

ABBREVIATIONS:

AB	ANCHOR BOLT	L	LOW
ABV	ABOVE	LB	LINK BEAM
AC	AIR CONDITIONER	LBS	POUNDS
ACI	AMERICAN CONCRETE INSTITUTE	LB/FT	POUNDS PER FOOT
ADD	ADDITIONAL	NET	DEVELOPMENT LENGTH
ADJ	ADJACENT	LG	LONG
AFB	ABOVE FINISHED FLOOR	LL	LIVE LOAD
ASCC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LLS	LATERAL LOAD RESISTING SYSTEM
ALT	ALTERNATE ALUM ALUMINUM	LLV	LONG LEG VERTICAL
ANCH	ANCHOR	LP	LOW POINT
ANG	ANGLE	LRFD	LOAD RESISTANCE FACTOR DESIGN
APPD	APPROVED	LT	LIGHT
APPROX	APPROXIMATE	LW	LIGHT WEIGHT
ARCH	ARCHITECTURAL	MAX	MAXIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MASONRY	MASONRY
AVG	AVERAGE	MAS	MATERIAL
AWK	AMERICAN WELDING SOCIETY	MAX	MAXIMUM
		MC	MOMENT CONNECTION
B	BASE	MD	METAL DECK
BETW	BETWEEN	MECH	MECHANICAL
BF	BRACE FRAME	MEFP	MECHANICAL ELECTRICAL AND PLUMBING
BKT	BRACKET	MEZ	MEZZANINE
BL	BUILDING LINE	MF	MOMENT FRAME
BLDG	BUILDING	MFG	MANUFACTURER
BM	BEAM	MIN	MINIMUM
BTOT	BOTTOM	MISC	MISCELLANEOUS
BRK	BRICK	N	NORTH
B/S/SL	BOTTOM OF STEEL	N	NOT APPLICABLE
BS	BOTH SIDES	NIC	NOT IN CONTRACT
		NO	NUMBER
CANT	CANTILEVER	N-S	NORTH-SOUTH
CF	CENTER FOOT	NT	NOT TO SCALE
CG	CURB OF GRAVITY	NW	NORMAL WEIGHT
CJP	CAST IN PLACE		
CJT	CONCRETE JOINT	O/C	ON CENTER
CL	CENTER LINE	OPNG	OPENING
CLG	CEILING	OPRTIC	OPPOSITE
CLR	CLEAR	PI	PILE CAP
CM	CONSTRUCTION MANAGER	PCF	POUNDS PER CUBIC FEET
CMU	CONCRETE MASONRY UNITS	PL	PLATE
COL	COLUMN	PLF	POUNDS PER LINEAR FOOT
CONC	CONCRETE	PSF	POUNDS PER SQUARE FOOT
COND	CONDITIONS	PSI	POUNDS PER SQUARE INCH
CONN	CONNECTION	PT	POST TENSION
CONST	CONSTRUCTIONS	RC	REINFORCED CONCRETE
CONT	CONTINUOUS	RD	ROOF DRAIN
CONTR	CONTRACTOR	REF	REFERENCE
COORD	COORDINATE	REFN	REINFORCEMENT
CORR	CORRUGATED	REQD	REQUIRED
CY	CUBIC YARD	RFT	REQUEST FOR INFORMATION
		S	SOUTH
DEMO	DEMOLITION	SCHD	SCHEDULE
DEPT	DEPARTMENT	SECT	SECTION
DET	DETAIL	SF	SQUARE FOOT
DIA	DIAMETER	SHT	SHEET
DM	DIMENSION	SL	SLAB
DN	DOWN	SP	SPACING
DWL	DRAWING	SPEC	SPECIFICATIONS
		SQ	SQUARE
E	EAST	STD	STANDARD
EA	EACH FACE	STIFF	STIFFENER
EF	ELEVATION	STL	STEEL
ELEC	ELECTRIC	STRUC	STRUCTURAL
ELEV	ELEVATOR	SW	SWITCH
EMBED	EMBEDMENT	SM	SIMILAR
ENCL	ENCLOSURE	T&B	TOP AND BOTTOM
ENR	ENGINEER OF RECORD	THK	THICK
EOS	EDGE OF SLAB	T/	TOP OF
EP	EMBEDDED PLATE	T/D	TO BE DETERMINED
EQ	EQUAL	TEMP	TEMPORARY
EQUIP	EQUIPMENT	TYP	TYPICAL
ETC	ELECTRA	UON	UNLESS OTHERWISE NOTED
EW	EACH WAY	UP	UPTURNED BEAM
E-W	EAST WEST	VERT	VERTICAL
EXIST	EXISTING	VF	VERIFY IN FIELD
EXP	EXPANSION	W	WEST
EXT	EXTENSION	W/O	WITH OUT
EXTR	EXTERIOR	WF	WIDE FLANGE
		W/P	WORKING POINT
FL	FLOOR	WPF	WATER PROOFING
FND	FACE OF BUILDING	WST	WATER STOP
FDB	FACE OF FOUNDATION	WTF	WIND TRUSS
FT	FOOT	WWF	WELDED WIRE FABRIC
FTG	FOOTING		
		C	CENTERLINE
GA	GAUGE	CL	CL
GALV	GALVANIZED	PL	PLATE
GC	GENERAL CONTRACTOR	AN	ANGLE
GR	GRADE BEAM	&	AND
GRG	GRAIN	D	DIAMETER
GRG	GRATING	Ø	AT
GVS	GVSIM BOARD		
H	HIGH		
HDR	HIGH DRAIN		
HGT	HEIGHT		
HORIZ	HORIZONTAL		
HP	HIGH POINT		
HR	HOOR		
HS	HIGH STRENGTH		
HVAC	HEAT, VENTILATION & AIR CONDITIONING		
ID	INSIDE DIAMETER		
IF	INTERIOR FACE		
IN	INCH		
INCL	INCLUDING		
INFO	INFORMATION		
INSUL	INSULATION		
JT	JOINT		
K	KIP (1000 POUNDS)		
KSF	KIPS PER SQUARE FOOT		
KSI	KIPS PER SQUARE INCH		

CONTROLLED INSPECTIONS

(TERMINOLOGY PER CURRENT TR-1)	CURRENT CODE REFERENCES	(PREVIOUS TERMINOLOGY)
SPECIAL INSPECTION		"CONTROLLED INSPECTION"
STRUCTURAL STEEL – WELDING	1704.3.1	WELDING
STRUCTURAL STEEL – ERECTION & BOLTING	1704.3.3	HIGH – STRENGTH BOLTING
CONCRETE – CAST IN PLACE	1704.4	CONCRETE
CONCRETE TEST CYLINDERS* (TR2)	1905.6	CONCRETE TEST CYLINDERS
CONCRETE DESIGN MIX* (TR3)	1905.3	CONCRETE MIX DESIGN
SOILS – SITE PREPARATION	1704.7.1	SUBGRADE
SOILS – FILL PLACEMENT & IN-PLACE DENSITY	1704.7.2 1704.7.3	CONTROLLED FILL –
SOILS – INVESTIGATIONS (BORINGS/TEST PITS) (TR4)	1704.7.4	BORINGS / TEST PITS
PILE FOUNDATIONS & DRILLED PIER INSTALLATION (TR5)	1704.8	PIILING
UNDERPINNING	1704.9.1	UNDERPINNING
WALL PANELS, CURTAIN WALLS AND VENEERS (ATTACHMENT TO BUILDING)	1704.10	(NONE)
SPRAYED FIRE RESISTANT MATERIALS	1704.11	SPRAY – ON FIREPROOFING
STRUCTURAL SAFETY – STRUCTURAL STABILITY	1704.19	STRUCTURAL STABILITY
EXCAVATION – SHEETING, SHORING AND BRACING	1704.19.4 3304.4	SHORING & SHEETING
FIRESTOP, DRAFTSTOP AND FIREBLOCK SYSTEMS	1704.25	(NONE)
PROGRESS INSPECTION		
FOOTING AND FOUNDATION	109.3.1	SOIL BEARING PRESSURE
FINAL	28-116.2.4.2 & 109.5 AND DIRECTIVE 14-(1915)	FINAL INSPECTION

* THESE TEST MUST BE PERFORMED BY A LICENSED CONCRETE TESTING LAB.

NOTES:

- REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION ON SCOPE AND DETAILED REQUIREMENTS FOR INSPECTIONS.
- ALL SPECIAL INSPECTIONS SHALL BE PERFORMED UNDER THE SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.
- REPORTS OF RESULTS SHALL BE SUBMITTED TO THE OWNER AND ARCHITECT FOR REVIEW. SIGNED COPIES OF ALL TESTS AND INSPECTION REPORTS SHALL BE FILED WITH THE BUILDING DEPARTMENT (THROUGH THE APPLICANT).
- REPORTS SHALL STATE WHETHER RESULTS COMPLY WITH CONTRACT REQUIREMENTS, SUMMARIZE THE TYPE OF TEST, THE LOCATION OR COMPONENT TESTED, AND RECOMMEND ANY REMEDIAL MEASURES REQUIRED. REPORT SHOULD NOTE ANY OTHER DEVIATIONS FROM THE CONTRACT DOCUMENTS.
- FOR ITEMS OF WORK OF OTHER TRADES WHICH ARE SUBJECT TO SPECIAL INSPECTION, SEE THE CITY OF NEW YORK BUILDING CODE, AS WELL AS ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC. DRAWINGS AND SPECIFICATIONS.
- IN ADDITION TO THE ABOVE REQUIREMENTS, ALL COLUMN SPLICES, BEAM MOMENT CONNECTIONS AT BEAMS DESIGNATED AS "LRS" AND BRACE FRAME OR WIND TRUSS CONNECTIONS (PER S-940 SERIES OF DWGS.) SHALL COMPLY WITH THE INSPECTION REQUIREMENTS OF AWS D1.8 "STRUCTURAL WELDING CODE-SEISMIC SUPPLEMENT", IF WELDING IS PRESENT IN CONNECTION.

GENERAL NOTES:

- ALL WORK TO BE PERFORMED IN COMPLIANCE WITH THE NEW YORK CITY BUILDING CODE, LATEST EDITION AND ALL SUPPLEMENTS.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS IN THE FIELD AND BE RESPONSIBLE FOR ACCURATE COORDINATION WHERE POSSIBLE.
- ALL UNDERPINNING, SHEETING, SHORING OR OTHER CONSTRUCTION REQUIRED FOR THE SUPPORT OF ADJACENT PROPERTIES, BUILDINGS, SIDEWALKS, UTILITIES, ETC., SHALL BE SUBJECT TO SPECIAL INSPECTION AS REQUIRED BY THE CODE. THE CONTRACTOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER ACCEPTABLE TO THE ENGINEER OF RECORD TO PROVIDE THE NECESSARY DESIGN AND THE REQUIRED INSPECTION. THE CONTRACTOR'S PROFESSIONAL ENGINEER SHALL PREPARE AND FILE THE REQUIRED FORMS FOR THE WORK WITH THE BUILDING DEPARTMENT.
- ALL ELEVATIONS SHOWN ON THIS SET REPRESENT RELATIVE ELEVATIONS BASED ON NAVD 88

A. EXCAVATION NOTES:

- ALL FOUNDATIONS SHALL BEAR ON PILES (SEE PILE NOTE) AND 20 TON/SF ROCK.
- WHERE EXISTING FOOTING OR FOUNDATIONS OF ADJACENT PROPERTY IS LOWER THAN ELEVATIONS SHOWN, NEW MAT FOUNDATION IS TO BE LOWERED TO SAME ELEVATION. WHERE NEW MAT FOUNDATION IS LOWER THAN EXISTING FOUNDATION, CONTRACTOR IS TO ESTABLISH EXISTING CONDITIONS BEFORE FOUNDATIONS, COMMENCING WORK AND NOTIFY THE ENGINEER.
- ALL UNDERPINNING, SHEETING, SHORING OR OTHER CONSTRUCTION REQUIRED FOR THE SUPPORT OF ADJACENT PROPERTIES, BUILDINGS, SIDEWALKS, UTILITIES, ETC., SHALL BE SUBJECT TO CONTROLLED INSPECTION AS REQUIRED BY THE CODE. THE CONTRACTOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER ACCEPTABLE TO THE ENGINEER OF RECORD TO PROVIDE THE NECESSARY DESIGN AND THE SHALL PREPARE AND FILE THE REQUIRED FORMS FOR THE WORK WITH THE REQUIRED INSPECTION. THE CONTRACTOR'S PROFESSIONAL ENGINEER BUILDING DEPARTMENT.

B. CONCRETE AND STEEL REINFORCEMENT

- ALL CONCRETE SHALL BE NORMAL WEIGHT CONTROLLED CONCRETE, U.O.N., AND COMPLY WITH A.C.I. BUILDING CODE AND THE CURRENT NEW YORK CITY BUILDING CODE.
- CONCRETE STRENGTH SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
 - FOUNDATION PIERS, PILE CAPS, MATS 5950 PSI
 - BUTTRESSES AND FOUNDATION WALLS 5950 PSI MIN. "SEE COLUMN SCHEDULE"
 - COLUMN PIERS IF ANY 5950 PSI MIN. "SEE COLUMN SCHEDULE"
 - FOUNDATION SLAB 5950 PSI
 - CRASH WALL 5950 PSI
- FOUNDATION WALLS AND BUTTRESSES CAST INTEGRALLY WITH SHEAR WALLS 5950 PSI. SEE PLAN.
- IF SLAB ON GROUND IS POURED BEFORE THE COLUMNS ABOVE AND THE COLUMN STRENGTH IS 5950 PSI OR GREATER, THE SLAB ON GROUND STRENGTH IS TO BE ACCORDING TO THE DETAIL OF BEAM AND SLAB CONCRETE PLACEMENT AT HIGH STRENGTH COLUMN." DWS, FO-202. IN ADDITION, THE DOWELS EXTENDING ABOVE THE FOOTINGS, PIERS OR PILE CAPS ARE TO BE LENGTHENED A MIN. 12", BEYOND THAT SHOWN OR CALLED FOR IN THE DETAILS.
- ALL STEEL REINFORCEMENT SHALL HAVE AN ULTIMATE TENSILE STRENGTH OF 90,000 PSI AS PER A.S.T.M. A615-94 GRADE 60. A.S.T.M. A775-94D FOR EPOXY COATED REINFORCING BARS, AND A.S.T.M. A884-94D FOR EPOXY COATED STEEL WIRE AND WELDED WIRE FABRIC FOR REINFORCEMENT. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE NECESSARY CHAIRS, REBARS, TIES, SPACERS, ETC., TO SECURE AND SUPPORT THE REINFORCING WHILE PLACING THE CONCRETE.
- ALL BARS MARKED CONTINUOUS, SHALL BE LAPPED AT SPICES AND CORNERS EXCEPT AS OTHERWISE SHOWN ON PLANS. LAP CONTINUOUS TOP BARS AT CENTER BETWEEN SUPPORTS AND BOTTOM BARS AT SUPPORTS. HOOK TOP BARS AT DISCONTINUOUS ENDS.
- VERTICAL CONSTRUCTION JOINTS IN ALL WALLS SHALL BE USED ONLY IF UNAVOIDABLE, OR UNLESS OTHERWISE NOTED, AND TO BE LOCATED AT LEAST 4'-0" FROM ANY SUPPORTING COLUMN OR WALL OPENING. DISTANCE BETWEEN JOINTS IN WALL SHALL BE ALLOWED AS PER SPECIFICATIONS. NO HORIZONTAL CONSTRUCTION JOINTS WILL BE ALLOWED IN GRADE BEAMS.
- IN NO CASE SHALL TRUCKS, BULLDOZERS, OR OTHER HEAVY EQUIPMENT BE PERMITTED CLOSER THAN 6'-0" FROM ANY FOUNDATION WALL UNLESS APPROVED BY THE ENGINEER.
- TEMPORARY BRACING SHALL BE PROVIDED FOR ALL BUTTRESSES, WHERE BUTTRESSES DO NOT EXIST OR SPACING BETWEEN BUTTRESSES EXCEED 25 FEET, AND WHERE THE DIFFERENCE IN LEVEL BETWEEN INSIDE AND OUTSIDE GRADE IS MORE THAN 4'-0". INTERMEDIATE BRACING SHALL BE PROVIDED, WHERE RAMPS OCCUR, THE GRADE ELEVATION OUTSIDE OF RAMP WALLS SHALL BE USED IN FIGURING THE DIFFERENCE IN LEVEL. CORNER BUTTRESSES NEED NOT BE BRACED. NO BACKFILLING IS TO BE DONE BEFORE ALL SLABS BRACING WALLS ARE IN PLACE UNLESS APPROVED BY THE ENGINEER. PROVIDE TEMPORARY BRACING FOR ALL PIERS AND SUMP PITS.
- CONTRACTOR TO INSTALL ALL PIPE SLEEVES, BOXED OPENINGS, ANCHOR BOLTS, ETC., AS REQUIRED FOR THE VARIOUS TRADES. WALL POCKETS TO RECEIVE BEAMS AND SLABS SHALL BE PROVIDED AS REQUIRED FOR THE SUPERSTRUCTURE. SHOP DRAWINGS SHOWING THE POSITION OF OPENINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER PRIOR TO PLACING CONCRETE.
- MINIMUM COVER FOR REINFORCING STEEL SHALL BE "N" FOR INTERIOR SLABS AND INTERIOR WALL SURFACES; 1½" FOR BEAMS, COLUMNS AND COLUMNS (TIES, STIRRUPS OR PRIMARY REINFORCEMENT), FOR ALL CONCRETE EXPOSED TO WEATHER AND EARTH FILL, COVER SHALL BE 2" (1½" FOR STIRRUPS), FOR CONCRETE PLACED AGAINST EARTH, MINIMUM COVER SHALL BE 3".
- THE CONTRACTOR MUST SUBMIT REINFORCING SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW. NO CONSTRUCTION IS TO BE STARTED UNTIL THE SHOP DRAWINGS ARE REVIEWED BY THE ENGINEER.
- THE STRUCTURAL ENGINEER OR HIS FIELD QUALIFIED REPRESENTATIVE MUST CHECK AND APPROVE ALL STEEL REINFORCING PRIOR TO CONCRETE PLACEMENT.

MASONRY NOTES

- SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR COMPLETE REQUIREMENTS FOR CMU MASONRY CONSTRUCTION AND APPEARANCE. DETAILS AND NOTES SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED TO SUPPLEMENT ARCHITECTURAL REQUIREMENTS AND TO DEFINE ELEMENTS WHICH PROVIDE STRUCTURAL STRENGTH AND STABILITY.
- DETAILS, SECTIONS, SCHEDULES, ETC. AND THESE NOTES, REPRESENT THE MINIMUM REQUIREMENTS FOR STRUCTURAL ADEQUACY. WHERE ARCHITECTURAL REQUIREMENTS DIFFER FROM STRUCTURAL, THE MORE STRINGENT SHALL BE FOLLOWED.
- CODE: MASONRY WALL CONSTRUCTION SHALL CONFORM TO THE NEW YORK CITY BUILDING CODE AND TO ACI 530/ASCE-5 AS REFERENCED BY THE NYC CODE.
- MASONRY UNITS SHALL BE LIGHTWEIGHT HOLLOW LOAD BEARING CONCRETE MASONRY (CMU). COMPRESSIVE STRENGTH OF MASONRY FM SHALL BE A MINIMUM OF 1300 PSI.
- MORTAR SHALL BE TYPE M OR S.
- HORIZONTAL JOINT REINFORCEMENT SHALL BE TRUSS TYPE GALVANIZED COLD-DRAWN STEEL WIRE CONFORMING TO ASTM A 951.
- PROVIDE HORIZONTAL JOINT REINFORCEMENT IN EVERY OTHER JOINT (16" O.C. VERTICALLY) UNLESS PLANS OR DETAILS CALL FOR CLOSER SPACING OR ADDITIONAL REINFORCEMENT.
- BAR REINFORCEMENT: ASTM A 615 GRADE 60, PER SCHEDULE, FOR ADDITIONAL REINFORCEMENT SEE WALL REINFORCEMENT ELEVATION.
- ALL CELLS WITH REINFORCEMENT SHALL BE GROUTED SOLID FOR THE FULL EXTENT OF BAR, VERTICAL AND HORIZONTAL.
- GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI. GROUT SHALL BE LIGHTWEIGHT TYPE AS DEFINED BY ASTM C 476.
- STEEL ANGLES: ASTM A 36. STEEL IN AN EXTERIOR WALL OR EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED. 12. CONTRACTOR SHALL COORDINATE ALL MASONRY WORK WITH WORK OF OTHER TRADES: ARCHITECTURAL, STRUCTURAL, MEP.

PILE AND FOOTING NOTES:

- PILES ARE DESIGNED FOR 150 TONS . PILES TO BE STEEL "H" BEARING PILES. "H" PILES TO BE HP 14 x 89 GR50.
- PILE DRIVING TO BE SUPERVISED BY A LICENSED PROFESSIONAL ENGINEER.
- TOP OF PILE CAP ELEVATION TO BE 2" BELOW BOTTOM OF SLAB U.O.N., THIS TO=XX'-XX" ON PLAN.
- ALL PILES TO BE DRIVEN TO PENETRATION IN BEARING STRATA TO RESISTANCE AS PER SPECIFICATIONS.
- RECORDS OF PILE PENETRATION OF EVERY PILE, AND THE BEHAVIOR OF SAME DURING DRIVING SHALL BE FILED WITH THE BUILDING DEPARTMENT.
- PILE RE-LOCATION PLANS AND PILE LOG SHALL BE FILED BY THE DESIGN ENGINEER AND APPROVED BY THE BUILDING DEPARTMENT. NO PILE CAPS ARE TO BE PLACED BEFORE THIS IS DONE.
- A PLAN SHOWING THE IDENTIFICATION OF ALL PILES AND A PILE NUMBERING PLAN SHALL BE FILED WITH THE BUILDING DEPARTMENT.
- PLANS TO INDICATE MINIMUM REQUIRED PENETRATION OF ALL PILES, SHALL BE FILED WITH THE BUILDING DEPARTMENT.
- AN AMENDMENT SHALL BE FILED AND APPROVED FOR ON-SITE INSPECTION ON ALL CRANES AND "RIGS", BEFORE MOVING THIS EQUIPMENT ONTO THE JOB SITE.
- A "SPECIAL INSPECTION" FORM IS TO BE SUBMITTED INDICATING THE ENGINEER WHO WILL HAVE RESPONSIBILITY FOR SUPERVISING THE PILES, APPROVED BY THE BUILDING DEPARTMENT, AND THE ENGINEER OF RECORD.
- LOAD TESTS SHALL BE PERFORMED AS PER LOAD TEST PROCEDURES NEW YORK CITY BUILDING CODE.
- FOR DETAILS AND OTHER PERTINENT INFORMATION REFER TO GEOTECHNICAL REPORT PROVIDED BY LANGAN, DATED APRIL 24, 2015.
- THE PILES ON DRAWINGS ARE BASED ON THE ROCK ELEVATIONS AS INDICATED ON THE BORING DATA. ACTUAL ROCK ELEVATION MAY BE DIFFERENT THAN ANTICIPATED. ONCE THE ACTUAL ELEVATION IS FOUND, THE CONTRACTOR, AT HIS EXPENSE SHALL ASK THE ENGINEER OF RECORD TO PROVIDE THE NECESSARY DESIGN CHANGES, SUCH AS SPREAD FOOTINGS WHERE PILE LENGTHS ARE LESS THAN 7 FEET.

NON-STRUCTURAL ITEMS SHOWN ON THE STRUCTURAL/FOUNDATION DRAWINGS

- THE FOLLOWING NON-STRUCTURAL ITEMS MAY BE SHOWN ON THE STRUCTURAL AND/OR FOUNDATION DRAWINGS FOR THE PURPOSE OF CLARITY IN INTERFERENCE WITH STRUCTURAL AND/OR FOUNDATION WORK. ITEMS BELOW MAY NOT BE FULLY DEFINED ON THE STRUCTURAL/FOUNDATION DRAWINGS. THE INFORMATION FOR NON-STRUCTURAL ELEMENTS IS FURNISHED BY OTHER CONSULTANTS AS LISTED BELOW. ALL PRT AND SHOP DRAWINGS RELATED TO THESE NON-STRUCTURAL ITEMS SHALL BE SUBMITTED TO THE CONSULTANTS LISTED BELOW FOR THEIR REVIEW AND APPROVAL.

