	DESIGN PARAME	TERS
1.	BUILDING CODE	2018 INTERNATIONAL BUILDING CODE (IBC)
	OCCUPANCY CATEGORY	II
2.	LIVE LOADS	
	A. ROOF - NON-REDUCIBLE	20 PSF
	B. SLAB-ON-GRADE	350 PSF
3.	ROOF SNOW LOAD	
	A. GROUND SNOW LOAD, Pg	20 PSF
	B. FLAT ROOF SNOW LOAD, Pf	20 PSF
	C. SNOW EXPOSURE FACTOR, Ce	1.0
	D SNOW LOAD IMPORTANCE FACTOR, I	1.0 1.0
	E. THERMAL FACTOR, Ct (BUILDING) F. SNOW DRIFT	PER REFERENCED CODE
4.	WIND DESIGN DATA	FER REFERENCED CODE
	A. ULTIMATE WIND SPEED (3 SECOND GUST), V	109 MPH
	B. WIND IMPORTANCE FACTOR, I	1.00
	C. WIND EXPOSURE CATEGORY	С
	D. INTERNAL PRESSURE COEFFICIENT, Gcpi	+/- 0.18
	E. DESIGN WIND PRESSURE ON COMPONENTS AND CLADDING (1.0W)	
	1) WALLS (500 SQUARE FEET EFFECTIVE WIND AREA)	
	END ZONES	23.7 PSF
	INTERIOR ZONES	23.7 PSF
	2) ROOF (10 SQUARE FEET EFFECTIVE WIND AREA FOR DECK	ATTACHMENT)
	CORNER ZONES	89.1 PSF
	END ZONES	65.4 PSF
	INTERIOR ZONE 1	49.6 PSF
	INTERIOR ZONE 2  F. WIDTH OF END ZONES, a	28.5 PSF 18.9 FT
5.	EARTHQUAKE DESIGN DATA	10.9 FT
0.	A. SEISMIC IMPORTANCE FACTOR, I	1.0
	B. MAPPED SPECTRAL RESPONSE ACCELERATION, Ss	9.9 %
	C. MAPPED SPECTRAL RESPONSE ACCELERATION, S1	6.8 %
	D. SITE CLASS	C
	E. SPECTRAL RESPONSE COEFFICIENT, Sds	0.086
	F. SPECTRAL RESPONSE COEFFICIENT, Sd1	0.068
	G. SEISMIC DESIGN CATEGORY	В
	H. STRUCTURAL SYSTEM (DUAL SYSTEM)	
	1) BASIC SEISMIC FORCE—RESISTING SYSTEM TYPE	H. STEEL SYSTEM
	2) VERTICAL ELEMENT TYPE	STEEL SYSTEM NOT SPECIFICALLY DETAILED     FOR SEISMIC RESISTANCE      A DEADING WALL SYSTEMS
	3) BASIC SEISMIC FORCE—RESISTING SYSTEM TYPE	A. BEARING WALL SYSTEMS
	4) VERTICAL ELEMENT TYPE	2) ORDINARY PRECAST SHEAR WALLS
	5) DESIGN BASE SHEAR, LRFD 6) SEISMIC RESPONSE COFFEIGIENT Co	0.029 W 0.029
	<ul><li>6) SEISMIC RESPONSE COEFFICIENT, Cs</li><li>7) CONTROLLING RESPONSE MODIFICATION FACTOR, R</li></ul>	0.029
	·	•
	J. ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

### CENERAL NOTES

### <u>GENERAL</u>

6. DEAD LOAD

A. EPDM MEMBRANE

B. RIGID INSULATION

D. LIGHTS, PLUMBING, & HVAC

H. TOTAL DEAD LOAD ON JOISTS

J. TOTAL DEAD LOAD ON COLUMNS

C. ROOF DECK

E. SPRINKLERS

F. STEEL JOISTS

G. STEEL GIRDERS

- 1. STRUCTURAL ELEMENTS ARE NON-SELF SUPPORTING AND REQUIRE INTERACTION WITH OTHER ELEMENTS FOR STABILITY AND RESISTANCE TO LATERAL FORCES. FRAMING AND WALLS SHALL BE TEMPORARILY BRACED BY THE CONTRACTOR UNTIL PERMANENT BRACING, ROOF DECKS, AND WALLS HAVE BEEN INSTALLED AND CONNECTIONS BETWEEN THESE ELEMENTS HAVE BEEN MADE.
- 2. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION, UNLESS NOTED OTHERWISE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATION OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO
- 3. THE SIZE AND LOCATION OF EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE FOR MECHANICAL, ELECTRICAL, AND PLUMBING WORK SHALL BE VERIFIED BY THE CONTRACTOR. PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OPENING LOCATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- 4. USE ONLY DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS OR USE ANY DIMENSIONS TAKEN FROM ELECTRONIC DRAWING FILES. CONTRACTOR SHALL COORDINATE IN-PLACE DIMENSIONS BASED ON TOLERANCES
- OF THE RESPECTIVE TRADES.

  5. ASSUME EQUAL SPACING IF NOT INDICATED ON DRAWINGS.
- 6. THE GENERAL NOTES ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUCTION WITH THE STRUCTURAL DRAWINGS. WHERE REQUIREMENTS INDICATED ON THE STRUCTURAL DRAWINGS DIFFER FROM THE GENERAL NOTES, NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
- 7. THE STRUCTURAL DRAWINGS ARE NOT INTENDED TO BE AN INDEPENDENT SET OF THE CONSTRUCTION DOCUMENTS. SEE ARCHITECTURAL, MEP, CIVIL AND OTHER DRAWINGS FOR INFORMATION RELATED TO THE STRUCTURAL WORK. CONTRACTOR SHALL VERIFY COORDINATION OF THE DESIRED DETAILS PRIOR TO CONSTRUCTION AND NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER IF ADDITIONAL COORDINATION IS REQUIRED.
- 8. ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS AND SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST SEISMIC FORCES AS DETERMINED IN CHAPTER 13 OF ASCE 7.

### <u>FOUNDATIONS</u>

- 1. FOUNDATION DESIGNS, SUBGRADE PREPARATION NOTES, AND STRUCTURAL EARTH MOVING SPECIFICATION ARE BASED ON THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT, BY: OLSSON, INC. OF 1700 E 123RD ST., OLATHE, KANSAS 64080 (PHONE NO. 913–829–0078) DATED: FEBRUARY 2022.
- 2. FOOTING DESIGNS ARE BASED ON AN ASSUMED STABLE, NON-EXPANSIVE SOIL WITH AN ALLOWABLE FOUNDATION PRESSURE OF 2500 PSF WITH A MAXIMUM DIFFERENTIAL SETTLEMENT OF 3/4 INCH. CONTRACTOR SHALL HIRE A GEOTECHNICAL ENGINEER TO DETERMINE WHETHER OR NOT SOIL MEETS THIS MINIMUM CRITERIA AND IF IT DOES NOT, SHALL NOTIFY ENGINEER SO THAT THE FOUNDATION MAY BE REDESIGNED ACCORDINGLY.
- 3. CONTRACTOR AND TESTING LABORATORY REPRESENTATIVE SHALL READ THE GEOTECHNICAL REPORT AND BECOME THOROUGHLY FAMILIAR WITH SITE AND SUBGRADE INFORMATION GIVEN THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT QUANTITIES OF CUT AND FILL FOR ESTIMATING AND CONSTRUCTION. SUBGRADE SHALL BE PREPARED AS NOTED IN THE GEOTECHNICAL REPORT.
- 4. A QUALIFIED AND REGISTERED GEOTECHNICAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED AND WORKING FOR THE TESTING LABORATORY, SHALL DETERMINE CONFORMANCE OF THE FOUNDATION BEARING STRATA WITH THE FOUNDATION DESIGN CRITERIA ABOVE, AND ALL OTHER CONTRACT DOCUMENTS. TESTING LABORATORY SHALL NOTIFY CONTRACTOR, ARCHITECT AND CONSULTING ENGINEER OF ANY CONDITIONS NOT IN ACCORDANCE WITH FOUNDATION DESIGN CRITERIA OR CONTRACT DOCUMENTS.

- 5. USE ONLY STRUCTURAL FILL MATERIAL AS NOTED IN THE GEOTECHNICAL REPORT FOR FILL BELOW BUILDING AND FIVE FEET BEYOND THE EDGES OF THE BUILDING.
- FOUNDATION WALLS SHALL HAVE ADEQUATE TEMPORARY BRACING INSTALLED BY THE CONTRACTOR BEFORE BACKFILL IS PLACED AGAINST THEM. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED.
   FOOTINGS SHALL BE POURED AGAINST UNDISTURBED SOIL, UNLESS NOTED OTHERWISE.
- 8. AVOID DAMAGE TO UNDERGROUND UTILITIES SUCH AS WATER MAINS, SANITARY SEWERS, BURIED CABLES, ETC., WHICH
  - MIGHT EXTEND ACROSS OR ADJOIN SITE.

### <u>CONCRETE</u>

1. MINIMUM COMPRESSIVE STRENGTH (f'c) AT THE END OF 28 DAYS SHALL BE AS FOLLOWS:

A. FOOTINGS (GRADE BEAMS)

B. FOUNDATION WALLS

C. SLABS-ON-GRADE

D. CONCRETE WALL PANELS (MINIMUM STRENGTH)

3000 PSI U.N.O. ON PLAN

4000 PSI

4000 PSI

MAXIMUM WATER/CEMENT RATIO = 0.48 TO 0.50 FOR FOOTINGS AND 0.52 FOR SLABS-ON-GRADE AND PRECAST WALLS PANELS

### SLUMP LIMITS = 4" + 1"

CONCRETE SHALL BE NORMAL WEIGHT (145 PCF), UNLESS NOTED OTHERWISE.

- CEMENTITOUS MATERIALS CONTENT SHALL NOT BE LESS THAN 520 POUNDS PER CUBIC YARD. USE OF ANY FLY ASH IN FLOOR SLAB MIXES SHALL BE NO MORE THAN 20%.
- 2. AIR-ENTRAINED IS NOT REQUIRED FOR STRUCTURAL CONCRETE.
- 3. AGGREGATES SHALL COMPLY WITH ASTM C 33 AND SHALL BE FREE OF DELETERIOUS MATTER AND SHALL BE MADE OF COARSE LIMESTONE OR GRANITE AGGREGATES.
- 4. MATERIALS OR ADMIXTURES SHALL NOT CONTAIN ANY CALCIUM CHLORIDE. IF ADMIXTURES ARE UTILIZED, THEY SHALL BE COMPATIBLE WITH OTHER ADMIXTURES AND MUST NOT CONTRIBUTE WATER—SOLUBLE CHLORIDE IONS EXCEEDING THOSE PERMITTED IN HARDENED CONCRETE.
- 5. REINFORCING STEEL SHALL MEET THE FOLLOWING:
- A. DEFORMED BARS

  B. WELDABLE DEFORMED BARS

  C. WELDED WIRE FABRIC

  ASTM A615, GRADE 60

  ASTM A706, GRADE 60

  ASTM A185
- 6. WHERE DOWELS ARE INDICATED BUT NOT SIZED, PROVIDE DOWELS THAT MATCH SIZE AND LOCATION OF MAIN REINFORCING STEEL AND LAP SPLICE WITH THE MAIN REINFORCING STEEL. REINFORCING BARS SHALL BE SPLICED AS NOTED IN THE REINFORCING LAP SCHEDULE.
- 7. REFER TO ACI 318 LATEST EDITION FOR CONCRETE COVER, ACI 315 LATEST EDITION FOR DETAILING, FABRICATION, PLACEMENT AND SUPPORT PRACTICES, ACI 347 FOR FORMWORK, ACI 305 FOR HOT WEATHER CONCRETING, ACI 306 FOR COLD WEATHER CONCRETING, AND ACI 301 LATEST EDITION FOR STANDARD PRACTICE FOR MIXING AND PLACING CONCRETE. PROVIDE CONCRETE COVER DIMENSIONS IN SHOP DRAWINGS FOR STRUCTURAL ENGINEER REVIEW.
- 8. "C.J." INDICATES SAW CUT CONTRACTION JOINT OR DOWELED CONSTRUCTION JOINT IN SLAB-ON-GRADE. SLAB POURS SHALL BE SEPARATED BY A DOWELED CONSTRUCTION JOINT. CONTRACTION/CONSTRUCTION JOINTS SHALL BE LOCATED AS SHOWN ON PLANS OR AS DIRECTED BY THE STRUCTURAL ENGINEER.
- 9. PROVIDE CORNER BARS THAT MATCH CONTINUOUS REINFORCMENT SIZE AND QUANTITY AT INTERSECTIONS AND CORNERS OF FOUNDATIONS.
- 10. REINFORCING BAR SUPPORTS SHALL BE BOLSTERS, CHAIRS, SPACERS AND OTHER DEVICES TO HOLD REINFORCING BARS AND WELDED WIRE REINFORCEMENT IN PLACE. MANUFACTURE BAR SUPPORTS FFROM STEEL, PLASTIC OR PRECAST CONCRETE ACCORDING TO CRSI'S "MANUAL OF STANDARD PRACTICE" OF GREATER COMPRESSIVE STRENGTH THAN THE CONCRETE PLACED IN.
- 11. FORM—FACING PANELS THAT WILL BE EXPOSED TO VIEW SHALL BE CONSTRUCTED TO MINIMIZE THE NUMBER OF JOINTS AND SHALL BE MADE OF PLYWOOD, METAL OR OTHER APPROVED PANEL MATERIAL. PLYWOOD MUST COMPLY WITH DOC PS 1 AND BE CLASS 1 OR BETTER.
- 12. CHAMFER EXTERIOR CORNERS AND EDGES OF PERMANENTLY EXPOSED CONCRETE.
- 13. THE CONCRETE SLABS SHOWN ON THE STRUCTURAL DRAWINGS HAVE BEEN DESIGNED FOR THE FINISHED STRUCTURE AND HAVE NOT BEEN DESIGNED FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, FORK LIFTS, MAN LIFTS, AND OTHER VEHICULAR TRAFFIC.
- 14. A VAPOR RETARDER NOT LESS THAN 10 MILS THICK SHALL BE INSTALLED ONLY AT AREAS NOTATED ON THE CONSTRUCTION DOCUMENTS. THE RETARDER SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATION WITH JOINTS USING THE MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE SENSITIVE JOINT TAPE AND INCLUDING THE MANUFACTURER'S PROPRIETARY PENETRATION FLASHING FOR ALL THROUGH—SLAB PENETRATIONS. LAP VAPOR RETARDER JOINTS 6 INCHES MINIMUM.
- 15. CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED WITH A HARD TROWEL FINISH AND BE FINISHED ACCORDING TO ASTM E 1155 TO ACHIEVE THE MINIMUM TOLERANCES BELOW:

### OVERALL VALUES: FF = 50 FL = 35 LOCAL VALUES: FF = 25 FL = 20

0.3 PSF

0.7 PSF

2.0 PSF

3.0 PSF

2.0 PSF

2.0 PSF

2.0 PSF

10.0 PSF

12.0 PSF

- 16. THE CONCRETE SLAB-ON-GRADE SHALL BE CURED WITH AN APPROVED CURING MATERIAL THAT HAS BEEN SUBMITTED AND APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD. THE FLOOR SHALL BE CURED WITH ONE COAT OF HARDENER/DENSIFIER (ASHFORD FORMULA SEALER OR APPROVED ALTERNATE).
- 17. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, OPENINGS, BLOCKOUTS, RECESSES, ELEVATIONS, ANCHOR RODS AND EMBED LOCATIONS PRIOR TO CONCRETE PLACEMENT. THE CONTRACTOR SHALL VERIFY WITH ARCHITECTURAL, STRUCTURAL AND MEP DRAWINGS FOR LOCATIONS OF REQUIRED COORDINATION ITEMS. CONTRACTOR SHALL CONTACT THE ARCHITECT OR ENGINEER IF AN ERROR OR OMISSION OCCURS AFTER CONCRETE PLACEMENT.
- 18. ANCHOR BOLTS AND EMBED PLATES SHALL BE TIED INTO THE REBAR CAGE AND HELD IN PLACE WITH A RIGID TEMPLATE TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT.
- 19. NON-SHRINK GROUT SHALL BE PRE-MIXED, NON-SHRINKING WITH A MINIMUM COMPRESSIBE STRENGTH OF 5000 PSI IN 28 DAYS CONFORMING TO USACE SPECIFICATIONS NO. CRD-C621.

