIFICATIONS FOR EACH MATERIAL ITEM AS INDICATED IN THE SPECIFICATIONS. ALL RE-TESTING DUE TO FAILURE OF ORIGINAL TEST SHALL BE PAID FOR BY THE GENERAL CONTRACTOR.
- ANY MATERIAL OR PLACEMENT DEVIATIONS FROM MINIMUMS SHOWN ON THE DRAWINGS OR IN SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

KEYED NOTES & LEGEND

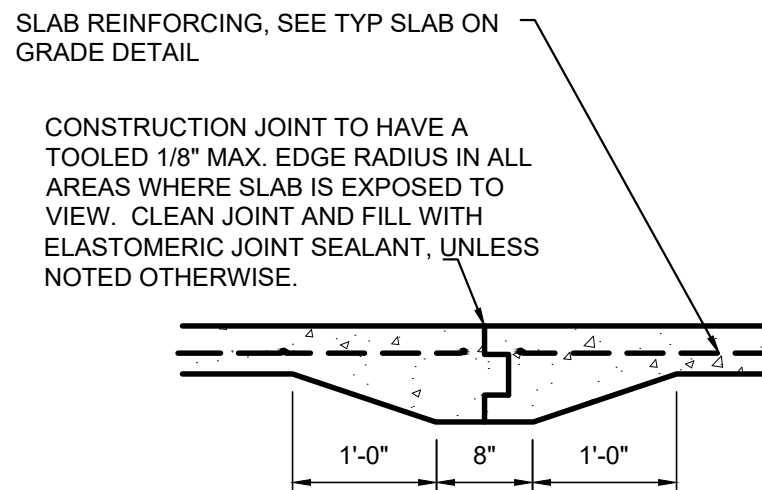
- WALL & COLUMN FOOTING EXTENTS
- TURNED DOWN SLAB BASE
- EDGE OF SLAB
- STRUCTURE BY OTHERS

FOOTING MARK F40 | W12x14 | 1'-4" | BP1
COLUMN SIZE
TOP OF FOOTING ELEV. BELOW FINISHED FLOOR
BASEPLATE MARK

SPREAD FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F30	3'-0"x3'-0"x12"	(4)-#4 E.W. TOP & BOT
F45	4'-6"x4'-6"x12"	(6)-#4 E.W. TOP & BOT
F100	10'-0"x10'-0"x12"	(11)-#4 E.W. TOP & BOT

NOTE:
FINAL FOOTING AND ANCHOR BOLT DESIGN TO BE CONFIRMED UPON RECEIPT OF REACTIONS FROM PEMB MANUFACTURER

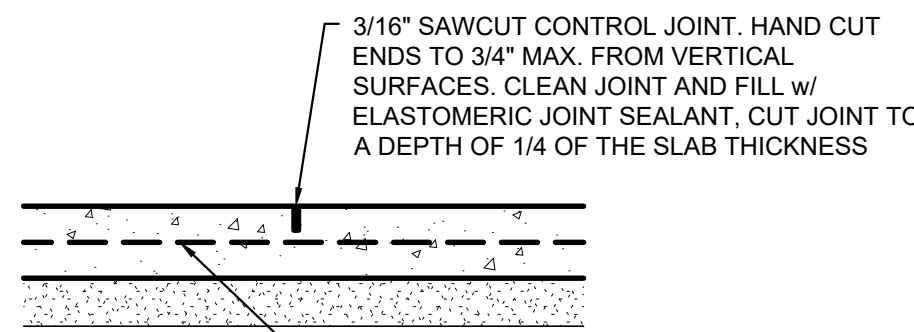
CONSTRUCTION JOINT TO HAVE A TOOLED 1/8" MAX. EDGE RADIUS IN ALL AREAS WHERE SLAB IS EXPOSED TO VIEW. CLEAN JOINT AND FILL WITH ELASTOMERIC JOINT SEALANT, UNLESS NOTED OTHERWISE.



