

1. SEE SHEET S4.0 FOR GENERAL STRUCTURAL NOTES.
2. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, CONDITIONS AND INDICATED MEMBERS BEFORE THE ORDERING OF MATERIALS AND CONSTRUCTION. NOTIFY ARCHITECT ENGINEER OF RECORD OF ANY DEVIATIONS.
3. FOR ALL OPENING DIMENSIONS AND LOCATIONS, VERIFY WITH ARCHITECTURAL DRAWINGS.
4. FOR EXTENT OF DEMOLITION, SEE ARCHITECTURAL DRAWINGS.
5. ALL ELEVATIONS ARE REFERENCED FROM EXISTING INTERIOR SLAB ELEVATION = 0'-0" U.N.
6. (N) DENOTES NEW
7. (E) DENOTES EXISTING TO REMAIN
8. V.I.F. = VERIFY IN FIELD



SHEET NO. _____

1. SEE SHEET 54.0 FOR GENERAL STRUCTURAL NOTES.
2. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, CONDITIONS AND INDICATED MEMBERS BEFORE THE ORDERING OF MATERIALS AND CONSTRUCTION. NOTIFY THE ARCHITECT ENGINEER OF RECORD IMMEDIATELY OF ANY DEVIATIONS.
3. FOR ALL OPENING DIMENSIONS AND LOCATIONS, VERIFY WITH ARCHITECTURAL DRAWINGS.
4. FOR EXTENT OF DIMENSION, SEE ARCHITECTURAL DRAWINGS.
5. ALL ELEVATIONS ARE REFERENCED FROM EXISTING INTERIOR SLAB ELEVATION = 0'-0" U.N.
6. (N) DENOTES NEW
7. (E) DENOTES EXISTING TO REMAIN
8. V.I.F. = VERIFY IN FIELD
9. FOR NEW RTU SUPPORT FRAMING SEE DETAIL 1/S3.1. FOR NEW CURB TO FRAME ATTACHMENT SEE DETAIL 2/S3.1. COORDINATE WITH MECHANICAL UNIT SUPPLIER & PLAN.

MAIN ROOF LOADS	
<u>DEAD LOADS</u>	
MEMBRANE (UNBALLASTED)	= 2.0 PSF
INSULATION	= 2.0 PSF
METAL DECK	= 2.0 PSF
JOISTS	= 2.5 PSF
BEAMS	= 2.5 PSF
MECH. /ELEC. /FIRE PROT. /MISC.	= 5.0 PSF
TOTAL DEAD LOAD	= 16.0 PSF
<u>LIVE LOADS</u>	
METAL DECK	= 20 PSF
<u>SNOW LOADS</u>	
GROUND SNOW LOAD, Pg	= 20 PSF
EXPOSURE FACTOR, Ce	= 1.0
LOAD IMPORTANCE FACTOR, I	= 1.0
DESIGN ROOF SNOW LOAD	= 20.0 PSF +DRIFT
<u>UPLIFT DUE TO WIND</u>	
NET UPLIFT	
JOISTS	= 17 PSF


REVIEWED FOR CODE COMPLIANCE
City Planning & Development
Development Services
City of Kansas City, Missouri

P_2

Jeffrey A Lee

Jeff Lee, P.E., M.C.F.
Lp2
Building Official

Date: 01/18/2022 By: jnewport

Ww: UNIFORM WIND LOAD (PLF, EITHER DIRECTION)  Date: 01/18/2022 By: jnew

Wd: UNIFORM DEAD LOAD (PLF) L: LENGTH OF SNOW DRIFT LOAD (FT)