### CONCRETE WALL PANELS

- 1. THE STRUCTURAL DRAWINGS REPRESENT THE REQUIRED FINAL IN PLACE LOADINGS FOR THE CONCRETE WALL PANELS. THE PANELS SHALL BE DESIGNED BY THE TILT-UP SUPPLIER FOR THE FINAL IN PLACE LOADINGS ALONG WITH BEING DESIGNED FOR ERECTION STRESSES, TEMPORARY BRACING OR LIFTING OF THE WALL PANELS. WALL PANELS SHALL BE DESIGNED AND DETAILED TO ADHERE TO ALL LOCAL CODES.
- 2. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR THE TILT—UP WALL PANELS. SHOP DRAWINGS SHALL INCLUDE CALCULATIONS FOR FINAL IN PLACE LOADINGS, ERECTION, LIFTING AND TEMPORARY BRACING OF THE WALL PANELS ALONG WITH ANY OTHER ADDITIONAL CONSTRUCTION CONSIDERATIONS. SHOP DRAWINGS AND CALCULATIONS FOR THE CONSTRUCTION CONSIDERATIONS SHALL BE DESIGNED, SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. DESIGN CALCULATIONS SHALL SHOW STRESSES IN THE PANELS FOR THE LOADS PRESCRIBED IN THE CONSTRUCTION DOCUMENTS ALONG WITH THERMAL DIFFERENTIAL AND ERECTION AND LIFTING FORCES. THE DEFERRED SUBMITTAL DOCUMENTS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL AS REQUESTED WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
- 3. THE CONTRACTOR SHALL VERIFY THE PROPOSED TILT-UP WALL PANELS ARE CAPABLE OF MEETING THE FINAL IN PLACE AND ERECTION REQUIREMENTS PRIOR TO BIDDING THE WORK. ANY DEVIATIONS FROM THE WALL PANELS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE QUALIFIED IN THE CONTRACTOR'S BID.
- 4. THE CONTRACTOR SHALL PROVIDE ADEQUATE VERTICAL AND LATERAL SYSTEM COMPONENTS TO SUPPORT THE LOADINGS STIPULATED IN THE CONSTRUCTION DOCUMENTS. THE FOUNDATIONS HAVE BEEN DESIGNED BASED ON THESE LOADING REQUIREMENTS. ANY DEVIATIONS IN THE LOADINGS SHALL BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO PROCEEDING.
- 5. THE CONCRETE WALL PANELS SHALL CONFORM TO ACI 301, ACI 318, ACI 551, CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE", AND AWS D1.4 STRUCTURAL WELDING CODE FOR REINFORCING STEEL. SEE THE CONCRETE GENERAL NOTES FOR ADDITIONAL CONFORMANCE SPECIFICATIONS.
- 6. SEE THE CONCRETE GENERAL NOTES AND SPECIFICATIONS FOR MIX DESIGN DATA AND REQUIREMENTS.
- 7. THE TILT-UP WALL PANEL SHALL ADHERE TO THE MECHANISMS SET FORTH IN THE STRUCTURAL CONSTRUCTION DOCUMENTS. ADDITIONALLY, THE DESIGN SHALL INCLUDE ALL BOLTS, EMBEDMENT PLATES, BLOCKOUTS, FUTURE KNOCKOUT PANEL LOCATIONS, BRACING AND SUPPORTING STRUCTURE.
- 8. SEE THE STEEL GENERAL NOTES AND SPECIFICATIONS FOR SECTION PROPERTY REQUIREMENTS. ALL STEEL SHAPES, PLATES, ANCHORS, BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
- 9. CAST-IN-PLACE ANCHORS SHALL BE HEADED STUDS OR DEFORMED BAR ANCHORS. ASTM 615 REINFORCING BARS SHALL NOT BE USED AS ANCHORS.
- 10. ALL WELDS SHALL BE PERFORMED BY A AWS CERTIFIED WELDER AND IN ACCORDANCE WITH AWS D1.1 "STRUCTURAL WELDING CODE" AND AWS D1.4 "STRUCTURAL WELDING CODE FOR REINFORCING STEEL". ALL WELDS SHALL BE PAINTED WITH ZINC RICH REPAIR PAINT AFTER WELDING.
- 11. ALL WELDS FOR DEFORMED BAR ANCHORS SHALL USE E90XX ELECTRODES.
- 12. PROVIDE BEARING PADS AND GROUT MATERIALS AS REQUIRED PER CODE AND INDUSTRY STANDARDS.
- 13. COORDINATE WITH THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS ANY ADDITIONAL REQUIREMENTS FOR DIMENSIONS, FINISH, REVEALS AND ANY OTHER REQUIREMENTS OF THE CONCRETE WALL PANELS.

- 14 CONTRACTOR SHALL ERECT THE CONCRETE WALL PANELS SUCH THAT IT IS SAFE FOR PERSONNEL AND PROPERTY AND PROVIDE BRACING TO PROTECT THE PANELS AGAINST WIND, SEISMIC AND FORCES THAT MAY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT BRACING, DECKING, CONNECTIONS AND WALL PANELS HAVE BEEN FULLY INSTALLED.
- 15. CONCRETE WALL PANELS SHALL BE ERECTED TO ADHERE TO THE TOLERANCES OF THE LATEST AMERICAN CONCRETE INSTITUTE SPECIFICATIONS. ERECTION TOLERANCES SHALL BE COORDINATED WITH THE STEEL SUPPLIER TO PROVIDE PROPER FIT—UP. DEFLECTIONS OF THE STRUCTURAL STEEL SYSTEM MAY OCCUR DURING CONCRETE WALL PANEL ERECTION. THESE DEFLECTIONS MAY REQUIRE ADJUSTMENT AND RESETTING OF CONCRETE WALL PANELS IN ORDER TO MEET THE TOLERANCES. THE CONTRACTOR SHALL BE AWARE OF THIS ITERATION PROCESS IN HIS BID AND IS RESPONSIBLE FOR THE TOLERANCES BEING MET.
- 16. THE CONCRETE SLABS SHOWN ON THE STRUCTURAL DRAWINGS HAVE BEEN DESIGNED FOR THE FINISHED STRUCTURE AND HAVE NOT BEEN DESIGNED FOR CRANE USE AND CONCRETE WALL PANEL BRACING. THE CONTRACTOR SHALL VERIFY THE SLAB ADEQUACY AND SUBMIT PROPOSED DESIGNED, IF REQUIRED, TO THE STRUCTURAL ENGINEER FOR REVIEW.
- 17. ALL CONCRETE WALL PANELS COMPONENTS SHALL ADHERE TO THE DETAILING, FABRICATION AND ERECTION REQUIREMENTS OF THE LATEST EDITIONS OF ACI 301 (SPECIFICATIONS FOR CONCRETE), ACI 318 (STRUCTURAL CONCRETE BUILDING CODE), AWS D1.4 (WELDING CODE FOR REINFORCING STEEL), CRSI (MANUAL OF STANDARD PRACTICE), PCI MNL 116 (MANUAL FOR QUALITY CONTROL FOR PLANS AND PRODUCTION OF PRECAST CONCRETE PRODUCTS), PCI MNL 120 (PCI DESIGN HANDBOOK) AND PCI MNL 135 (TOLERANCE MANUAL FOR PRECAST PRESTRESSED CONCRETE CONSTRUCTION).
- 18. CONCRETE WALL PANELS SHALL PROVIDE EXPANSIONS JOINTS AT THE ROOF EXPANSION JOINT TO ALLOW FOR THERMAL EXPANSION AND CONTRACTION. ADDITIONALLY, THE PRECAST SUPPLIER SHALL ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN WALL PANELS BY ALLOWING EXPANSION EVERY FIFTH WALL PANEL.
- 19. CONCRETE WALL PANELS SHALL BE SOLID CORE BELOW FINISH FLOOR ELEVATION.

### STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRESS (Fy), UNLESS NOTED OTHERWISE:

		YIELD	ASTM SPECIFICATION
A.	W, WT SHAPES:	50 KSI	A992
В.	BARS, PLATES, CHANNELS, ANGLES:	36 KSI	A36
C.	SQUARE, RECTANGULAR HSS:	50 KSI	A500, GRADE C
D.	ANCHOR RODS:	36 KSI OR 55 KSI	F1554
E.	ALL-THREAD RODS:	36 KSI	A36
F.	HEADED STUD ANCHORS:	65 KSI TENSILE STRESS	A108, GRADES 1010-1020

- 2. ALL STRUCTURAL STEEL SHALL ADHERE TO THE DETAILING, FABRICATION AND ERECTION REQUIREMENTS OF THE LATEST EDITIONS OF THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND THE AISC CODE OF PRACTICE.
- 3. BOLTS FOR STEEL BEAM AND COLUMN CONNECTIONS SHALL BE 3/4-INCH DIAMETER ASTM A325-N HIGH-STRENGTH BOLTS UNLESS NOTED OTHERWISE. ALL BOLTED CONNECTIONS ARE BEARING TYPE AND SHALL BE SNUG TIGHTENED UNLESS NOTED OTHERWISE. FOR PRETENSIONED OR SLIP-CRITICAL JOINTS, THE METHOD OF INSTALLATION SHALL BE TURN-OF-NUT WITH MATCH MARKING, TWIST-OFF-TYPE TENSION CONTROL BOLT ASSEMBLIES (ASTM F1852), OR DIRECT TENSION INDICATORS (ASTM F959).
- 4. WELDING SHALL MEET ANSI / AWS D1.1, STRUCTURAL WELDING CODE LATEST REVISION. ELECTRODES SHALL BE
- E70XX, LOW HYDROGEN. ALL STRUCTURAL STEEL WELDS SHALL BE PERFORMED BY A AWS CERTIFIED WELDER.

  5. WELDS NOT SPECIFICALLY SIZED ON THE STRUCTURAL DRAWINGS SHALL BE THE MINIMUM SIZE PER THE LATEST AWS
- 6. PROVIDE DOUBLE NUTS AND DOUBLE WASHERS FOR STEEL COLUMN ANCHOR BOLTS TO ALLOW FOR ADJUSTMENT IN BASE PLATE ELEVATION. PROVIDE 1 1/2 INCH NON-SHRINK GROUT UNDER BASE PLATE AFTER ERECTION. USE 2 1/2 INCHES NON-SHRINK GROUT WHEN COLUMN ANCHOR BOLTS ARE 1 1/4 INCH DIAMETER OR LARGER. NON-SHRINK GROUT SHALL BE NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS.
- 7. SHEAR CONNECTORS SHALL BE A CARBON STEEL HEADED STUD TYPE ASTM A108 GRADES 1010 THRU 1020, AWS D1.1, TYPE B WITH ARC SHIELDS.
- 8. ALL CONNECTIONS ON THE STRUCTURAL DRAWINGS, UNLESS NOTED OTHERWISE, SHALL BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, EMPLOYED OR RETAINED BY THE STEEL FABRICATOR. THE DESIGN AND DETAILING SHALL COMPLY WITH ALL APPLICABLE CODES AND SPECIFICATION SECTIONS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INCLUDING THE COSTS FOR ALL MISCELLANEOUS STEEL IN THEIR BID REGARDLESS OF WHETHER THOSE ITEMS ARE INDICATED ON THE STRUCTURAL DRAWINGS. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO MISCELLANEOUS STEEL ITEMS SHOWN ON ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS SUCH AS SHELF ANGLES, GLAZING SUPPORTS AND LINTELS.

11. ALL STRUCTURAL STEEL SHALL HAVE A COAT OF LIGHT GRAY PAINT TO PROVIDE PROTECTION AND GOOD APPEARANCE

10. LEDGER ANGLES AND LINTELS IN EXTERIOR WALL SYSTEMS SHALL BE HOT DIPPED GALVANIZED PER ASTM A123.

### CURRAN ARCHITECTURE

5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753





collective

wallace design collective, pc structural · civil · landscape · survey 1703 wyandotte street, suite 200 kansas city, missouri 64108 816.421.8282 · 800.364.5858

CERTIFICATION



### PROJECT INFORMATION

LEE'S SUMMIT LOGISTICS
BUILDING A LOT I
TENANT IMPROVEMENTS
NW CORNER TUDOR RD & MAINST
LEE'S SUMMIT, MO

ISSUE DA	TES
ISSUE	D
ISSUE FOR PERMIT	07.11.2

210300

S0.0

GENERAL NOTES

### POST INSTALLED ANCHORS:

- 1. ANCHORS SHALL ONLY BE INSTALLED WHERE SPECIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO INSTALLING POST INSTALLED ANCHORS IN PLACE OF MISSING OR MIS—PLACED CAST—IN—PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST—INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REINFORCING.
- 2. THE CONTRACTOR SHALL SUBMIT PRODUCT DATA WITH DESIGN VALUES AND PHYSICAL PROPERTIES FOR ALL POST INSTALLED ANCHORS. ADDITIONALLY, THE CONTRACTOR SHALL SUBMIT CERTIFIED ICC ES OR ESR REPORTS WHICH VERIFY COMPLIANCE WITH THE SPECIFIED CRITERIA.
- 3. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED ON THE CONTRACT DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE STRUCTURAL ENGINEER ALONG WITH CALCULATIONS THAT ARE SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION AND LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERTINENT EQUIVALENT PERFORMANCE VALUES OF THE SPECIFIED PRODUCT USING THE APPROPRIATE DESIGN PROCEDURE AND/OR STANDARDS AS REQUIRED BY THE BUILDING CODE.
- 4. ALL HOLES SHALL BE DRILLED, DRY AND CLEANED AND ANCHORS SHALL BE INSTALLED IN ACCORDANCE PER ANCHOR MANUFACTURER'S WRITTEN SPECIFICATIONS. THE LATEST VERSION OF THE WRITTEN SPECIFICATION SHALL BE ON—SITE AND FOLLOWED DURING THE INSTALLATION OF THE ANCHORS.
- THE ANCHOR EMBEDMENT DEPTH SHALL BE DEFINED AS THE DEPTH FROM THE SURFACE FACE OF THE LOAD BEARING BASE MATERIAL TO THE DEEPEST PART OF THE ANCHOR AFTER THE ANCHOR HAS BEEN DRIVEN INTO THE HOLE, BUT NOT YET EXPANDED, IF APPLICABLE.
- S. ANCHORS AT ALL WEATHER EXPOSED LOCATIONS SHALL BE STAINLESS STEEL.
- 7. NON-EPOXY BASED ADHESIVES SHALL BE USED WHEN BASE MATERIAL TEMPERATURE IS BELOW 40 DEGREES
- 8. THE FOLLOWING CONCRETE MECHANICAL ANCHORS ARE ALLOWED FOR USE IN CRACKED AND UNCRACKED CONCRETE AND HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC—ES AC193.