2 4" SLAB ON GRADE CONST. JOINT
SCALE: 3/4" = 1'-0"

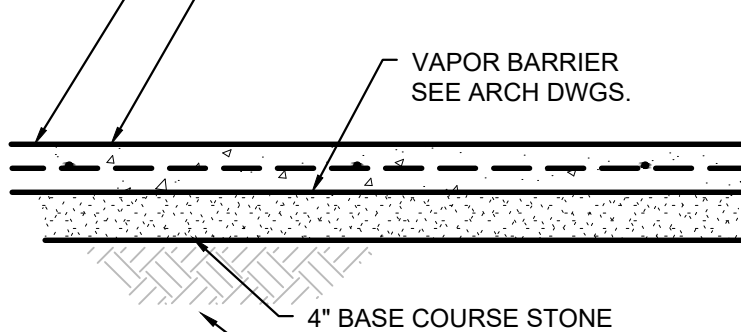
NOTES:

- CONTRACTORS OPTION - USE REMOVABLE CONTROL JOINT MATERIAL SUCH AS "ZIP STRIP", "STRESSLOCK", OR APPROVED EQUAL.
- SLAB ON GRADE CONTROL JOINTS SHALL BE TOOLED OR SAWCUT. THE JOINT PATTERN SHALL BE APPROXIMATELY SQUARE AND LIMITED TO AN AREA NOT TO EXCEED 225 S.F. JOINTS SHALL BE CUT WITHIN 12 HOURS OF POURING SLAB. SEE PLAN FOR PROPOSED JOINT LAYOUT. FINAL JOINT LAYOUT TO BE DETERMINED BY THE GENERAL CONTRACTOR.



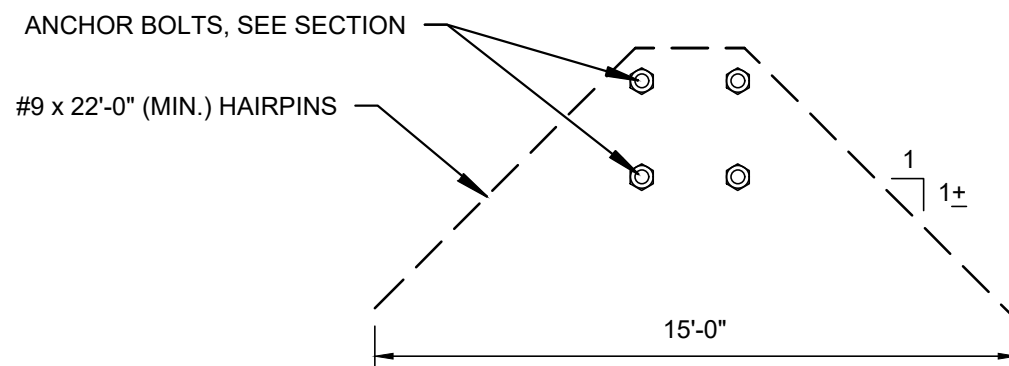
3 4" SLAB ON GRADE CONTROL JOINT
SCALE: 3/4" = 1'-0"

4" CONC SLAB, SEE PLAN
6"x6" - W2xW2 WELDED WIRE MESH PLUS 1-1/2 lbs. PER CUBIC YARD FIBRILLATED, COLLATED POLYPROPYLENE FIBERS. WELDED WIRE MESH MUST BE PREFABRICATED SHEETS, NO ROLLED MESH ALLOWED. PROVIDE A MINIMUM OF ONE CHAIR PER 25 SQUARE FEET OF MESH SUPPORTED.



- NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR SLOPES, DROPS, AND DRAIN LOCATIONS IN FLOOR SLABS.