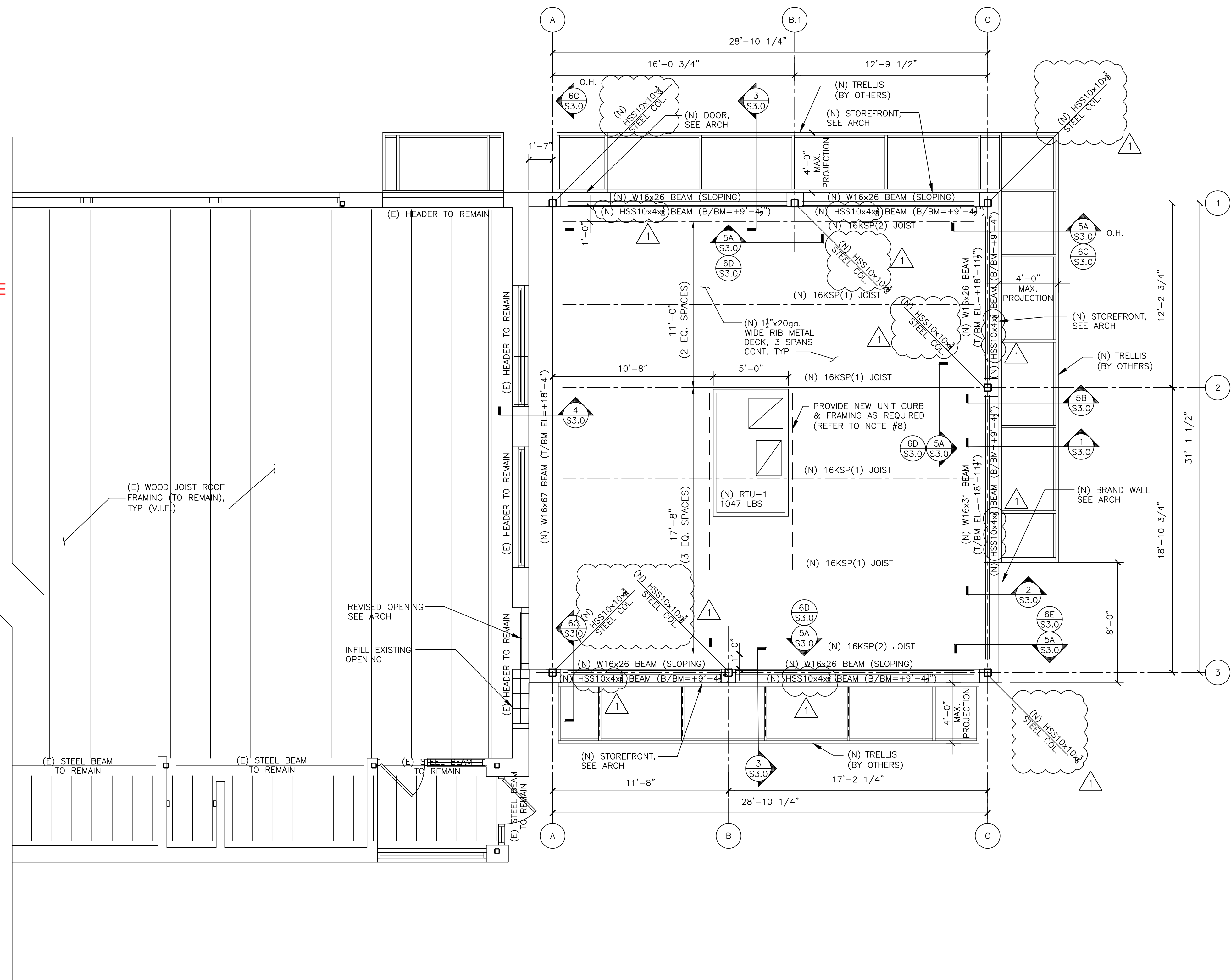
Ws: UNIFORM SNOW LOAD (PLF) LP: CONCENTRATED LOAD (KIPS)

Wsd: SNOW DRIFT LOAD (PLF) LP: DISTANCE OF CONCENTRATED LOAD (FT)

NOTE:

1. MANUF SHALL ADD ADD'L LOADS DUE TO TRANS, UH UNITS & SPRINKLER LINE LOADS PERPENDICULAR TO JOIST, VERIFY ALL SPRINKLER LINE LAYOUTS WITH CONTRACTOR
2. THE JOIST MANUFACTURER SHALL DESIGN SPECIAL JOISTS FOR ALL GLOBAL AND LOCALIZED EFFECTS.

JOIST MARK	Wd (PLF)	Ws (PLF)	Wsd (PLF)	Wws (PLF)	L (FT)	P ₁ (KIPS)	Lp ₁ (FT)	P ₂ (KIPS)	Lp ₂ (FT)
16KSP(1)	96	135	210	155	5	0.525	13.17	1.3	1.83
16KSP(2)	60	110	140	210	5	0	0	1.3	1.83



1 PARTIAL FRAMING PLAN
S1.1 1/4" = 1'-0"



PREPARED BY: **EBC Consulting**
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SIGNED BY:


DATE:

NAME: JOSHUA WELL CARRELL

LICENSE NO: A-2018040323

PREPARED FOR: © 2016 McDonald's USA, LLC

PREPARED FOR:



CONSULTANT:

COA # 2012012048
12/21/2021

COA # 2012012048
12/21/2021

[illegible]