  A. SIMPSON STRONG—TIE "STRONG BOLT 2" (ICC—ES ESR—3037)
- B. SIMPSON STRONG-TIE "TITEN HD" (ICC-ES ESR-2713)
- C. HILTI "KWIK BOLT TZ" EXPANSION ANCHOR (ICC-ES ESR 1917)
- D. HILTI "HSL-3" HEAVY DUTY EXPANSION ANCHOR (ICC-ES ESR 1545)
- E. HILTI "HDA" UNDERCUT ANCHOR (ICC-ES ESR 1546)
- F. HILTI "KWIK HUS EZ" EXPANSION ANCHOR (ICC-ES ESR 3027)
- 9. THE FOLLOWING CONCRETE ADHESIVE ANCHORS ARE ALLOWED FOR USE IN CRACKED AND UNCRACKED CONCRETE AND HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.4 AND ICC—ES AC308.
- A. SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
- B. HILTI "HIT-HY200" (ICC-ES ESR-1385)
- C. HILTI "HIT-RE 500 V3" (ICC-ES ESR-3814)

### **MASONRY**

- CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C90, WITH A MINIMUM UNIT COMPRESSIVE STRENGTH = 1900 PSI. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF THE CONCRETE MASONRY ASSEMBLY (f'm) SHALL BE 1900 PSI.
- 2. MORTAR SHALL BE A PREBLENDED DRY MIX CONFORMING TO ASTM C1714 AND MEETING THE PROPERTY SPECIFICATIONS OF ASTM C270 TYPE "S" MORTAR FOR BELOW GRADE. TYPE "N" MORTAR FOR ABOVE GRADE. MASONRY CEMENT SHALL NOT BE USED FOR MORTAR.
- 3. GROUT SHALL MEET ASTM SPECIFICTION C476 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2000 PSI.
- 4. SOLID GROUT HOLLOW MASONRY CELLS AS NOTED ON STRUCTURAL DRAWINGS. USE GROUT METHOD OF CONSTRUCTION CONFORMING TO REQUIREMENTS OF CURRENT MSJC. GROUT SPACE DIMENSIONS AND MAXIMUM POUR HEIGHTS SHALL COMPLY WITH MSJC.
- A. LIMIT THE HEIGHT OF VERTICAL GROUT POURS TO 4'-0" OR THE DISTANCE BETWEEN BOND BEAMS, WHICHEVER IS LESS.
- B. GROUTING SHALL BE A CONTINUOUS PROCEDURE FOR EACH LIFT. DO NOT ALLOW HORIZONTAL CONSTRUCTION JOINT TO FORM BY DISCONTINUING GROUTING.
- C. VERTICAL GROUT POUR EXCEEDING 12 INCHES SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4 INCH DIAMETER HEAD.
- 5. CONTRACTOR SHALL CLEAN THE GROUT SPACES SUCH THAT THEY ARE FREE OF MORTAR DROPPINGS, DEBRIS, LOOSE AGGREGATES AND ANY MATERIAL THAT WOULD PREVENT CONTINUITY OF THE GROUT.
- 6. HORIZONTAL JOINT REINFORCEMENT SHALL BE LADDER TYPE. JOINT REINFORCEMENT SHALL BE SPACED AT 8 INCHES ON CENTER BELOW FINISHED FLOOR AND IN PARAPETS, AND 16 INCHES ON CENTER ABOVE FINISHED FLOOR.
- 7. CONCRETE MASONRY SHALL BE LAID IN RUNNING BOND.

NOTED IN THE REINFORCING LAP SCHEDULE.

- 8. CONCRETE MASONRY BELOW FINISHED FLOOR SHALL BE NORMAL WEIGHT UNITS AND SHALL HAVE ALL THE CELLS FULLY GROUTED. CONCRETE MASONRY ABOVE FINISHED FLOOR SHALL BE MEDIUM WEIGHT AND IS TO BE GROUTED ONLY AT REINFORCED CELLS AND BOND BEAMS, UNLESS NOTED OTHERWISE. ALL CELLS WITH REINFORCING OR EMBEDDED ITEMS SHALL BE GROUTED SOLID.
- 9. REFERENCE WALL SECTIONS AND DETAILS FOR MISCELLANEOUS BOND BEAM LOCATIONS AND EMBEDDED ITEMS. USE OPEN KNOCK OUT BOND BEAM BLOCK. DO NOT USE TROUGH TYPE BLOCKS FOR BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS, UNLESS NOTED OTHERWISE.
- 10. REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A615, GRADE 60. REINFORCING STEEL SHALL BE SPLICED AS
- 11. PROVIDE TEMPORARY BRACING FOR WALLS, LINTELS, AND OTHER MASONRY DURING ERECTION. BRACING SHALL BE DESIGNED IN ACCORDANCE WITH THE MASON CONTRACTORS ASSOCIATION OF AMERICA STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION. DESIGN SHALL BE PERFORMED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. BRACING SHALL REMAIN UNTIL ROOFING AND OTHER STRUCTURAL ELEMENTS ARE COMPLETE AND PROVIDE PERMANENT STABILITY.

### PRECAST CONCRETE

- 1. MINIMUM COMPRESSIVE STRENGTH (f'c) AT THE END OF 28 DAYS OF 5000 PSI. REFERENCE SPECIFICATIONS FOR MAXIMUM WATER/CEMENT RATIOS, MINIMUM CEMENT CONTENTS AND OTHER MIX DESIGN REQUIREMENTS. CONCRETE SHALL BE NORMAL WEIGHT (145 PCF), UNLESS NOTED OTHERWISE.
- 2. THE STRUCTURAL DRAWINGS REPRESENT THE FINAL IN PLACE CONCRETE WALL PANELS. THE PANELS HAVE NOT BEEN DESIGNED FOR ERECTION STRESSES, TEMPORARY BRACING OR LIFTING OF THE WALL PANELS.
- 3. ALL PRECAST COMPONENTS AND CONNECTIONS SHALL BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, EMPLOYED OR RETAINED BY THE PRECAST MANUFACTURER. CALCULATIONS SHALL INCLUDE CONSIDERATIONS FOR ERECTION, LIFTING AND TEMPORARY BRACING ALONG WITH ANY OTHER ADDITIONAL CONSTRUCTION CONSIDERATIONS.
- 4. THE CONTRACTOR SHALL VERIFY THE PROPOSED PRECAST COMPONENTS ARE CAPABLE OF MEETING THE ERECTION REQUIREMENTS PRIOR TO BIDDING THE WORK. ANY DEVIATIONS FROM THE WALL PANELS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE QUALIFIED IN THE CONTRACTOR'S BID. ANY DEVIATIONS SHALL BE APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD PRIOR TO PROCEEDING.
- 5. THE PRECAST CONTRACTOR SHALL PROVIDE ADEQUATE COMPONENTS TO SUPPORT THE VERTICAL AND LATERAL LOADINGS STIPULATED IN THE CONSTRUCTION DOCUMENTS. ANY DEVIATIONS SHALL BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO PROCEEDING. THE SUPPORTING STRUCTURE HAS BEEN DESIGNED BASED ON THE DETAILS
- 6. REFERENCE THE STEEL GENERAL NOTES AND SPECIFICATIONS FOR STRUCTURAL STEEL REQUIREMENTS. ALL STEEL SHAPES, PLATES, ANCHORS, BOLTS, NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
- 7. CAST-IN-PLACE ANCHORS SHALL BE HEADED STUDS OR WELDABLE DEFORMED BARS. ASTM A615 REINFORCING BARS SHALL NOT BE USED AS ANCHORS.
- 8. REFERENCE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PANEL SIZE, LOCATIONS, JOINTS, FINISH, REVEALS AND OTHER AESTHETIC REQUIREMENTS OF THE PRECAST WALL PANELS.
- 9. REFERENCE ARCHITECTURAL AND MEP DRAWINGS FOR OPENINGS, SLEEVES AND INSERTS NOT SHOWN ON THE STRUCTURAL DRAWINGS. ITEMS SHALL BE SHOWN ON SHOP DRAWINGS FOR APPROVAL.
- 10. PROVIDE TEMPORARY BRACING FOR PRECAST COMPONENTS DURING ERECTION. BRACING SHALL BE DESIGNED IN ACCORDANCE WITH PRECAST/PRESTRESSED CONCRETE INSTITUE (PCI) HANDBOOK DESIGN SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. BRACING SHALL REMAIN UNTIL STRUCTURAL ELEMENTS THAT PROVIDE PERMANENT SUPPORT ARE FULLY INSTALLED.
- 11. ERECTION TOLERANCES SHALL BE COORDINATED WITH THE STEEL SUPPLIER TO PROVIDE PROPER FIT—UP.
  DEFLECTIONS MAY REQUIRE ADJUSTMENT AND RESETTING OF PRECAST WALL PANELS IN ORDER TO MEET THE
  TOLERANCES. THE CONTRACTOR SHALL BE AWARE OF THIS ITERATION PROCESS AND IS RESPONSIBLE FOR THE
  TOLERANCES BEING MET.
- 12. WALL PANELS SHALL HAVE EXPANSION JOINTS AT THE ROOF EXPANSION JOINT TO ALLOW FOR THERMAL EXPANSION AND CONTRACTION. ADDITIONALLY, THE PRECAST SUPPLIER SHALL ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN WALL PANELS.

### DEFERRED STRUCTURAL SUBMITTALS

- 1. THE FOLLOWING STRUCTURAL COMPONENTS SHALL BE DESIGNED AND SUBMITTED BY OTHERS FOR APPROVAL IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
  - A. STRUCTURAL STEEL CONNECTIONS OF FRAMING AND BRACING ELEMENTS
  - B. STEEL JOISTS AND JOIST GIRDERS (CONTRACTOR SHALL OBTAIN FIRE LINE LOCATIONS AND SIZES PRIOR TO SUBMITTAL OF JOIST SHOP DRAWINGS.)
  - C. STEEL, SELF-SUPPORTING STAIRS AND HANDRAIL FRAMING
- D. STOREFRONT AND CURTAINWALL FRAMING, ACCESSORIES AND ATTACHMENTS TO STRUCTURE
- E. EXCAVATION SUPPORT
- F. TEMPORARY BRACING AND SUPPORT
- G. CONCRETE WALL PANEL REINFORCING

J. HOLLOW-CORE PRECAST CONCRETE

- H. ROOF ACCESS LADDERS AND SAFETY CAGES
- I. SEISMIC ANCHORAGE AND BRACING OF MEP COMPONENTS
- 2. DOCUMENTS FOR DEFERRED STRUCTURAL SUBMITTAL ITEMS SHALL BE DESIGNED, SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE DEFERRED SUBMITTAL DOCUMENTS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL AS REQUESTED WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

### SHOP DRAWINGS

- 1. SHOP DRAWINGS AND SUBMITTALS SHALL BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL FOR THE ENGINEER'S REVIEW. THE STRUCTURAL ENGINEER'S REVIEW IS TO CHECK THE GENERAL CONFORMANCE OF THE SHOP DRAWINGS WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ANY ALTERATIONS FROM THE CONTRACT DOCUMENTS WHICH MAY INCLUDE QUANTITIES, DIMENSIONAL ERRORS OR OTHER ERRORS AND OMISIONS IN THE SHOP DRAWINGS.
- 2. SHOP DRAWINGS SHALL NOT BE REPRODUCTIONS OF THE CONTRACT DOCUMENTS.
- 3. THE FOLLOWING STRUCTURAL COMPONENTS SHALL BE SUBMITTED AS A SHOP DRAWING FOR REVIEW:
- A. CONCRETE MIX DESIGN AND MATERIALS
- B. CONCRETE REINFORCING STEEL
- C. CONCRETE FORMWORK
- D STRUCTURAL STEEL
- E. STEEL JOISTS
- F. STEEL ROOF DECK AND THEIR ATTACHMENTS.G. ALL DEFERRED SUBMITTAL ITEMS

### SPECIAL INSPECTIONS

- 1. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS PER SECTION 1704 OF THE IBC. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- 2. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE SPECIAL INSPECTOR REGARDING INDIVIDUAL INSPECTION FOR ITEMS LISTED ON THE STATEMENT OF SPECIAL INSPECTIONS AND AS NOTED ON THE BUILDING DEPARTMENT APPROVED PLANS. ADEQUATE NOTICE AND ACCESS TO APPROVED PLANS SHALL BE PROVIDED SO THAT THE SPECIAL INSPECTOR HAS TIME TO BECOME FAMILIAR WITH THE PROJECT.
- 4. FABRICATORS OF STRUCTURAL LOAD—BEARING MEMBERS AND ASSEMBLIES SHALL CONFORM TO THE REQUIREMENTS OF SECTION 1704.2 OF THE IBC.
- 5. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION PER SECTION 1700 OF THE REFERENCED BUILDING CODE.
  - A. BOLTS & ANCHORS EMBEDDED IN CONCRETE
- B. PLACEMENT OF REINFORCING STEEL IN CONCRETE
- C. CONCRETE MIX DESIGN
- D. CONCRETE FORMWORK
- E. STRUCTURAL STEEL FABRICATIONS
- F. STRUCTURAL STEEL BOLTING AND WELDING
- G. ON SITE STRUCTURAL FRAMING
- H. INSPECTION OF ROOF DECK ATTACHMENTS
- I. SHEAR WALL ATTACHMENTS AND ANCHORS
- J. POST INSTALLED ANCHORS
- K. ON SITE SOILS, EXCAVATIONS, FILLING AND COMPACTION
- L. ERECTION OF PRECAST CONCRETE MEMBERS

### A.B. LONG LEG HORIZONTAL ACI AMERICAN CONCRETE INSTITUTE LLV LONG LEG VERTICAL LONG. LONGITUDINAL **AESS** ARCHITECTURALLY EXPOSED STRUCTURAL STEEL A.F.F. MAX. MAXIMUM ABOVE FINISHED FLOOR ARCH. ARCHITECTURAL MECH. MECHANICAL MFR. **MANUFACTURER** BAL. BALANCE BLOCK LINTEL MIN. MINIMUM MISC. **MISCELLANEOUS** BUILDING B.O. BOTTOM OF N.I.C. NOT IN CONTRACT B.O.D. BOTTOM OF DECK NO. NUMBER BRG. N.T.S. NOT TO SCALE BEARING N.S. NEAR SIDE C.J. CONTRACTION JOINT 0.C. ON CENTER C.L. CENTER LINE CLR. 0.D. OUTSIDE DIAMETER OPPOSITE HAND CMU CONCRETE MASONRY UNIT 0.H. P.A.F. POWER ACTUATED FASTENER COL. COLUMN PCF POUNDS PER CUBIC FOOT CONC. CONCRETE CONST. PLF CONSTRUCTION POUNDS PER LINEAR FOOT CONT. CONTINUOUS P.M.E.J. PREMOLDED EXPANSION JOINT PSF POUNDS PER SQUARE FOOT D.B.A. DEFORMED BAR ANCHOR POUNDS PER SQUARE INCH DIA. DIAMETER PSI QTY. DWG. QUANTITY DRAWING REFER E.F. EACH FACE REINF. REINFORCING EXPANSION JOINT REQD. REQUIRED ELEV. **ELEVATION** E.O.D. R.O. EDGE OF DECK ROUGH OPENING E.O.S. RTU ROOF TOP UNIT EDGE OF SLAB SCHED. SCHEDULE EQ. EQUAL E.W. EACH WAY S.D.S. SELF-DRILLING SCREWS EXIST. SIM. SIMILAR **EXISTING** SPECS. **SPECIFICATIONS** FDN. FOUNDATION STD. STANDARD F.F.E. FINISHED FLOOR ELEV. F.S. FAR SIDE STL. STEEL FTG. FOOTING T&B TOP AND BOTTOM T.O. TOP OF GA. GAGE

KSI

LBS.

