

INTERIOR FIT-OUT

Number	Description	Date
1	ISSUE FOR PERMIT	02/21/14
1	ISSUE FOR CONSTRUCTION	10/27/14

Key Plan:
A
B
C
Project North

CAD File:
Project No.: K2017800
Copyright: 2014 KlingStubbins, Inc or LLC

Drawing Sheet Title:
**SLAB REINFORCEMENT
AND INFILL DETAILS**

Drawing Sheet Number:

S-002

Owner's Drawing Sheet No.:

CAST-IN-PLACE CONCRETE NOTES:

- PROVIDE CAST-IN-PLACE CONCRETE FOR EACH CLASS OF CONCRETE SHOWN IN THE CONCRETE MATERIAL SCHEDULE AND AS REQUIRED BY CONSTRUCTION METHODS & SCHEDULES.
- REINFORCING SHALL BE AS FOLLOWS:
A. CONVENTIONAL DEFORMED REINFORCING BARS - ASTM A615, GRADE 60.
B. WELDED WIRE REINFORCEMENT - ASTM A185, SUPPLIED IN FLAT SHEETS.
- CONCRETE COVER OVER REINFORCING SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:
A. CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO EARTH OR WEATHER - 3 IN.
B. REINFORCING IN SLABS & WALLS NOT EXPOSED TO EARTH OR WEATHER - 3/4 IN.
C. REINFORCING EXPOSED TO EARTH OR WEATHER -
#5 & SMALLER - 1 1/2 IN
#6 & LARGER - 2 IN
D. COVER TO STIRRUPS & TIES IN BEAMS & COLUMNS - 1 1/2 IN
- SPLICE REINFORCING BARS PER ACI 318 WITH CLASS B TENSION LAP SPLICES, UNLESS NOTED OTHERWISE. REINFORCING BAR DEVELOPMENT LENGTHS SHALL BE PER THE TABLE SHOWN BELOW, WHICH COMPLIES WITH ACI 318.
- WWR SHALL BE LAP SPLICED PER ACI 318 AND TIED SECURELY.
- DOWELS SHALL MATCH AND BE CLASS B TENSION LAP SPLICED WITH THE MAIN REINFORCEMENT, UNLESS NOTED OTHERWISE.
- ALL HOOKS IN REINFORCING STEEL SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE.
- FIELD BENDING OF REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE IS NOT PERMITTED UNLESS INDICATED ON THE DRAWINGS OR APPROVED IN WRITING BY THE DESIGN PROFESSIONAL. REBAR SHALL NOT BE HEATED WITH A TORCH IN THE FIELD.
- DO NOT WELD REINFORCING UNLESS INDICATED ON THE DRAWINGS OR APPROVED IN WRITING BY THE DESIGN PROFESSIONAL.
- ALL CONSTRUCTION JOINTS SHALL BE WIRE BRUSHED, CLEANED, AND COATED WITH A BONDING AGENT OR MOISTENED WITH A CEMENT SLURRY SCRUBBED INTO THE JOINT IMMEDIATELY PRIOR TO PLACING NEW CONCRETE.
- PROVIDE A WATERSTOP IN ALL SLAB CONSTRUCTION JOINTS EXPOSED TO EARTH OR WEATHER, COVERED WITH A WATERPROOF MEMBRANE AND WHERE INDICATED.
- CHAMFER ALL EXPOSED CORNERS 3/4 INCH, UNLESS NOTED OTHERWISE.
- PRIOR TO PLACEMENT OF NEW CONCRETE AGAINST EXISTING CONCRETE SURFACES, CLEAN AND ROUGHEN TO 1/4" AMPLITUDE AND APPLY BONDING AGENT IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

BAR SIZE	REINFORCING BARS DEVELOPMENT LENGTH (IN)			
	4000 (psi)			
	TOP BARS		OTHER BARS	
	CASE 1	CASE 2	CASE 1	CASE 2
#3	19	28	14	21
#4	25	37	19	28
#5	31	46	24	36
#6	37	56	28	43
#7	54	81	42	62
#8	62	93	47	71
#9	69	104	53	80
#10	77	116	59	89
#11	85	127	65	98