DRAWN BY	
REVIEWED BY	
STD ISSUE DATE	
DATE ISSUED	2021
SITE ID NO.	30909

PROJECT TITLE
MCDONALD'S RESTAURANT
KC MO-OAK: 2019 MOD C

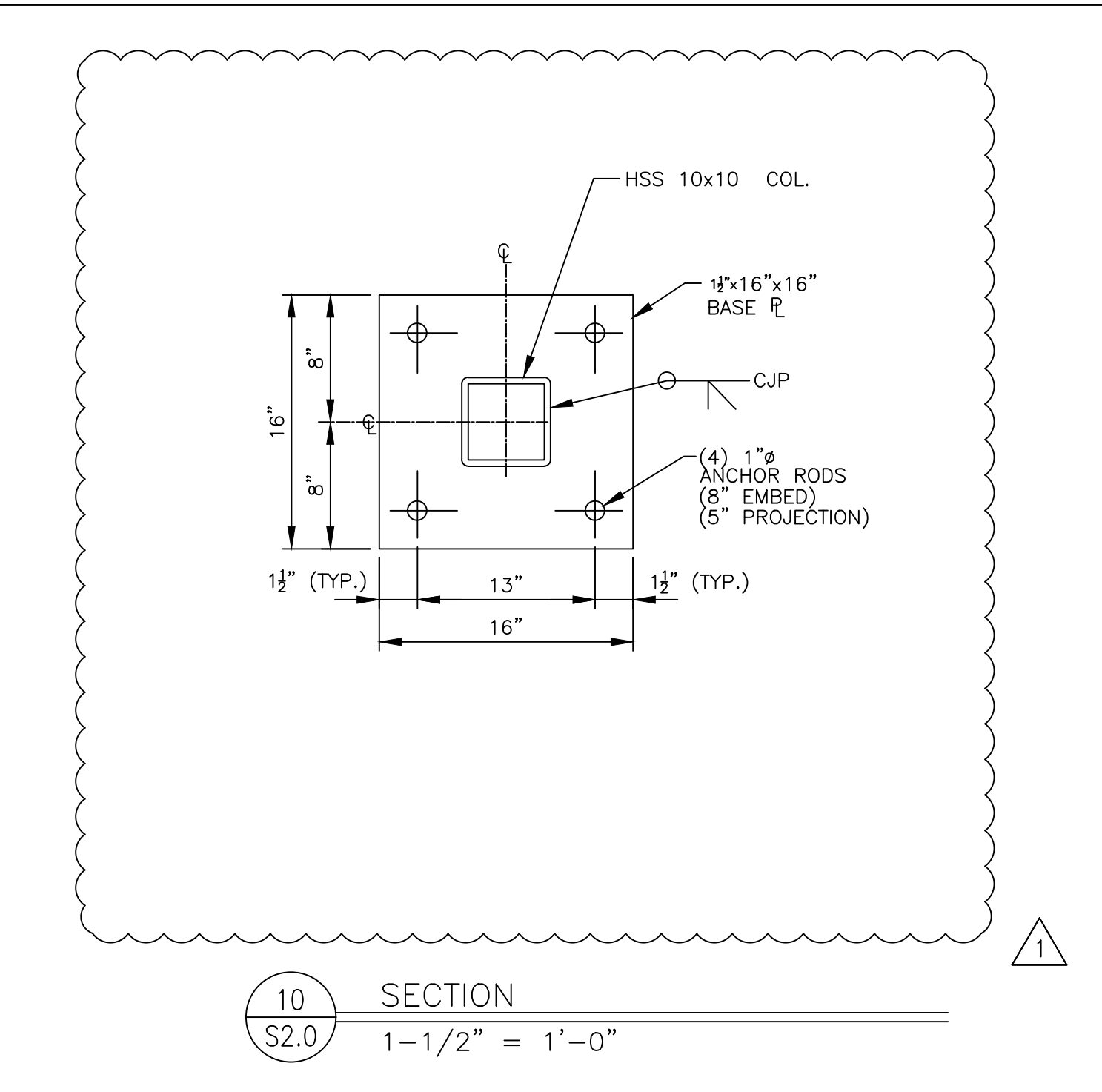
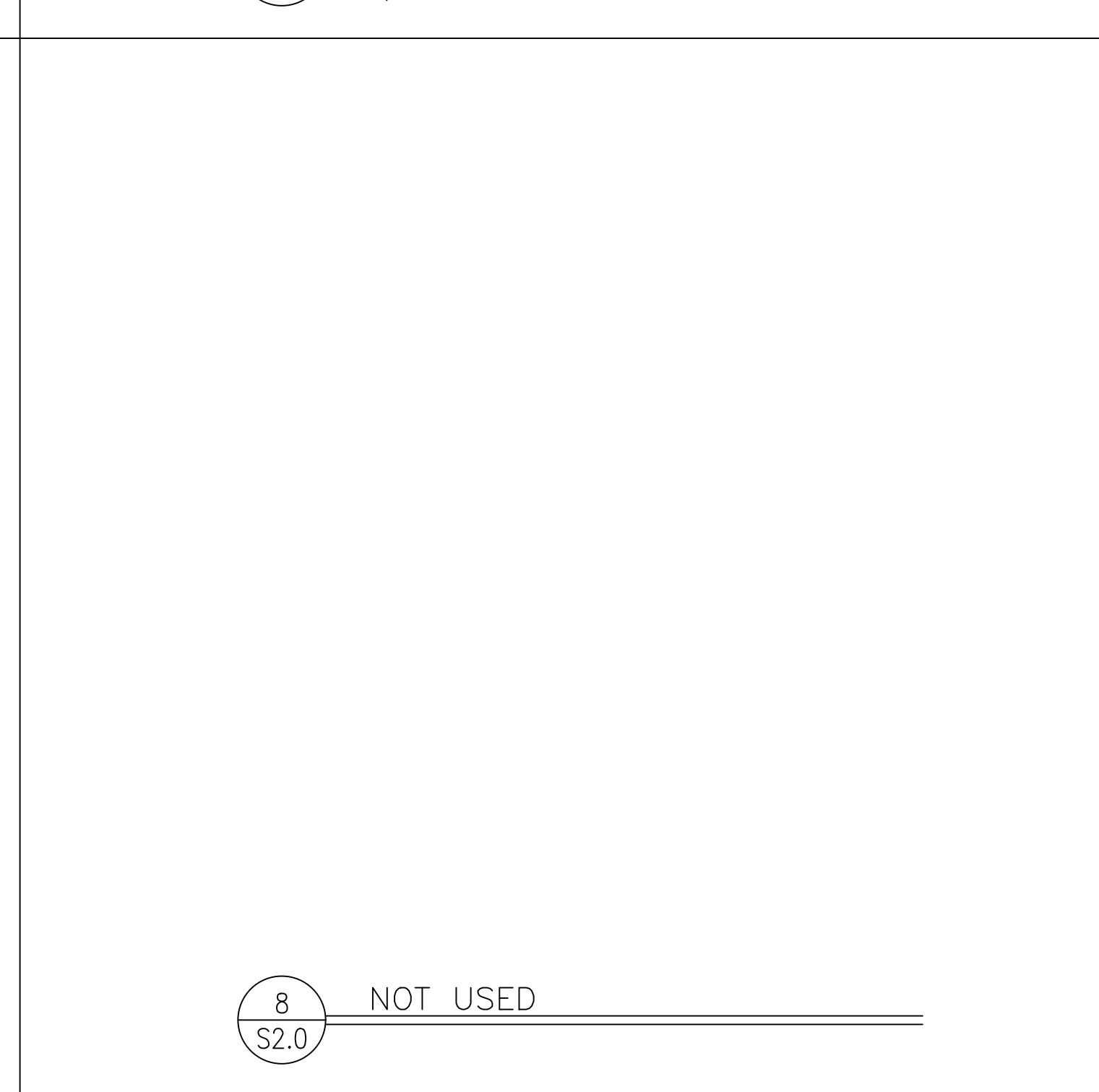
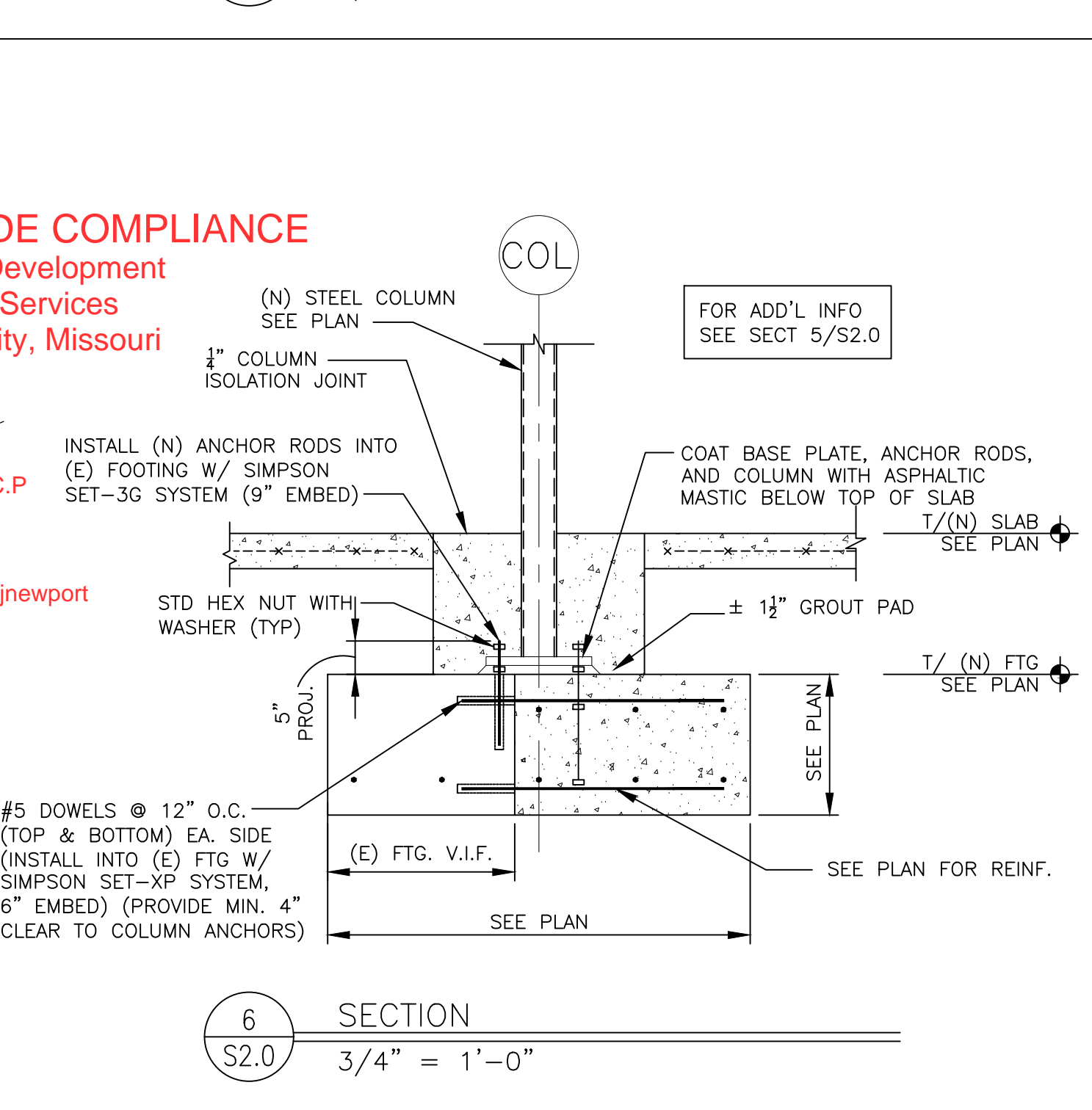