T.O.P.

T.O.W.

TRANS.

TYP.

U.N.O.

VERT.

W.P.

W.W.R.

TOP OF PIER

TOP OF WALL

TRANSVERSE

WORK POINT

UNLESS NOTED OTHERWISE

WELDED WIRE REINFORCEMENT

TYPICAL

VERTICAL

WEIGHT

KIPS PER SQUARE INCH

POUNDS

**ABBREVIATIONS** 

GALV.

G.B.

HORIZ.

H.S.A.

INFO.

J.B.E.

GALVANIZED

GRADE BEAM

HORIZONTAL

INFORMATION

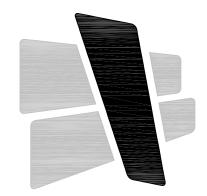
JOINT

HEADED STUD ANCHOR

INTERNATIONAL BUILDING CODE

UNIT OF 1,000 POUNDS (KIP)

JOIST BEARING ELEVATION



## CURRAN ARCHITECTURE

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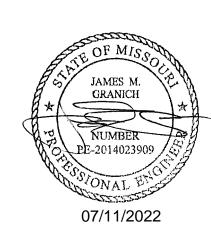




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### PROJECT INFORMATION

LEE'S SUMMIT LOGISTICS
BUILDING A LOT I
TENANT IMPROVEMENTS
NW CORNER TUDOR RD & MAINST
LEE'S SUMMIT, MO

ISSUE	DA
ISSUE FOR PERMIT	07.11.20

ISSUE DATES

210300

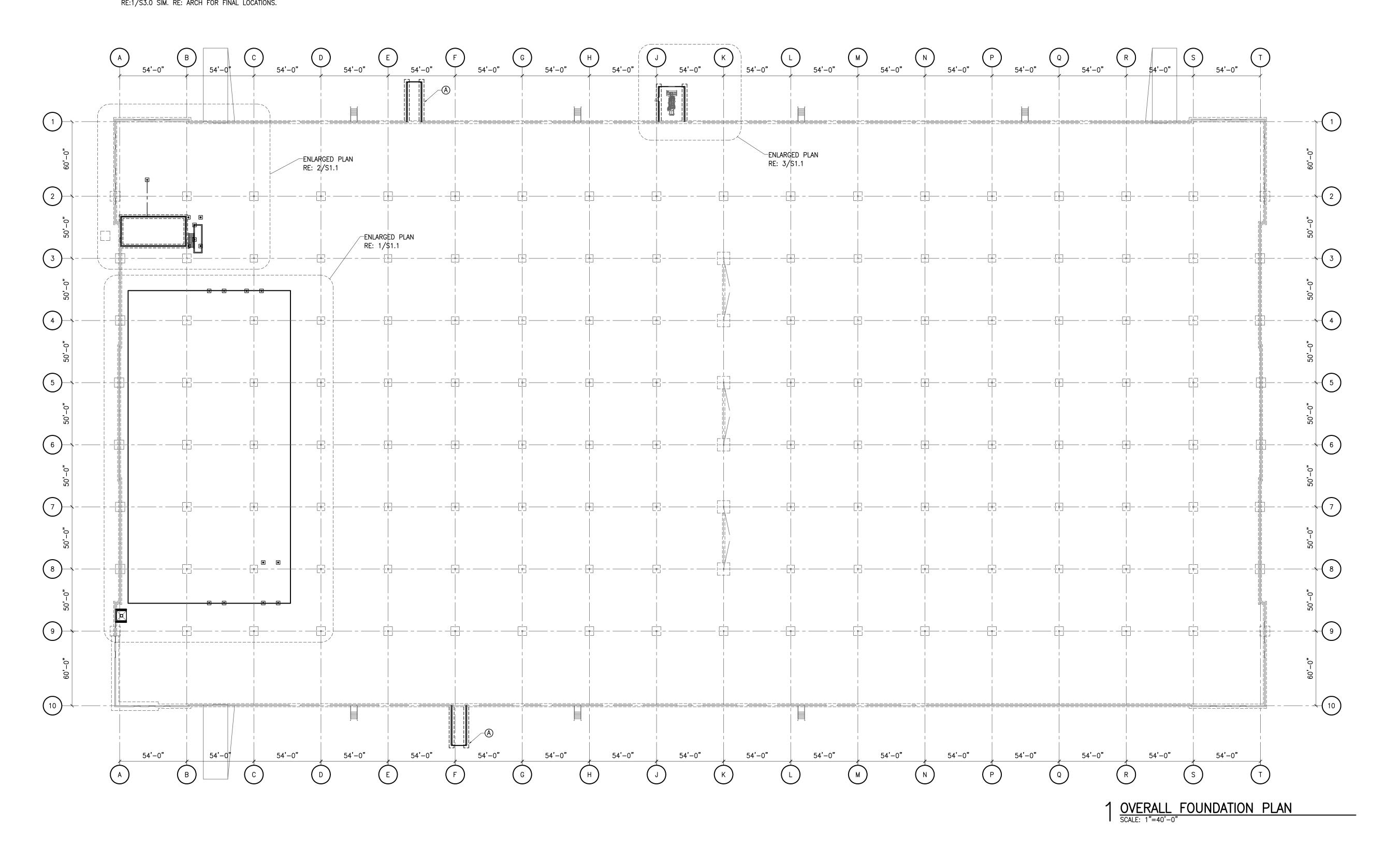
SO.1
GENERAL NOTES

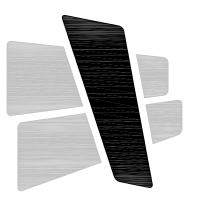


1. RE: 1/S3.2 FOR CMU WALL SECTIONS.

PLAN REFERENCE NOTES

(A) 8" PRECAST WALL SCREEN AT COMPACTOR LOCATIONS, RE:1/S3.0 SIM. RE: ARCH FOR FINAL LOCATIONS.





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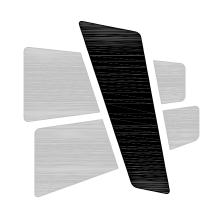
### PROJECT INFORMATION

LEE'S SUMMIT LOGISTICS
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NW CORNER TUDOR RD & MAINST
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S1.0
OVERALL FOUNDATION PLAN



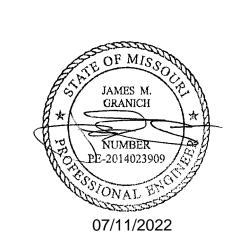
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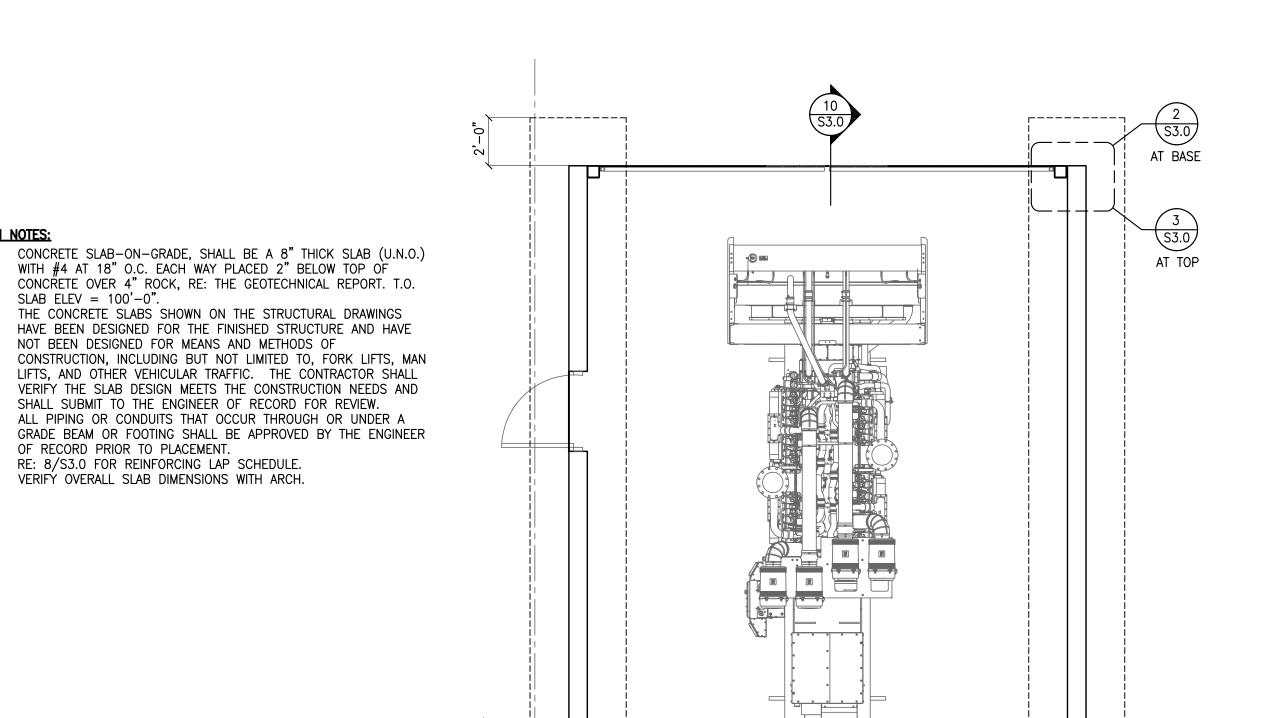
### PROJECT INFORMATION

LEE'S SUMMIT LOGISTICS BUILDING A LOT I TENANT IMPROVEMENTS NW CORNER TUDOR RD & MAINST LEE'S SUMMIT, MO

ISSUE DATES DATE ISSUE FOR PERMIT 07.11.2022

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S1.1 ENLARGED PARTIAL FOUNDATION PLAN



# 3 PARTIAL FOUNDATION PLAN AT GENERATOR ENCLOSURE SCALE: 1/4"=1'-0"

### PLAN REFERENCE NOTES:

<u>PLAN NOTES:</u>

SLAB ELEV = 100'-0".

OF RECORD PRIOR TO PLACEMENT.

RE: 8/S3.0 FOR REINFORCING LAP SCHEDULE. VERIFY OVERALL SLAB DIMENSIONS WITH ARCH.

A PRE-ENGINEERED SHADE CANOPY BY OTHERS, RE: 4/S3.0 FOR CANOPY FOOTING SUPPORT. RE: ARCH FOR FINAL CANOPY

WITH #4 AT 18" O.C. EACH WAY PLACED 2" BELOW TOP OF

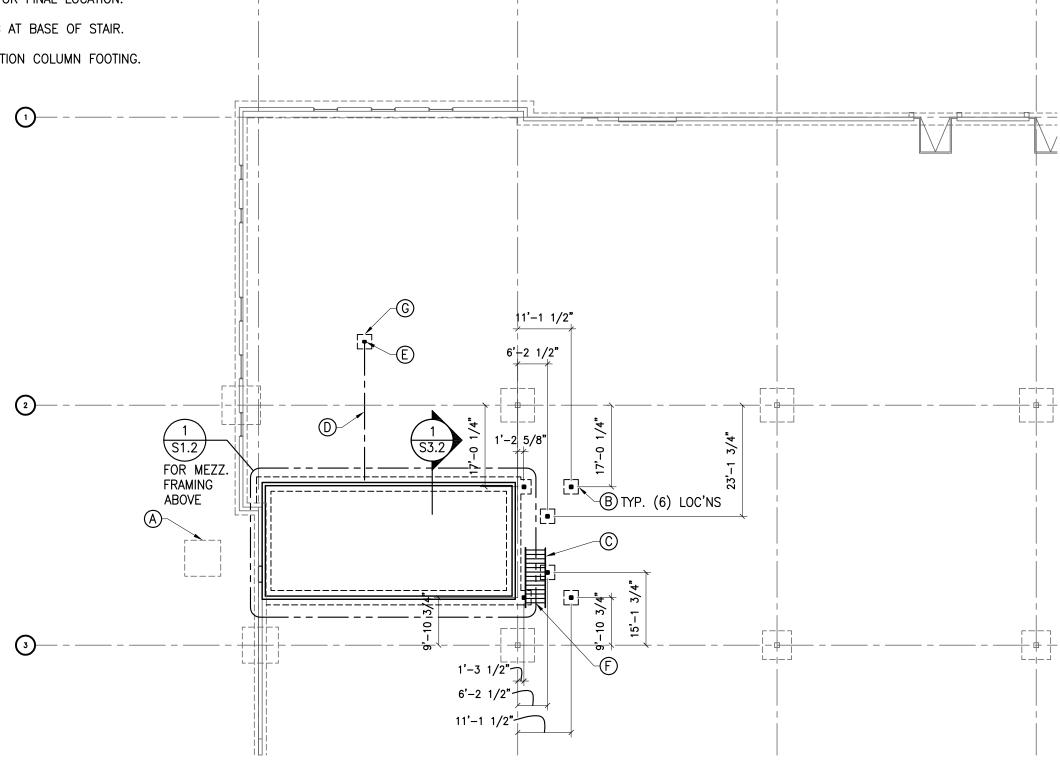
THE CONCRETE SLABS SHOWN ON THE STRUCTURAL DRAWINGS

SHALL SUBMIT TO THE ENGINEER OF RECORD FOR REVIEW.