GEOTECHNICAL ENGINEER:

- FOUNDATION/UNDERSLAB WATERPROOFING, DAMPROOFING SYSTEMS
- WALL AND UNDERSLAB DRAINAGE SYSTEM, INCLUDING SUMP PITS, GRAVEL & PIPING, CLEAVANETS
- ROCK ANCHORS
- CAISSONS AND PILES, INCLUDING REINFORCEMENT
- ROCK CONTIGURS

ARCHITECT OF RECORD:

- SUMP PITS
- WATERPROOFING/DAMPPOOFING APPLIED TO EXPOSED SURFACES, ELEVATOR OR SUMP PIT INTERIOR SURFACES
- PAINT
- FIREPROOFING
- CONCRETE CURBS: HEIGHT, WIDTH, EXTENT, LOCATION
- BRICK, BLOCK, TILE MASONRY, METAL PANELS, PRECAST FACADE PANELS, CURTAIN WALLS AND ALL OTHER FACADE SYSTEMS
- ROOFING SYSTEMS, DRAIN LOCATIONS, SLOPES TO DRAINS
- FILLS, INSULATION, PAVERS OR GRAVEL
- FLOATING/SECONDARY SLABS

SUPERSTRUCTURE CONCRETE NOTES

A. CONCRETE

- ALL CONCRETE SHALL BE NORMAL WEIGHT CONTROLLED CONCRETE, U.O.N., AND COMPLY WITH THE A.C.I. BUILDING CODE AND THE CURRENT NEW YORK CITY BUILDING CODE.
- CONCRETE STRENGTH SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
 - SLABS AND BEAMS U.O.N. ON PLANS= 5950 PSI
 - SHEAR WALLS & COLUMNS SEE COLUMN SCHEDULE
 - LINK BEAMS SAME AS SHEARWALL STRUCTURE
 - SLAB AT COLUMNS AND SHEARWALLS TO BE PLACED WITH CONCRETE AS PER "BEAM AND SLAB CONCRETE PLACEMENT AT HIGH STRENGTH COLUMN OR WALL" DETAIL ON DRAWING S-962.
- NO CONCRETE SHALL BE PLACED UNTIL THE CONTRACTOR HAS INSTALLED ALL THE INSERTS AND DOWELS NECESSARY TO PROVIDE SUPPORT FOR MULLIONS, APPLY FINISHES, PARTITIONS, PIPES, DUCTS, EQUIPMENT, ETC., AS REQUIRED IN ARCHITECTURAL, H.V.A.C. AND STRUCTURAL DRAWINGS. WHERE BRICK VENER EXCEEDS 14" IN HEIGHT, PROVIDE DOWEL TYPE MASONRY ANCHORS SPACED AT 24" O/C IN ALL BACK UP VERTICAL CONCRETE SURFACES.
- CONTRACTOR SHALL VERIFY LOCATIONS AND DIMENSIONS OF ALL SLOTS, PIPE SLEEVES, DUCTS AND ANY OTHER CONCRETE PENETRATIONS AS REQUIRED FOR VARIOUS TRADES BEFORE CONCRETE IS LACED.
- ALL PLUMBING AND ELECTRICAL SLOTS SHALL BE FILLED WITH CONCRETE TO THE SAME DEPTH AS FLOOR AFTER CONDUITS AND/OR PIPES ARE INSTALLED.
- NO PIPES OR CONDUITS EXCEEDING 1/3 SLAB THICKNESS IN OUTSIDE DIAMETER NOR OVER NOMINAL 2" INSIDE DIAMETER SHALL BE EMBEDDED CLOSER THAN 3 DIAMETER ON CENTER NOR PASS WITHIN 24" OF COLUMN FACE, U.O.N. JUNCTION BOXES MAY BE PLACED IN STRUCTURAL CONCRETE SLAB BUT SHALL NOT EXCEED 4½"x4½"x3½" IN DEPTH AND SHALL BE SEPARATED FROM OTHER JUNCTION BOXES BY NOT LESS THAN 8" OF CONCRETE.
- ALL MEMBERS IN THE FLOOR SYSTEM INCLUDING BEAMS, BRACKETS, COLUMN CAPITALS AND HAUNCHES SHALL BE PLACED MONOLITHICALLY. VERTICAL CONSTRUCTION JOINTS NECESSARY MAY BE MADE AT CENTER OF BEAM OR SLAB USING APPROVED BULKHEADS AND ADDITIONAL REINFORCING AS SHOWN ON DETAILS.
- NO CONCRETE FLOOR SYSTEM IS TO BE INSTALLED UNTIL AT LEAST TWO HOURS HAVE PASSED AFTER THE SUPPORTING COLUMNS AND WALLS ARE PLACED.
- WHEN PLACING CONCRETE AGAINST AN ADJACENT BUILDING OR AT EXPANSION JOINT, AT LEAST 1" (U.O.N.) OF HIGH DENSITY STYROFOAM SHALL BE PLACED AT THE INTERFACE BETWEEN THE EXISTING AND NEW CONCRETE. IN ADDITION, THE CONTRACTOR MUST TAKE ALL THE NECESSARY MEASURES SO AS TO NOT CREATE ANY DAMAGE TO THE EXISTING CONSTRUCTION WHILE PLACING THE NEW CONCRETE.
- ALL WORK MARKED S-5 (SUPERSTRUCTURE) IN FOUNDATION DRAWINGS SHALL BE PART OF SUPERSTRUCTURE CONTRACT.
- TEMPORARY SHORING AND RESHORING SHALL REMAIN IN PLACE AT LEAST 28 DAYS AFTER PLACEMENT OF CONCRETE.
- NO DEVIATION FROM THE STRUCTURAL PLANS SHALL BE PERMITTED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.

B. REINFORCEMENT

- ALL STEEL REINFORCEMENT (STIRRUPS AND TIES INCLUSIVE) SHALL HAVE AN ULTIMATE TENSILE STRENGTH OF 90,000 PSI AS PER A.S.T.M. A615 GRADE 60. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE CHAIRS, REBARS, TIES, SPACERS, ETC., TO SECURE AND SUPPORT THE REINFORCING WHILE PLACING THE CONCRETE.
- THE CONTRACTOR MUST SUBMIT REINFORCING SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW. NO CONSTRUCTION IS TO BE STARTED UNTIL THE SHOP DRAWINGS ARE REVIEWED BY THE ENGINEER.
- THE STRUCTURAL ENGINEER OR HIS FIELD QUALIFIED REPRESENTATIVE MUST CHECK AND APPROVE ALL STEEL REINFORCEMENT PRIOR TO CONCRETE PLACEMENT.
- ALL REINFORCING BARS MARKED CONTINUOUS SHALL BE LAPPED AT SPICES AND CORNERS IN CONFORMANCE WITH LAP SPLICE TABLES IN TYPICAL DETAILS UNLESS OTHERWISE NOTED. LAP CONTINUOUS TOP BARS AT CENTER BETWEEN SUPPORTS AS REQUIRED. TERMINATE CONTINUOUS BARS AT END SUPPORTS WITH STANDARD HOOKS, U.O.N.
- MINIMUM COVER FOR REINFORCING STEEL SHALL BE "N" FOR INTERIOR SLABS AND INTERIOR WALL SURFACES; 1½" FOR BEAMS, COLUMNS AND COLUMNS (TIES, STIRRUPS OR PRIMARY REINFORCEMENT), FOR ALL CONCRETE EXPOSED TO WEATHER AND EARTH FILL, COVER SHALL BE 2" (1½" FOR STIRRUPS), FOR CONCRETE PLACED AGAINST EARTH, MINIMUM COVER SHALL BE 3".

C. CODES AND TESTS

- THIS STRUCTURE HAS BEEN DESIGNED UNDER THE PROVISIONS OF THE NEW YORK CITY BUILDING CODE AS AMENDED AND A.C.I. 318.
- ALL CONTROLLED CONCRETE SHALL COMPLY WITH THE A.C.I. 318 BUILDING CODE. APPLICATION FOR CONTROLLED CONCRETE WITH CONCRETE TESTS AND CURVES OF TESTS FOR THE PRELIMINARY DESIGN MIX PREPARED BY AN APPROVED LABORATORY MUST BE SUBMITTED TO THE ENGINEER FOR FILING WITH THE BUILDING DEPARTMENT. NO CONCRETE SHALL BE PLACED WITHOUT THE DESIGN MIX BEING APPROVED BY THE BUILDING DEPARTMENT.
- DESIGN AND CONSTRUCTION OF FORMWORK IS TO COMPLY WITH THE A.C.I. 318 BUILDING CODE AND NEW YORK CITY BUILDING CODE AS AMENDED.
- THE DESIGN DETAILS AND NOTES INCLUDED HEREIN ARE IN COMPLIANCE WITH LOCAL LAW 17/95.

SEISMIC AND WIND CRITERIA

- THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE LATEST NEW YORK CITY BUILDING CODE (NYCBC 2014).
- WIND DESIGN DATA:
 - BASED ON SPECIFIC WIND TUNNEL REPORT DATED 02/19/2016
- EARTHQUAKE DESIGN DATA:
 - SEISMIC IMPORTANCE FACTOR = 1
 - S_s = 0.213g
 - S₁ = 0.058g
 - S_{0.5} = 0.355g
 - S_{0.1} = 0.136g
- SITE CLASS
 - E FOR AMENITY AREAS OUTSIDE OF THE TOWER FOOTPRINT
 - D FOR TOWER
- SEISMIC DESIGN CATEGORY
 - C FOR AMENITY AREAS OUTSIDE OF THE TOWER FOOTPRINT
 - B FOR TOWER
- SEISMIC FORCE RESISTING SYSTEM
 - ORDINARY REINFORCED CONCRETE SHEAR WALLS
- DESIGN BASE SHEAR (V):
 - E/W = 1800 kips
 - N/W = 1800 kips
- SEISMIC RESPONSE COEFFICIENT (C):
 - E/W = 0.013
 - N/W = 0.013
- RESPONSE MODIFICATION FACTORS:
 - R = 5
- ANALYSIS PROCEDURE USED
 - EQUIVALENT LATERAL FORCE PROCEDURE

- STRUCTURAL SEPARATIONS, (NYCBC-1613.7): ALL STRUCTURES SHALL BE SEPARATED FROM ADJACENT STRUCTURES. WHEN A STRUCTURE ADJOINS A PROPERTY LINE NOT COMMON TO A PUBLIC WAY (TYPICALLY SIDE OR REAR LOT LINES), THAT STRUCTURE SHALL ALSO BE SET BACK FROM THE PROPERTY LINE BY AT LEAST 1 INCH FOR EACH 50 FEET OF HEIGHT AND A MINIMUM OF 1 INCH FOR STRUCTURES WITH HEIGHTS LESS THAN 50 FEET. SMALLER SEPARATIONS OR PROPERTY LINE SETBACKS SHALL BE PERMITTED WHEN JUSTIFIED BY RATIONAL ANALYSIS BASED ON MAXIMUM EXPECTED GROUND MOTIONS WITH A MINIMUM SEPARATION OF 1 INCH ALONG THE FULL HEIGHT OF THE STRUCTURE.

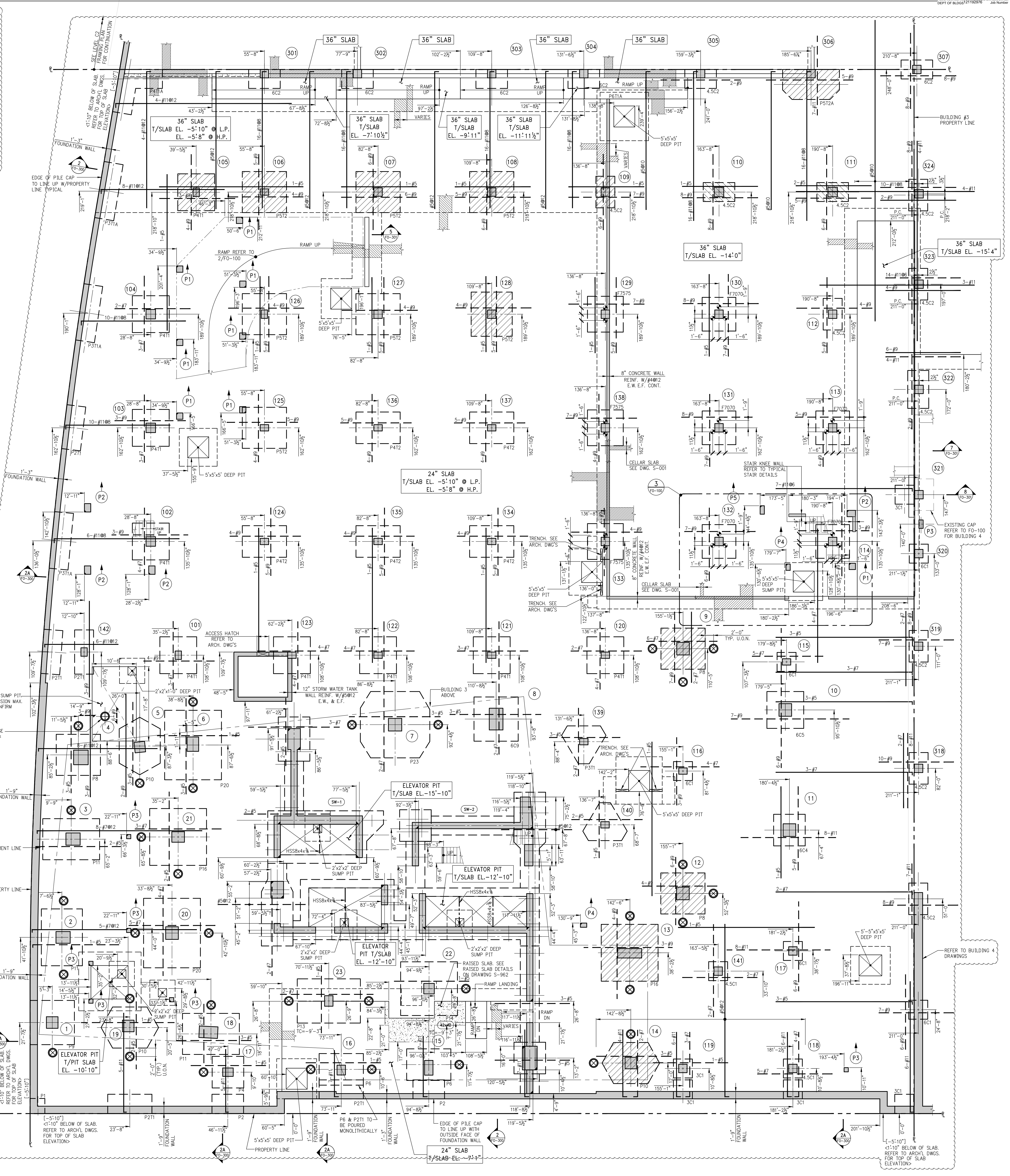
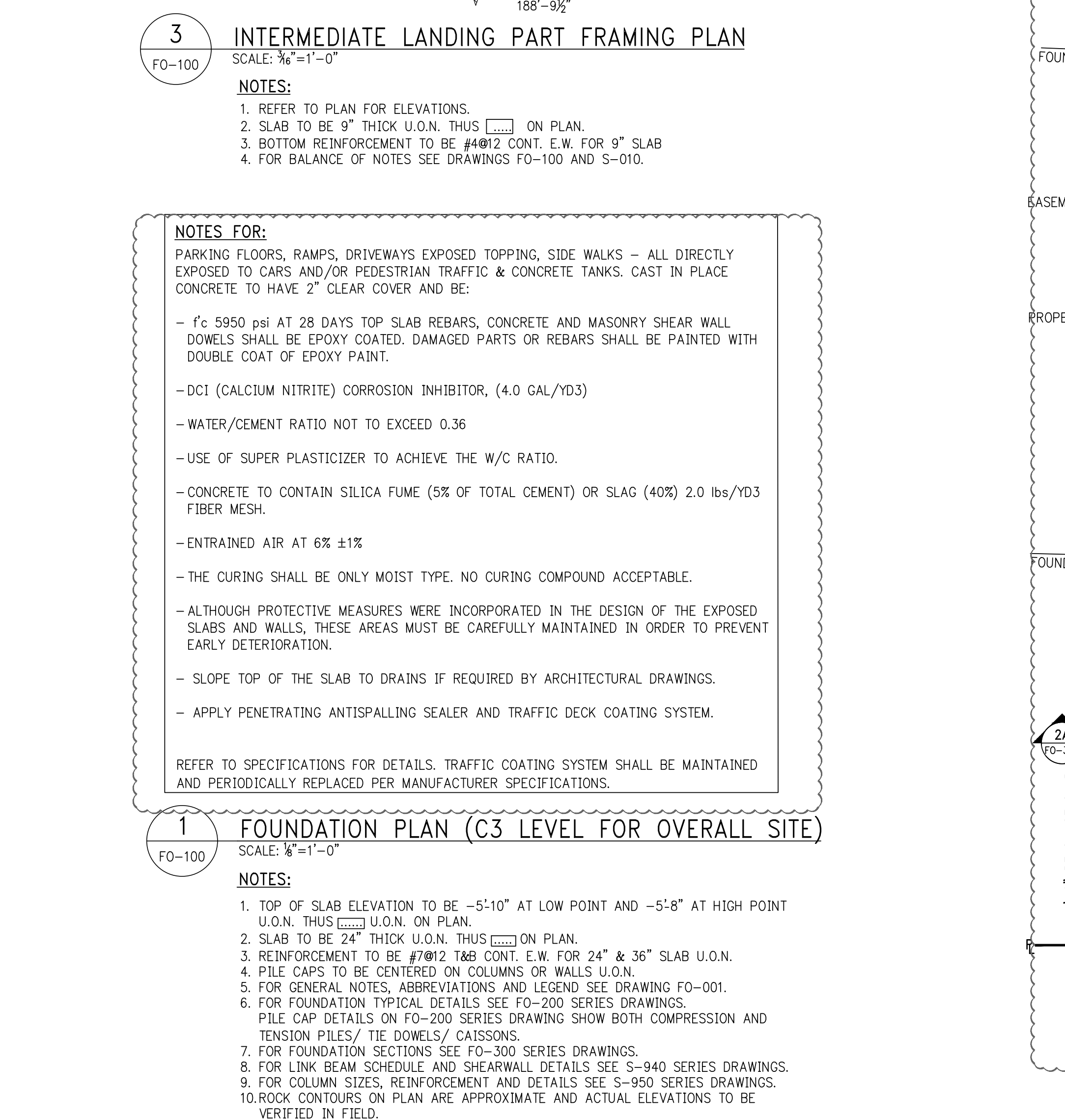
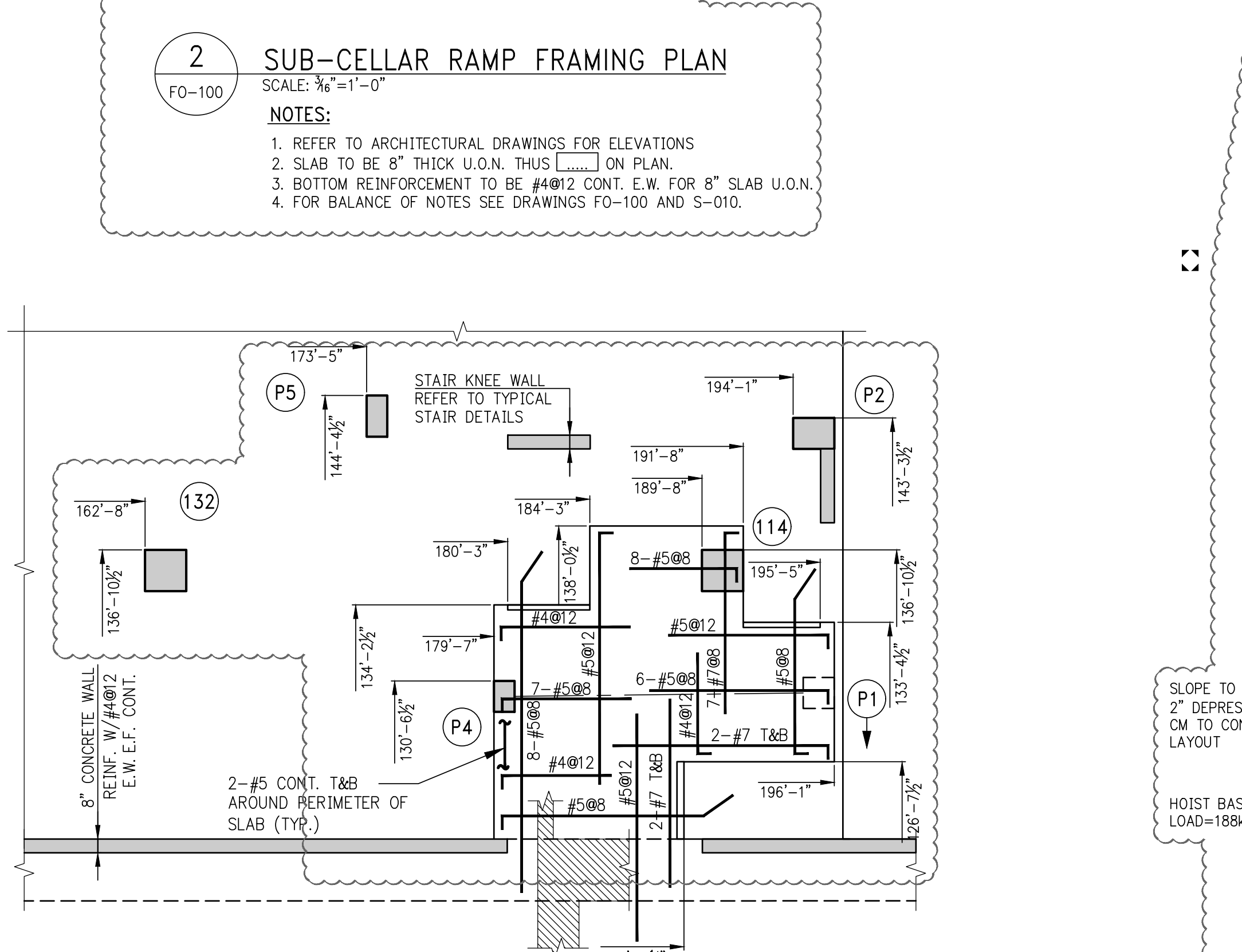
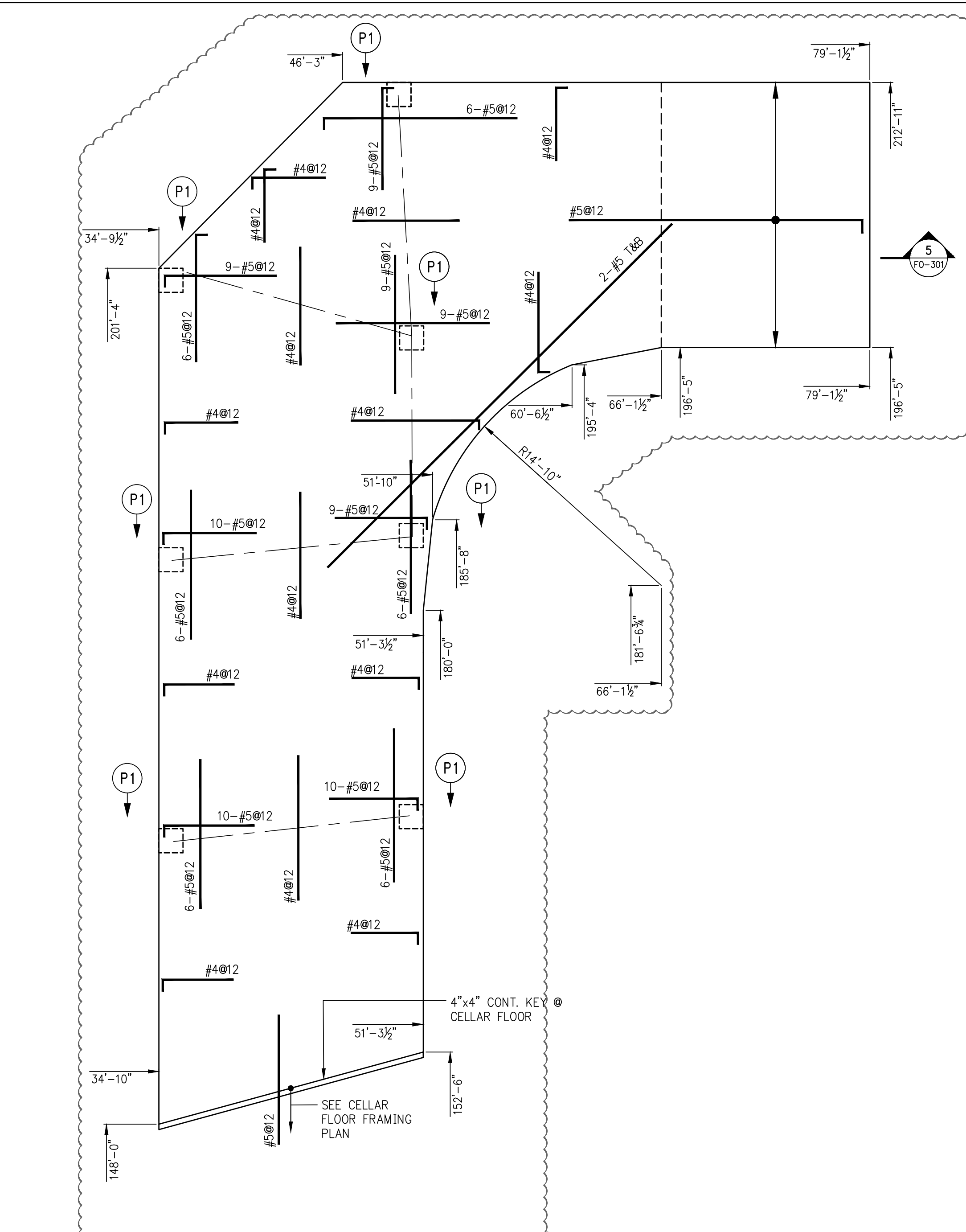
LEGEND:

- INDICATES ADDITIONAL WIND BARS
- INDICATES THE BOTTOM OF FOUNDATION WALL ELEVATION (1/PRESSURE SLAB)
- INDICATES THE TOP OF FOUNDATION WALL OR SHEARWALL ELEVATION (LIMIT OF FOUNDATION CONTRACT)
- INDICATES TOP OF PILE CAP ELEVATION
- INDICATES PILE CAP WITH END-BEARING HP14x89 PILES WITH 150 TON COMPRESSION CAPACITY
- INDICATES PILE CAP WITH MINI-CAISSONS WITH 150 TON COMPRESSION CAPACITY AND 75 TON TENSION CAPACITY
- INDICATES SIZE OF PIER IN INCHES, FIRST DIMENSION SHOWN IS IN THE EAST-WEST DIRECTION.
- INDICATES ROCK ANCHOR.
- INDICATES DRAIN DIRECTION
- INDICATES CLEANOUT
- INDICATES ADDITIONAL TOP REINFORCEMENT AT SUPPORTS
- INDICATES ADD'L BOTTOM REINFORCING AT SUPPORTS
- INDICATES ADDITIONAL TOP REINFORCEMENT CONTINUOUS BETWEEN SUPPORTS
- INDICATES ADDITIONAL BOTTOM REINFORCEMENT CONTINUOUS BETWEEN SUPPORTS
- 1" & 4" LAYERS
- INDICATES ORDER OF BAR PLACEMENT AS SHOWN ON PLAN.
- 2" & 3" LAYERS
- INDICATES CHANGE IN ELEVATION
- INDICATES CONCRETE COLUMN/SHEARWALL/FOUNDATION WALL
- INDICATES CONCRETE COLUMN/SHEARWALL BELOW
- INDICATES LIGHT WEIGHT CONCRETE FILL
- INDICATES SLAB OPENING (FIRST DIMENSION IS IN EAST-WEST DIRECTION)
- INDICATES COLUMN ABOVE OR BELOW
- INDICATES COLUMN DESIGNATION
- INDICATES COLUMN POST DESIGNATION
- INDICATES SHEARWALL DESIGNATION
- INDICATES AMTRAK SEWER
- INDICATES TO BE CONFIRMED BY ARCHITECT