- TOP BARS AS DEFINED BY ACI 318-05.
- CASE 1: CLEAR SPACING OF BARS DEVELOPED OR SPLICED NOT LESS THAN db. CLEAR COVER NOT LESS THAN db, AND STIRRUPS OR TIES THROUGH Ld NOT LESS THAN THE CODE MINIMUM OR CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2db AND CLEAR COVER NOT LESS THAN db.
CASE 2: BARS DEVELOPED OR SPLICED WITH CLEAR COVER AND/OR SPACING NOT MEETING THE REQUIREMENTS OF CASE 1.
- SPLICE LENGTHS:
A. CLASS A TENSION SPLICE = 1.0Ld, 12 IN. MIN.
B. CLASS B TENSION SPLICE = 1.3Ld, 12 IN. MIN.
C. COMPRESSION SPLICE = 30db, 12 IN. MIN.

ELEMENT	F'c (psi)	MAXIMUM W/C RATIO	MAX DRY UNIT WEIGHT (lb/ft ³)	MAX AGGREGATE SIZE (in)	AGGREGATE CLASS DESIGNATION (ASTM C33)	ENTRAINED AIR CONTENT (%)	SLUMP* ± 1 (in)	MAXIMUM CHLORIDE CONTENT (%)
SLAB-ON GRADE	4,000	0.48	145	3/4	2S	N/A	4/8	0.30
FOOTINGS & GRADE BEAMS	4,000	0.48	145	3/4	1S	5 1/2% ± 1/2%	4/8	0.30

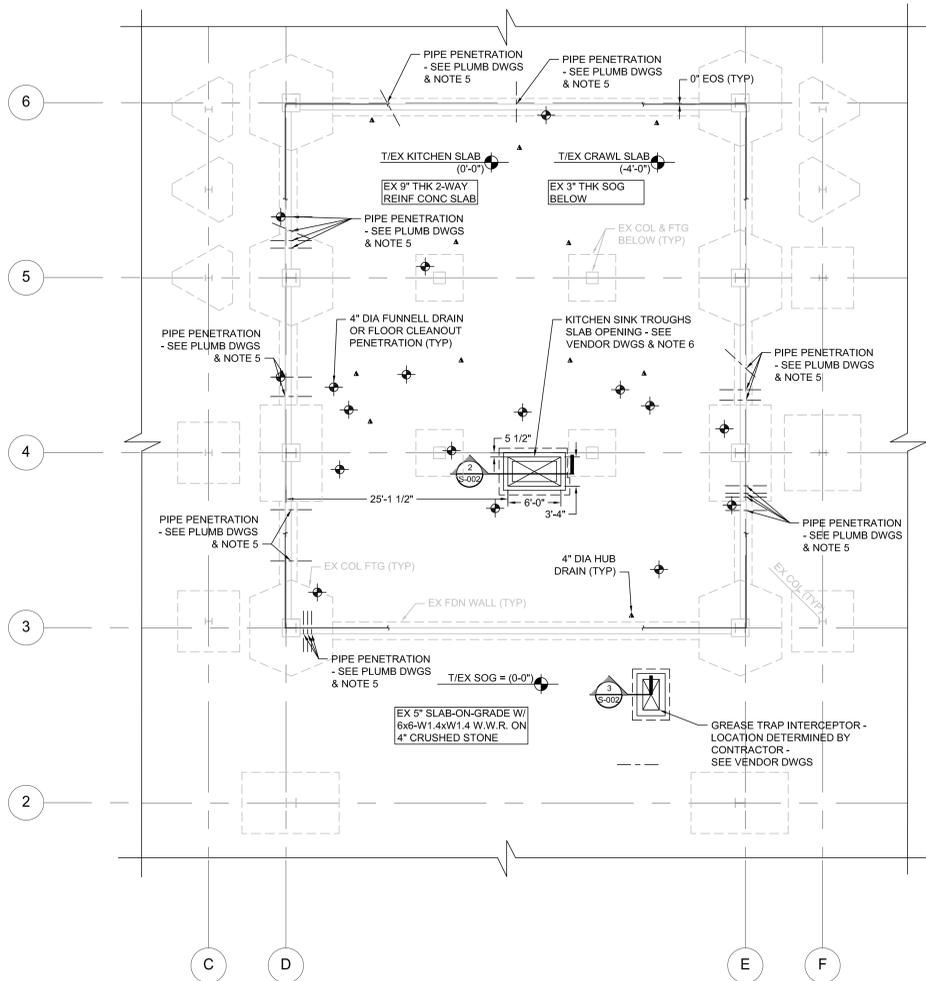
*VALUES SHOWN ARE MAX SLUMP OF THE CONCRETE AS PLACED WITHOUT SUPERPLASTICIZERS OVER MAX SLUMP IF SUPERPLASTICIZERS ARE USED.