ALL PIPING OR CONDUITS THAT OCCUR THROUGH OR UNDER A

NOT BEEN DESIGNED FOR MEANS AND METHODS OF

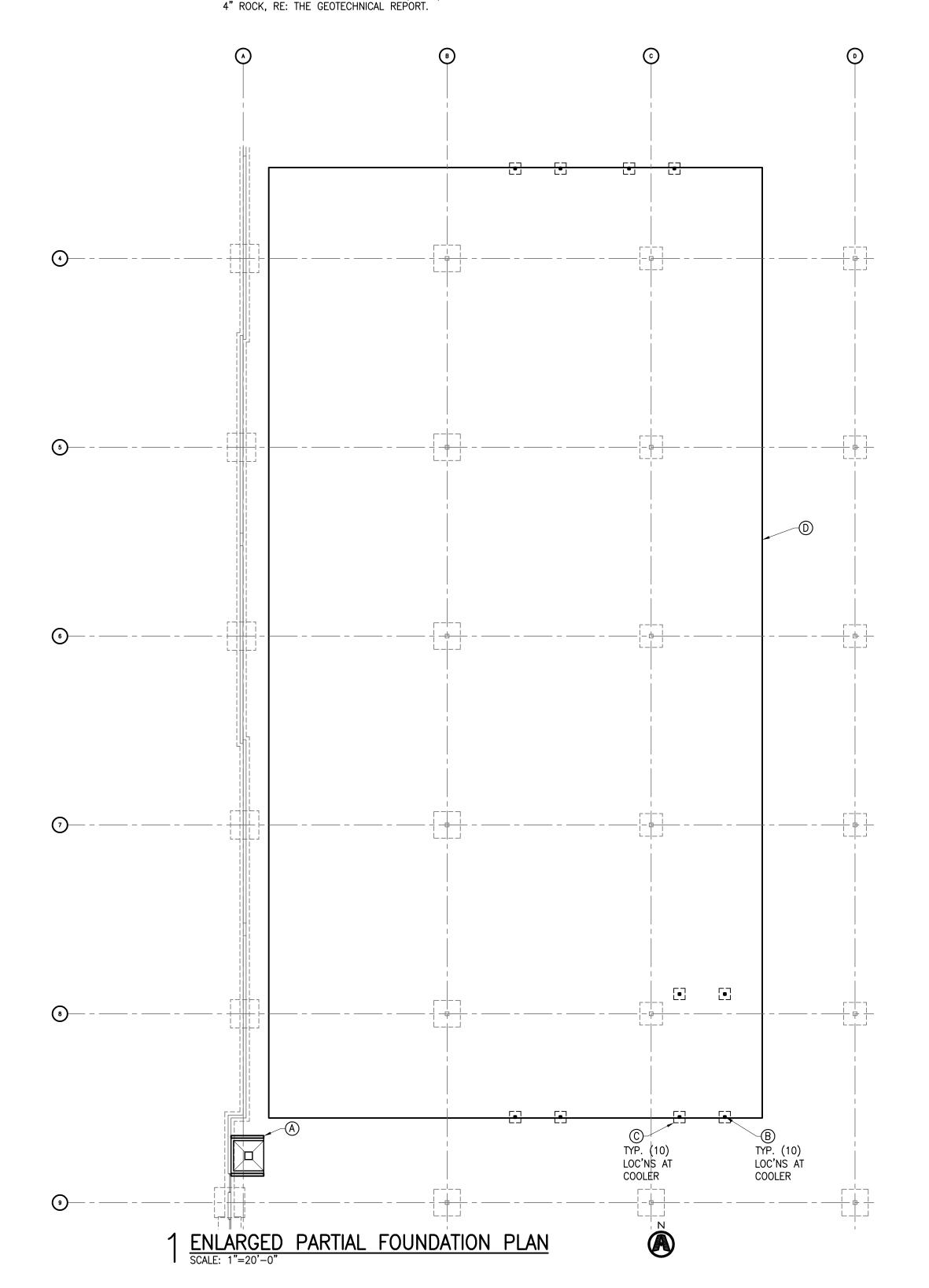
- B RE: 6/S3.0 FOR STAIR COLUMN FOOTING.
- RE: 9/S4.0 FOR STAIR FRAMING REQUIREMENTS.
- W18x40 OPERABLE PARTITION SUPPORT BEAM ABOVE, RE: 1/S3.1
- HSS6x3x1/4 CENTERED IN INTERIOR WALL AND ALIGNED WITH OPERABLE PARTITION. RE: ARCH FOR FINAL LOCATION.
- F RE: 5/S3.0 FOR THICKENED SLAB AT BASE OF STAIR.
- G RE: 6/S3.0 FOR OPERABLE PARTITION COLUMN FOOTING.

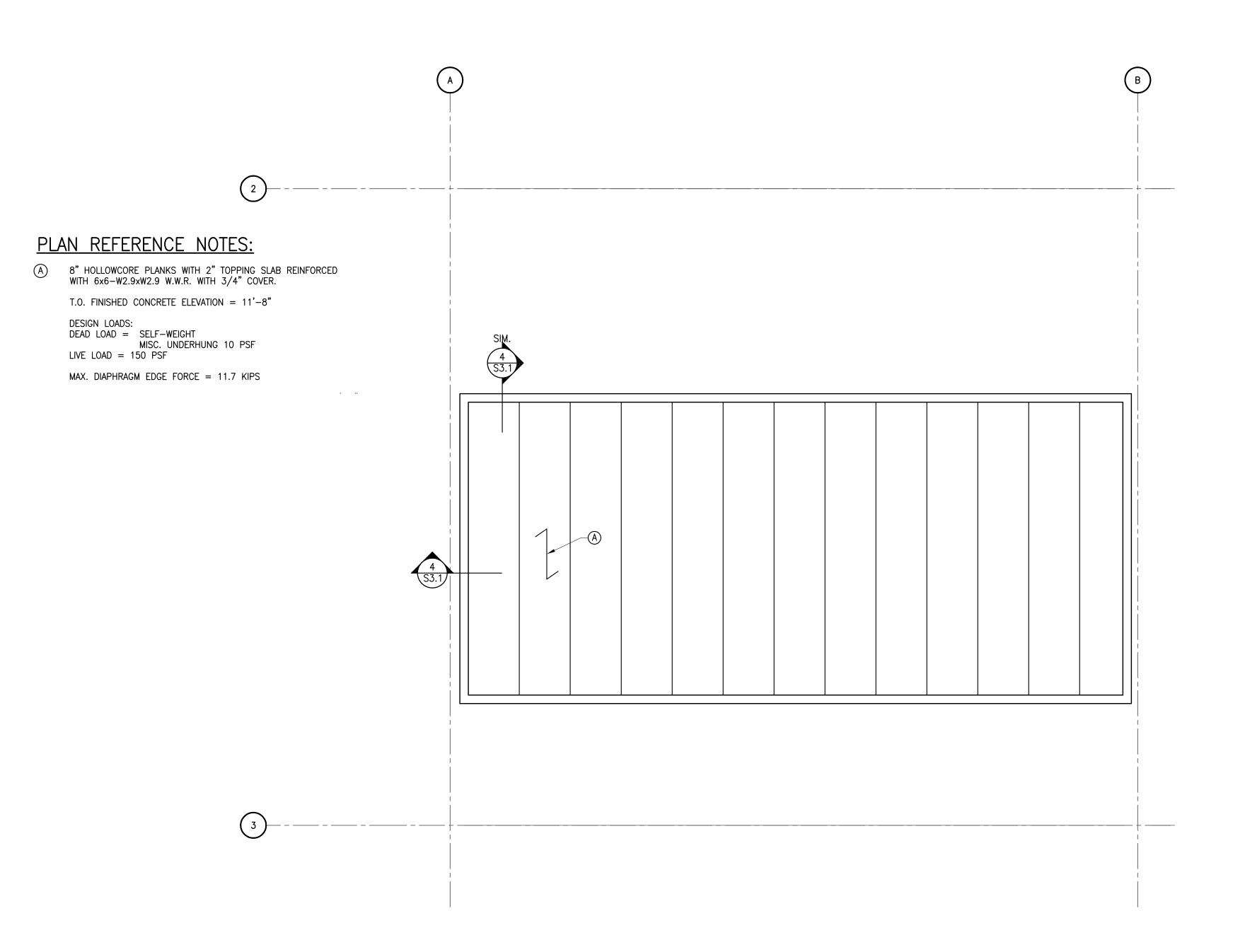


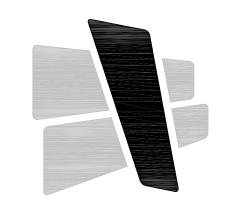
### 2 ENLARGED PARTIAL FOUNDATION PLAN SCALE: 1"=20'-0"

### PLAN REFERENCE NOTES:

- (A) 8" CMU PARTITION WALL EACH SIDE OF SCRUBBER DUMP RE: 2/S3.2 AND ARCH.
- HSS5x5x3/8 POST AT NEW HIGH SPEED OVERHEAD DOOR SUPPORTS. LOCATE WITHIN IMP WALL CAVITY. RE: ARCH FOR FINAL LOCATIONS.
- © RE: 6/S3.0 FOR POST SUPPORT FOOTING.
- RE: 3/S3.1 FOR TYP. COOLER SLAB DETAIL. RE: 2/S3.1 FOR TYP. FREEZER SLAB DETAIL. RE: ARCH FOR EXTENTS. WHERE REFERENCED, SLAB-ON-GRADE SHALL BE A 8" THICK UNREINFORCED SLAB (U.N.O.) OVER







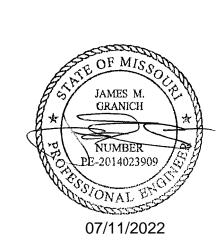
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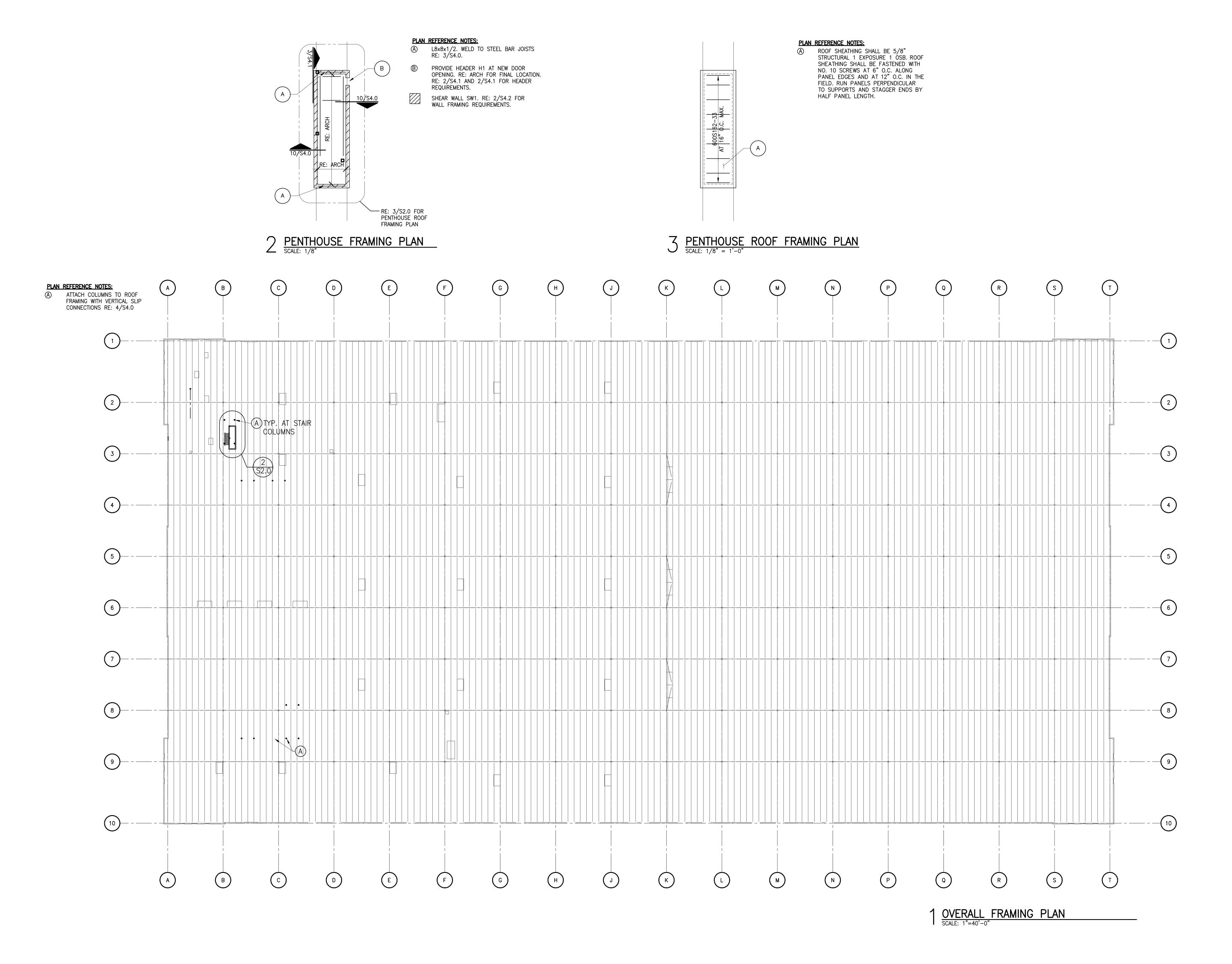
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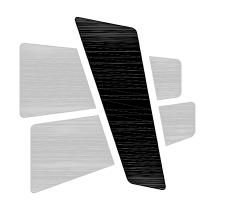
LEE'S SUMMIT LOGISTICS
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S1.2
ENLARGED MEZZANINE
ROOF FRAMING PLAN





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### PROJECT INFORMATION

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LEE'S SUMMIT, MO

ISSUE	DAT
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S2.0 OVERALL FRAMING PLAN

### PLAN REFERENCE NOTES:

<u>2</u> S2.0

CCU-3 4000 LB\$

|30| (1|80/|20)|

CCU-1 | 4000 LB\$

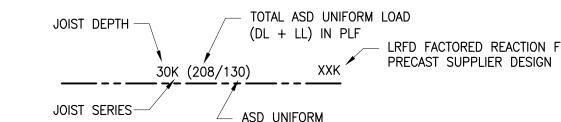
 $\frac{\text{B.O. } \underline{\text{DECK ELEV.}}}{= 139^{\circ} - 10} \frac{3}{\sqrt{4"}} - \frac{1}{3}$ 

- NEW ROOF TOP EQUIPMENT, RE: ARCH./MEP. PROVIDE ANGLE FRAME AND CURB RE: 5/S4.0. JOIST SUPPLIER SHALL ACCOUNT FOR LOAD SHOWN ON PLAN IN JOIST DESIGN IN ADDITION TO LOADING PREVIOUSLY INDICATED IN BASE DRAWINGS ISSUED JULY 15, 2022.
- RE: 6/S4.0 FOR ADDITIONAL SPECIAL JOIST LOADING REQUIREMENTS. JOIST SUPPLIER SHALL ACCOUNT FOR LOAD SHOWN ON PLAN IN JOIST DESIGN IN ADDITION TO LOADING PREVIOUSLY INDICATED IN BASE DRAWINGS ISSUED JULY 15, 2022.
- NEW ROOF PENTHOUSE, RE: ARCH. FOR FINAL LOCATION. JOIST SUPPLIER SHALL ACCOUNT FOR LOADS SHOWN ON PLAN IN JOIST DESIGN IN ADDITION TO LOADING PREVIOUSLY INDICATED IN BASE DRAWINGS ISSUED JULY 15, 2022.