- INDICATES PILE CAP WITH PILES POTENTIALLY SHORTER THAN 10 FEET. TOP OF ROCK ELEVATIONS BASED ON ROCK CONTIGURS PROVIDED BY LANGAN AND THE POTENTIALLY AFFECTED PILE CAPS INCLUDE BUT IS NOT LIMITED TO THOSE STATED ON PLAN. IF EFFECTIVE LENGTH OF MONITOR PILE IS LESS THAN 7'-0", PILE CAP SHALL BE EXTENDED DOWN TO REST ON A MIN. OF 20'-0" ROCK MAINTAINING THE DESIGN TOP OF PILE CAP ELEVATION AND MONITOR PILE SHALL BE CUT-OFF AT ROCK ELEVATION. IF EFFECTIVE LENGTH IS BETWEEN 7'-0" & 10'-0" THE PILE EMBEDMENT TO BE INCREASED AS PER TYPICAL DETAILS. A CREDIT FOR THE NON-DRIVEN PILES ON THE DENOTED PILE CAPS SHOULD BE GIVEN TO THE OWNERSHIP. IN CASE PILE LENGTH IS LESS THAN 7'-0", REFER TO TYPICAL CROSS SECTION THRU PILE/MINI CAISSON DETAIL ON DRAWING FO-200.

bb. -20' INDICATES ESTIMATED CONTOUR LINE FOR TOP OF 20 TON/SF ROCK ELEVATION

- INDICATES MINI-CAISSON WITH ALLOWABLE AXIAL UPLIFT CAPACITY OF 30 TONS & 450 TONS IN COMPRESSION. ADD'L INFORMATION SEE TYPICAL CROSS SECTION THRU PILE/MINI CAISSON CAP & MINI CAISSON DETAIL ON DWG. FO-201. IF MINI CAISSON IS CONCENTRIC OR WITHIN THE SHEARWALL/COLUMN ABOVE MINI CAISSON VERTICAL REINFC. SHALL BE EXTEND 6'-0" ABOVE TOP OF SLAB ON GRADE. OTHERWISE A 18"x18"x2" STEEL PLATE SHALL BE INSTALLED IN ACCORDANCE WITH THE TYPICAL CROSS SECTION THRU THE PILE/MINI CAISSON DETAIL ON DRAWING FO-201.
- INDICATES MINI-CAISSON WITH ALLOWABLE AXIAL UPLIFT CAPACITY OF 75 TONS & 150 TONS IN COMPRESSION. PILE CAP WITH MINI PILES INDICATED AS MPxx ON PLAN
- INDICATES TIE-DOWN WITH ALLOWABLE AXIAL UPLIFT CAPACITY OF 75 TONS (TEMPORARY CONDITION), DESIGN & BUILT ITEMS.
- INDICATES 13½" MINI-CAISSON REFER TO FO-200 FOR ADD'L INFORMATION.
- INDICATES HP14x89 END-BEARING PILE WITH 150 TON COMPRESSION CAPACITY AND 3.5 TONS LATERAL CAPACITY. PILE CAP WITH HP14x89 END-BEARING PILES INDICATED AS Pxx ON PLAN.
- INDICATES AREA OUTSIDE BUILDING #3 FOOTPRINT/PROPERTY LINE)
- INDICATES 150 TONS TENSION ANCHOR. DESIGN TO BE PROVIDED BY GEOTECHNICAL ENGINEER.
- INDICATES TOP BARS TO BE PLACED AS PER "ADDITIONAL COLUMN STRIP RE



KEY PLAN

OWNER: GID DEVELOPMENT
125 HIGH STREET
BOSTON, MA 02110

PROJECT: RIVERSIDE CENTER BUILDING 3
NEW YORK, NY

EXECUTIVE ARCHITECT: GHWA
Goldstein, Hill & West Architects, LLP
11 Broadway, Suite 1700
New York, NY 10004
Tel (212) 213-8007 Fax (212) 686-1754

DESIGN ARCHITECT: RICHARD MEIER & PARTNERS
ARCHITECTS, LLP
475 Tenth Avenue
New York, NY 10018
Tel: (212) 967-6860

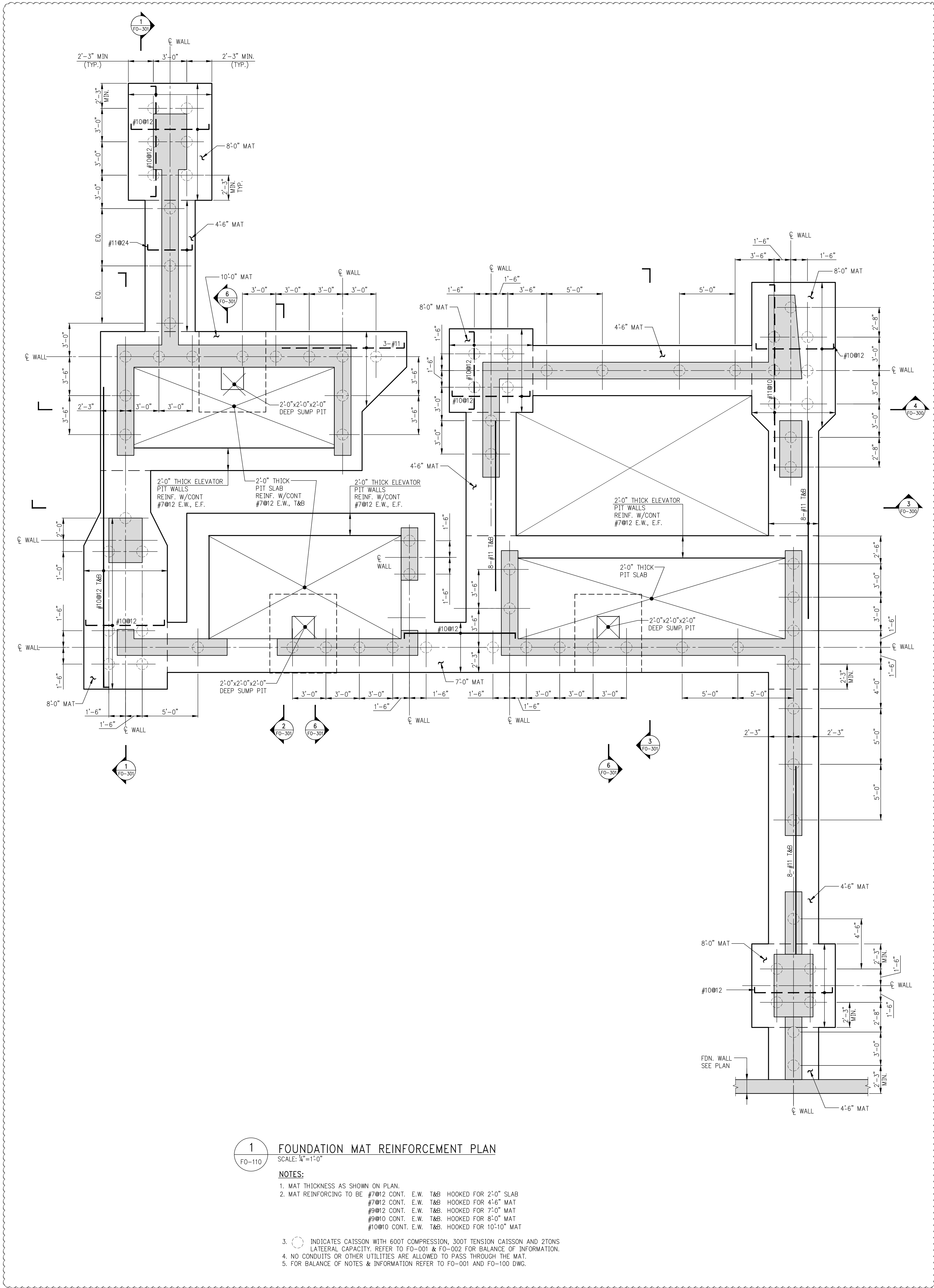
STRUCTURAL ENGINEER: WSP BUILDING STRUCTURES
CONSULTING ENGINEERS
228 East 45th St, 3rd Floor
New York, NY 10017
Tel: (212) 687-9888 Fax: (646) 487-5501

MEP/FP ENGINEER: WSP BUILDING SYSTEMS
CONSULTING ENGINEERS
512 Seventh Avenue
New York, NY 10018
Tel: (212) 532-9600

DWG TITLE: FOUNDATION PLAN (C3 LEVEL FOR OVERALL SITE)
NB#XXXXXXX

DATE: 07/31/2015
SCALE: AS SHOWN

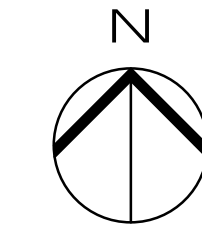
FO-100.01



1 FOUNDATION MAT REINFORCEMENT PLAN
FO-110
SCALE: 1/4"=1'-0"

- NOTES:
- MAT THICKNESS AS SHOWN ON PLAN.
 - MAT REINFORCING TO BE:
 - #7@12 CONT. E.W. T&B HOOKED FOR 2'-0" SLAB
 - #7@12 CONT. E.W. T&B HOOKED FOR 4'-6" MAT
 - #9@12 CONT. E.W. T&B HOOKED FOR 7'-0" MAT
 - #9@10 CONT. E.W. T&B HOOKED FOR 8'-0" MAT
 - #10@10 CONT. E.W. T&B HOOKED FOR 10'-0" MAT
 - INDICATES CAISSON WITH 600T COMPRESSION, 300T TENSION CAISSON AND 2TONS LATERAL CAPACITY. REFER TO FO-001 & FO-002 FOR BALANCE OF INFORMATION.
 - NO CONDUITS OR OTHER UTILITIES ARE ALLOWED TO PASS THROUGH THE MAT.
 - FOR BALANCE OF NOTES & INFORMATION REFER TO FO-001 AND FO-100 DWG.

KEY PLAN



14	04/02/2017	DOB SUBMISSION
11	04/14/2017	ISSUE FOR CONSTRUCTION
10	12/02/2016	SEALED
9	10/02/2016	SEALED UPON SET
8	04/15/2016	POST-APPROVAL AMENDMENT
7	04/15/2016	SUPERSTRUCTURE AWARD SET
6	08/24/2015	DOB SUBMISSION
5	08/02/2015	FOUNDATION SET
4	07/31/2015	DOB SUBMISSION
3	07/20/2015	SEALED
2	03/02/2015	SEALED
1	03/06/2015	DOB FILING

OWNER:
GID DEVELOPMENT
125 HIGH STREET
HIGH STREET TOWER, 27TH FLOOR
BOSTON, MA 02110

PROJECT:
RIVERSIDE CENTER BUILDING 3
NEW YORK, NY

EXECUTIVE ARCHITECT:
GHWA
Goldstein, Hill & West Architects, LLP
11 Broadway, Suite 1700
New York, NY 10004
Tel: (212) 213-8007 Fax: (212) 686-1754

DESIGN ARCHITECT:
RICHARD MEIER & PARTNERS
ARCHITECTS, LLP
475 Tenth Avenue
New York, NY 10018
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STRUCTURAL ENGINEER:
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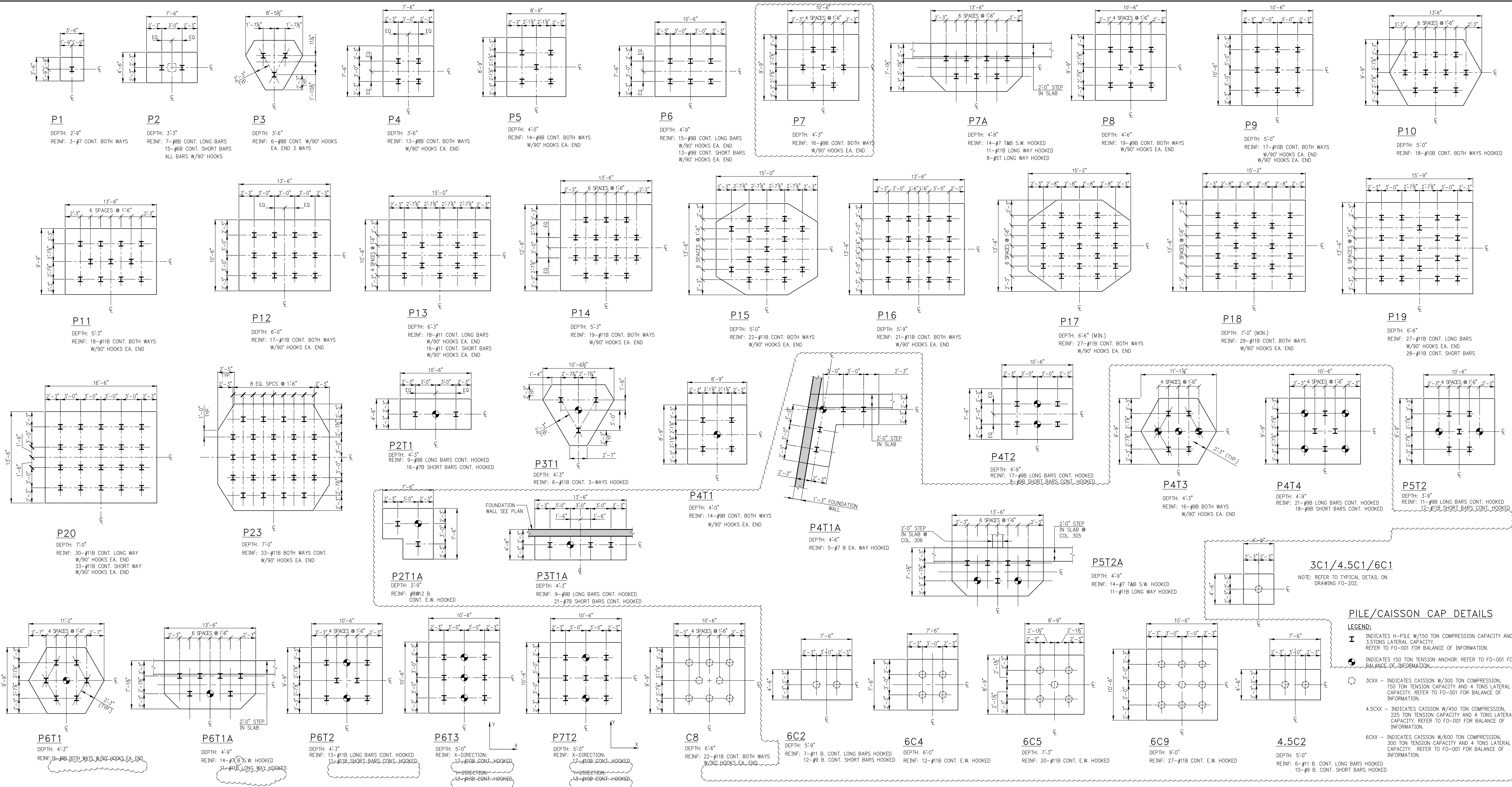
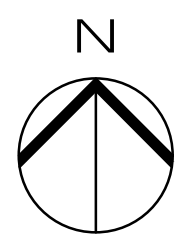
DOB STAMPS & SIGNATURES:

DWG TITLE:
FOUNDATION MAT
REINFORCEMENT PLAN
NB#XXXXXXXX

SEAL & SIGNATURE:

DATE: 07/31/2015
PROJECT #: 188704
SCALE: AS NOTED
FO-110.01
DWG NO.

KEY PLAN



13	06/02/2017	D08 SUBMISSION
12	04/14/2017	ISSUED FOR CONSTRUCTION
11	12/02/2016	90% DD
10	10/06/2016	90% CD UPDATED SET
9	04/19/2016	POST APPROVAL AMENDMENT
8	04/15/2016	SUPERSTRUCTURE AWARD SET
7	09/24/2015	D08 SUBMISSION
6	09/09/2015	FOUNDATION SET
5	07/31/2015	D08 SUBMISSION
4	07/20/2015	100% DD
3	03/20/2015	50% DD
2	03/06/2015	D08 FILING
1	12/17/2015	100% SD

ANSWER: GID DEVELOPMENT
125 HIGH STREET
HIGH STREET TOWER, 27TH FLOOR
BOSTON, MA 02110

PROJECT:
RIVERSIDE CENTER BUILDING 3
NEW YORK, NY

EXECUTIVE ARCHITECT:

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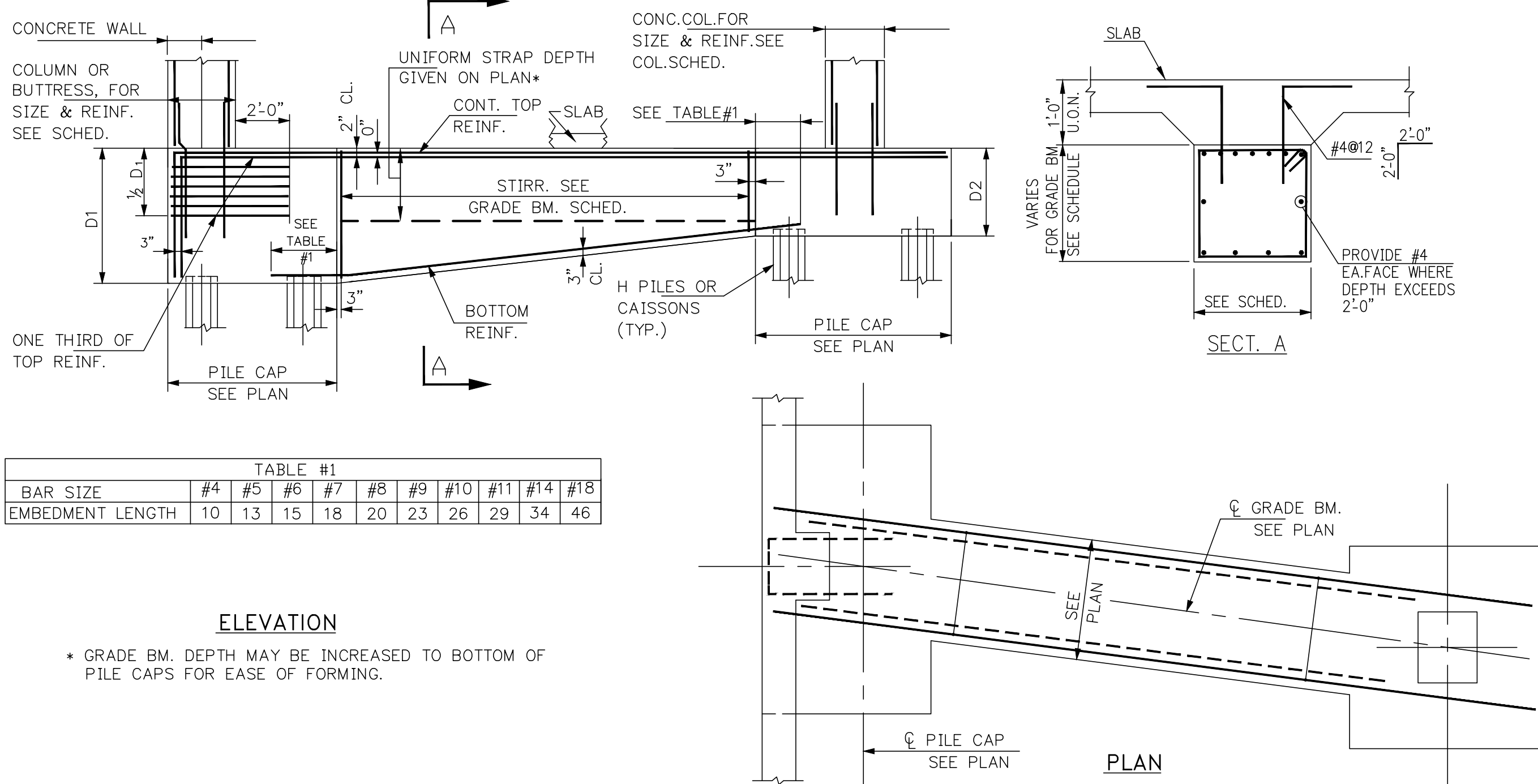
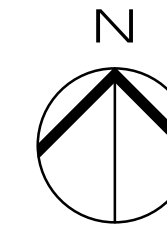
DOB STAMPS & SIGNATURES:

Victor Daza
[Signature]
APPROVED
Under Directive 2 of 1975
AMENDED APPLICATION
Date: 02/06/2018
NYC Development Hub

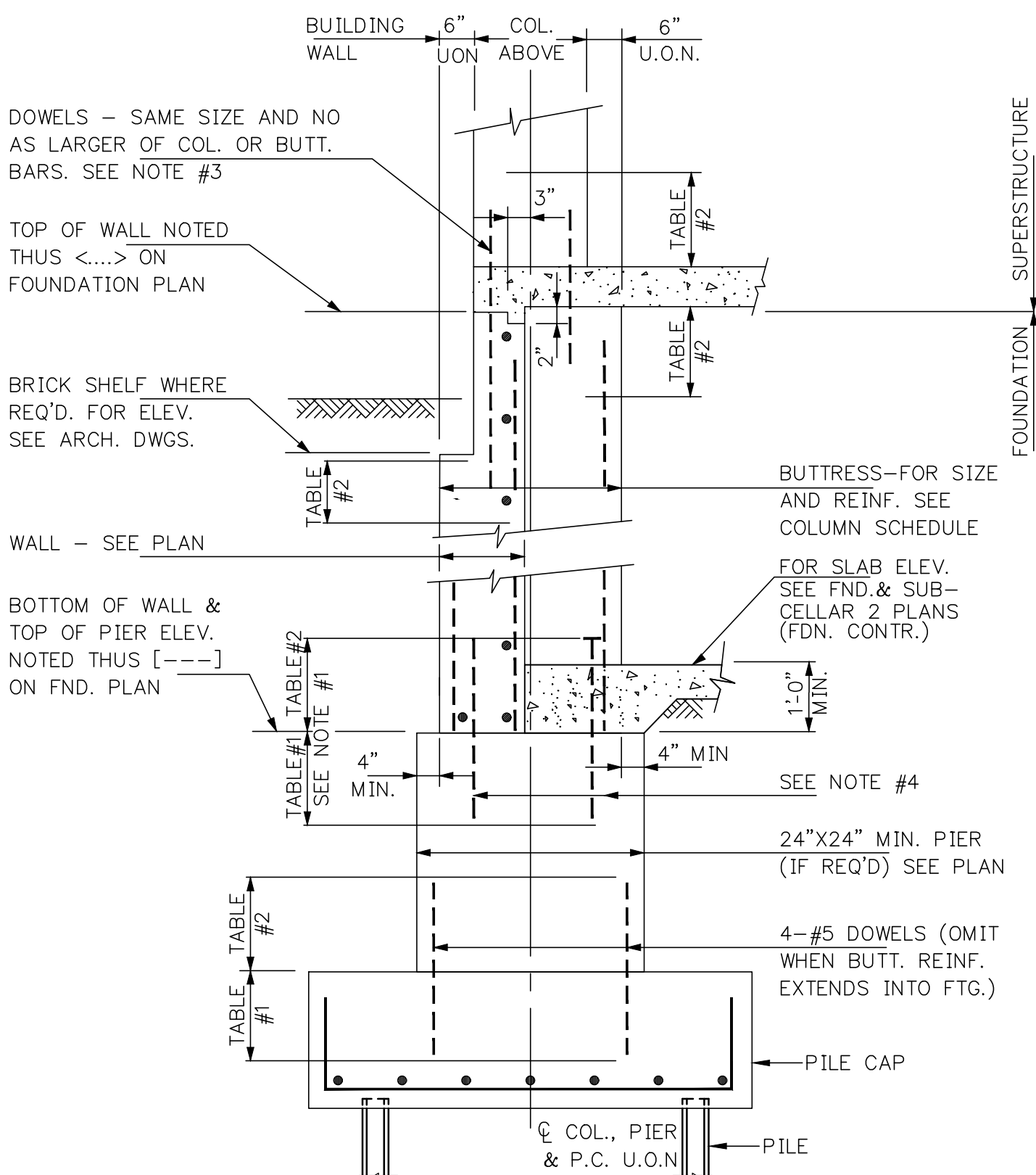
DRAWING TITLE:
 TYPICAL FOUNDATION
 DETAILS 1
 NB#XXXXXXXXXX

DATE: 07/31/2015	
PROJECT #: 1490104	
SCALE: AS NOTED	
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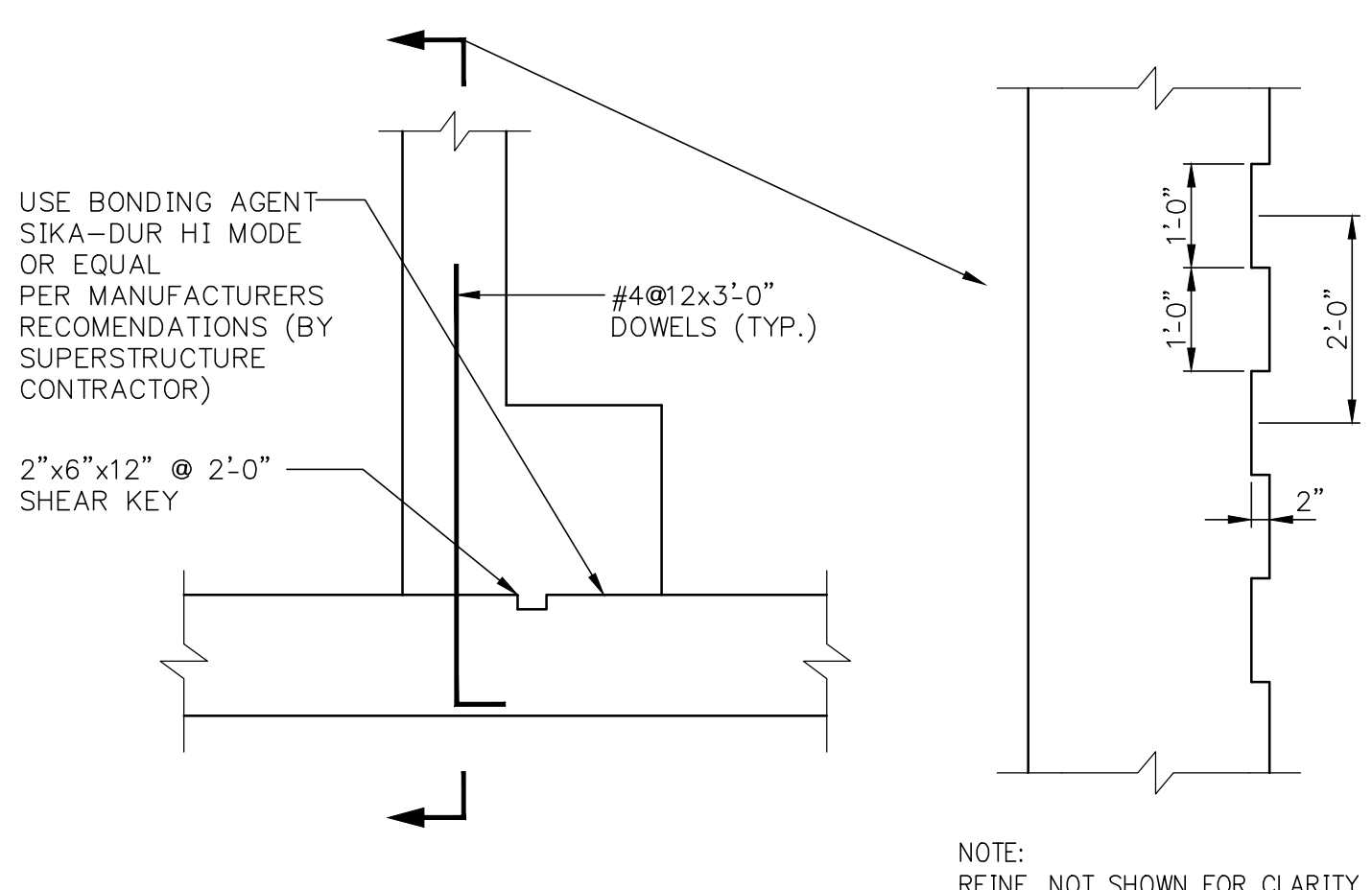
KEY PLAN