FOUNDATIONS AND EARTHWORK:

- FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH IBC 2009 CHAPTER 18. NO NEW GEOTECHNICAL REPORT HAS BEEN PROVIDED BY THE OWNER FOR THIS PROJECT.
- FOUNDATIONS HAVE BEEN DESIGNED FOR THE FOLLOWING NET ALLOWABLE BEARING PRESSURE: 2.0 KSF USING TABLE 1804.2.
- AFTER THE EXCAVATED AREAS ARE CLEANED OF LOOSE MATERIAL AND PRIOR TO PLACING CONCRETE, THE SUBGRADE FOR ALL FOUNDATIONS AND SLABS SHALL BE INSPECTED AND APPROVED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- THE CONCRETE FOUNDATION, OR A 3 INCH CONCRETE MUD MAT MUST BE PLACED THE SAME DAY THE SUBGRADE IS INSPECTED. IF THE SURFACE IS DISTURBED BEFORE CONCRETE IS PLACED, THE SUBGRADE SHALL BE RE-INSPECTED BY THE OWNER'S GEOTECHNICAL ENGINEER AT THE CONTRACTOR'S EXPENSE.
- WHEN FILLING AGAINST OPPOSITE SIDES OF A WALL OR STRUCTURE, BACKFILL IN LIFTS SUCH THAT THE DIFFERENCE IN FILL ELEVATION ON OPPOSITE SIDES DOES NOT EXCEED 12 INCHES.
- WHERE EXCAVATION SLOPE IS GREATER THAN 1.0 H TO 1.0 V PROVIDE ALL SHEETING, SHORING, AND BRACING NECESSARY, AND TAKE CARE NOT TO UNDERMINE THE EXISTING CONSTRUCTION.
- UTILITIES SHALL NOT BE LOCATED BENEATH FOUNDATIONS UNLESS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS.
- CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND PERFORMANCE OF ALL DEWATERING AND EARTH RETENTION SYSTEMS, INCLUDING SYSTEMS SUCH AS UNDERPINNING AND BRACING NECESSARY TO PROTECT EXISTING STRUCTURES AND UTILITIES.
- EXISTING FOUNDATION INFORMATION SHOWN IS TAKEN FROM EXISTING STRUCTURAL DRAWINGS DATED 02/17/1969 AND MUST BE FIELD VERIFIED. REPORT DISCREPANCIES TO THE DESIGN PROFESSIONAL BEFORE PROCEEDING WITH WORK.
- UNDERPINNING IS NOT ANTICIPATED, HOWEVER IF OVER EXCAVATION OCCURS FOR ANY REASON, UNDERPINNING IS REQUIRED WHERE THE DEPTH OF EXCAVATION IS BELOW EXISTING FOUNDATIONS. CONTRACTOR SHALL PROTECT EXISTING FOUNDATION SUBGRADE. UNDERPINNING IS CONSIDERED CONSTRUCTION MEANS AND METHODS.