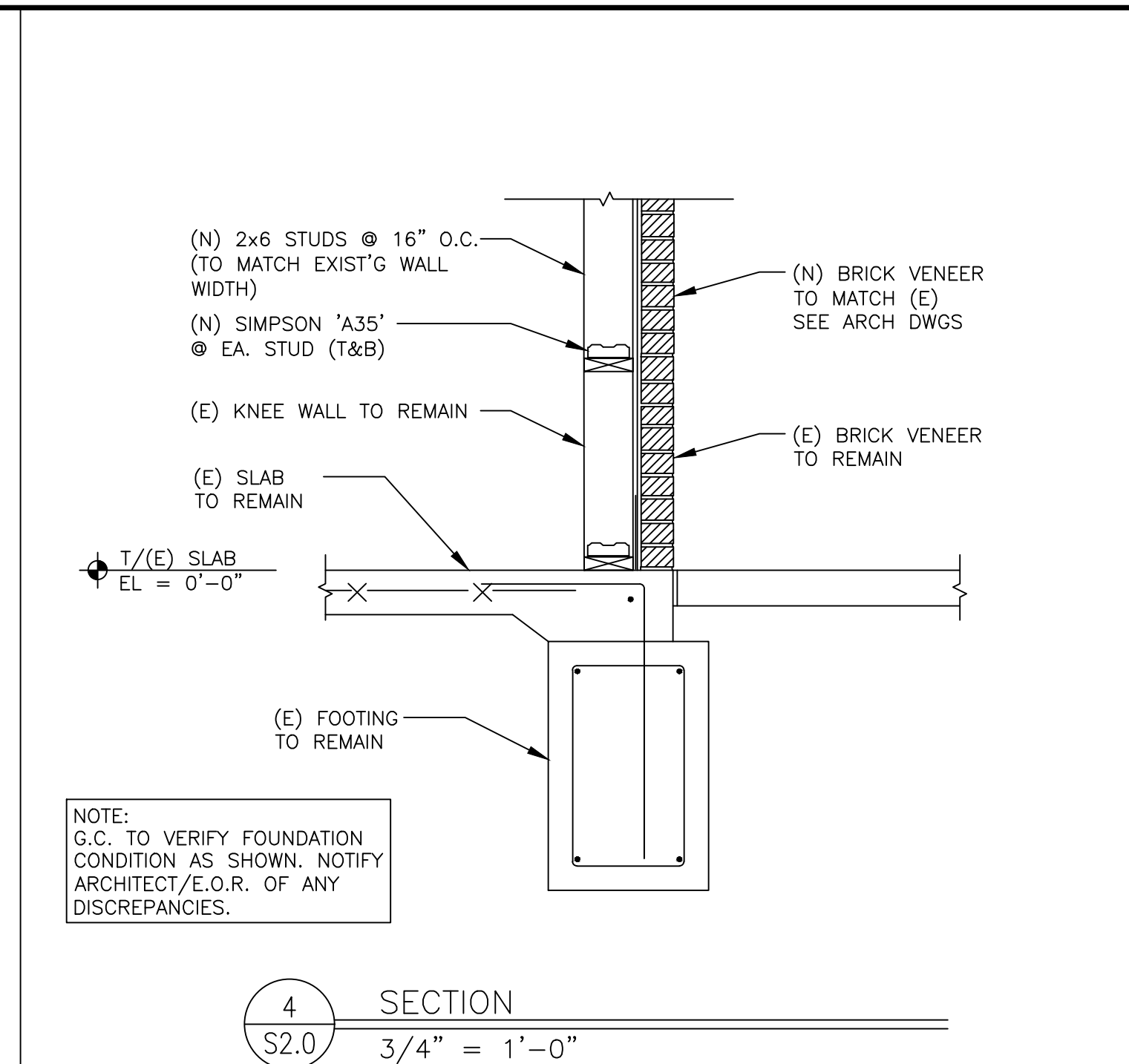
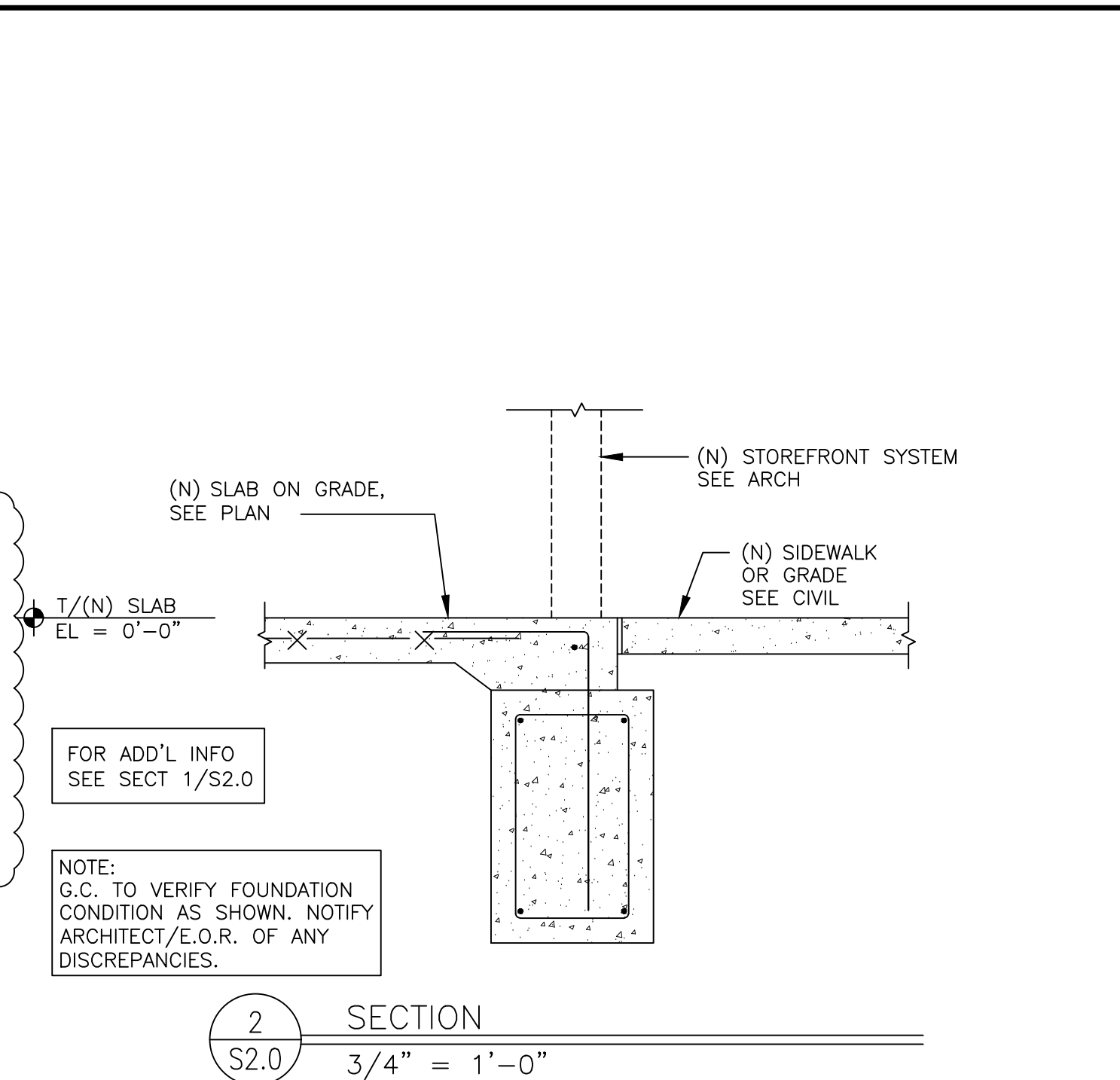
SHEET TITLE
FRAMING PLAN