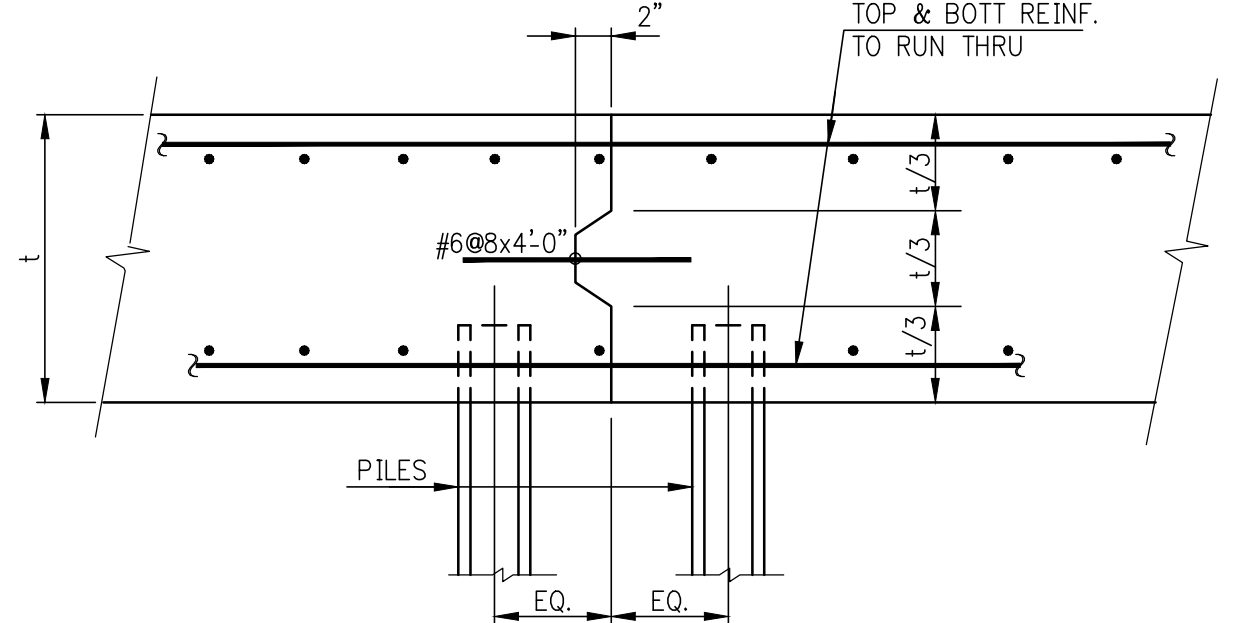
TYPICAL GRADE BEAM DETAIL



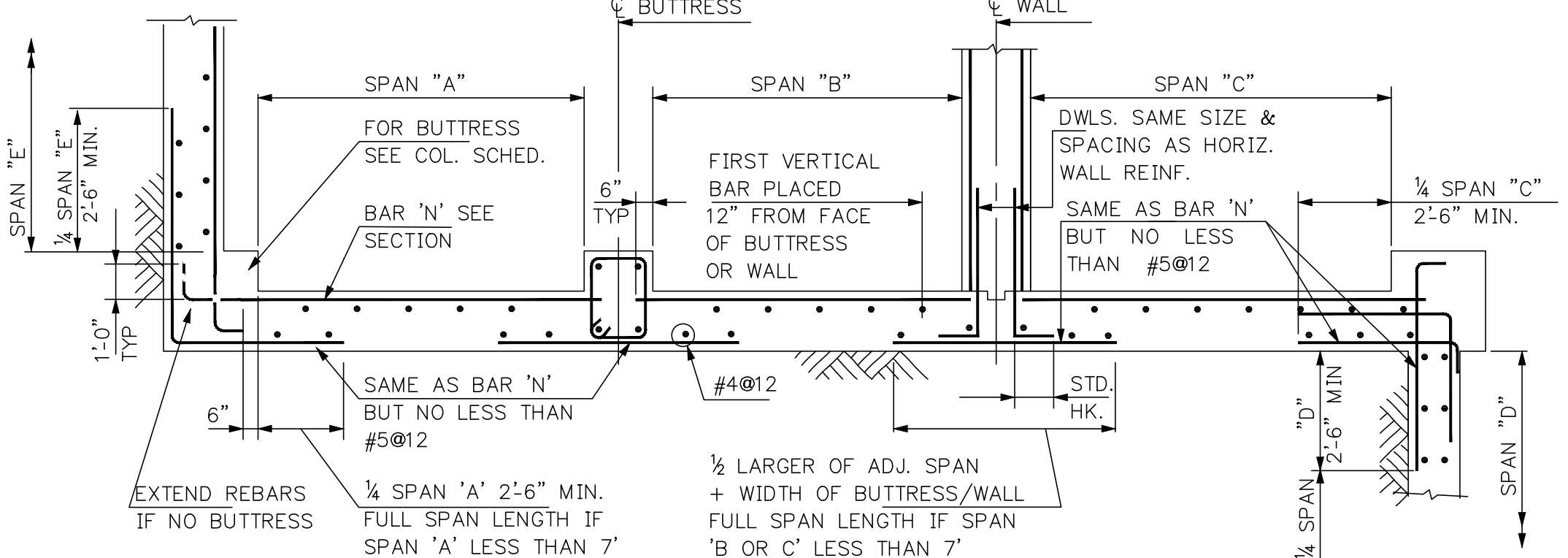
TYPICAL BUTTRESS DETAIL



TYPICAL BUTTRESS TO SHEAR WALL CONNECTION DETAIL



TYPICAL PILE CAP CONSTRUCTION JOINT DETAIL
FOR LOCATION SEE SHEAR WALL FOUNDATION DETAILS



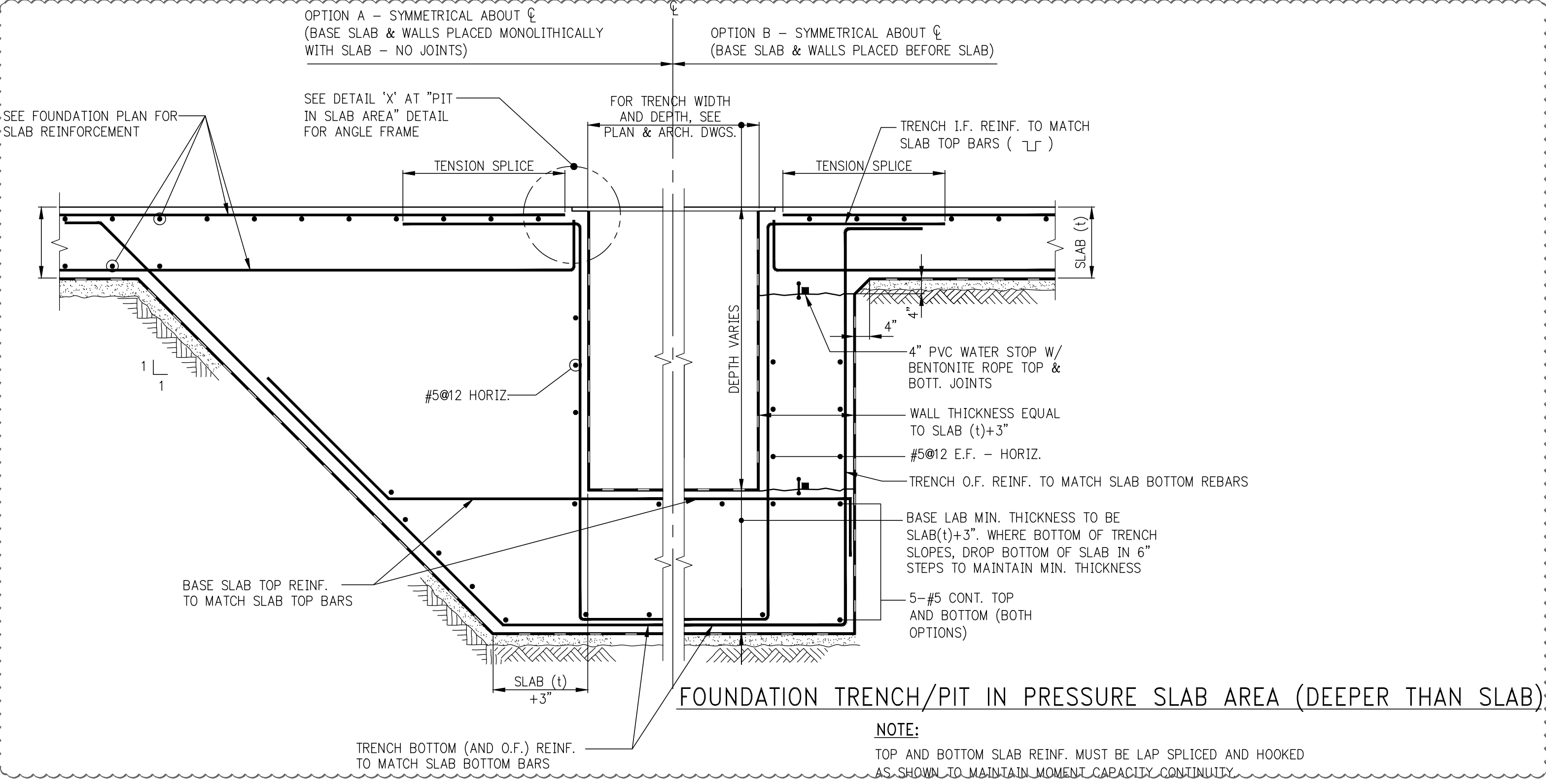
HORIZONTAL SECTION SHOWING METHOD OF PLACING WALL REINFORCEMENT

- NOTES:
1. WHEN PIER HEIGHT IS LESS THAN 2'-6" RUN BUTTRESS REINF. INTO FTG.
 2. MAXIMUM PIER UNREINF. HEIGHT TO BE 8 TIMES LEAST DIMENSION; FOR REINF. REQ'D WHEN HEIGHT EXCEEDS 8 TIMES LEAST DIMENSION; SEE GENERAL FOUNDATION NOTES
 3. WHERE GRADE BEAM HEIGHT IS LESS THAN 3'-0" CARRY DOWELS INTO PIER OR FOOTING.
 4. OMIT THESE BARS WHERE GRADE BEAM HEIGHT IS LESS THAN 3'-0"
 5. PROVIDE DOVETAIL TYPE MASONRY ANCHORS SPACED 2'-0" o.c. WHERE HEIGHT OF BRICK SHELF EXCEEDS 1'-6"

TABLE #1									
BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11	#14
EMBEDMENT LENGTH	10	13	15	18	20	23	26	29	34

TABLE #2									
BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11	#14
EMBEDMENT LENGTH	10	13	15	18	20	23	26	29	34

NOTE: WHEN SPlicing FROM f_y=75 KSI TO f_y=60 KSI, USE 30 DIA



13	06/02/2017	DOS SUBMISSION
12	04/14/2017	SUBMIT FOR CONSTRUCTION
11	12/02/2016	85% CD
10	10/02/2016	90% CD UPDATED SET
9	04/15/2016	POST APPROVAL AMENDMENT
8	04/15/2016	SUPERSTRUCTURE AWARD SET
7	09/24/2015	DOS SUBMISSION
6	08/09/2015	FOUNDATION SET
5	07/07/2015	DOS SUBMISSION
4	07/20/2015	100% CD
3	03/20/2015	50% CD
2	03/02/2015	30% CD
1	12/17/2015	100% CD

Number: Date: Revision:

OWNER: GID DEVELOPMENT
125 HIGH STREET
HIGH STREET TOWER, 27TH FLOOR
BOSTON, MA 02110

PROJECT: RIVERSIDE CENTER BUILDING 3
NEW YORK, NY

EXECUTIVE ARCHITECT: GHWA
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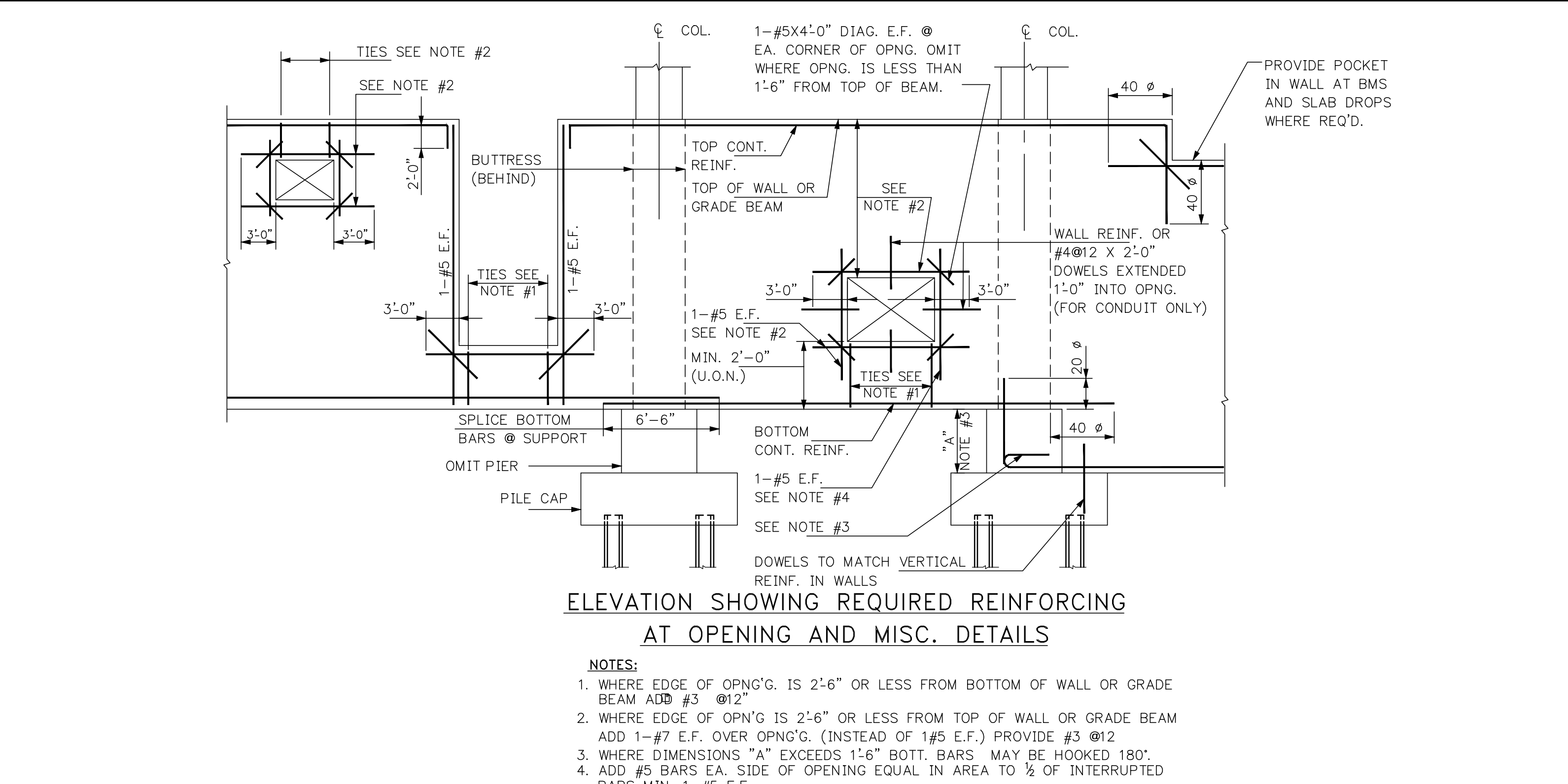
STRUCTURAL ENGINEER: WSP BUILDING STRUCTURES
CONSULTING ENGINEERS
228 East 45th St, 3rd Floor
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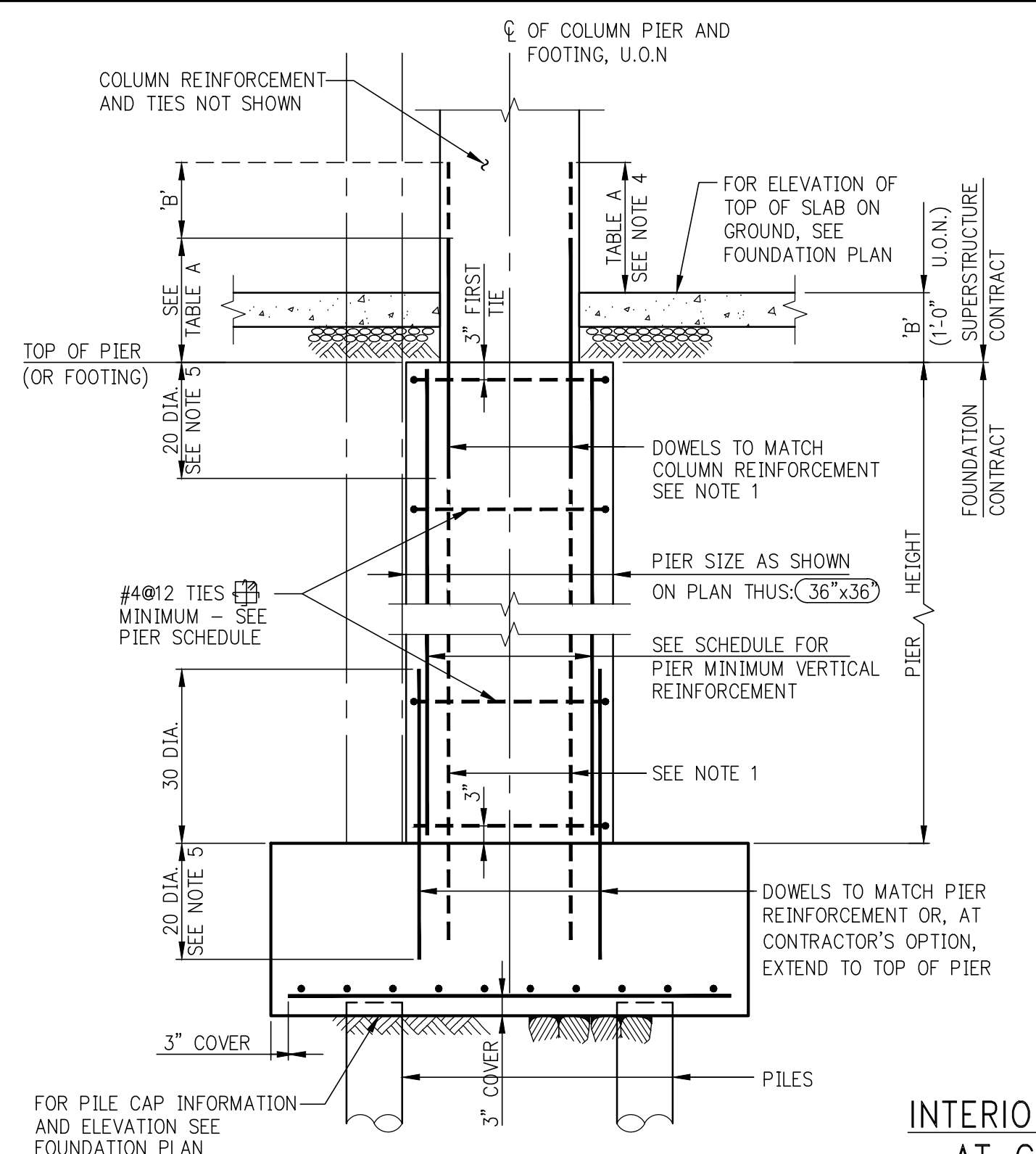
DOS STAMPS & SIGNATURES: Victor Daza
Under Certificate of Signatory
NYC Development Hub

DWG TITLE: TYPICAL FOUNDATION DETAILS 2
NB#XXXXXXXX

SCALE: AS NOTED
FO-201.01
DWG NO.