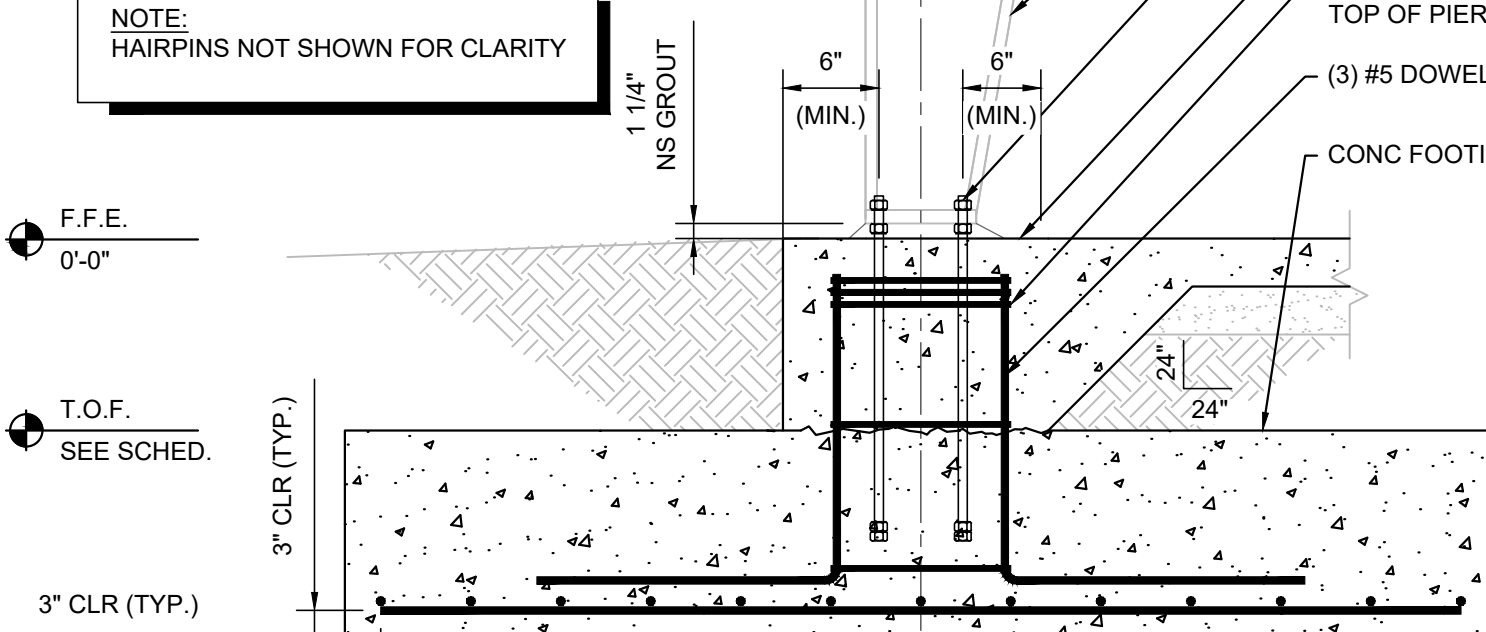
4 4" SLAB ON GRADE DETAIL
SCALE: 3/4" = 1'-0"