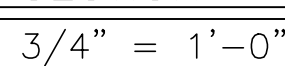
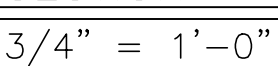
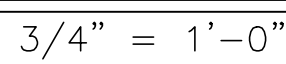
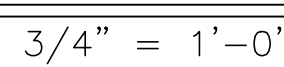
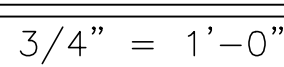
SITE ADDRESS
9551 N MCGEE STREET,
KANSAS CITY, MO 64155

PROJECT NO.

S1.1

SHEET NO.





GENERAL NOTES:	
<div><div>DESIGN AND LOADING</div><div><div>1. THE STRUCTURAL DESIGN OF THIS BUILDING WAS BASED ON THE DESIGN CRITERIA: A. BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE (ASCE 7-16) B. FLOOR: <div>LIVE LOAD: 100 PSF C. ROOF DEAD LOADS + LIVE LOADS: LIVE LOAD: 20 PSF (REDUCIBLE) DEAD LOAD: SEE FRAMING PLAN D. OCCUPANCY CATEGORY: II E. SNOW: GROUND LOAD: 20 PSF FLAT ROOF LOAD: 20 PSF SNOW EXPOSURE FACTOR, Ce = 1.0 IMPORTANCE FACTOR, I = 1.0 THERMAL COEFFICIENT, Ct = 1.0 ALL APPLICABLE EFFECTS DUE TO SNOW DRIFTING F. WIND: BASIC WIND SPEED: 110 MPH IMPORTANCE FACTOR = (N/A) BUILDING OCCUPANCY CATEGORY: I WIND EXPOSURE: C FOR MAIN WIND FORCE RESISTING SYSTEM WIND EXPOSURE CATEGORY C FOR COMPONENTS AND CLADDING G. SEISMIC: IMPORTANCE FACTOR = 1.00 MAPPED SPECTRAL RESPONSE ACCELERATIONS: SS = 0.093, S1= 0.068 SOIL SITE CLASS: D DESIGN SPECTRAL RESPONSE PARAMETERS: SDS = 0.099, SD1 = 0.109 SEISMIC DESIGN CATEGORY: B SEISMIC FORCE RESISTING SYSTEM: STEEL ORDINARY MOMENT FRAMES RESPONSE MODIFICATION FACTOR R = 3.5 ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE ANALYSIS</div></div></div><div>FOUNDATION NOTES</div><div><div>1. THE FOUNDATION DESIGN OF THIS BUILDING WAS BASED ON THE FOLLOWING CRITERIA: A. MINIMUM ALLOWABLE SOIL BEARING CAPACITY = 3000 PSF (PER EXISTING DRAWINGS) THE SOIL BEARING CAPACITY SHALL BE TESTED PRIOR TO CONSTRUCTION AND THE FOUNDATIONS SHALL BE MODIFIED IF THE ACTUAL SOIL BEARING CAPACITY IS LESS THAN THE ALLOWABLE VALUE NOTED ABOVE. 2. ALL EXTERIOR FOOTINGS SHALL EXTEND BELOW THE MAXIMUM ANTICIPATED DEPTH OF FROST. 3. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER OF RECORD IMMEDIATELY IN THE EVENT THAT THE SOILS CONDITIONS ENCOUNTERED VARY FROM THOSE SHOWN ON THE BORING LOGS. 4. ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY A SOILS TESTING LABORATORY PRIOR TO PLACEMENT OF CONCRETE.</div></div><div>CONCRETE AND REINFORCING</div><div><div>1. ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE "AMERICAN CONCRETE INSTITUTE BUILDING CODE" (ACI 318) AND WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) LATEST EDITIONS. 2. ALL NORMAL WEIGHT CONCRETE (145 PCF) SHALL OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI (3500 PSI FOR SLABS). 3. ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE SHALL BE AIR ENTRAINED AS RECOMMENDED BY ACI 318. 4. TEST CYLINDERS SHALL BE MADE AND TESTED AS OUTLINED IN CHAPTER 16 OF ACI-308.1. 5. REINFORCING BARS SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. ALL REINFORCING AND ACCESSORIES SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI STANDARD 315 AND 315R. 6. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITIONS SHOWN ON THE PLANS AND DETAILS. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE WORK. 7. THE GENERAL CONTRACTOR SHALL CHECK WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND THE SUB-CONTRACTORS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, INSERTS, SLAB DEPRESSIONS AND OTHER ITEMS RELATED TO THE CONCRETE WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR PROPER LOCATION.</div></div><div>STRUCTURAL STEEL</div><div><div>1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERRECTED IN CONFORMANCE WITH THE AISC360 "SPECIFICATION FOR STRUCTURAL STEEL". SEISMIC DESIGN OF STRUCTURAL STEEL STRUCTURES SHALL CONFORM TO AISC 341. 