ELEVATION SHOWING REQUIRED REINFORCING AT OPENING AND MISC. DETAILS

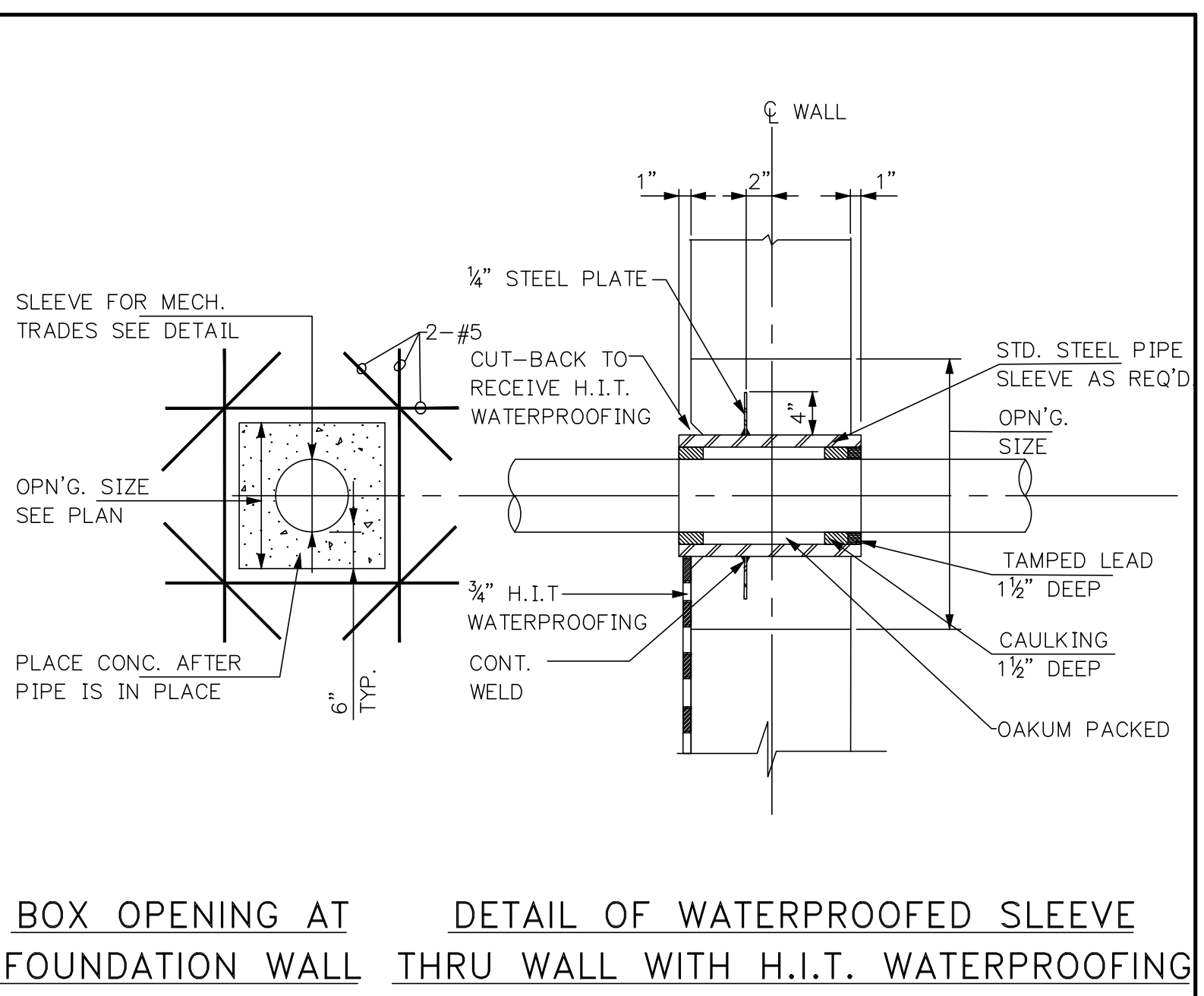


INTERIOR FOOTING AND PIER AT CONCRETE COLUMN

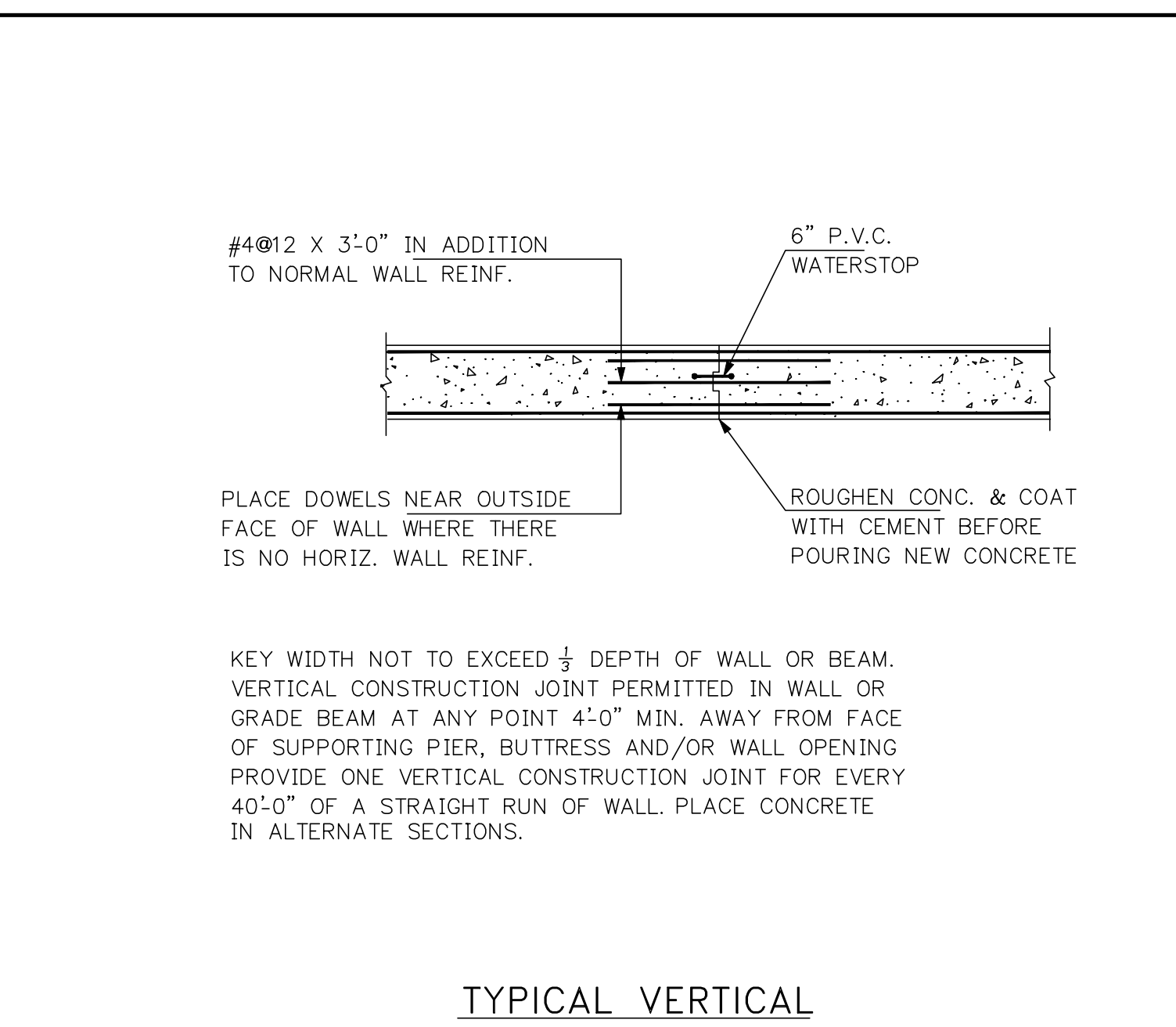
- NOTES:
1. WHERE PIER HEIGHT IS LESS THAN EMBEDMENT LENGTH OF COLUMN DOWELS, EMBED DOWELS IN FOOTING AND EXTEND THROUGH PIER INTO COLUMN ABOVE.
 2. AT CONTRACTOR'S OPTION, A SHORT PIER MAY BE ELIMINATED BY THICKENING THE COLUMN FOOTING TO THE TOP OF PIER ELEVATION.
 3. MAXIMUM PIER HEIGHT TO BE EIGHT TIMES THE LEAST PIER DIMENSION. INCREASE PIER SIZE AS REQUIRED TO MAINTAIN THIS RATIO.
 4. WHEN SLAB ON GROUND IS POURED BEFORE COLUMN, INCREASE LENGTH OF DOWELS BY DIMENSION 'B' (FROM TOP OF PIER TO TOP OF SLAB). IN ADDITION, IF COLUMN CONCRETE STRENGTH IS GREATER THAN 1.4 TIMES SLAB CONCRETE STRENGTH, THE SLAB CONCRETE STRENGTH MUST BE INCREASED LOCALLY TO MATCH COLUMN CONCRETE STRENGTH FOR A DISTANCE OF 2 FEET IN ALL DIRECTIONS FROM COLUMN FACES.
 5. IF GRADE 75 COLUMN REINFORCEMENT IS USED, INCREASE DOWEL EMBEDMENT LENGTH TO 24 DIAMETERS.
 6. MINIMUM CONCRETE STRENGTH OF f_c=4,000 PSI IS REQUIRED FOR PIER AND FOOTING. SEE PLANS AND NOTES FOR GREATER STRENGTH REQUIREMENTS.

PIER: MINIMUM VERTICAL REINFORCEMENT		
PIER SIZE (OR EQUIVALENT)	VERTICAL REINF.	
UP TO 36x36	8-#6	
37x37 TO 48x48	12-#6	
49x49 TO 54x54	12-#7	
55x55 TO 66x66	16-#7	
67x67 TO 84x84	16-#8	

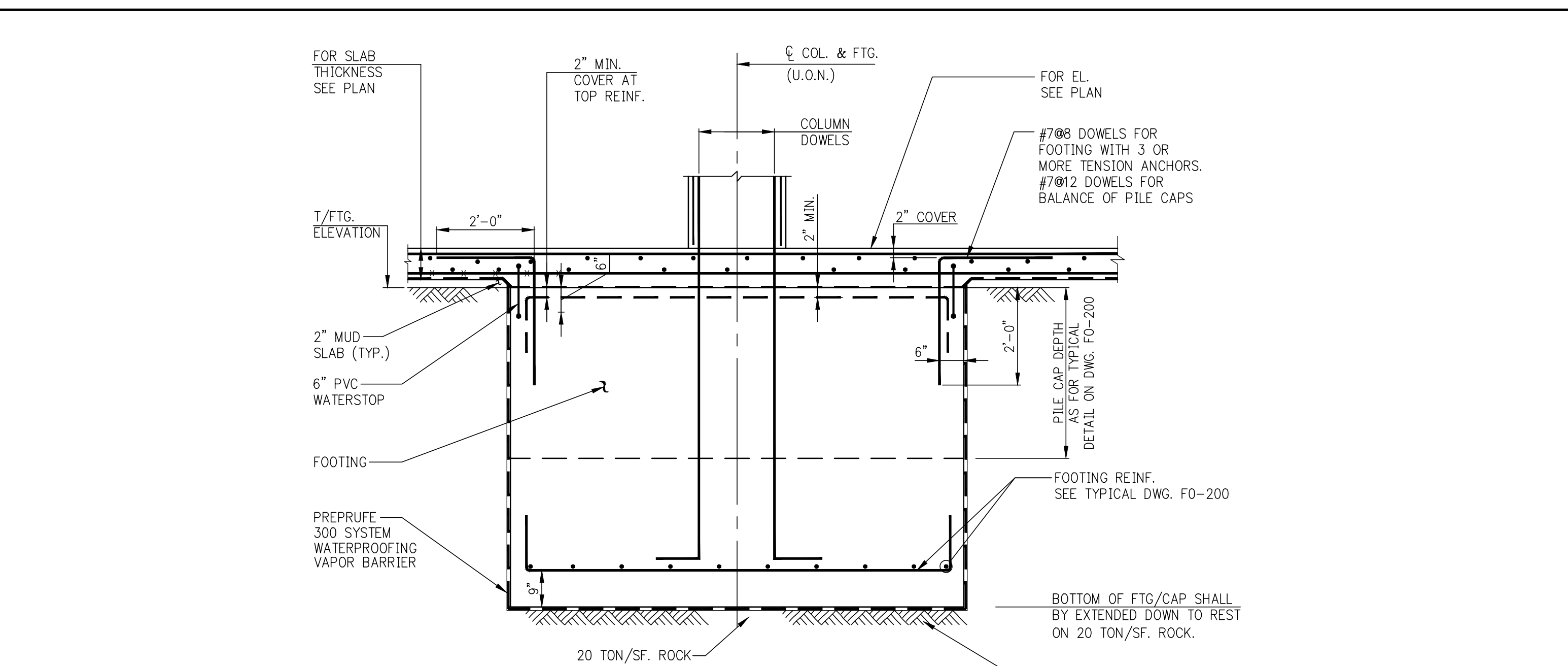
TABLE A COMPRESSION LAP SPLICED LENGTH		
BAR SIZE	f _y =60 KSI	f _y =75 KSI
#5 TO #11	30 DIA.	44 DIA.



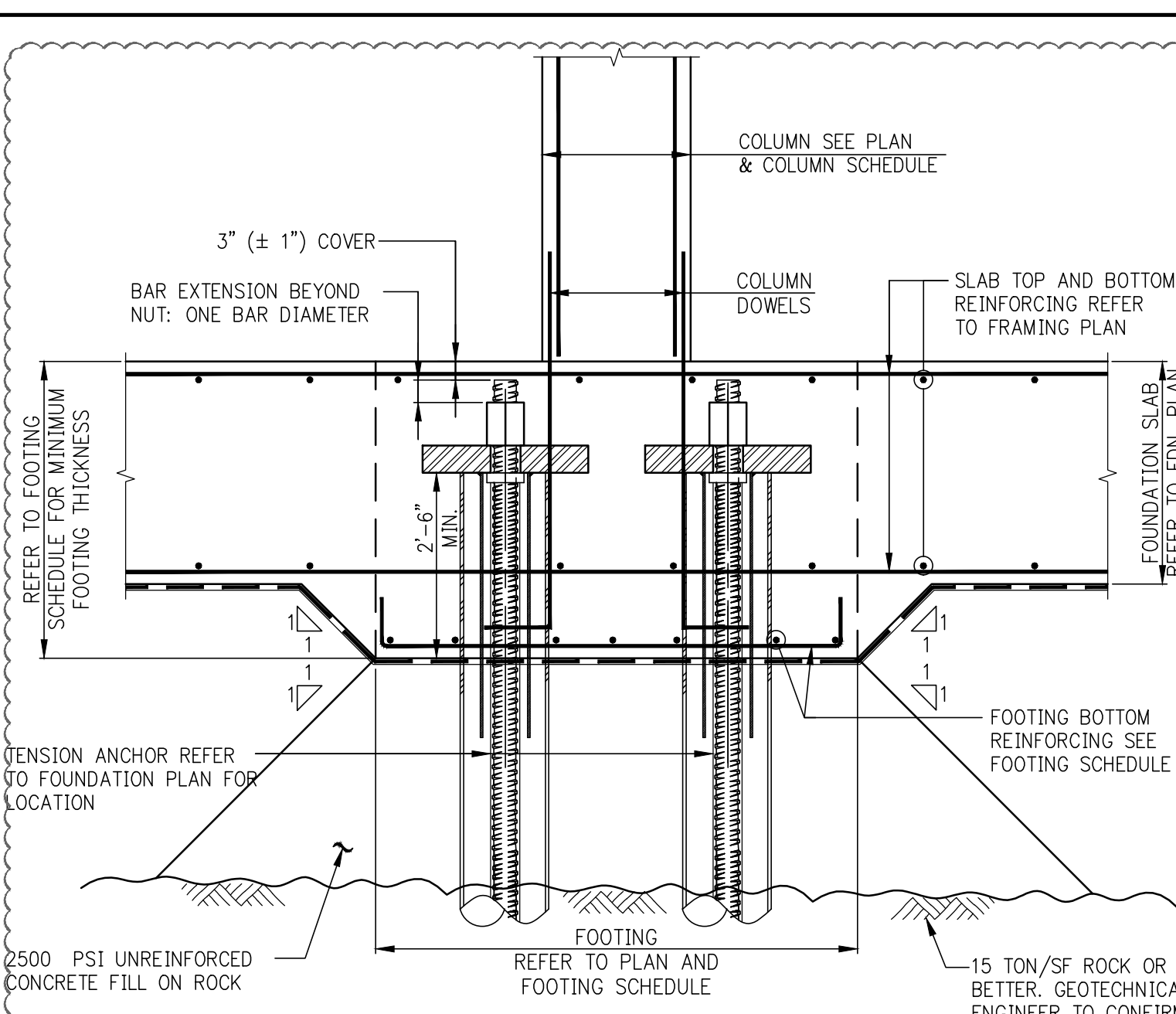
BOX OPENING AT DETAIL OF WATERPROOFED SLEEVE FOUNDATION WALL THRU WALL WITH H.I.T. WATERPROOFING



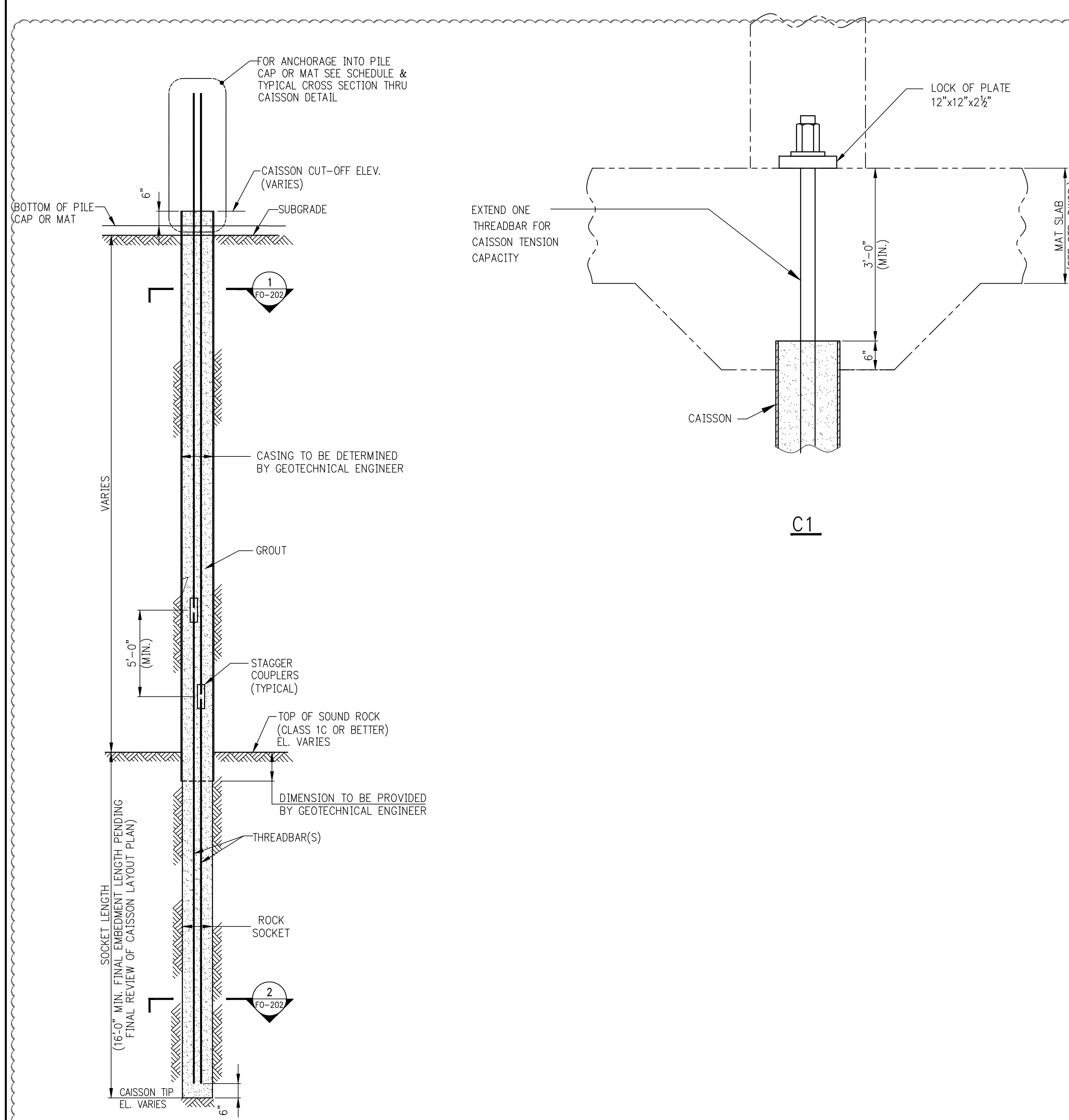
TYPICAL VERTICAL CONSTRUCTION JOINT IN WALL



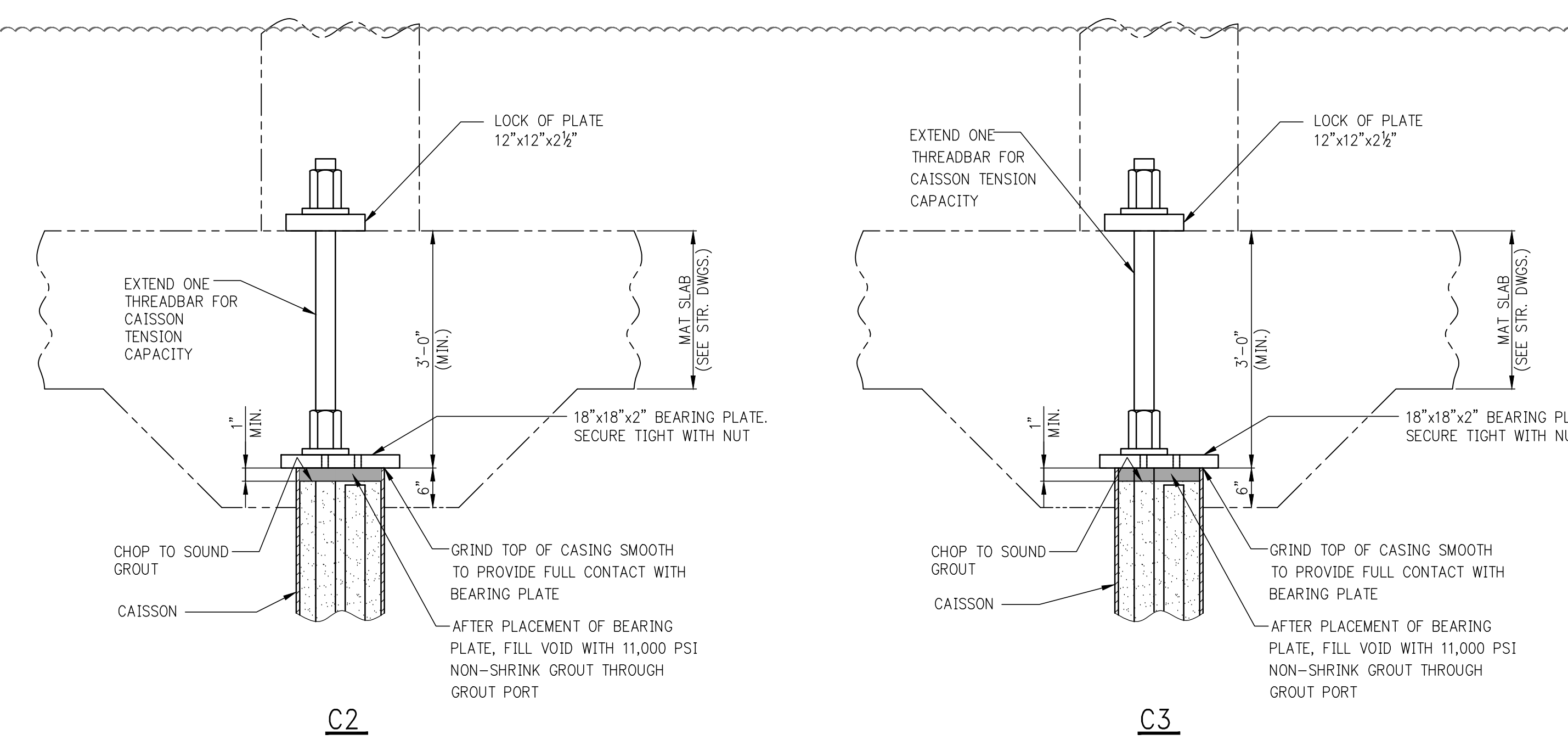
TYPICAL FOOTING DETAIL ON 20 ton/sf ROCK
SCALE: 3/4" = 1'-0"



TYPICAL FOOTING IN MAT DETAIL
SCALE: 3/4" = 1'-0"

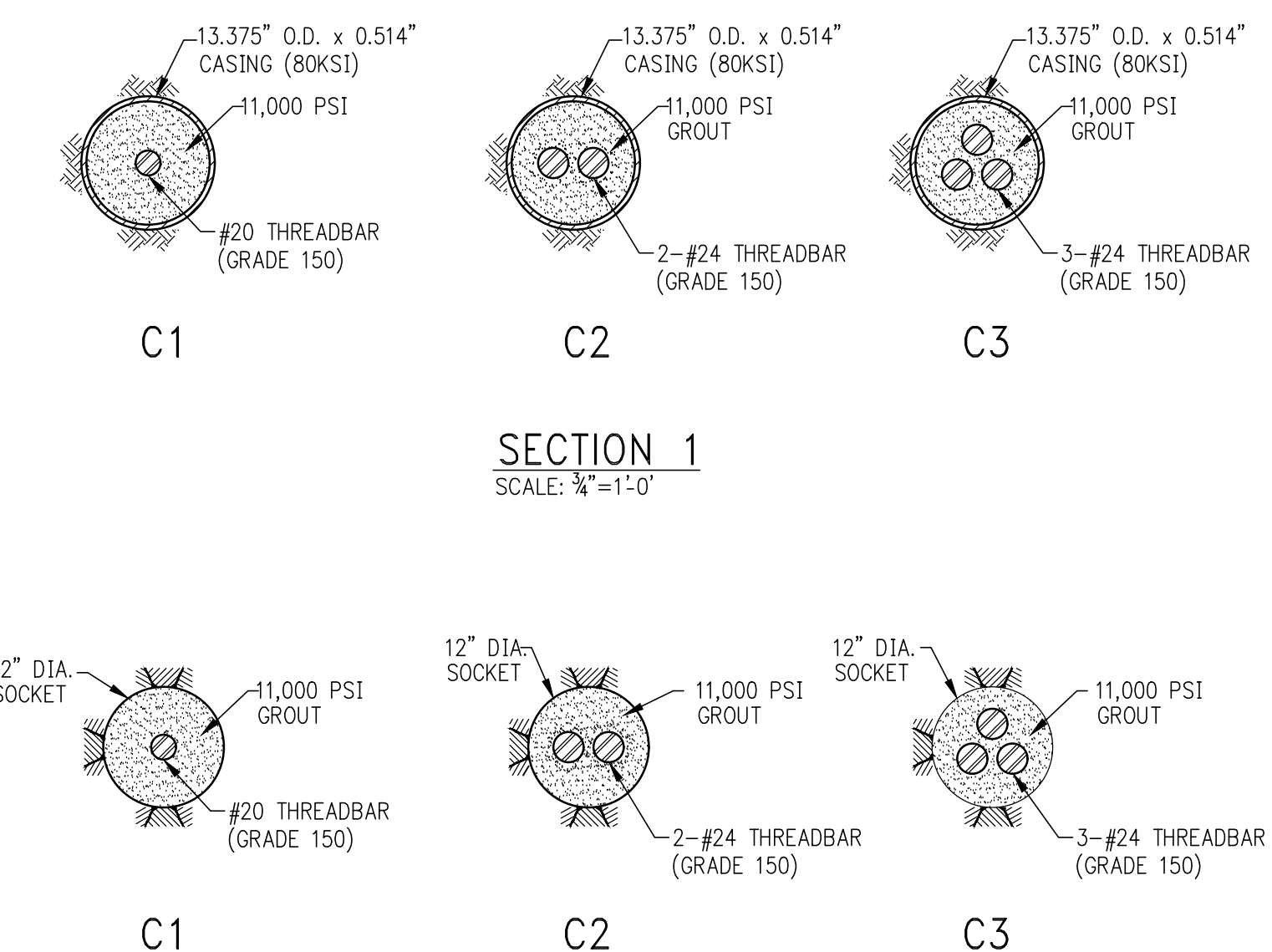


TYPICAL CAISSON DETAIL-ELEVATION
SCALE: N.T.S.



TYPICAL CAISSON ANCHORAGE DETAIL
SCALE: 3/4" = 1'-0"

NOTE: APPLIES TO SINGLE CAISSON ONLY. FOR GROUP OF 2 OR MORE CAISSON REFER TO TYPICAL CAISSON CAP DETAILS ON FD-200.



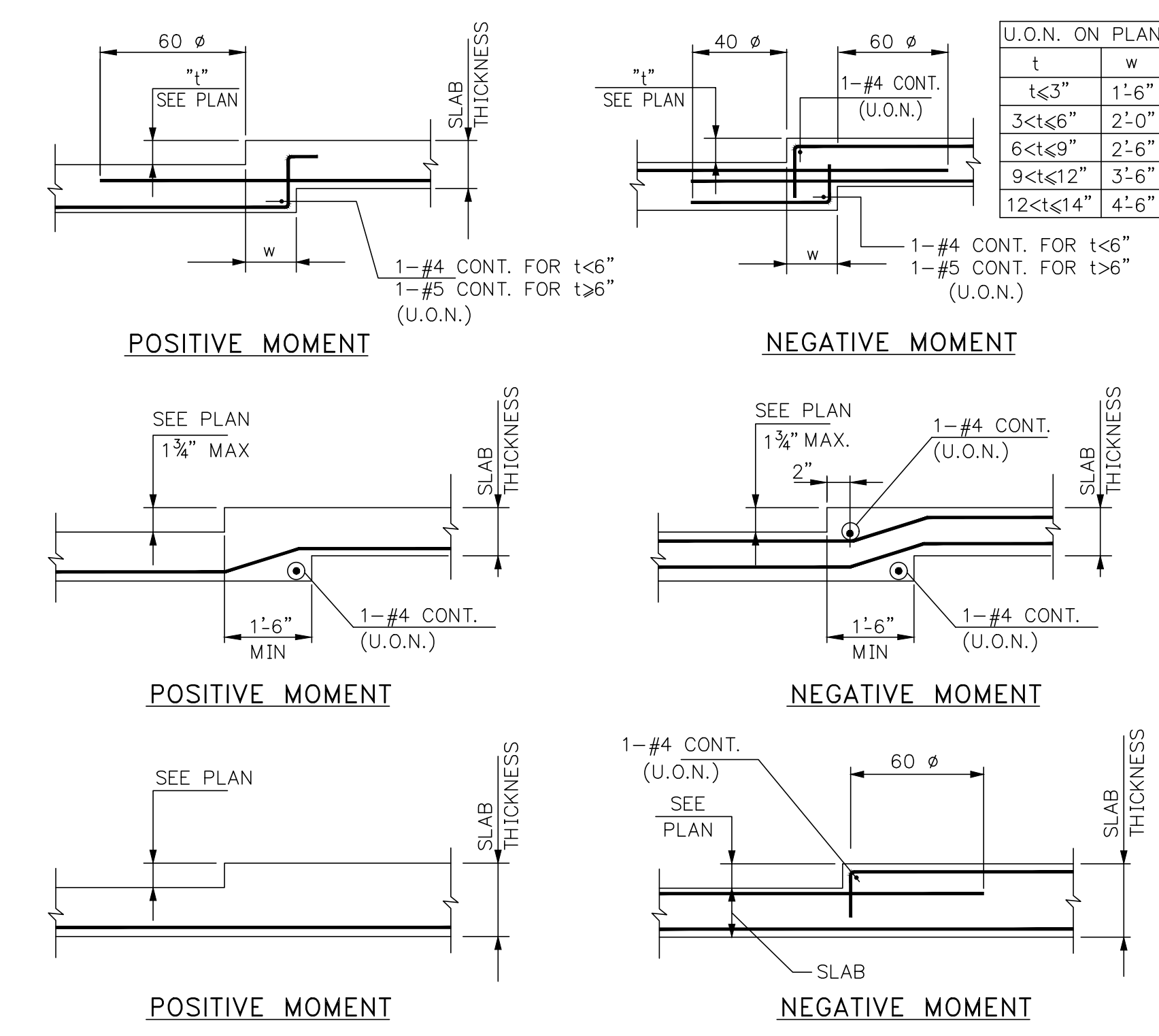
CAISSON SCHEDULE						
MARK	COMPRESSION CAPACITY	TENSION CAPACITY	OUTSIDE DIAMETER	WALL THICKNESS	REINFORCEMENT ENTIRE LENGTH	MIN. SOCKET LENGTH IN ROCK
C1	300 TONS	150 TONS	13 3/4"	3/4" STEEL GRADE 80 (MIN)	(1) - #20 GRADE 150	*
C2	450 TONS	225 TONS	13 3/4"	3/4" STEEL GRADE 80 (MIN)	(2) - #24 GRADE 150	*
C3	600 TONS	330 TONS	13 3/4"	3/4" STEEL GRADE 80 (MIN)	(3) - #24 GRADE 150	*

* REFER TO TYPICAL CAISSON DETAIL - ELEVATION FOR REQUIRED SOCKET LENGTH.