HAIRPIN CONDITION

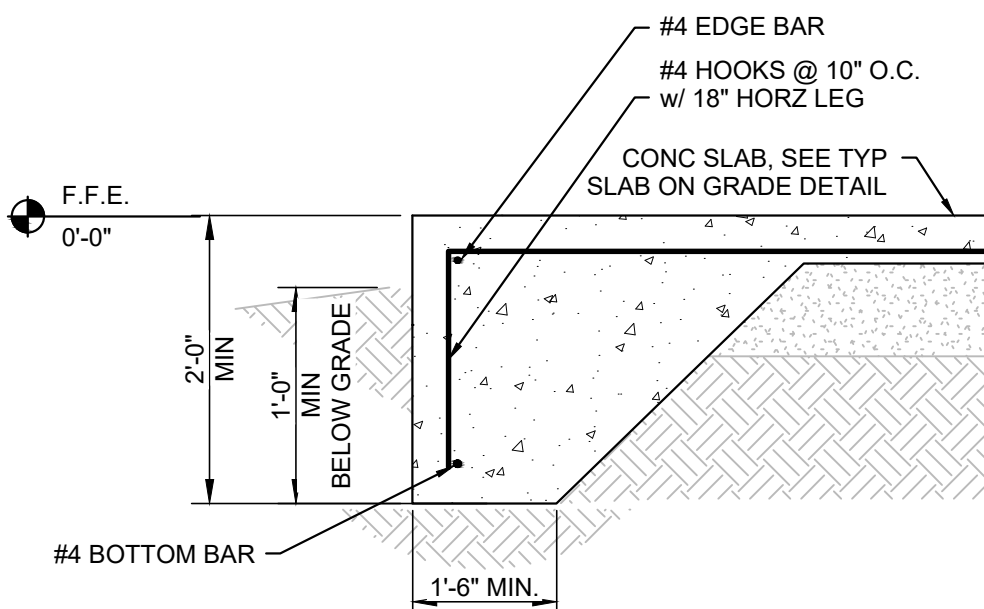
7 TYP. HAIRPIN DETAILS
SCALE: 1" = 1'-0"