### PLAN NOTES

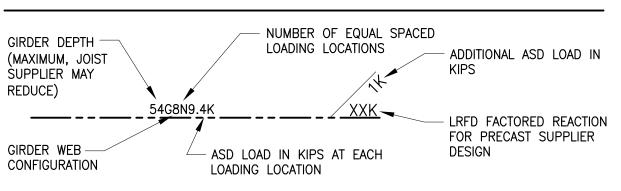
- 1. VERIFY ALL WALL OPENING, DIMENSIONS, JOINTS, BLOCKOUTS, REVEALS AND FUTURE KNOCK OUT PANELS WITH ARCHITECTURAL
- 2. JOIST SHALL BE DESIGNED FOR ROOF TOP EQUIPMENT, RE: ARCH./MEP. PROVIDE ANGLE FRAME AND CURB, RE: 5/S4.0. JOIST SUPPLIER SHALL ACCOUNT FOR LOAD SHOWN ON PLAN IN JOIST
- 3. JOIST AND JOIST GIRDER DEPTHS SHALL BE LIMITED SO THAT 36'-0" CLEAR HEIGHT TO BOTTOM OF STRUCTURE IS MAINTAINED. 4. RE: 6/S4.0 FOR SPECIAL JOIST LOADS WHERE REFERENCED ON

### JOIST LEGEND

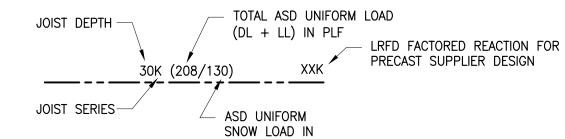


PLF

### JOIST GIRDER LEGEND



30K (180/120)



# W21x50 50K L3x3x1/4 BOTTOM

BEAM REACTION LEGEND

USE MINIMUM TWO BOLT CONNECTION

FLANGE BRACE ANGLE

PER 2/S4.0

STEEL FABRICATOR SHALL DESIGN THE BEAM CONNECTIONS FOR THE STRENGTH

36LH (195/120)

30K (180/120)

3pk (180/12¢)

N

3pk (180/12¢)

LEVEL LOADS (ASD) SHOWN ON THIS PLAN, TYP. (RE: 1/S4.0)

GRAVITY BEAM STRENGTH (ASD) END REACTION (IN KIPS) FOR CONNECTION DESIGN. RÈACTION IS APPLIED VERTICALLY PARALLEL TO BEAM WEB, 10K MIN. WHERE VALUE NOT PROVIDED ON PLAN

- AXIAL WIND AND SEISMIC STRENGTH (ASD) BEAM END REACTION (IN KIPS) FOR CONNECTION DESIGN. REACTION IS APPLIED PARALLEL TO BEAM SPAN LENGTH, WHERE SHOWN ON PLAN.



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CERTIFICATION



### PROJECT INFORMATION

LEE'S SUMMIT LOGISTICS BUILDING A LOT I TENANT IMPROVEMENTS NW CORNER TUDOR RD & MAINST LEE'S SUMMIT, MO

ISSUE DATES	) 
ISSUE	DATE
ISSUE FOR PERMIT	07.11.2022

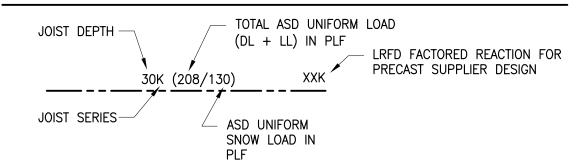
210300

S2.1 ENLARGED PARTIAL FRAMING PLAN

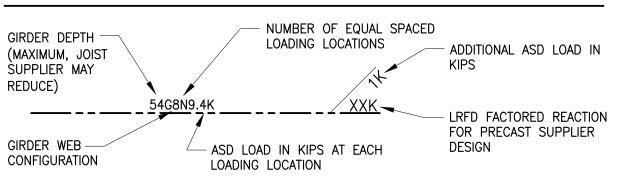
1 ENLARGED PARTIAL FRAMING PLAN SCALE: 1"=20'-0"

30K (180/120)

### JOIST LEGEND



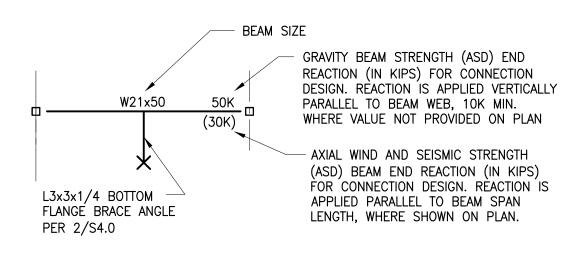
### JOIST GIRDER LEGEND



### BEAM REACTION LEGEND

STEEL FABRICATOR SHALL DESIGN THE BEAM CONNECTIONS FOR THE STRENGTH LEVEL LOADS (ASD) SHOWN ON THIS PLAN, TYP. (RE: 1/S4.0)

USE MINIMUM TWO BOLT CONNECTION





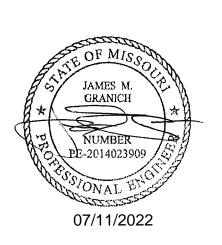
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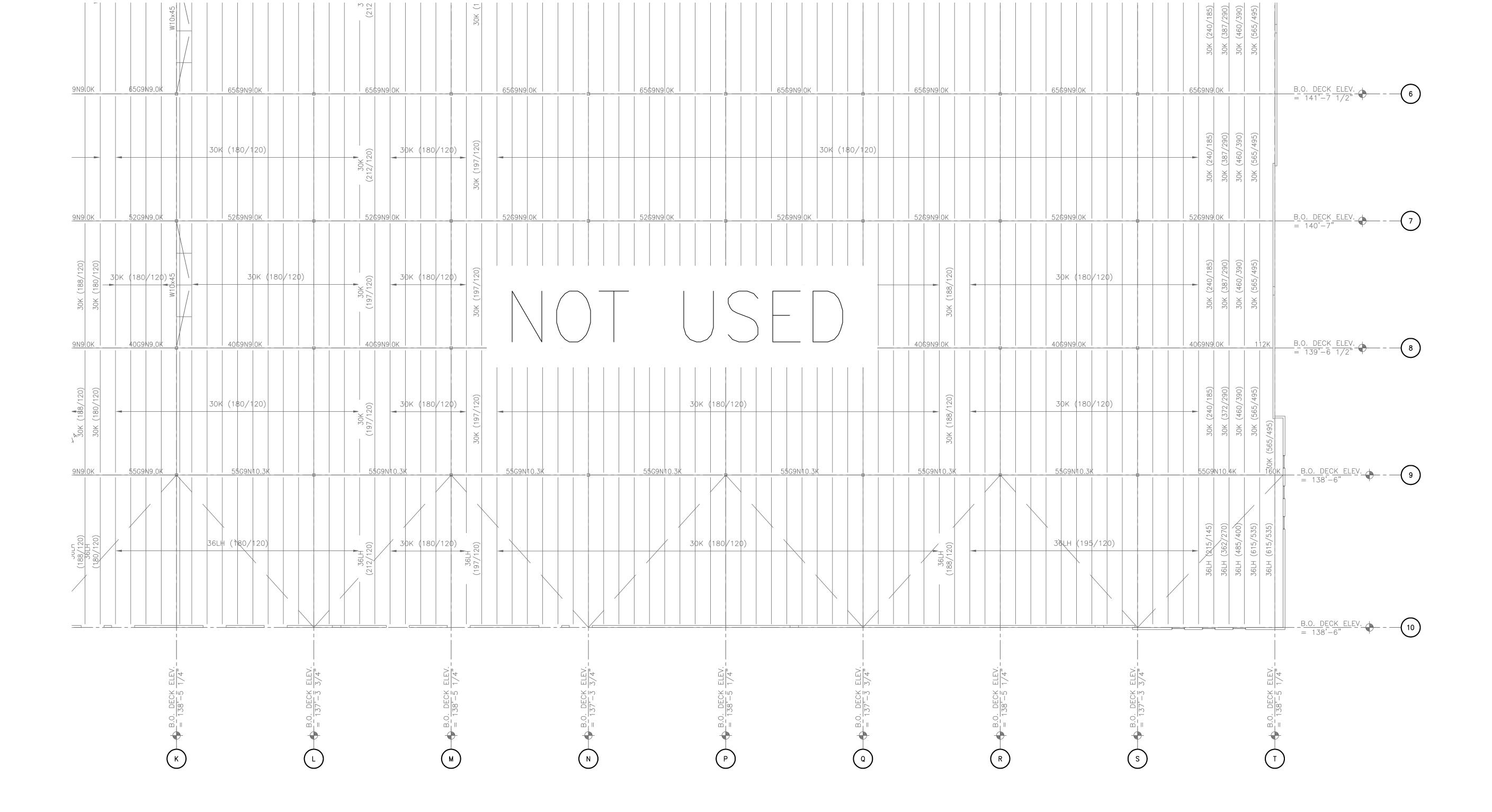
### PROJECT INFORMATION

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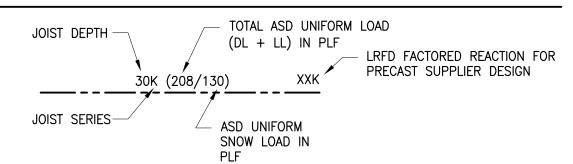
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ISSUE	DATE
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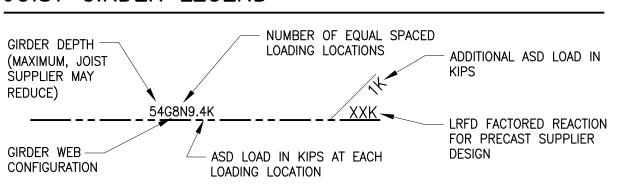
S2.2
ENLARGED PARTIAL
FRAMING PLAN



### JOIST LEGEND



### JOIST GIRDER LEGEND



3þK (180/12¢)

3pk (180/12¢)

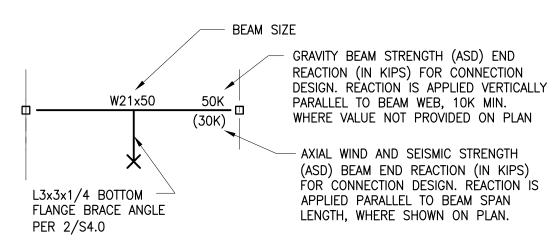
54'-0"

54'-0"

### BEAM REACTION LEGEND

STEEL FABRICATOR SHALL DESIGN THE BEAM CONNECTIONS FOR THE STRENGTH LEVEL LOADS (ASD) SHOWN ON THIS PLAN, TYP. (RE: 1/S4.0)

USE MINIMUM TWO BOLT CONNECTION





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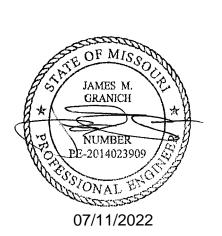
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### PROJECT INFORMATION

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S2.3
ENLARGED PARTIAL
FRAMING PLAN



54'-0"

54'-0"

3pk (180/12¢)

54'-0"

3pk (180/12¢)

54'-0**"** 

54'-0"

′ 3þK (180/12¢)

54'-0"

54'-0"

### PLAN REFERENCE NOTES:

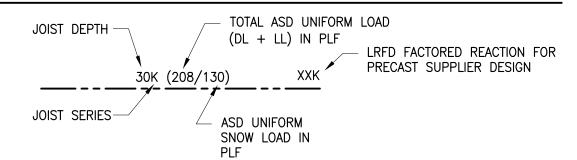
A NEW ROOF TOP EQUIPMENT, RE: ARCH./MEP. PROVIDE ANGLE FRAME AND CURB RE: 5/S4.0. JOIST SUPPLIER SHALL ACCOUNT FOR LOAD SHOWN ON PLAN IN JOIST DESIGN IN ADDITION TO LOADING PREVIOUSLY INDICATED IN BASE DRAWINGS ISSUED JULY 15, 2022.

### <u>Plan notes</u>

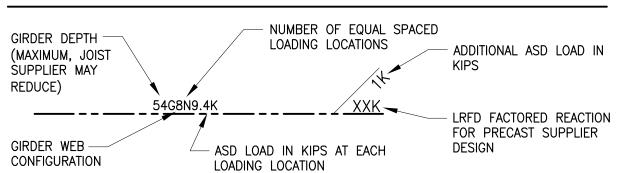
- 1. VERIFY ALL WALL OPENING, DIMENSIONS, JOINTS, BLOCKOUTS, REVEALS AND FUTURE KNOCK OUT PANELS WITH ARCHITECTURAL
- DRAWINGS.

  2. JOIST SHALL BE DESIGNED FOR ROOF TOP EQUIPMENT, RE:
  ARCH./MEP. PROVIDE ANGLE FRAME AND CURB, RE: 5/S4.0. JOIST
  SUPPLIER SHALL ACCOUNT FOR LOAD SHOWN ON PLAN IN JOIST
  DESIGN
- JOIST AND JOIST GIRDER DEPTHS SHALL BE LIMITED SO THAT 36'-0" CLEAR HEIGHT TO BOTTOM OF STRUCTURE IS MAINTAINED.
   RE: 6/S4.0 FOR SPECIAL JOIST LOADS WHERE REFERENCED ON DIAM.