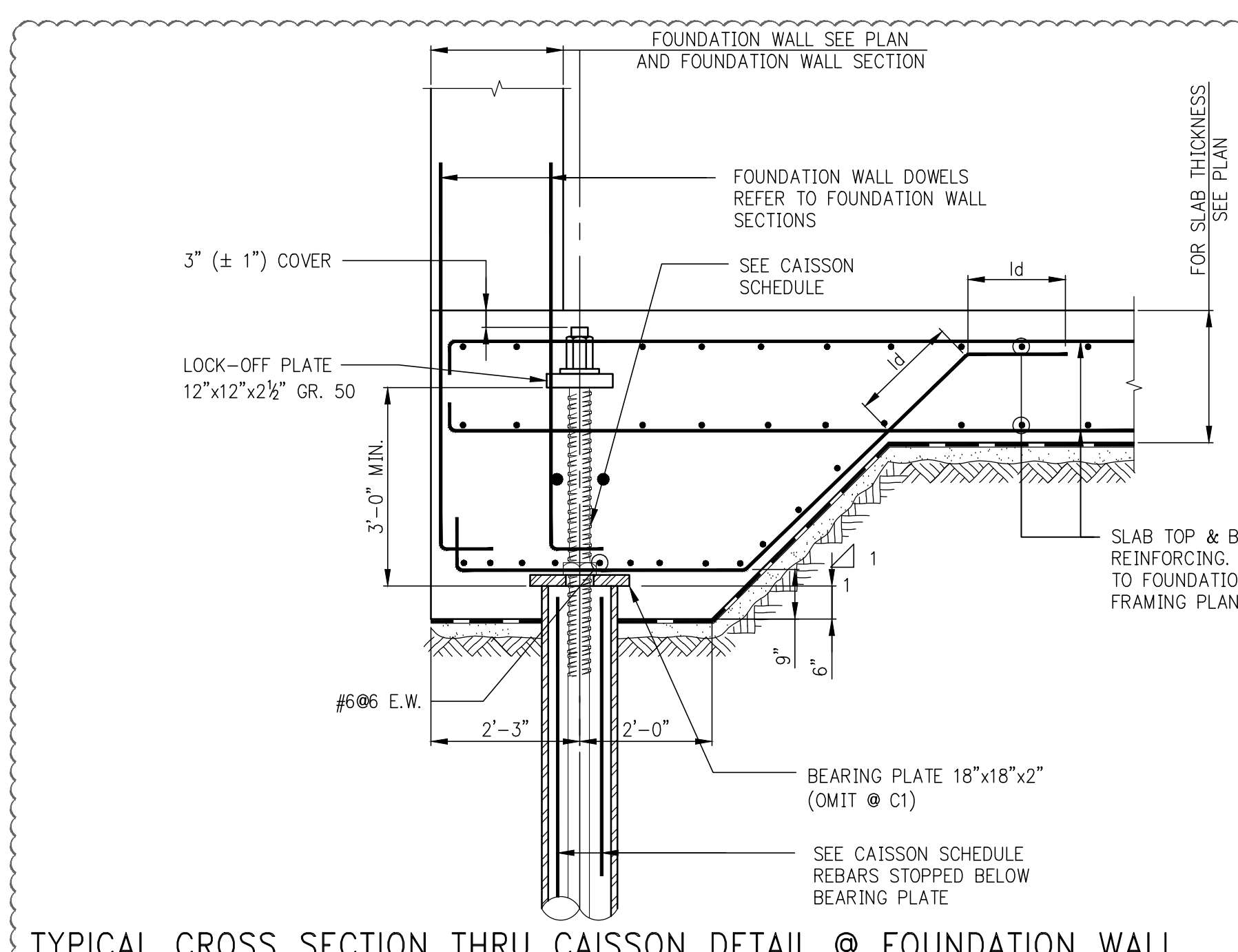
CAISSON NOTES:

- THE DESIGN AND INSTALLATION OF CAISSONS, CAISSON CAPS, AND RELATED CONSTRUCTION IS TO CONFORM TO THE REQUIREMENTS SET FORTH IN THE 2008 NEW YORK CITY BUILDING CODE, AND SPECIFICATIONS.
- FOR CAISSON REINFORCEMENT AND CAPACITY SEE SCHEDULE.
- CAISSON INSTALLATION TO BE SUBJECTED TO SPECIAL INSPECTION BY ENGINEER LICENSED IN NEW YORK STATE.
- FOR CAISSON INSTALLATION NOTES SEE PROJECT TECHNICAL SPECIFICATIONS SECTION 316333.
- STEEL PIPE CASING WILL BE OF THE MINIMUM SIZE AND YIELD STRENGTH INDICATED ON THE SECTIONS. COUPLERS SHALL BE FLUSH-THREADED.
- THREADBAR WILL BE OF THE SIZE AND GRADE INDICATED ON THE SECTIONS. COUPLERS SHALL BE STOP-TYPE CAPABLE OF DEVELOPING THE FULL TENSILE CAPACITY OF THE BAR. CENTRALIZERS WILL BE PROVIDED FOR BUNDLED OR SINGLE THREADBARS AT A MAXIMUM SPACING OF 10'-0" ON CENTER.
- GROUT WILL HAVE A MINIMUM COMPRESSIVE STRENGTH INDICATED ON THE SECTIONS AT 28 DAYS.
- CAISSON ROCK SOCKETS WILL BE OF THE MINIMUM DIAMETER AND LENGTH INDICATED ON THE SECTIONS AND WILL BE IN CLASS 10 ROCK OR BETTER.
- AT COMPLETION OF DRILLING THE CAISSON ROCK SOCKET, A VIDEO INSPECTION OF THE SOCKET WILL BE PERFORMED. PRIOR TO CONTINUING CAISSON INSTALLATION, THE VIDEO WILL BE PROVIDED TO THE ENGINEER. THE FINAL SOCKET LENGTH SHALL BE DETERMINED BY THE ENGINEER BASED ON THE RESULTS OF THE VIDEO INSPECTION.
- THE OWNER SHALL RETAIN THE SERVICES OF AN INDEPENDENT TESTING LABORATORY TO MAKE A SET OF 6 TEST CYLINDERS EACH DAY GROUT IS CAST AND PERFORM 2 TESTS EACH AT 7, 14 AND 28 DAYS. GROUT TEST RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- A PLAN SHOWING THE IDENTIFICATION OF ALL CAISSONS AND A CAISSON NUMBERING PLAN IS TO BE SUBMITTED TO THE ENGINEER OF RECORD FOR FILING WITH THE BUILDING DEPARTMENT, PRIOR TO COMMENCEMENT OF DRILLED CAISSON INSTALLATION WORK AS REQUIRED BY 2008 NYC BUILDING CODE.
- LOAD TESTS TO BE PERFORMED AS PER THE REQUIREMENTS OF THE PROJECT TECHNICAL SPECIFICATIONS. LOCATION OF TEST CAISSONS TO BE APPROVED BY THE ENGINEER OF RECORD AND SPECIFICATION SECTION 316333.
- ALL CAISSON GROUPS TO BE CONCENTRIC WITH COLUMNS ABOVE UNLESS OTHERWISE NOTED ON PLAN.
- RECORDS OF PENETRATION OF EVERY CAISSON, AND THE BEHAVIOR OF SAME DURING DRILLING ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD.
- AN "AS-DRILLED" CAISSON LOCATION PLAN AND CAISSON LOGS ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL. NO CAISSON ARE TO BE PLACED BEFORE THIS IS DONE.

KEY PLAN

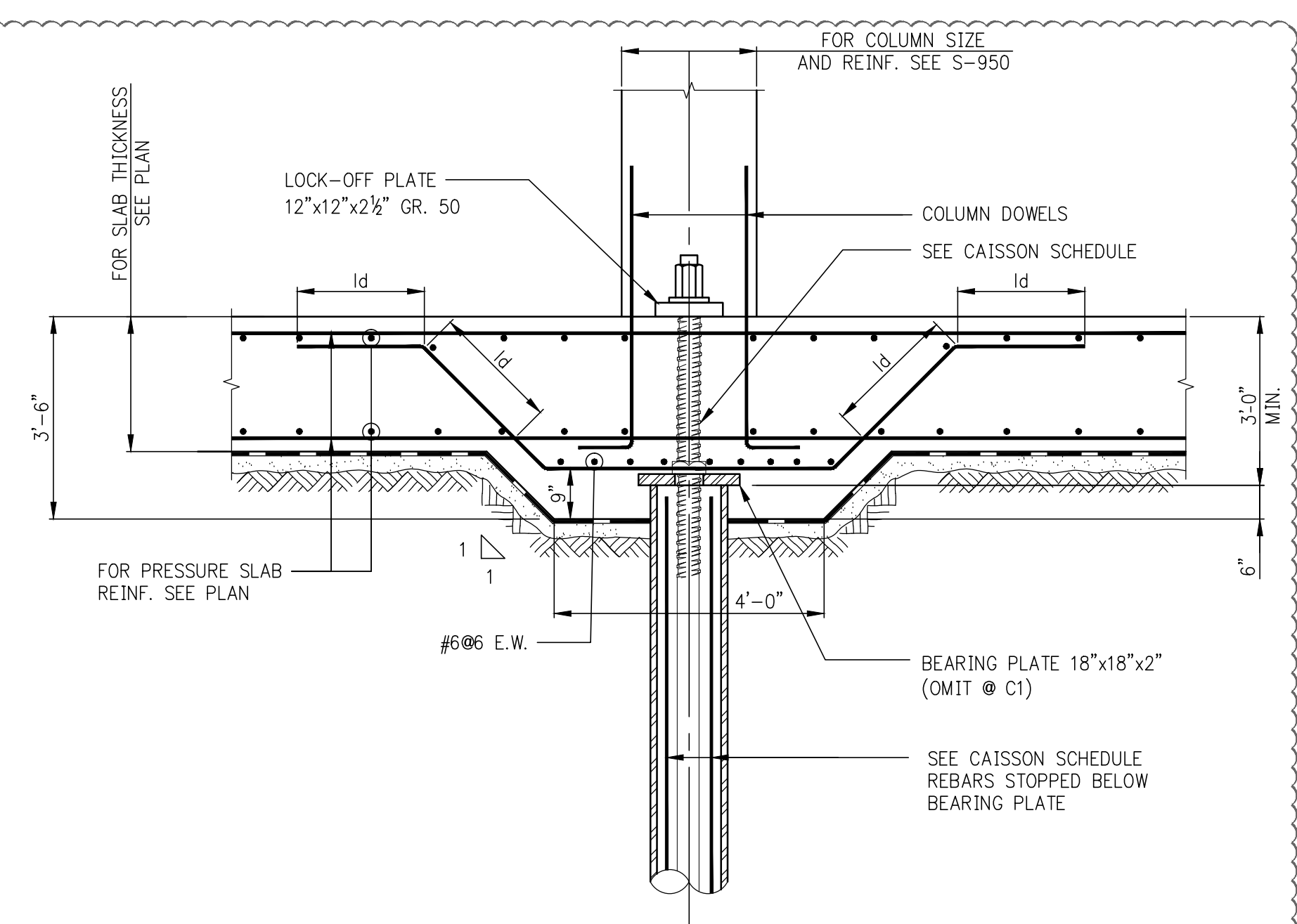


TYPICAL DETAILS OF DROPS IN SLABS



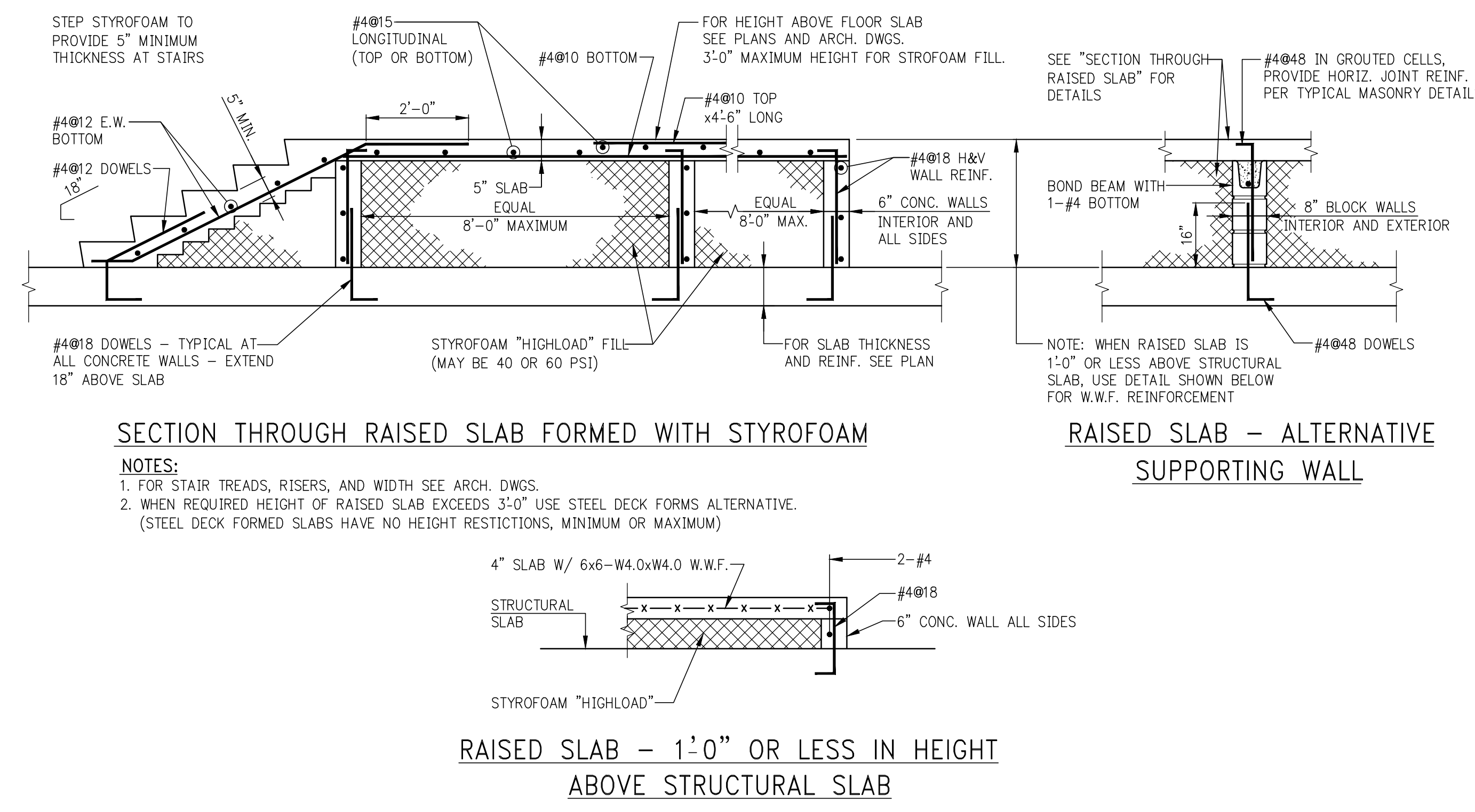
TYPICAL CROSS SECTION THRU CAISSON DETAIL @ FOUNDATION WALL
SCALE: 3/4" = 1'-0"

- NOTES:
- APPLIES TO SINGLE CAISSON ONLY. FOR GROUP OF 2 OR MORE CAISSON REFER TO TYPICAL CAISSON CAP DETAILS ON FD-200.
 - FOR BALANCE OF INFO. SEE TYPICAL CAISSON ANCHORAGE DETAILS C1, C2 & C3.

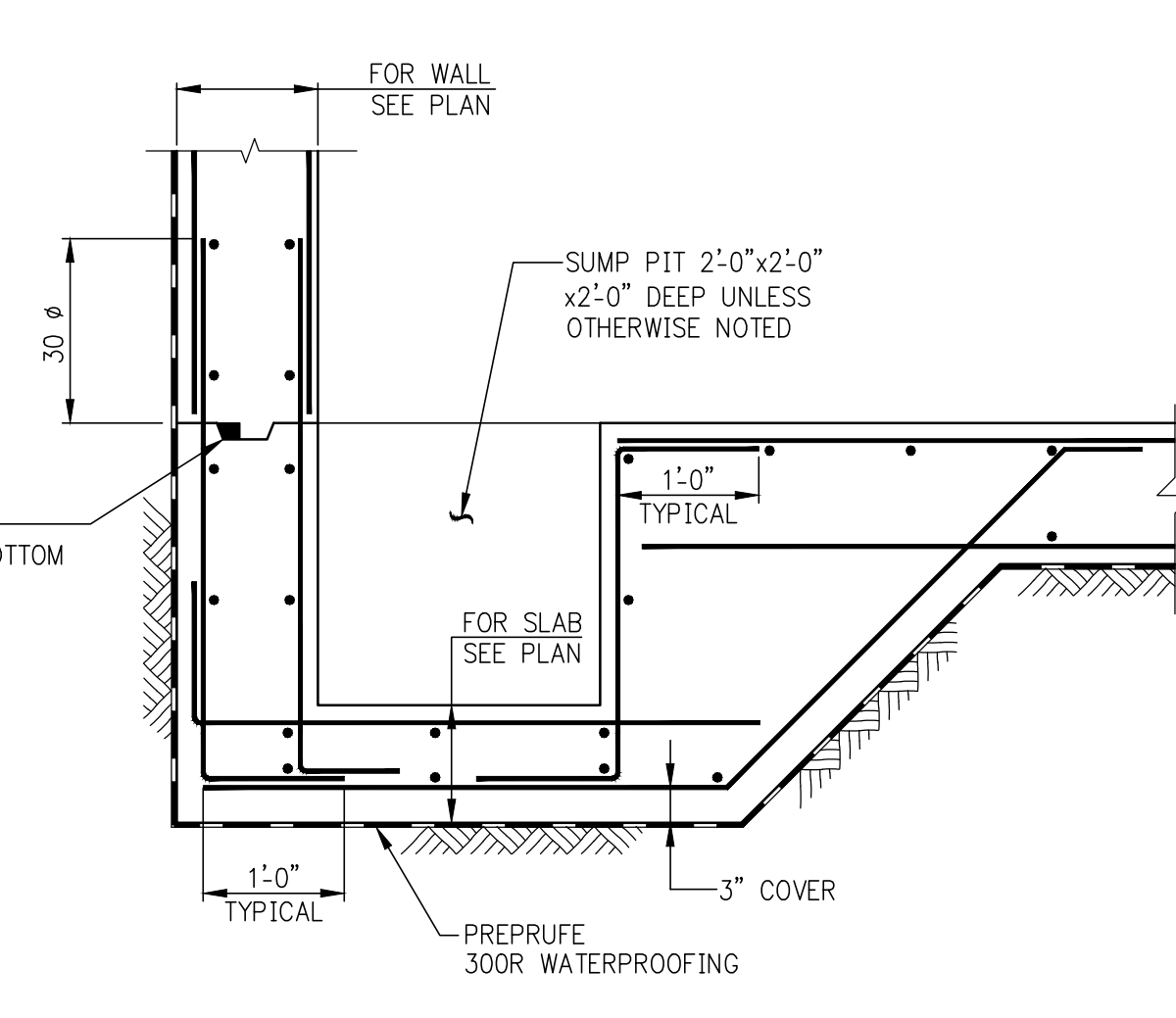


TYPICAL CROSS SECTION THRU CAISSON DETAIL
SCALE: 3/4" = 1'-0"

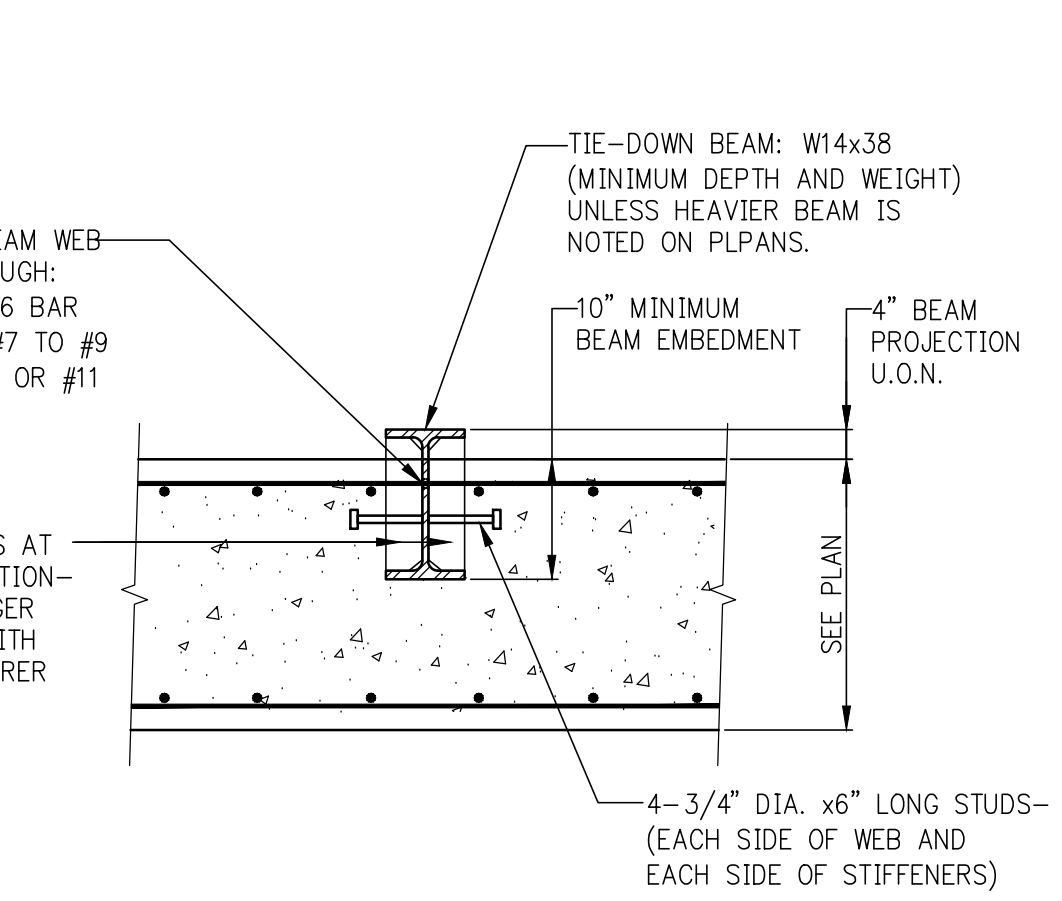
- NOTES:
- APPLIES TO SINGLE CAISSON ONLY. FOR GROUP OF 2 OR MORE CAISSON REFER TO TYPICAL CAISSON CAP DETAILS ON FD-200.
 - FOR BALANCE OF INFO. SEE TYPICAL CAISSON ANCHORAGE DETAILS C1, C2 & C3.



RAISED SLAB - 1'-0" OR LESS IN HEIGHT ABOVE STRUCTURAL SLAB



SUMP PIT TYPICAL DETAIL U.O.N. ON PLAN



ELEVATOR TIE-DOWN BEAM

BEAM AND SLAB CONCRETE PLACEMENT AT HIGH STRENGTH CONCRETE COLUMN OR WALL

- NOTES:
- IN CONFORMANCE WITH 10.13 OF ACI 318-11 USE THIS DETAIL WHEN THE SPECIFIED CONCRETE STRENGTH IN COLUMN/WALL IS GREATER THAN 1.4 TIMES THAT SPECIFIED FOR THE FLOOR SYSTEM.
 - CAP SHALL BE NORMAL-WEIGHT STONE CONCRETE, EQUAL IN STRENGTH TO THAT SPECIFIED FOR THE COLUMN/WALL. CAP SHALL EXTEND BEYOND COLUMN/WALL IN ALL DIRECTIONS AS SHOWN ABOVE.
 - THE BALANCE OF CONCRETE IN SLAB AND BEAMS SHALL BE PLACED WHILE CAP CONCRETE IS STILL IN A WORKABLE PLASTIC CONDITION, BEFORE INITIAL SET. RETEMPERING OF CONCRETE WILL NOT BE PERMITTED.
 - IN LIEU OF PLACING TWO DIFFERENT STRENGTHS OF CONCRETE WITHIN THE SAME FLOOR SYSTEM, THE CONTRACTOR MAY ERECT (AT NO ADDITIONAL COST TO THE OWNER) TO PLACE ONE STRENGTH THROUGHOUT THE ENTIRE FLOOR. THE MINIMUM FLOOR CONCRETE STRENGTH REQUIRED BY ACI CODE WOULD BE 0.72 TIMES THE SPECIFIED STRENGTH OF CONCRETE IN THE COLUMNS/WALLS, UP TO 10,000 PSI COLUMN/WALL CONCRETE.
 - WHEN COLUMN/WALL CONCRETE STRENGTH EXCEEDS 10,000 PSI, THE CAP DETAILS SHOWN ABOVE MUST BE FOLLOWED, USING CAPS OF SAME CONCRETE STRENGTH AS IN COLUMNS/WALLS, AND THE STRENGTH SPECIFIED ON THE DRAWINGS FOR THE BALANCE OF THE FLOOR SYSTEM.