NOTE:
HAIRPINS NOT SHOWN FOR CLARITY

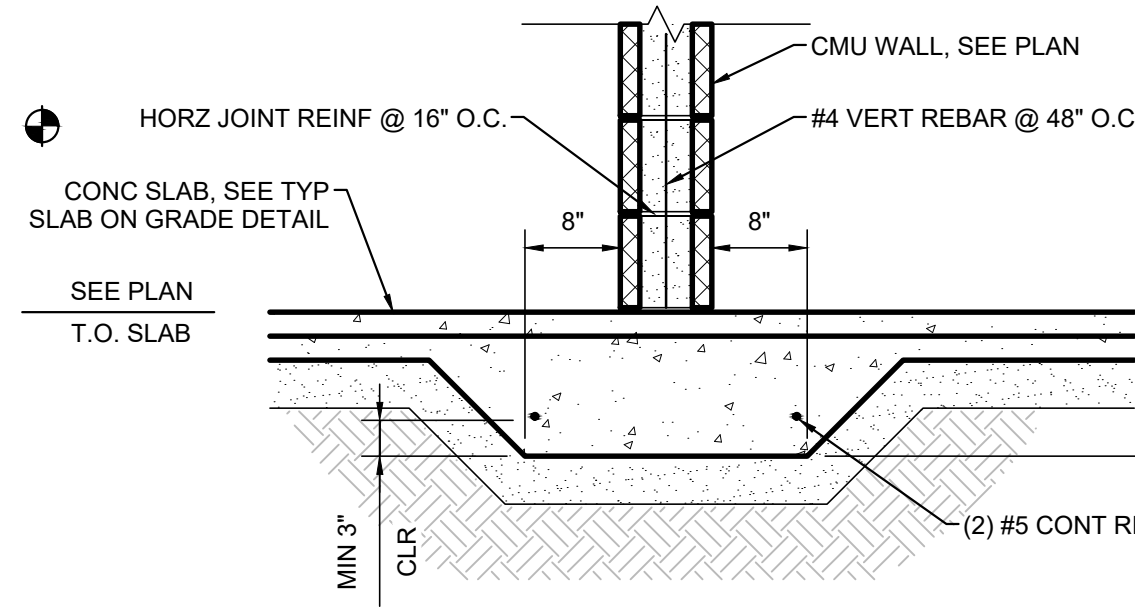


5 SECTION - TYPICAL COLUMN
SCALE: 3/4" = 1'-0"

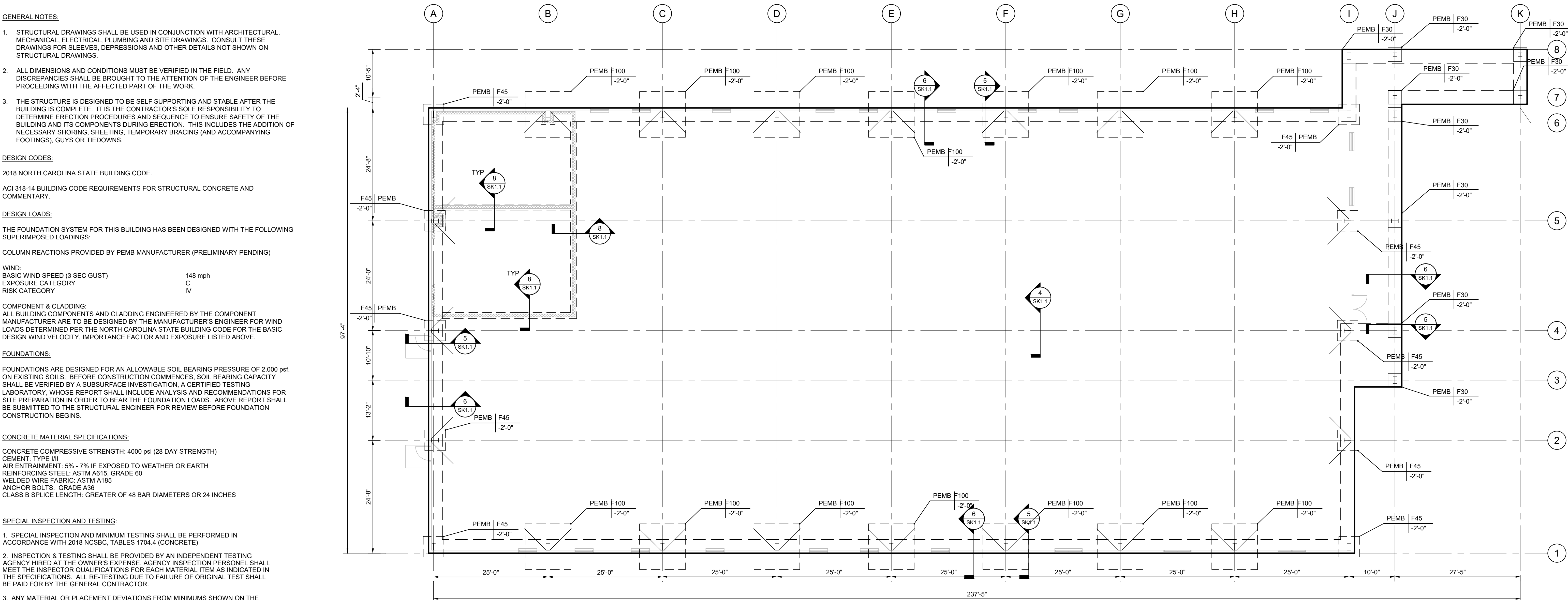
- PEMB COLUMN BY OTHERS
(4) 5/8"Ø SIMPSON PAB5H ANCHOR BOLT (7" MIN. EMBEDMENT)
CONC SLAB, SEE TYP SLAB-ON-GRADE DETAIL
#4 TIES @ 12" O.C. & (3) ADD'L TIES AT TOP OF PIER
(3) #5 DOWEL @ EA. PEDISTAL FACE
CONC FOOTING, SEE PLAN & SCHEDULE



6 PERIMETER FOUNDATION
SCALE: 3/4" = 1'-0"



8 THICKENED SLAB AT INT. CMU PARTITION WALL
SCALE: 3/4" = 1'-0"



1 PEMB FOOTINGS
ARCH REF: 1/A-1
Scale: 3/32" = 1'-0"



Project Name

GENERAL NOTES
FOUNDATION PLAN
CONSTRUCTION DETAILS

Sheet Title

DESIGNED BY:		AJI/JT
DRAWN BY:		AJI/JT
APPROVED BY:		HMM
PROJECT #:		24-30
DATE:		03/24/202
No.	Revision	Date
1	FOOTING ADD	01/16/20