### JOIST LEGEND



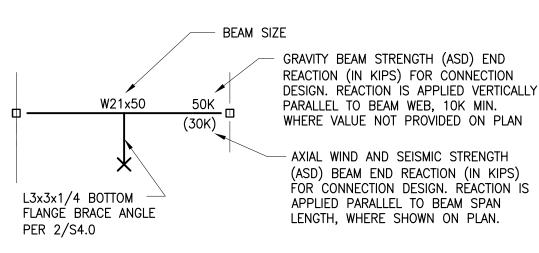
### JOIST GIRDER LEGEND

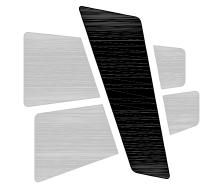


### BEAM REACTION LEGEND

STEEL FABRICATOR SHALL DESIGN THE BEAM CONNECTIONS FOR THE STRENGTH LEVEL LOADS (ASD) SHOWN ON THIS PLAN, TYP. (RE: 1/S4.0)

USE MINIMUM TWO BOLT CONNECTION





CURRAN ARCHITECTURE

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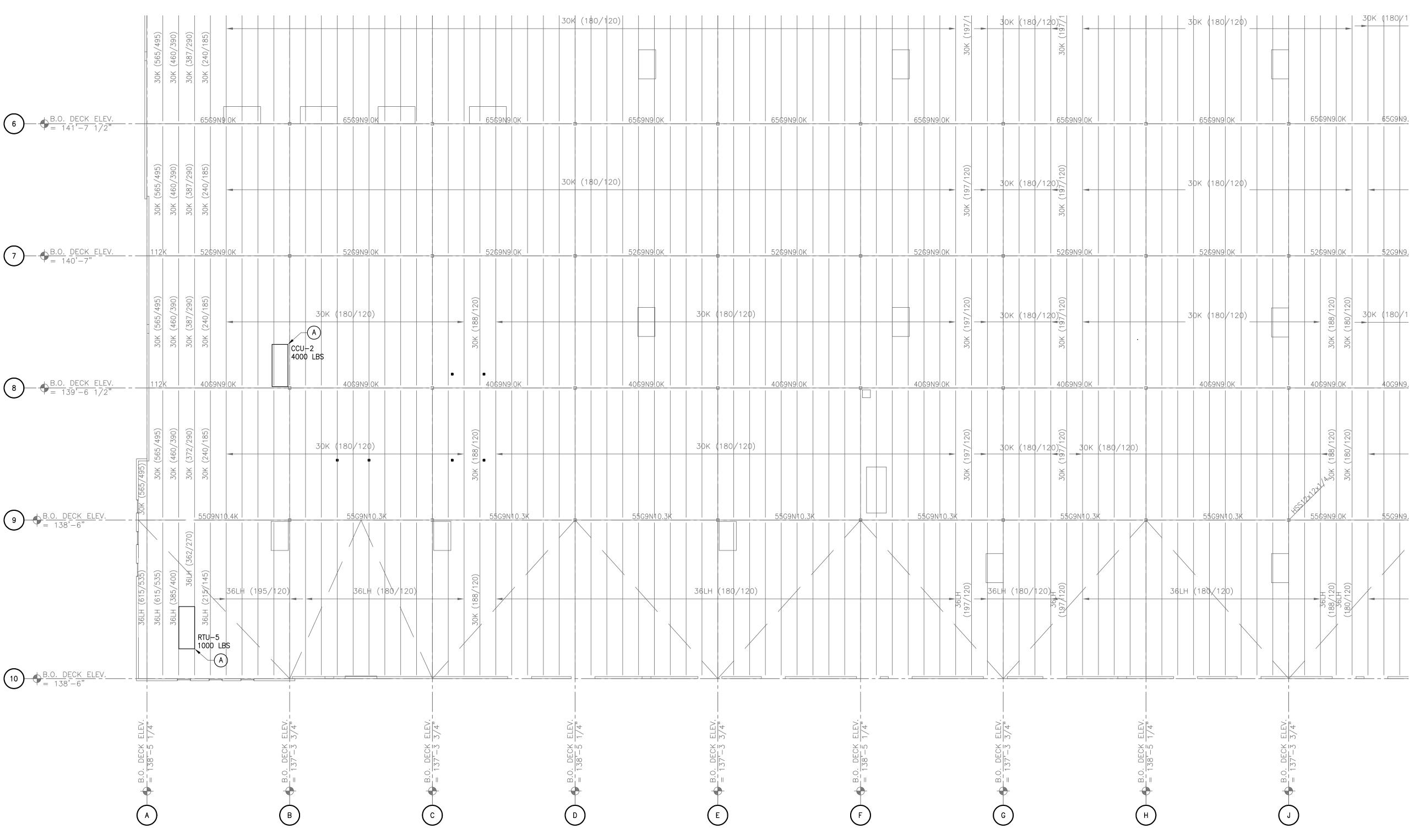
### PROJECT INFORMATION

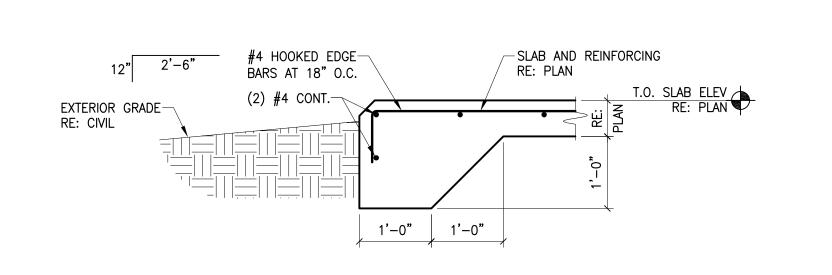
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ISSUE	D/
ISSUE FOR PERMIT	07.11.2

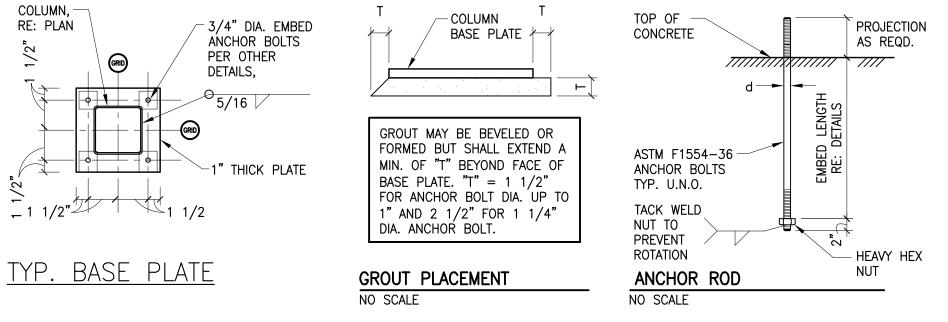
210300

S2.4
ENLARGED PARTIAL
FRAMING PLAN





 $\int \frac{\text{FOUNDATION SECTION}}{3/4" = 1'-0"}$ 



STEEL REINF. LAP SCHEDULE (INCHES)						
			CONC	RETE		
	f'c = 30	000 PSI	f'c = 40	000 PSI	f'c = 50	000 PSI
BAR SIZE	TOP	OTHER	TOP	OTHER	TOP	OTHER
#3	22	17	20	16	17	13
#4	29	22	27	21	23	17
<b>#</b> 5	36	28	33	26	28	22
<b>#</b> 6	43	33	40	31	34	26
<b>#</b> 7	63	48	58	45	49	38
#8	72	55	66	51	56	43
#9	91	70	79	61	71	54

NOTE: EXTEND THICKENED SLAB 1'-6" PAST STAIR STRINGERS EACH END.

8 CONC. LAP SCHEDULE  $\frac{3}{4} = 1 - 0$ 

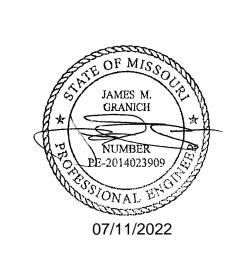






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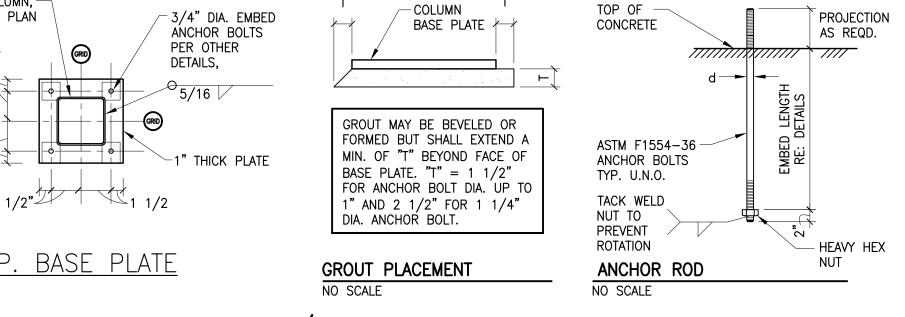
PROJECT INFORMATION

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ISSUE FOR PERMIT	07.11.202

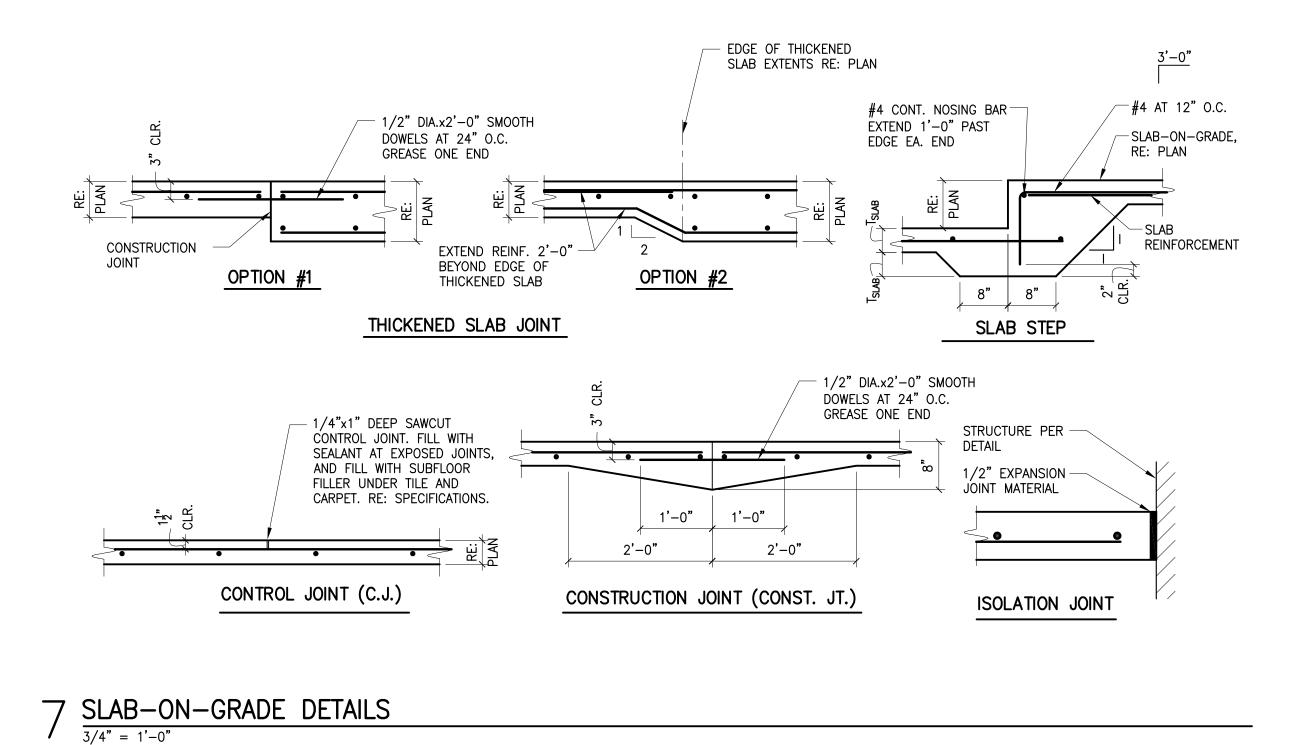
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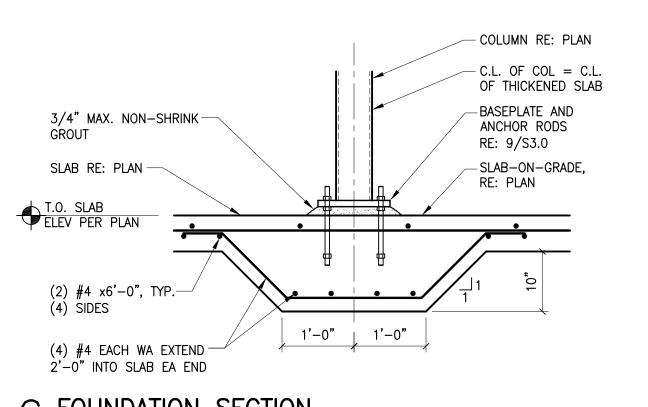
S3.0 FOUNDATION DETAILS