2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS: A. ANCHOR RODS F1554, GRADE 36 B. HIGH STRENGTH STRUCTURAL BOLTS A325-N U.N.O. C. STRUCTURAL SHAPES (W, WT) A992 D. STRUCTURAL SHAPES (M, S, C, MC, PLATES) A36 E. STRUCTURAL SHAPES (HP) A572 F. STRUCTURAL TUBING (HSS) A500 GRADE B G. STRUCTURAL ANGLES A36 3. ALL WELDING ELECTRODES SHALL BE E70-XX. ALL SHOP AND FIELD WELDING SHALL BE MADE IN ACCORDANCE WITH A.W.S. D1.1 "CODE FOR WELDING IN BUILDING CONSTRUCTION" AND SHALL BE MADE BY CERTIFIED WELDERS.</div></div><div>METAL DECK</div><div><div>1. ALL METAL DECK SHALL BE DETAILED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH THE STEEL DECK INSTITUTE SPECIFICATIONS, LATEST EDITION. 2. ALL METAL DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS, EXCEPT WHERE STEEL LAYOUT DOES NOT PERMIT. 3. METAL ROOF DECK SHALL BE 20 GAUGE, 1 3/8" DEEP, TYPE B, WIDE RIB METAL DECK, PAINTED. 4. METAL DECK SHALL BE ATTACHED TO ALL SUPPORTS WITH 3/8" DIA. PUDDLE WELDS AT 12" O.C. AND 6" O.C. AT ALL PERIMETER SUPPORTS. PROVIDE 36/77 FASTENER LAYOUT. PROVIDE A MINIMUM OF FOUR #10 TEK SCREWED SIDELAP CONNECTION PER TRUSS BAYS OR AS SHOWN ON PLANS.</div></div><div>COLD FORMED METAL FRAMING (METAL STUDS)</div><div><div>1. METAL STUDS SHOWN ON THE DRAWINGS HAVE BEEN SPECIFIED USING AMERICAN IRON & STEEL INSTITUTE (AISI) STANDARD DESIGNATIONS. 2. DESIGN, FABRICATIONS AND ERECTION SHALL CONFORM TO AISI "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION. THE CONTRACTOR SHALL SUBMIT FABRICATION DRAWINGS FOR REVIEW SIGNED AND SEALED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.</div></div><div>GALVANIZED MATERIAL:</div><div><div>1. ALL GALVANIZED STUDS AND ACCESSORIES 54 MIL (16 GA), 68 MIL (14 GA), 97 MIL (12 GA), SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE MINIMUM REQUIREMENTS OF ASTM A1003, GRADE D WITH A MINIMUM YIELD OF 50,000 PSI. 2. ALL GALVANIZED 33 MIL (20 GA), 43 MIL (18 GA), STUDS, TRACK, BRIDGING, END CLOSURES AND ACCESSORIES SHALL BE FORMED FROM STEEL THAT CORRESPONDS TO THE REQUIREMENTS OF ASTM A1003, GRADE A WITH A MINIMUM YIELD OF 33,000 PSI. 3. ALL GALVANIZED STUDS, TRACK, BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A1003. 4. UNLESS NOTED, ALL SCREWS OR PINS SHALL BE NON-CORROSIVE NO. 8-18 (D=.125") OR LARGER. (DO NOT USE STAINLESS STEEL OR COPPER COATED FASTENERS). FOR SHEATHING ATTACHMENT TO FRAMING SEE SHEAR WALL SCHEDULE ON S6. 5. UNLESS NOTED, TRACKS SHALL BE SAME DEPTH AS JOISTS AND EQUAL OR THICKER THAN JOISTS. TRACKS SHALL BE CONNECTED TO SUPPORTS AT 16" O.C. MAXIMUM UNLESS NOTED OTHERWISE. STUDS SHALL BE CONNECTED TO TRACKS AT EACH SIDE.</div></div><div>SAWN LUMBER</div><div><div>1. ALL GRADES OF LUMBER INDICATED ON STRUCTURAL DRAWINGS SHALL BE RATED BY THE SOUTHERN PINE INSPECTION BUREAU (SPIB), OR THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA). LUMBER GRADES SHALL BE AS FOLLOWS, WITH A MAXIMUM MOISTURE CONTENT OF 19%: A. SOUTHERN PINE NO. 2 Fb = 950 PSI E = 1,400,000 PSI B. DOUGLAS FIR-LARCH NO. 2 Fb = 900 PSI E = 1,600,000 PSI 2. BOLT HEADS AND NUTS BEARING ON WOOD SHALL BE PROVIDED WITH STANDARD CUT WASHERS. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED. 3. MINIMUM NAILED CONNECTIONS FOR WOOD FRAMING MEMBERS SHALL BE IN ACCORDANCE WITH THE LOCAL BUILDING CODE OR TABLE 2304.9.1 OF THE INTERNATIONAL BUILDING CODE IF NO OTHER CRITERIA IS GIVEN. NAIL CONNECTIONS SHALL UTILIZE "COMMON" NAILS UNLESS OTHERWISE NOTED. 