Sheet

SK1.1

FOR PERMIT

STATEMENT OF SPECIAL INSPECTIONS					
PROJECT INFORMATION		DESIGN PROFESSIONAL INFORMATION		CONSTRUCTION AND SITE	
PROJECT NAME	COLUMBUS COUNTY SHERIFF OFFICE	ARCHITECT/ENGINEER/CONSULTANT	HEATH HENDRICK, PE	INSPECTION CATEGORIES	CONCRETE
PROJECT DESCRIPTION	COMMERCIAL	FIRM	FDR ENGINEERS, PLLC	SEISMIC DESIGN CATEGORY	D
LOCATION	WHITESVILLE, NC	ADDRESS	121 KITTY HAWK DR, MORRISVILLE, NC 27560	WIND SPEED	148 MPH
OWNER	N/A	PHONE	(919) 957-5100	EXPOSURE CATEGORY	C

SPECIAL INSPECTION AND TESTING:

1. SPECIAL INSPECTION AND MINIMUM TESTING SHALL BE PERFORMED IN ACCORDANCE WITH 2018 NCSBC, TABLES 1704.3 (STEEL), 1705.3 (CONCRETE), AND 1705.2.3 (OPEN-WEB STEEL JOISTS AND JOIST GIRDERS).

2. INSPECTION & TESTING SHALL BE PROVIDED BY AN INDEPENDENT TESTING AGENCY HIRED AT THE OWNER'S EXPENSE. AGENCY INSPECTION PERSONEL SHALL MEET THE INSPECTOR QUALIFICATIONS FOR EACH MATERIAL ITEM AS INDICATED IN THE SPECIFICATIONS. ALL RE-TESTING DUE TO FAILURE OF ORIGINAL TEST SHALL BE PAID FOR BY THE GENERAL CONTRACTOR.

3. ANY MATERIAL OR PLACEMENT DEVIATIONS FROM MINIMUMS SHOWN ON THE DRAWINGS OR IN SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION				
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT	-	X	ACI 318 CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2. REINFORCING BAR WELDING:				
a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	-	X	AWS D1.4 ACI 318: 26.6.4	-
b. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND		X		
c. INSPECT ALL OTHER WELDS	X			
3. INSPECT ANCHORS CAST IN CONCRETE	-	X	ACI 318: 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS				
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	X		ACI 318: 17.8.2.4	-
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.a		X	ACI 318: 17.8.2	
5. VERIFY USE OF REQUIRED DESIGN MIX	-	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF CONCRETE	X	-	ASTM C172 ASTM C31 ASTM 318: 26.4, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	-	X	ACI 318: 26.5.3-26.5.5	1908.9
9. INSPECT PRESTRESSED CONCRETE FOR:				
a. APPLICATION OF PRESTRESSING FORCES; AND	X	-	ACI 318: 26.10	-
b. GROUTING OF BONDED PRESTRESSING TENDONS	X	-		
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	-	X	ACI 318: CH. 26.8	-
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	ACI 318: 26.11.2	-
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	-	X	ACI 318: 26.11.1.2(b)	-

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Project Name

COLUMBUS COUNTY SHERIFF'S DEPT
PEMB FOUNDATION DESIGN

WHITESVILLE, NC

Sheet Title

SPECIAL INSPECTIONS

DESIGNED BY:		AJI/JTF
DRAWN BY:		AJI/JTF
APPROVED BY:		HMH
PROJECT #:		24-308
DATE:		03/24/2025
No.	Revision	Date
1	FOOTING ADD	01/16/2025

Sheet

SK1.2

FOR PERMIT