Number	Date	Revision
13	06/02/2017	DOS SUBMISSION
12	04/14/2017	SUBMIT FOR CONSTRUCTION
11	12/02/2016	85% CD
10	10/02/2016	85% CD UPDATED SET
9	04/15/2016	POST APPROVAL AMENDMENT
8	04/15/2016	SUPPERSTRUCTURE AWARD SET
7	09/24/2015	DOS SUBMISSION
6	08/09/2015	FOUNDATION SET
5	07/07/2015	DOS SUBMISSION
4	07/20/2015	100% DD
3	03/23/2015	50% DD
2	03/02/2015	30% FILING
1	12/17/2015	100% DD

OWNER:
GID DEVELOPMENT
125 HIGH STREET
HIGH STREET TOWER, 27TH FLOOR
BOSTON, MA 02110

PROJECT:
RIVERSIDE CENTER BUILDING 3
NEW YORK, NY

EXECUTIVE ARCHITECT:
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Goldstein, Hill & West Architects, LLP
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CONSULTING ENGINEERS
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Tel: (212) 687-9888 Fax: (646) 487-5501

WSP BUILDING SYSTEMS
CONSULTING ENGINEERS
512 Seventh Avenue
New York, NY 10018
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DWG TITLE:
TYPICAL FOUNDATION
DETAILS 3
NB#XXXXXXXX

SCALE: AS NOTED
FO-202.01
DWG NO.

TABLE #1: TENSION LAP SPLICE LENGTHS (CLASS B MINIMUM)																		
TABLE 1.A: ¾" COVER TO OUTER LAYER BARS OUTER LAYER LAP LENGTHS (IN INCHES)										TABLE 1.C: 1½" COVER TO OUTER LAYER BARS OUTER LAYER LAP LENGTHS (IN INCHES)								
NOTE: USE TABLE 1.A IF BAR SPACING IS LESS THAN 4" O/C UP TO #8, 5" O/C FOR #9, #10, #11										NOTE: USE TABLE 1.A IF BAR SPACING IS LESS THAN 4" O/C UP TO #8, 5" O/C FOR #9, #10, #11								
BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000		BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
#3	16	16	16	16	16	16	16	16		#3	16	16	16	16	16	16	16	16
#4	21	20	20	20	20	20	20	20		#4	20	20	20	20	20	20	20	20
#5	31	27	24	24	24	24	24	24		#5	24	24	24	24	24	24	24	24
#6	43	37	33	30	29	29	29	29		#6	29	29	29	29	29	29	29	29
#7	69	60	53	49	45	42	40	38		#7	42	37	34	34	34	34	34	34
#8	85	74	66	60	56	52	49	47		#8	53	46	41	39	39	39	39	39
#9	103	89	80	73	67	63	59	56		#9	66	57	51	46	44	44	44	44
#10	121	105	94	86	79	74	70	66		#10	79	68	61	56	51	49	49	49
#11	140	122	109	99	92	86	81	77		#11	92	80	72	65	60	57	54	54
TABLE 1.B: ¾" COVER TO OUTER LAYER BARS INNER LAYER LAP LENGTHS (IN INCHES)										TABLE 1.D: 1½" COVER TO OUTER LAYER BARS INNER LAYER LAP LENGTHS (IN INCHES)								
NOTE: USE TABLE 1.A IF BAR SPACING IS LESS THAN 4" O/C UP TO #8, 5" O/C FOR #9, #10, #11										NOTE: USE TABLE 1.A IF BAR SPACING IS LESS THAN 5" O/C UP TO #8, 6" O/C FOR #9, #10, #11								
BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000		BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
#3	16	16	16	16	16	16	16	16		#3	16	16	16	16	16	16	16	16
#4	20	20	20	20	20	20	20	20		#4	20	20	20	20	20	20	20	20
#5	24	24	24	24	24	24	24	24		#5	24	24	24	24	24	24	24	24
#6	30	29	29	29	29	29	29	29		#6	29	29	29	29	29	29	29	29
#7	48	42	38	34	34	34	34	34		#7	37	34	34	34	34	34	34	34
#8	61	53	47	43	40	39	39	39		#8	43	39	39	39	39	39	39	39
#9	75	65	58	53	49	46	44	44		#9	53	46	44	44	44	44	44	44
#10	89	77	69	63	58	55	51	49		#10	64	55	49	49	49	49	49	49
#11	104	90	81	74	68	64	60	57		#11	75	65	58	54	54	54	54	54

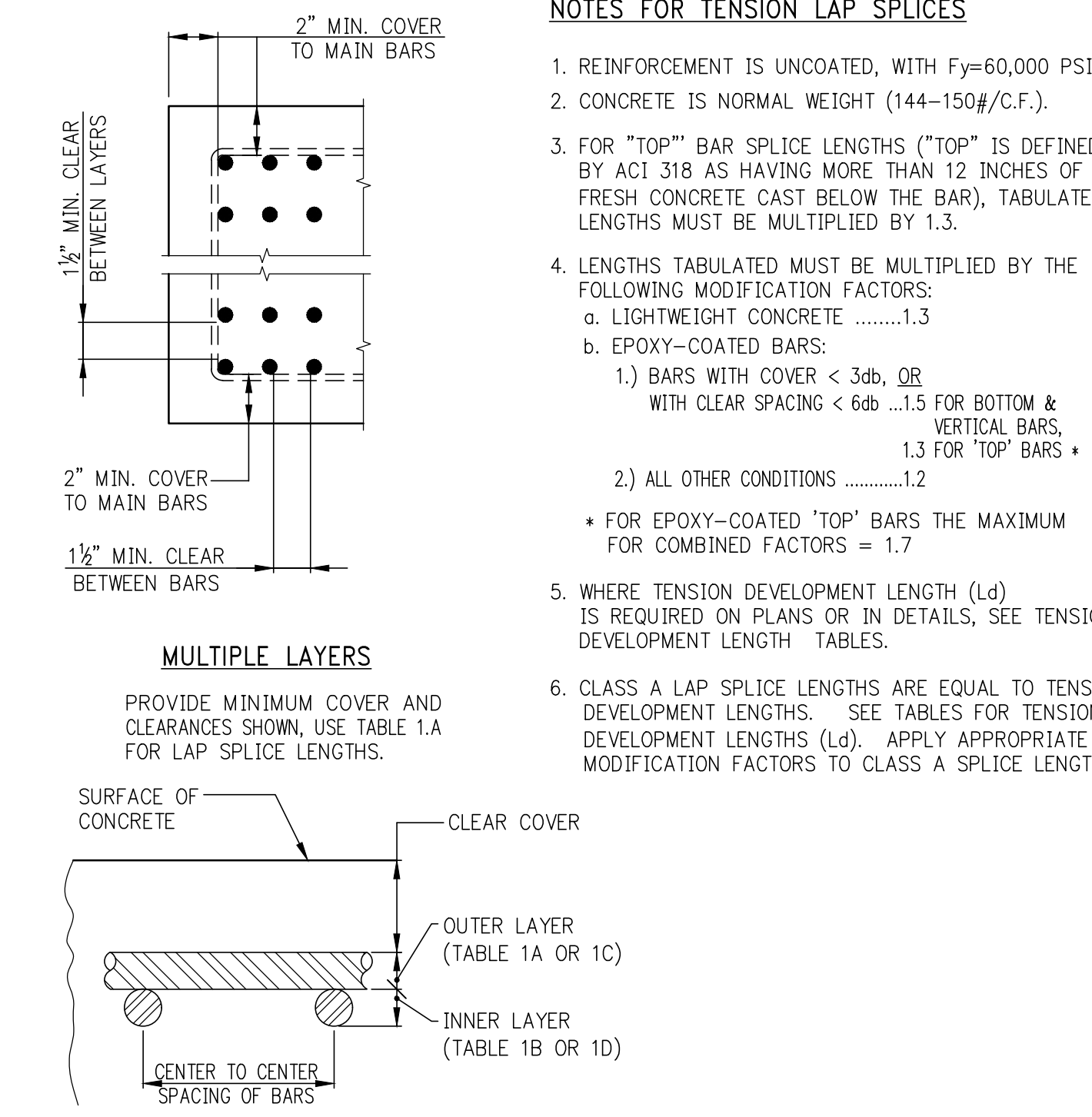


TABLE #2:
TENSION DEVELOPMENT LENGTHS (l_d) (IN INCHES)

TABLE 2.A: ¾" COVER TO OUTER LAYER BARS
OUTER LAYER DEVELOPMENT LENGTHS

BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
#3	12	12	12	12	12	12	12	12
#4	16	14	13	12	12	12	12	12
#5	24	21	19	17	16	15	14	13
#6	33	28	25	23	22	20	19	18
#7	53	46	41	37	35	32	31	29
#8	66	57	51	46	43	40	38	36
#9	79	69	61	56	52	49	46	43
#10	93	81	72	66	61	57	54	51
#11	108	94	84	76	71	66	62	59

TABLE 2.C: 1½" COVER TO OUTER LAYER BARS
OUTER LAYER DEVELOPMENT LENGTHS

BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
#3	12	12	12	12	12	12	12	12
#4	13	12	12	12	12	12	12	12
#5	16	14	13	13	13	13	13	13
#6	20	17	15	15	15	15	15	15
#7	32	28	25	23	21	20	19	18
#8	41	36	32	29	27	25	24	23
#9	50	44	39	36	33	31	29	28
#10	60	52	47	43	40	37	35	33
#11	71	61	55	50	46	43	41	39

TABLE 2.B: ¾" COVER TO OUTER LAYER BARS
INNER LAYER DEVELOPMENT LENGTHS

BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
#3	12	12	12	12	12	12	12	12
#4	13	12	12	12	12	12	12	12
#5	16	14	13	13	13	13	13	13
#6	23	20	18	16	15	15	15	15
#7	37	32	29	26	24	23	22	20
#8	47	41	36	33	31	29	27	26
#9	57	50	44	41	38	35	33	31
#10	68	59	53	48	45	42	40	38
#11	80	69	62	57	52	49	46	44

TABLE 2.D: 1½" COVER TO OUTER LAYER BARS
INNER LAYER DEVELOPMENT LENGTHS

BAR SIZE	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000
#3	12	12	12	12	12	12	12	12
#4	13	12	12	12	12	12	12	12
#5	16	14	13	13	13	13	13	13
#6	20	17	15	15	15	15	15	15
#7	29	25	22	20	19	18	18	18
#8	33	28	25	23	22	20	20	20
#9	41	35	31	29	27	25	23	23
#10	49	42	38	35	32	30	28	27
#11	58	50	45	41	38	35	33	32

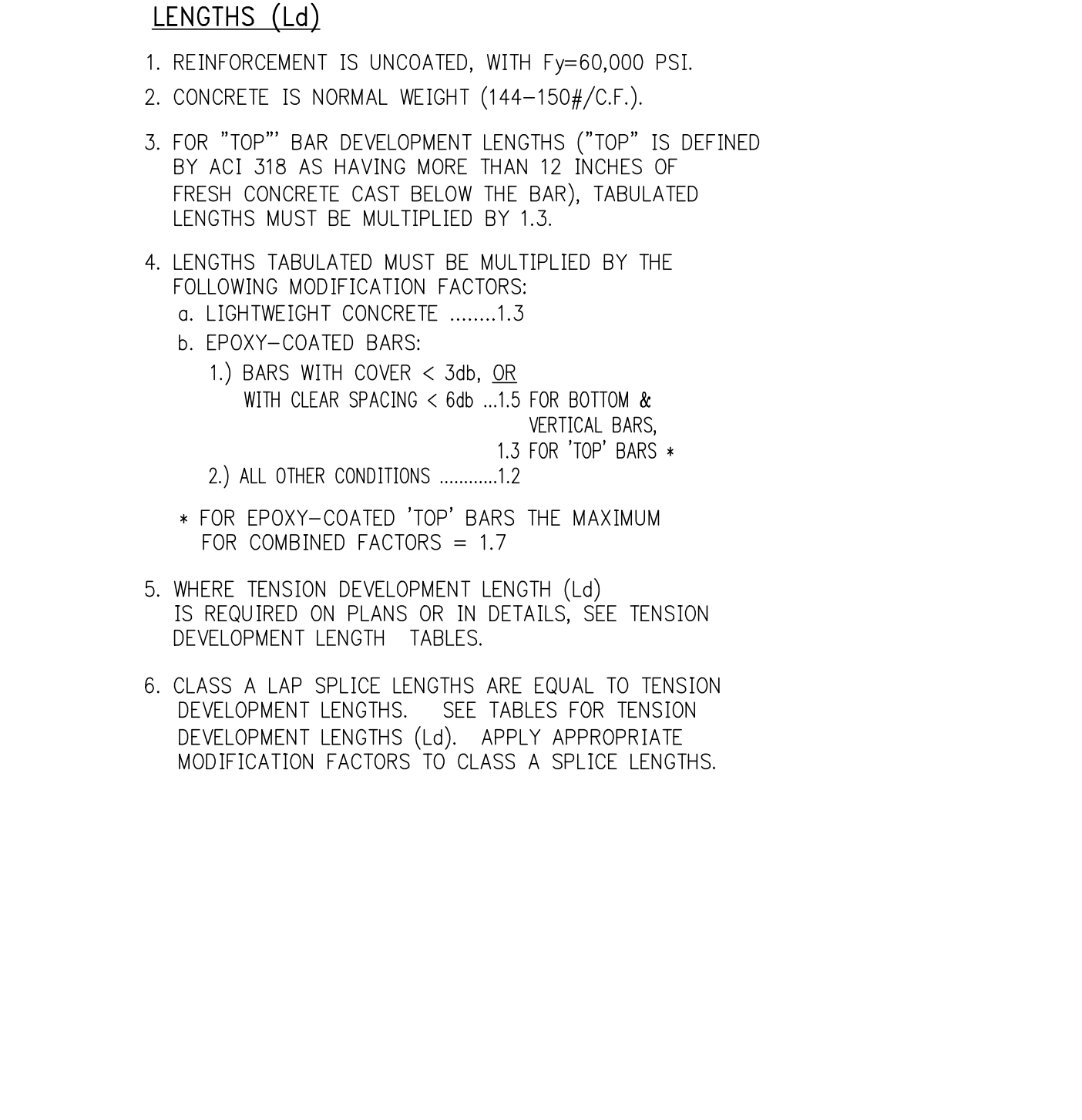


TABLE #3 TENSION DEVELOPMENT LENGTHS FOR STANDARD END HOOKS (l_{dh}) (LENGTHS IN INCHES)	
BAR SIZE	CONCRETE STRENGTH (PSI)
	3,000 4,000 5,000 6,000 7,000 8,000 9,000 10,000
#3	9 7 7 6 6 6 6 6
#4	11 10 9 8 7 7 7 6
#5	14 12 11 10 9 9 8 8
#6	17 15 13 12 11 10 10 9
#7	19 17 15 14 13 12 11 11
#8	22 19 17 16 15 14 13 12
#9	25 22 19 18 16 15 15 14
#10	28 24 22 20 19 17 16 16
#11	31 27 24 22 21 19 18 17
#14	37 32 29 27 25 23 22 21
#18	50 43 39 35 33 31 29 27

NOTES:

- TABLE 2 CONFORMS TO ACI 318-2002 (AND 2005). TABULATED VALUES ARE BASED UPON ACI 12.5.2 - ASSUMING GRADE 60 REINFORCEMENT AND NORMALWEIGHT CONCRETE.
- PER ACI 12.5.3 (d), FOR #11 AND SMALLER BARS, IF COVER TO BAR IS 2½ INCHES OR MORE, AND FOR 90 DEGREE HOOK WITH COVER ON BAR EXTENSION BEYOND HOOK NOT LESS THAN 2 INCHES, A MODIFICATION FACTOR OF 0.7 MAY BE APPLIED. MINIMUM l_{dh} SHALL NOT BE LESS THAN 8db NOR 6 INCHES.

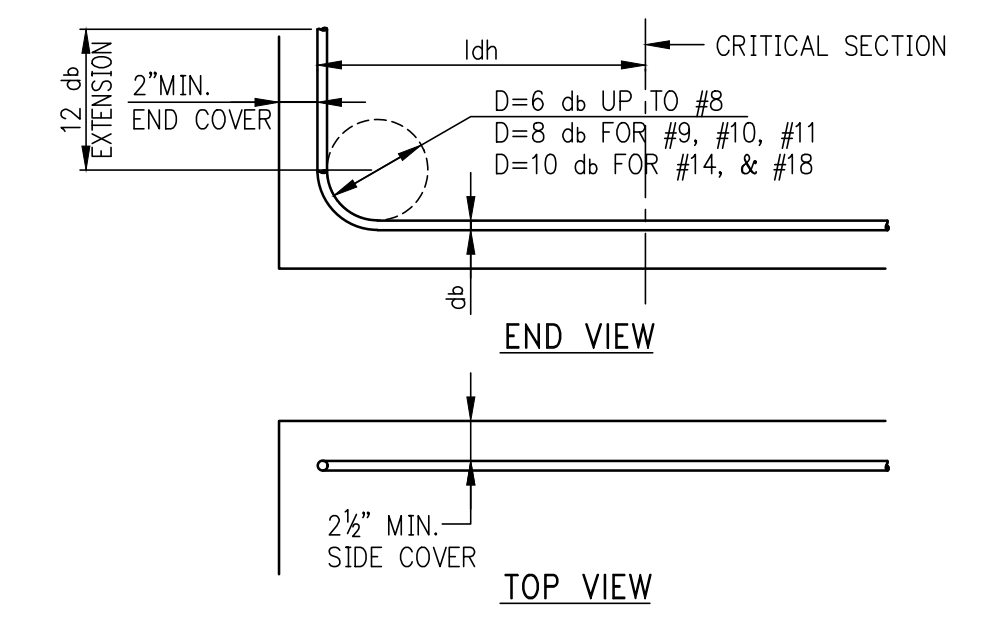


TABLE #4 COMPRESSION LAP SPLICES (LENGTHS IN INCHES)	
BAR SIZE	GRADE OF REINFORCEMENT
	60 KSI (30 DIA.) 75 KSI (44 DIA.) 80 KSI (48 DIA.)
#3	12 17 18
#4	15 22 24
#5	19 28 30
#6	23 33 36
#7	27 39 42
#8	30 44 48
#9	34 50 54
#10	38 56 61
#11	43 62 68
#14 AND #18	1. LAP SPLICES ARE NOT PERMITTED. USE MECHANICAL CONNECTIONS OR WELDED SPLICES FOR #14 AND #18. PER ACI 318 (12.14.3). 2. LAP SPLICES OF #14 AND #18 BARS TO #11 AND SMALLER BARS ARE PERMITTED PER ACI 318 (12.16.2).

NOTE:

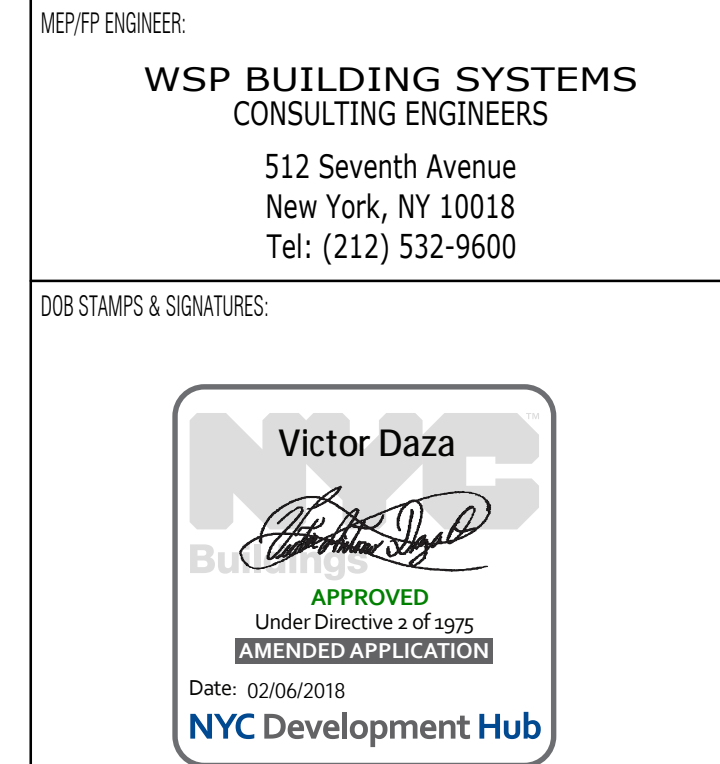
TABLE #3 APPLIES FOR NORMALWEIGHT CONCRETE WITH $f_c = 3,000$ PSI OR GREATER.

TABLE #5 DEVELOPMENT LENGTHS FOR BARS IN COMPRESSION (LENGTHS IN INCHES)											
BAR SIZE	fy = 60,000 PSI			fy = 75,000 PSI			fy = 80,000 PSI				
	CONC. fc (IN PSI)			CONC. fc (IN PSI)			CONC. fc (IN PSI)				
	3,000	4,000	5,000 OR MORE	3,000	4,000	5,000 OR MORE	3,000	4,000	5,000 OR MORE		
#3	12	12	12	12	12	12	12	12	12	12	
#4	12	12	12	14	12	12	15	15	13	12	
#5	14	12	12	17	15	14	18	16	15	14	
#6	17	15	14	21	18	17	22	22	19	18	
#7	19	17	16	24	21	20	26	22	22	21	
#8	22	19	18	28	24	23	29	25	24	23	
#9	25	22	21	31	27	25	33	28	27	27	
#10	28	24	23	34	30	28	36	31	31	30	
#11	31	27	26	38	33	31	40	34	34	33	
#14	37	32	31	48	42	39	51	44	44	42	
#18	50	43	41	62	54	51	65	56	54	54	

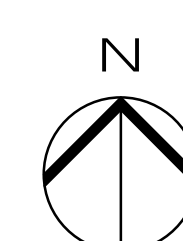


13	06/02/2017	D08 SUBMISSION
12	04/14/2017	ISSUED FOR CONSTRUCTION
11	12/02/2016	85% CD
10	03/05/2016	90% CD UPDATED SET
9	04/16/2016	POST APPROVAL W/AGREEMENT
8	04/15/2016	SUPERSTRUCTURE AWARD SET
7	09/24/2015	D08 SUBMISSION
6	08/09/2015	FOUNDATION SET
5	07/07/2015	D08 SUBMISSION
4	07/20/2015	100% DD
3	03/20/2015	50% DD
2	03/05/2015	D08 FILING
1	12/17/2015	100% DD

Number	Date	Revision
OWNER: GID DEVELOPMENT 125 HIGH STREET HIGH STREET TOWER, 27TH FLOOR BOSTON, MA 02110		
PROJECT: RIVERSIDE CENTER BUILDING 3 NEW YORK, NY		
EXECUTIVE ARCHITECT: Goldstein, Hill & West Architects, LLP 11 Broadway, Suite 1700 New York, NY 10004 Tel (212) 213-8007 Fax (212) 686-1754		
DESIGN ARCHITECT: RICHARD MEIER & PARTNERS ARCHITECTS, LLP 475 Tenth Avenue New York, NY 10018 Tel: (212) 967-6560		
STRUCTURAL ENGINEER: WSP BUILDING STRUCTURES CONSULTING ENGINEERS 228 East 45th St, 3rd Floor New York, NY 10017 Tel: (212) 687-9888 Fax: (646) 487-5501		
MEP/FP ENGINEER: WSP BUILDING SYSTEMS CONSULTING ENGINEERS 512 Seventh Avenue New York, NY 10018 Tel: (212) 532-9600		



DWG TITLE: TYPICAL FOUNDATION DETAILS 4 NB#XXXXXXXX	
SEAL & SIGNATURE: 	DATE: 07/03/2015
PROJECT #: 1880104	SCALE: AS NOTED
FO-203.00	DWG NO.