4. CONNECTORS SHOWN ON THE DETAILS ARE MANUFACTURED BY SIMPSON STRONG TIE. WRITTEN APPROVAL BY THE ENGINEER OF RECORD IS REQUIRED FOR SUBSTITUTIONS.</div></div><div>ROOF & WALL SHEATHING</div><div><div>1. ALL SHEATHING SHALL CONFORM TO AMERICAN PLYWOOD ASSOCIATION (APA) DESIGN SPECIFICATIONS, LATEST EDITION. SHEATHING SHALL BE CONTINUOUS OVER THREE ADJACENT SPANS MINIMUM. 2. WALL SHEATHING SHALL BE 15/32" (1/2" NOMINAL) APA RATED SHEATHING, EXPOSURE 1, 32/16. ALL WALL SHEATHING SHALL BE FASTENED TO SUPPORTING MEMBERS W/ 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATED SUPPORTS, U.N.O. 3. ROOF SHEATHING SHALL BE 23/32" (3/4" NOMINAL) APA RATED SHEATHING, EXPOSURE 1, 32/16. ALL ROOF SHEATHING SHALL BE FASTENED TO SUPPORTING MEMBERS W/ 10d COMMON NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. AT INTERMEDIATE SUPPORTS MINIMUM. 4. ALL ROOF SHEATHING SHALL BE TONGUE & GROOVE OR PROVIDE SIMPSON "PSC" FASTENERS MINIMUM ONE CLIP PER SIDE TO ALLOW FOR EXPANSION. 5. REFER TO DRAWINGS FOR SPECIAL SHEATHING OR NAILING REQUIREMENTS. THE SHEATHING SHALL NOT BE USED AS A NAILING EDGE. 6. JOF PANEL DIMENSIONS SHALL NOT BE LESS THAN 24" UNLESS ALL EDGES OF THE UNDERSIZED PANELS ARE SUPPORTED BY FRAMING MEMBERS OR BLOCKING.</div></div><div>P.E., M.C.P.E. Masonry</div><div><div>CONCRETE BLOCK DESIGN AND CONSTRUCTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES," TMS 402/ACI 530/ASCE 5 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (TMS 602/ACI 530.1/ASCE 6) 1. MASONRY MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS: A. HOLLOW LOAD BEARING CONCRETE BLOCK: ASTM C-90. MINIMUM COMPRESSIVE STRENGTH = 1900 PSI AT 28 DAYS. B. MORTAR: ASTM C-270, TYPE S. MINIMUM COMPRESSIVE STRENGTH = 1800 PSI AT 28 DAYS. C. MORTAR: ASTM C-270, TYPE M. MINIMUM COMPRESSIVE STRENGTH = 2500 PSI AT 28 DAYS. (USED FOR BELOW GRADE WORK) D. GROUT: ASTM C-476. MINIMUM COMPRESSIVE STRENGTH = 2000 PSI AT 28 DAYS E. MASONRY REINFORCEMENT: ASTM A-82 GALVANIZED F. MASONRY PRISM STRENGTH: F'm = 1500 PSI 2. PRIOR TO DELIVERY OF MASONRY UNITS TO THE JOB SITE, FURNISH TO THE OWNER AFFIDAVITS FROM AN APPROVED TESTING LABORATORY CERTIFYING THAT ALL UNITS CONFORM TO THEIR RESPECTIVE ASTM REQUIREMENTS. 3. GROUT ALL CAVITIES CONTAINING REINFORCEMENT IN LIFTS NOT TO EXCEED 5'-0". 4. LABORATORY PREPARED MIXES SHALL BE PREPARED AND TESTED IN ACCORDANCE WITH ASTM C-270. FIELD MORTAR SHALL BE TESTED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH ASTM C-780 TWO SETS OF THREE MORTAR CUBES SHALL BE TAKEN DIRECTLY FROM THE MIXER FOR EACH DAY OF MASONRY WORK. TEST THE CUBES AT 28 DAYS. ACCEPTANCE OF THE MORTAR SHALL BE AT THE DISCRETION OF THE ENGINEER. 5. CALCIUM CHLORIDE AND/OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE INCLUDED IN MORTAR OR GROUT MIX, EXCEPT WHEN APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. NO ANTI FREEZE COMPOUNDS SHALL BE USED TO LOWER THE MORTAR'S FREEZING POINT. 6. NO EXTERIOR MASONRY SHALL BE LAID WHEN THE OUTSIDE AIR TEMPERATURE IS LESS THAN 40 DEGREES FAHRENHEIT, UNLESS THE RECOMMENDATIONS SPECIFIED BY THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" TMS 402/ACI 530/ASCE 5 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (TMS 602/ACI 530.1/ASCE 6) FOR COLD WEATHER CONSTRUCTION ARE STRICTLY FOLLOWED. 7. THE MASONRY CONTRACTOR SHALL PROVIDE BRACING TO WITHSTAND HORIZONTAL PRESSURES AS REQUIRED BY THE BUILDING CODE AND LOCAL ORDINANCE. 8. SEE NOTE ON SHEET S1.0 FOR CMU JOINT REINFORCEMENT AND VENEER TIES (WHERE APPLICABLE)</div></div></div>	

S4.0