EXISTING SLAB/FDN WALL PENETRATION NOTES:

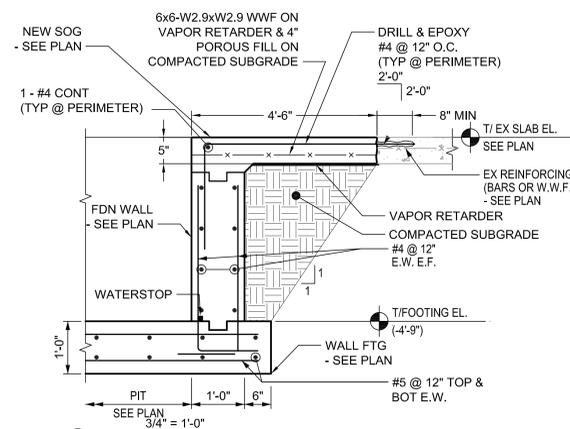
- REFER TO PLUMBING AND KITCHEN DRAWINGS FOR EXACT PENETRATION LOCATIONS.
- PENETRATIONS LESS THAN 3" ARE NOT SHOWN FOR CLARITY, REFER TO PLUMBING AND KITCHEN DRAWINGS.
- DRILLING & SAW CUTTING INTO THE EXISTING STRUCTURE SHALL BE PERFORMED IN A MANNER WHICH AVOIDS DAMAGE TO ALL EXISTING REINFORCEMENT UNLESS OTHERWISE APPROVED BY THE DESIGN PROFESSIONAL. PRIOR TO DRILLING OR SAW CUTTING, LOCATE EXISTING REINFORCEMENT BY USE OF A BAR DETECTION METHOD TO AVOID DAMAGE.
- ALL PENETRATIONS LESS THAN EXISTING REINFORCEMENT SPACING SHALL BE LOCATED TO AVOID DAMAGE TO EXISTING REINFORCEMENT. REFER TO EXISTING VINCENT G. KLING AND ASSOCIATES ARCHITECTS DRAWING S3, DATED 02/17/1969 FOR SLAB REINFORCEMENT DETAILS AND SPACING. THE AVERAGE REINFORCEMENT SPACING THROUGHOUT THE SLAB IS 12" O.C., EXCEPT AT SPECIFIC LOCATIONS DOCUMENTED WHERE IT IS REDUCED TO AS LOW AS 8" O.C.
- ALL PENETRATIONS GREATER THAN EXISTING REINFORCEMENT SPACING SHALL BE LOCATED TO MINIMIZE DAMAGE TO EXISTING REINFORCEMENT. CONTRACTOR TO PROVIDE PENETRATION SIZE, LOCATION AND APPROXIMATE NUMBER OF INTERFERING STEEL REINFORCEMENT BARS PRIOR TO SAW CUTTING THE CONCRETE FOR APPROVAL BY THE DESIGN PROFESSIONAL.
- REFER TO TYPICAL SLAB-ON-GRADE INFILL DETAILS FOR TRENCHING OF EXISTING SLAB-ON-GRADE.



1 FOUNDATION & SLAB-ON-GRADE PLAN
S-002 SCALE: 1/8" = 1'-0"

NOTES:

- SEE DRAWING S-001 FOR GENERAL NOTES.
- TOP OF SLAB ELEVATION 0'-0" ABOVE REFERENCE ELEVATION 301'-0".
- COORDINATE ALL EMBEDS, PIPE/CONDUIT SLEEVE SIZE AND ELEVATIONS, ETC. WITH INTERIOR, MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS AND CONTRACTORS.
- UNLESS SPECIFICALLY INDICATED ON THE STRUCTURAL DRAWINGS, NO PENETRATIONS OF ANY SIZE SHALL BE MADE THROUGH EXISTING STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE DESIGN PROFESSIONAL. NOTE THAT PENETRATIONS FOR PIPES AND/OR CONDUITS LESS THAN 3" NOT SHOWN FOR CLARITY, REFER TO PLUMBING AND ELECTRICAL DRAWINGS AND EXISTING SLAB PENETRATION NOTES.
- PENETRATIONS FOR NEW PIPES THROUGH FDN WALL SUPPORTING 9" THK SLAB SHALL BE LOCATED AT LEAST 1'-0" BELOW T/SLAB. ADJACENT PIPE PENETRATIONS SHALL BE LOCATED AT LEAST 1'-0" MIN AWAY. NOTIFY THE DESIGN PROFESSIONAL IF EITHER REQUIREMENT CAN'T BE MET.
- PROVIDE TEMPORARY SLAB SUPPORTS, SHORING AND/OR BRACING AROUND THE KITCHEN SINK OPENING PERIMETER, AS NECESSARY, PRIOR TO SAW CUTTING THE KITCHEN SINK OPENINGS SHOWN IN 2/S-002.