KEY PLAN

12	06/02/2017	DOB SUBMISSION
11	04/14/2017	ISSUED FOR CONSTRUCTION
10	12/02/2016	BN CO
9	10/05/2016	BN CO UPDATED SET
8	04/10/2016	POST-APPROVAL AMENDMENT
7	04/15/2016	SUBSTRUCTURE AWARD SET
6	03/04/2015	DOB SUBMISSION
5	09/09/2015	FOUNDATION SET
4	07/31/2015	DOB SUBMISSION
3	01/20/2015	100% DD
2	03/20/2015	50% DD
1	03/06/2015	DOB FILING

OWNER:
GID DEVELOPMENT
125 HIGH STREET
HIGH STREET TOWER, 27TH FLOOR
BOSTON, MA 02110

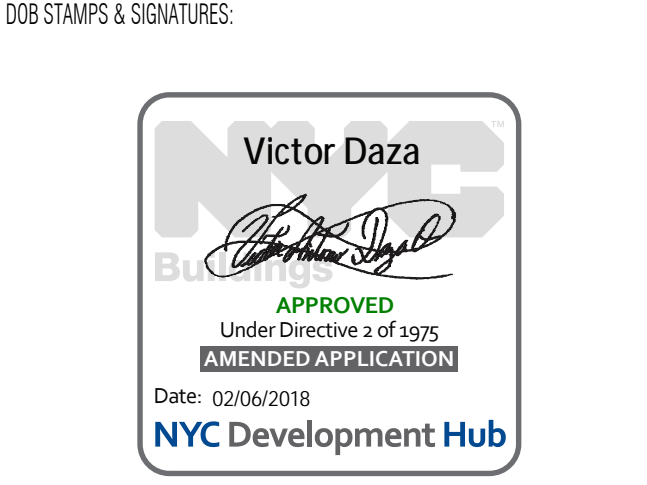
PROJECT:
RIVERSIDE CENTER BUILDING 3
NEW YORK, NY

EXECUTIVE ARCHITECT:
GHAWA
Goldstein, Hill & West Architects, LLP
11 Broadway, Suite 1700
New York, NY 10004
Tel: (212) 213-8007 Fax: (212) 686-1754

DESIGN ARCHITECT:
RICHARD MEIER & PARTNERS
ARCHITECTS, LLP
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New York, NY 10018
Tel: (212) 532-9600



DWG TITLE: FOUNDATION SECTIONS 1

NB#XXXXXXX

SEAL & SIGNATURE: [Seal of Victor Daza]

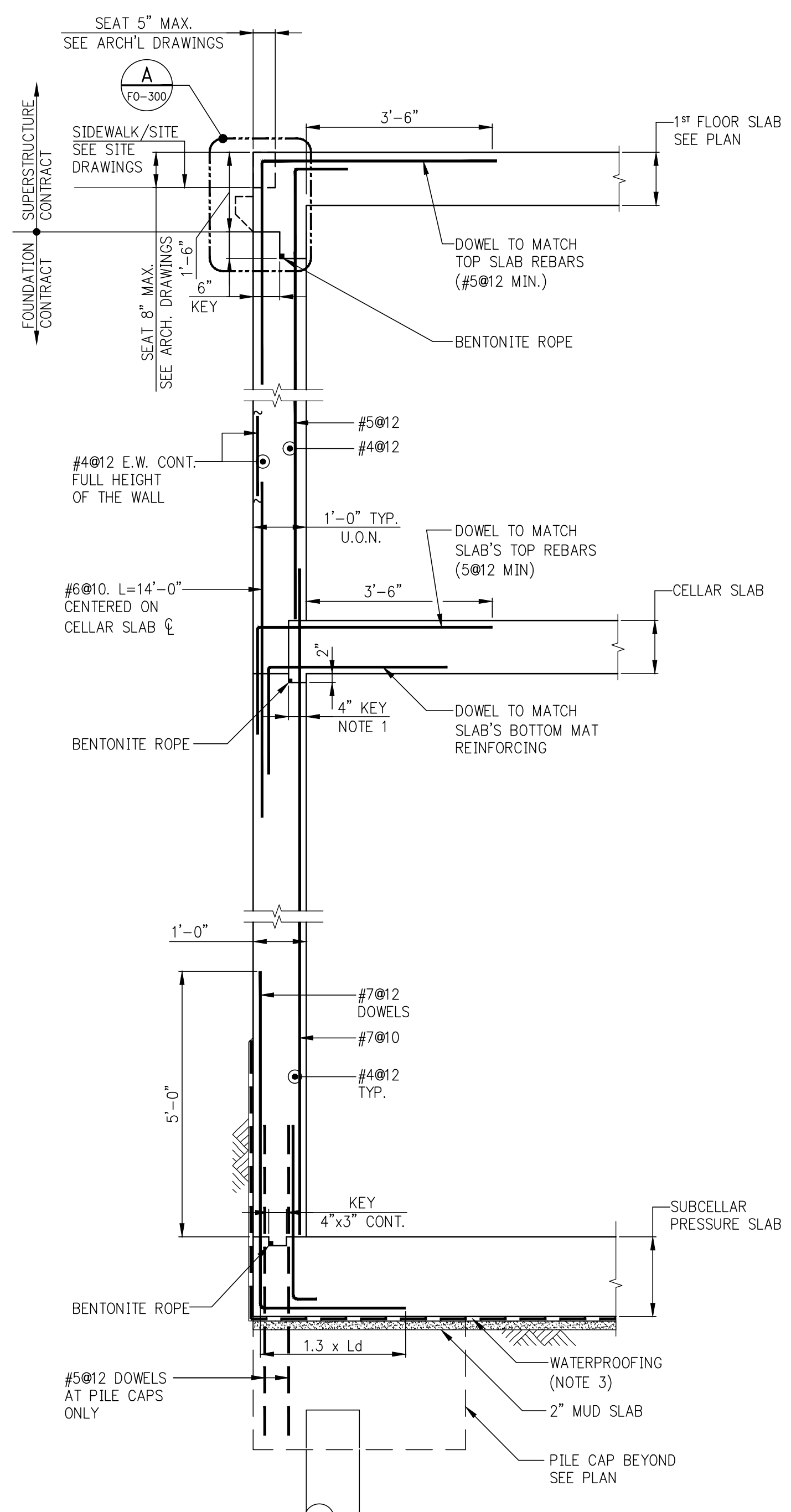
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PROJECT #: 180104

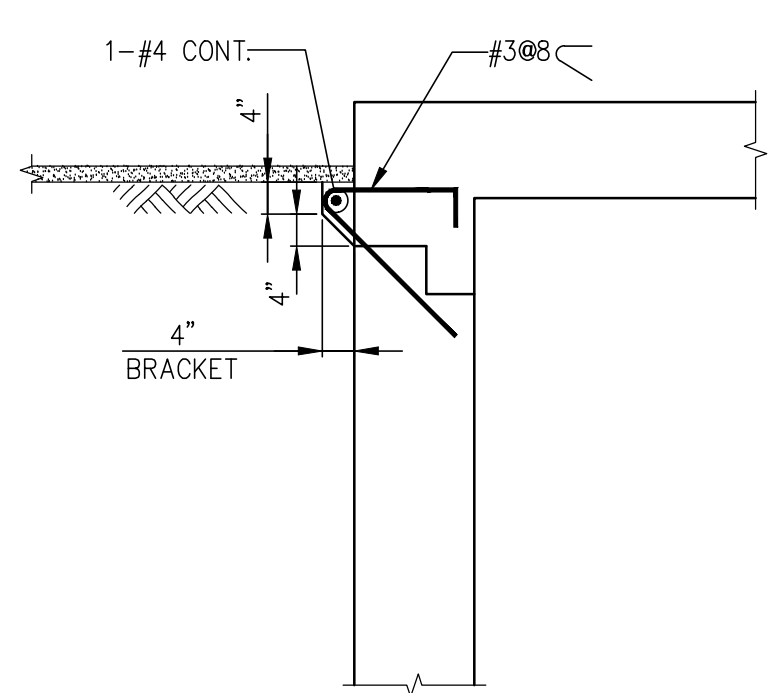
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FO-300.01

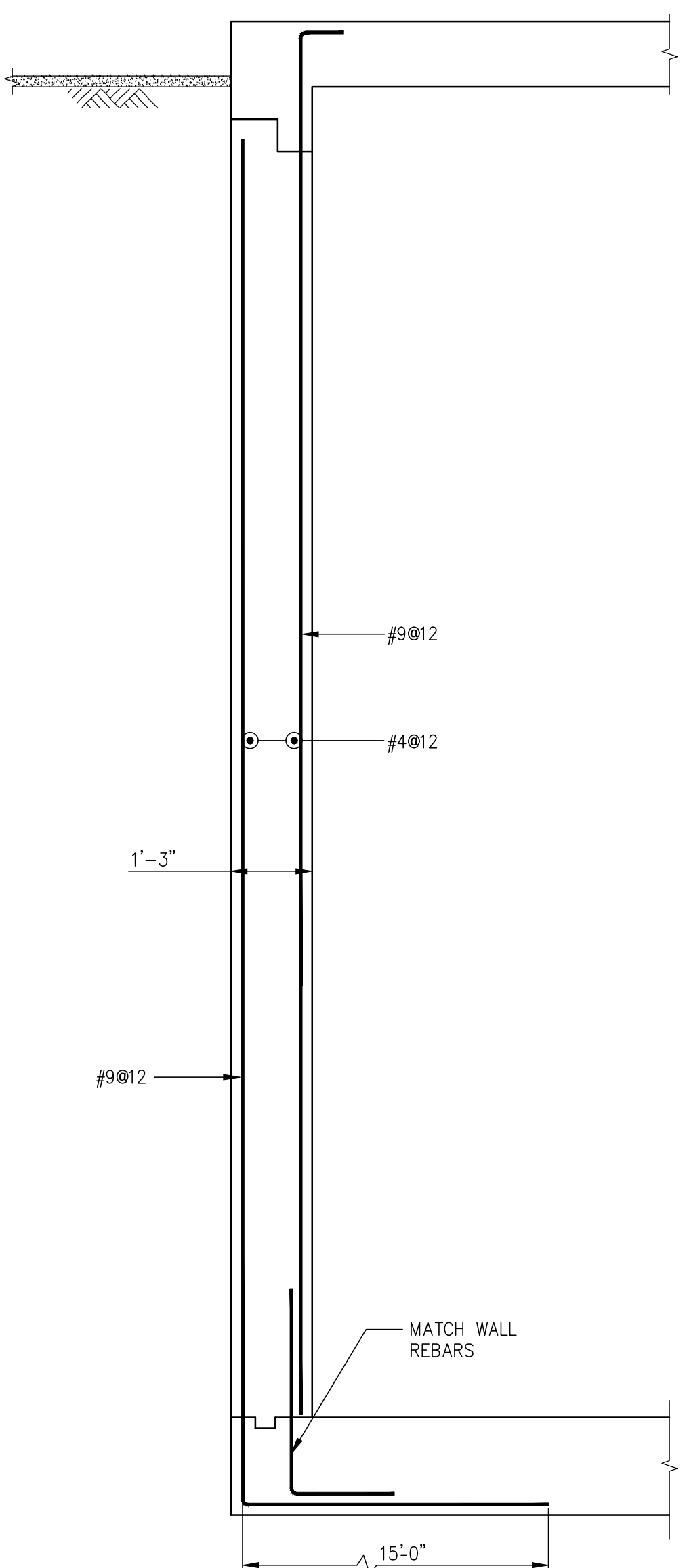
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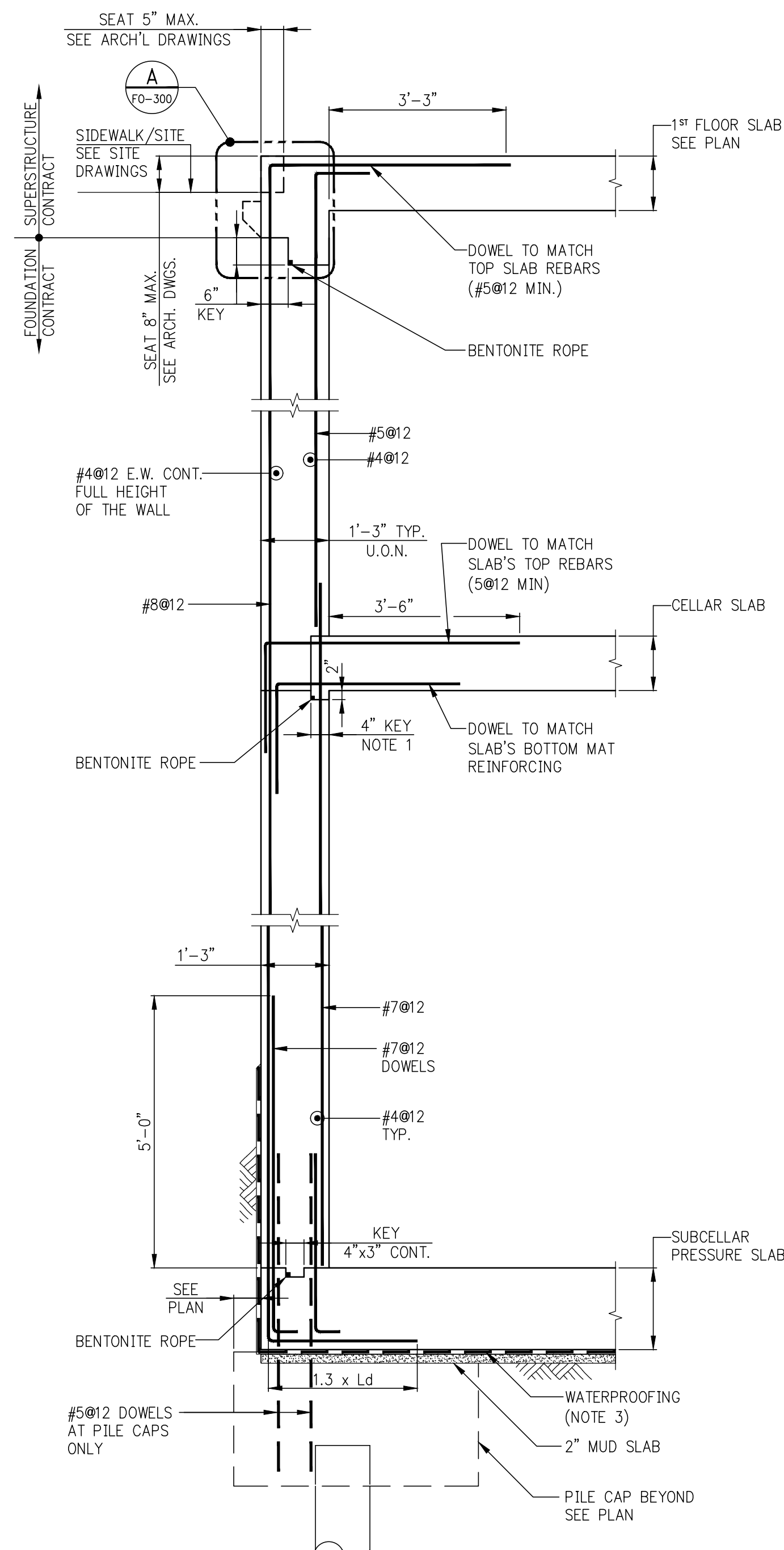
1 SECTION
SCALE: 3/8"=1'-0"
FO-300
NOTES:
1. RUN REBARS CONTINUOUSLY THROUGH THE KEY.
2. SLAB REBARS NOT SHOWN FOR CLARITY.
3. REFER TO GEOTECHNICAL REPORT FOR DRAINAGE AND WATERPROOFING DETAILS ETC.



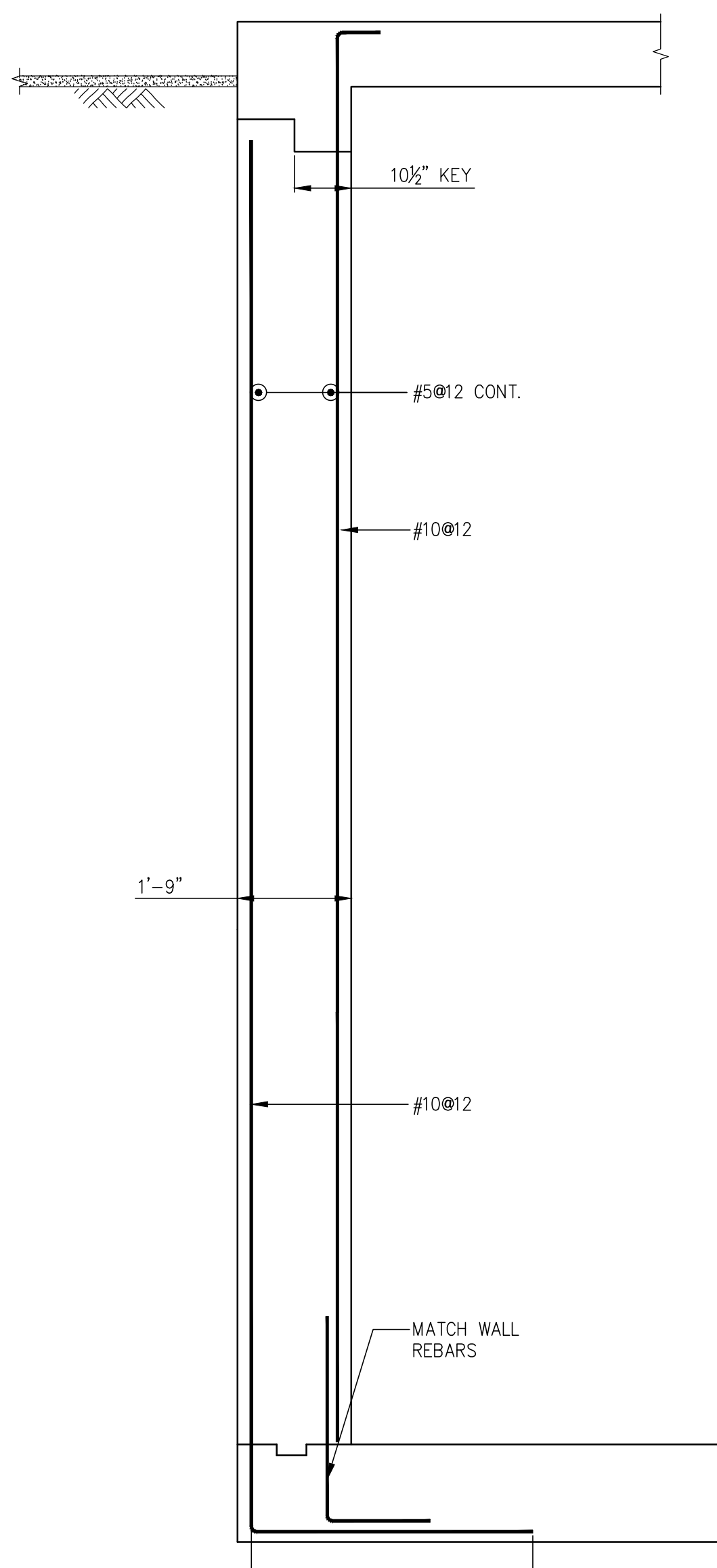
A DETAIL
SCALE: 3/8"=1'-0"
FO-300
(REFER TO ARCH. DWGS. FOR LOCATION)
NOTE:
1. FOR BALANCE OF INFORMATION SEE SECTION 1



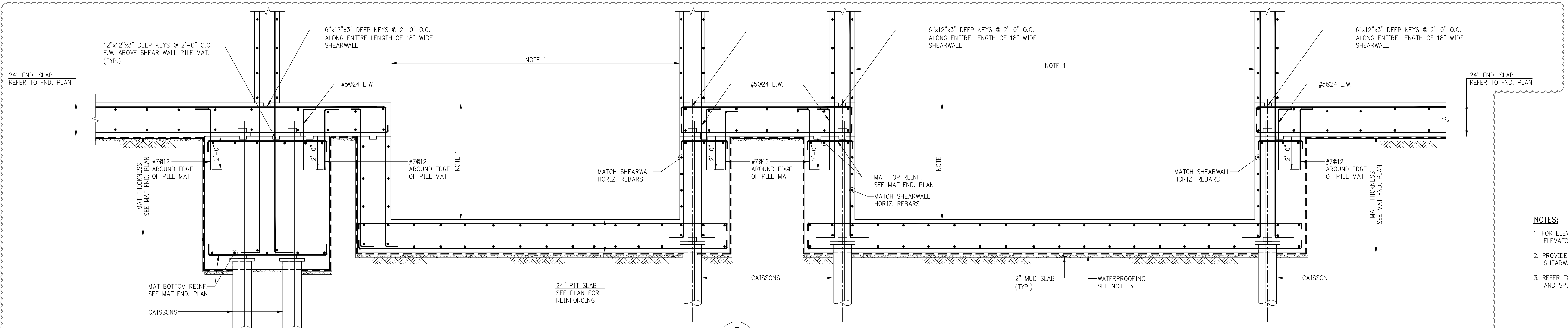
1A SECTION
SCALE: 3/8"=1'-0"
FO-300
NOTES:
1. FOR BALANCE OF INFORMATION SEE SECTION 1



2 SECTION
SCALE: 3/8"=1'-0"
FO-300
NOTES:
1. RUN REBARS CONTINUOUSLY THROUGH THE KEY.
2. SLAB REBARS NOT SHOWN FOR CLARITY.
3. REFER TO GEOTECHNICAL REPORT FOR DRAINAGE AND WATERPROOFING DETAILS ETC.

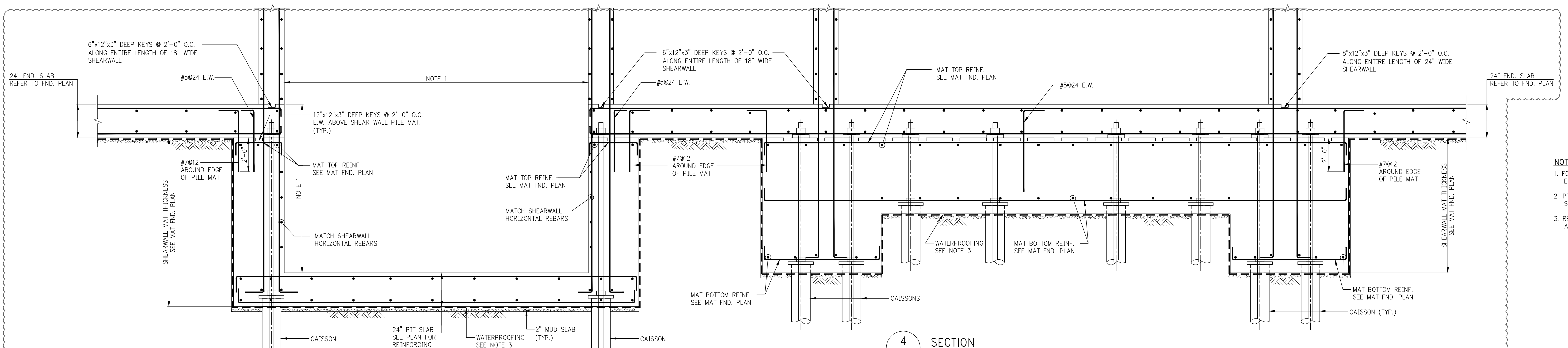


2A SECTION
SCALE: 3/8"=1'-0"
FO-300
NOTE:
1. FOR BALANCE OF INFORMATION SEE SECTION 2



3 SECTION
SCALE: 3/8"=1'-0"
FO-300

NOTES:
1. FOR ELEVATOR DIMENSIONS SEE LATEST ARCH'L AND ELEVATOR CONSULTANTS DRAWINGS.
2. PROVIDE FULL TENSION SPLICE ABOVE SLAB BETWEEN SHEARWALL DOWELS AND SHEARWALL REBARS.
3. REFER TO ARCHITECTURAL AND GEOTECHNICAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING INFORMATION.



4 SECTION
SCALE: 3/8"=1'-0"
FO-300

NOTES:
1. FOR ELEVATOR DIMENSIONS SEE LATEST ARCH'L AND ELEVATOR CONSULTANTS DRAWINGS.
2. PROVIDE FULL TENSION SPLICE ABOVE SLAB BETWEEN SHEARWALL DOWELS AND SHEARWALL REBARS.
3. REFER TO ARCHITECTURAL AND GEOTECHNICAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING INFORMATION.

KEY PLAN



- NOTES:
1. FOR ELEVATOR DIMENSIONS SEE LATEST ARCH'L AND ELEVATOR CONSULTANTS DRAWINGS.
 2. PROVIDE FULL TENSION SPLICE ABOVE SLAB BETWEEN SHEARWALL DOWELS AND SHEARWALL REBARS.
 3. REFER TO ARCHITECTURAL AND GEOTECHNICAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING INFORMATION.

1 SECTION
FO-301 SCALE: 3/8"=1'-0"

- NOTES:
1. FOR ELEVATOR DIMENSIONS SEE LATEST ARCH'L AND ELEVATOR CONSULTANTS DRAWINGS.
 2. PROVIDE FULL TENSION SPLICE ABOVE SLAB BETWEEN SHEARWALL DOWELS AND SHEARWALL REBARS.
 3. REFER TO ARCHITECTURAL AND GEOTECHNICAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING INFORMATION.

2 SECTION
FO-301 SCALE: 3/8"=1'-0"

- NOTES:
1. FOR ELEVATOR DIMENSIONS SEE LATEST ARCH'L AND ELEVATOR CONSULTANTS DRAWINGS.
 2. PROVIDE FULL TENSION SPLICE ABOVE SLAB BETWEEN SHEARWALL DOWELS AND SHEARWALL REBARS.
 3. REFER TO ARCHITECTURAL AND GEOTECHNICAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING INFORMATION.

3 SECTION
FO-301 SCALE: 3/8"=1'-0"

4 NOT USED
FO-301 SCALE: 3/8"=1'-0"

5 SECTION
FO-301 SCALE: 3/8"=1'-0"

6 SECTION
FO-301 SCALE: 3/8"=1'-0"

- NOTE:
1. REFER TO SHEARWALL MAT SECTIONS FOR BALANCE OF INFORMATION.

7 SECTION
FO-301 SCALE: 3/8"=1'-0"

- NOTES:
1. UNDER NO CIRCUMSTANCE PILECAP CAN PROTRUDE INTO THE SPACE OF BUILDING #3 ABOVE THE PRESSURE SLAB OF BUILDING

8 SECTION
FO-301 SCALE: 3/8"=1'-0"

- NOTES:
1. REFER TO SECTION 7/FO-301, "TYPICAL CROSS SECTION THRU CAISSON DETAIL AT FOUNDATION WALL", DETAIL ON DRAWING FO-202 AND FO-100 FOR BALANCE OF INFORMATION.
 2. REFER TO ARCHITECTURAL AND GEOTECHNICAL DRAWINGS AND SPECIFICATIONS FOR WATERPROOFING INFORMATION.

14	08/02/2017	DOB SUBMISSION
10	04/14/2017	ISSUED FOR CONSTRUCTION
9	12/02/2016	80% CD
8	10/02/2016	80% CD UPDATED SET
7	09/02/2016	90% CD
6	04/18/2016	POST APPROVAL AMENDMENT
5	04/15/2016	SUPPLEMENTAL DRAWING SET
4	09/24/2015	DOB SUBMISSION
3	09/08/2015	FOUNDATION SET
2	07/01/2015	DOB SUBMISSION
1	07/02/2015	100% CD

Number: Date: Revision:

OWNER:
GID DEVELOPMENT
125 HIGH STREET
HIGH STREET TOWER, 27TH FLOOR
BOSTON, MA 02110

PROJECT:
RIVERSIDE CENTER BUILDING 3
NEW YORK, NY

EXECUTIVE ARCHITECT:
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DOB STAMPS & SIGNATURES:

Victor Daza
Under Direction of a Registered Professional Engineer
Date: 08/02/2015
NYC Development Hub

DWG TITLE:
FOUNDATION SECTIONS 2
NB#XXXXXXXXX
SEAL & SIGNATURE: DATE: 07/01/2015
PROJECT # 180104
SCALE: AS NOTED
FO-301.01
DWG NO.