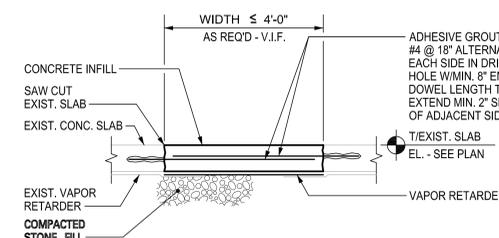
3 SECTION
S-002 SCALE:

4 PIPE SLEEVE THROUGH WALL

S-002 SCALE: 3/4" = 1'-0"

NOTES:

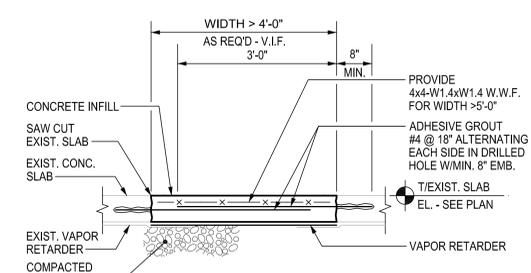
- SEE ARCHITECTURAL, MECHANICAL AND PLUMBING DRAWINGS FOR SLEEVE DETAILS, SIZE & LOCATIONS.



5 TYPICAL SLAB-ON-GRADE INFILL DETAIL (WIDTH ≤ 4'-0")
S-002 SCALE: 3/4" = 1'-0"

NOTES:

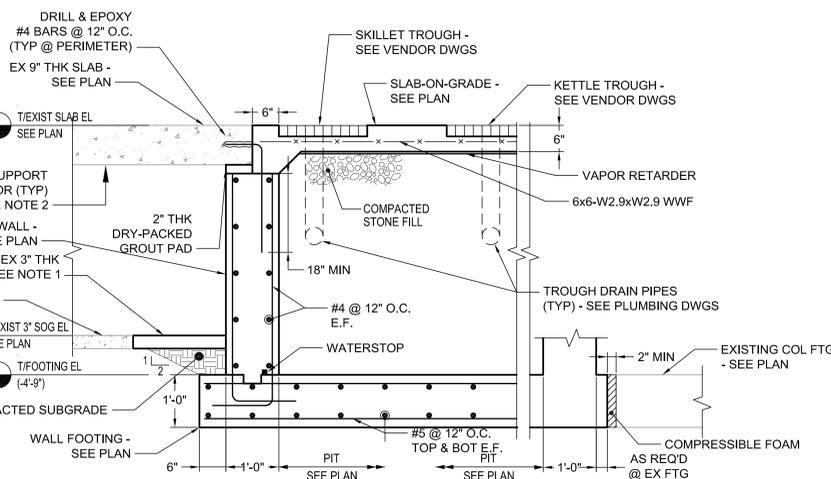
- REPLACE, PATCH AND REPAIR VAOPR RETARDER.
- ROUGHEN SLAB EDGE AND APPLY BONDING MATERIAL.



6 TYPICAL SLAB-ON-GRADE INFILL DETAIL (WIDTH > 4'-0")
S-002 SCALE: 3/4" = 1'-0"

NOTES:

- REPLACE, PATCH AND REPAIR VAOPR RETARDER.
- ROUGHEN SLAB EDGE AND APPLY BONDING MATERIAL.



2 SECTION
S-002 SCALE: 3/4" = 1'-0"

NOTES:

- REPLACE EX 3" CRAWL SPACE SOG BEYOND PIT WALL AROUND ENTIRE PIT PERIMETER.
- INSTALL TEMPORARY SUPPORTS AROUND OPENING PERIMETER PRIOR TO SAW CUTTING EX 9" THK SLAB.