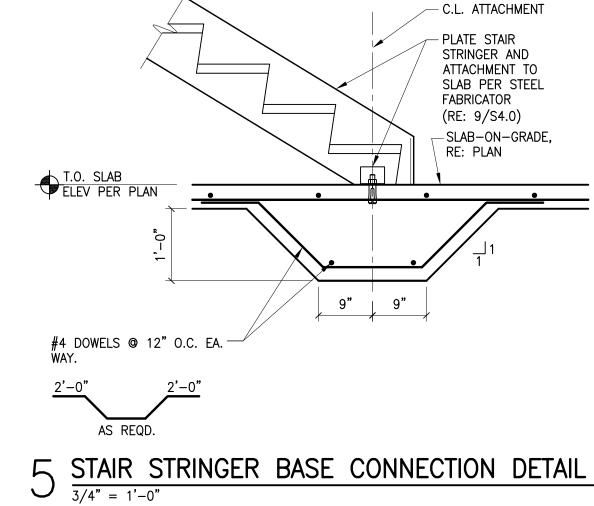


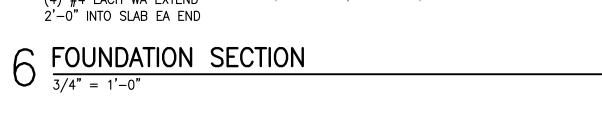
ANCHOR ROD EMBEDMENT/BASE PLATE DIAGRAM

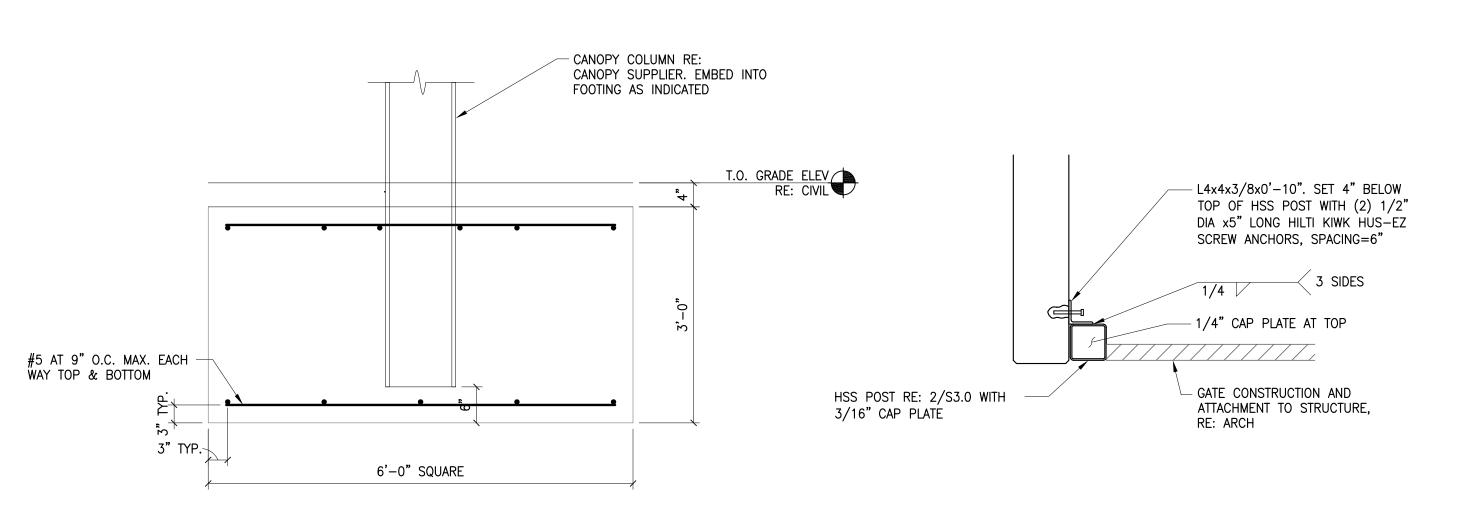




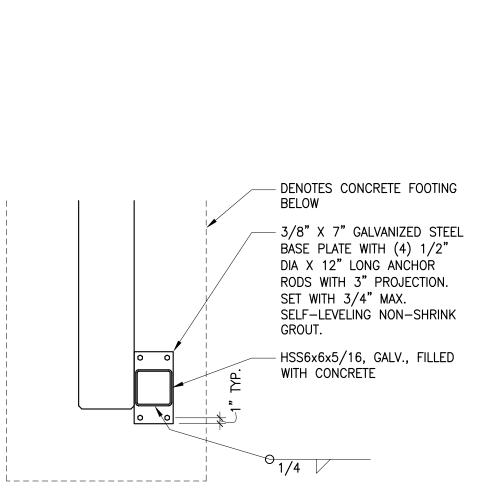




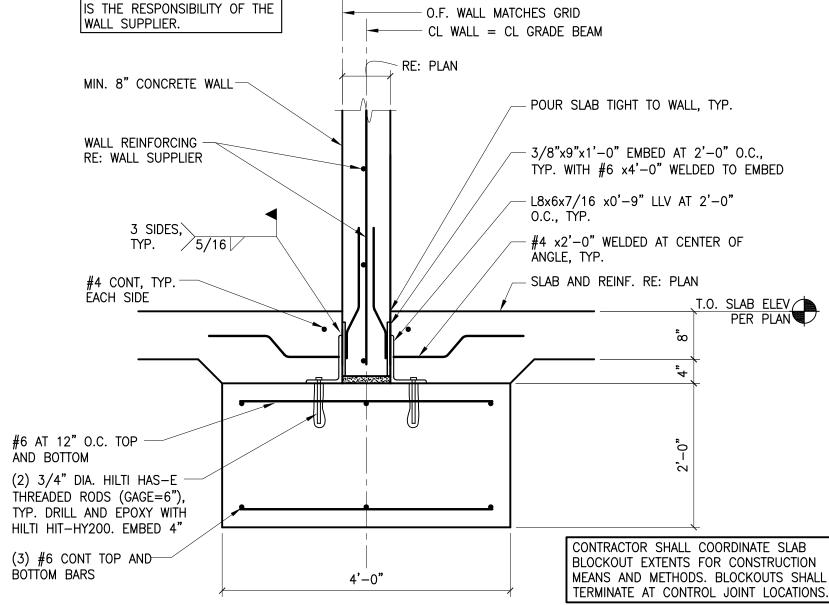








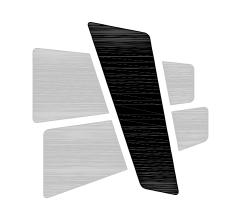
 $2^{\frac{\text{GATE ENCLOSURE FOUNDATION SECTION}}{3/4" = 1'-0"}}$ 



GENERATOR ENCLOSURE WALL SECTION 3/4" = 1'-0"

SECTION PROVIDED AS BASIS FOR DESIGN ONLY. DESIGN OF THE WALL AND ITS CONNECTION

TO THE FOUNDATION AND SLAB



# ARCHITECTURE

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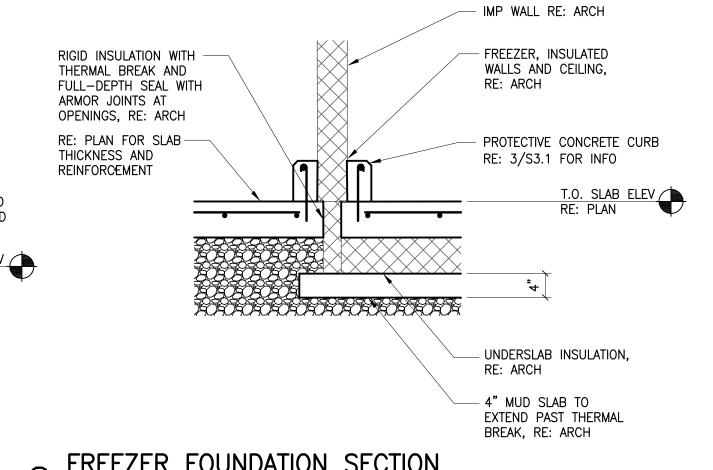
### PROJECT INFORMATION

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ISSUE DATES DATE ISSUE FOR PERMIT 07.11.2022

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S3.1 FRAMING DETAILS



 $2 \frac{\text{FREEZER FOUNDATION SECTION}}{\frac{3}{4"} = 1'-0"}$ 

OPERABLE PARTITION CONNECTION DETAILS

3/4" = 1'-0"

1/8" CAP PLATE-

IMP WALL RE: ARCH MIN. 4" WIDE PROTECTIVE CONCRETE CURB EACH SIDE OF IMP WALL WITH #4 AT 12" O.C. VERTS. PROVIDE 180 DEGREE HOOKS AT TOP. DRILL AND EPOXY INTO SLAB WITH HILTI HIT—HY 200, EMBED RE: PLAN FOR SLAB ---THICKNESS AND = 3". RE: ARCH. FOR FINAL CURB DIMENSIONS RIENFORCEMENT T.O. SLAB ELEV RE: PLAN

 $\frac{\text{COOLER FOUNDATION SECTION}}{3/4" = 1'-0"}$ 

CONTRACTOR VERIFY B.O. STEEL ELEVATION WITH OPERABLE PARTITION DRAWINGS. AT CONTRACTOR'S OPTION, SUPPORT STEEL ABOVE THE OPERABLE PARTITION AND IT'S CONNECTION TO THE STRUCTURE MAY BE PROVIDED BY THE PARTITION SUPPLIER

- CONCRETE TOPPING

- PRECAST FLOOR PANEL

PRECAST BEAM, DEPTH OF FLOOR PANEL AND AS REQUIRED

L6x6x5/16 CONT. WITH 3/4" DIA.

THREADED ROD AT 24" O.C. MAX.

DRILL AND EPOXY WITH HILTI HIT-HY270. EMBED=6 3/4"

— CMU WALL, RE: PLAN

BY PRECAST SUPPLIER

BEAM-TO-WALL PANEL

CMU WALL RE: PLAN

PRECAST SUPPLIER

CONNECTION BY

RE: PLAN

RE: PLAN

FRAMING SECTION
SCALE: 3/4"=1'-0"

STEEL BEAM, -RE: PLAN STEEL BEAM, -RE: PLAN - OPERABLE PARTITION THRU-BOLT CONNECTION BY PARTITION SUPPLIER B.O. BEAM ELEV PL3/8"x4"x0'-8" SHEAR

PLATE w/ (3) 3/4" DIA

A325 BOLTS AT EACH BEAM

TO COLUMN AND BEAM TO BEAM CONNECTION - OPERABLE PARTITION — STEEL TUBE POST RE: PLAN. ATTACH RE: ARCH WALL STUD TO EAST AND WEST FACE OF SUPPLIER

- BASE PLATE WITH (2) 3/4" DIA.x 4 1/2" HÍTI KWIK HUS-EZ SCREW ANCHORS

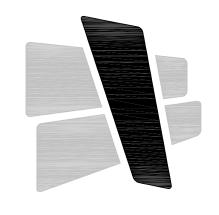
BY PARTITION

L5x5x3/8x0'-8" DOUBLE CLIP  $^-$ ANGLE WITH (2) 3/4" DIA A325 BOLTS AND (4) 3/4"
DIA. THREADED RODS. DRILL
AND EPOXY WITH HILTI HIT—HY 270. EMBED =  $6 \frac{3}{4}$ " ATTACHMENT AT CMU WALL

STEEL BEAM,-

RE: PLAN

HSS6x3 BASE PLATE



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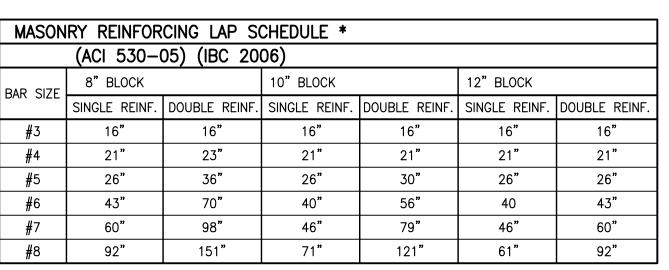
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LEE'S SUMMIT, MO

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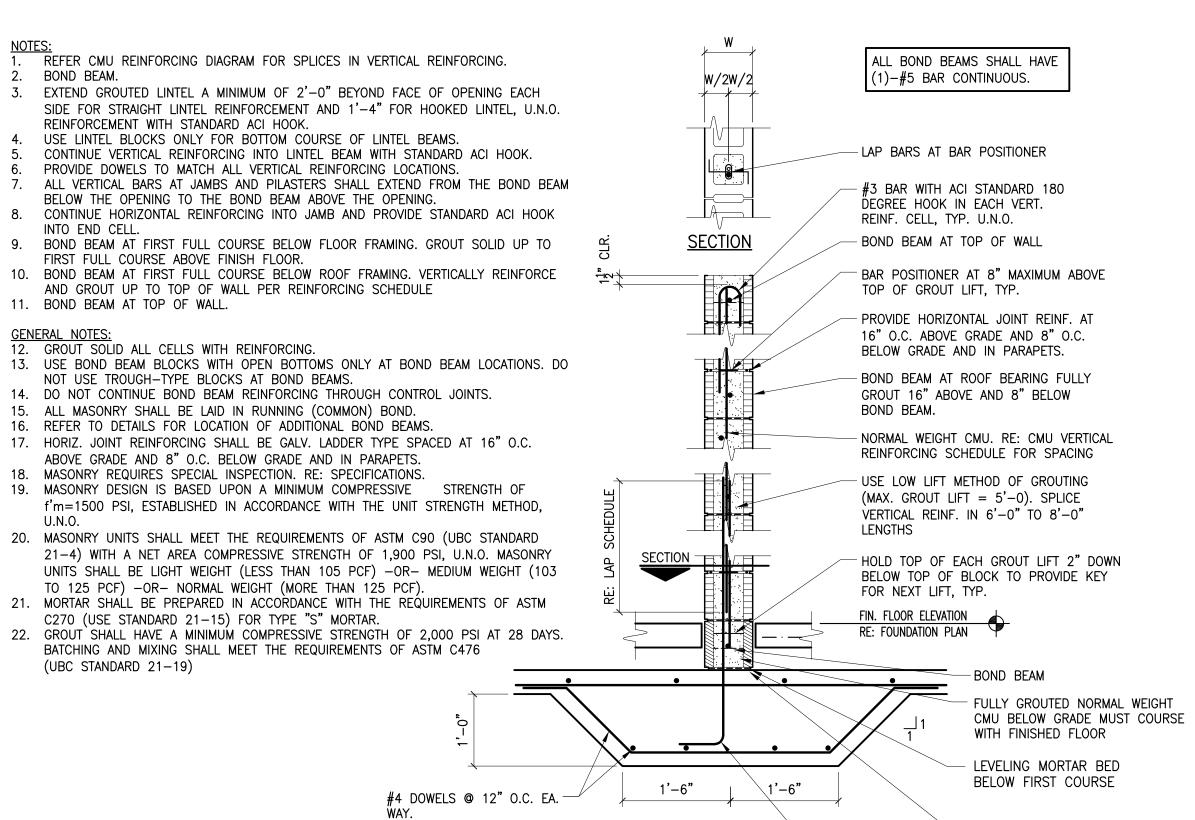
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S3.2
FOUNDATION DETAILS

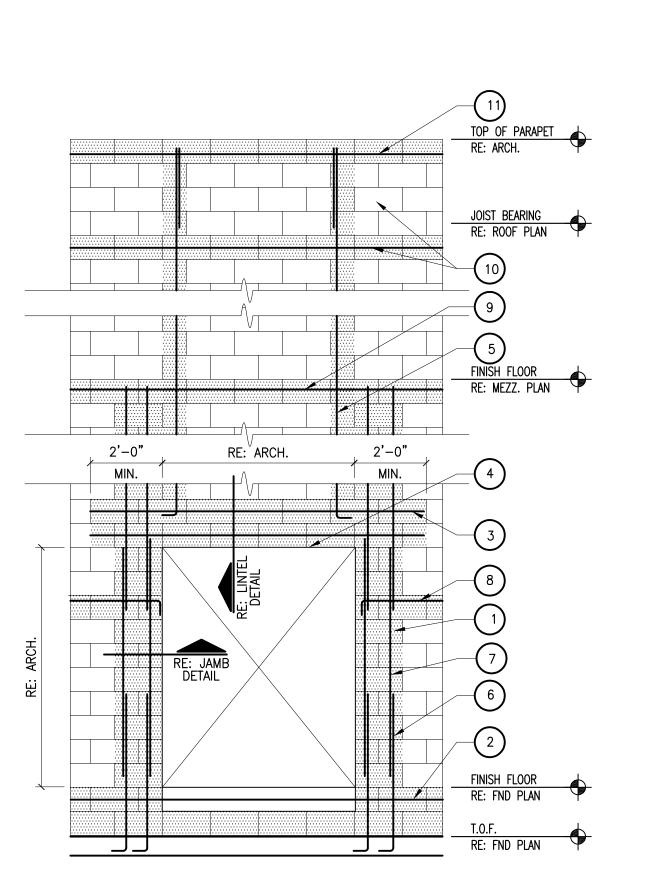


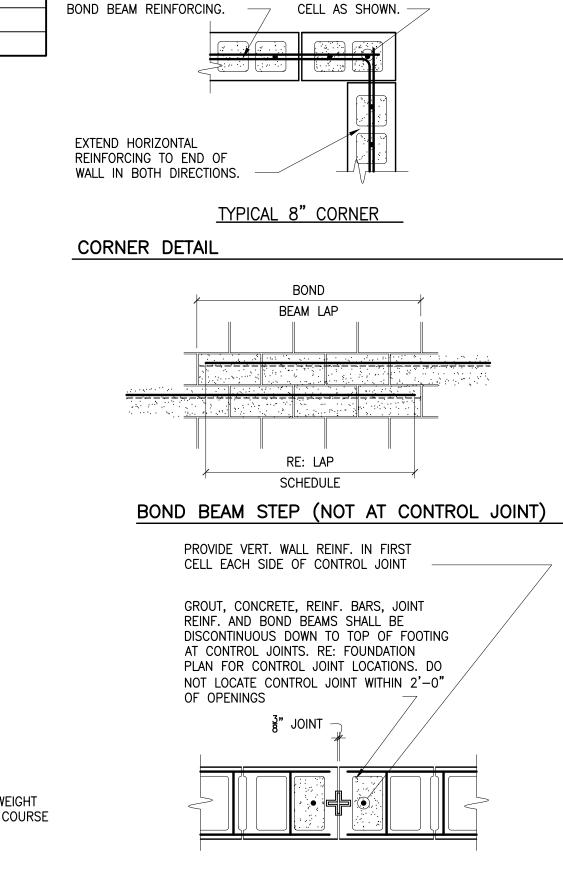
\* BASED ON f'm = 1500 PSI

	CMU VERTICAL REINFORCING SCHEDULE		
MW-1	8" CMU W/ (1)-#5 VERT. AT 8" O.C. WITH (1)-#4 DOWEL TO MATCH.		
	* PROVIDE HIGH STRENGTH BLOCK - fm = 2000 PSF		



<u>8" WALL</u>





EXPANSION/CONTROL JOINT DETAIL

C.L. WALL

- LAP SPLICE RE:

- SLAB-ON-GRADE

WALL REINFORCING

PROVIDE VERT. WALL

REINF. IN THE CORNER

RE: PLAN

1/S3.2

BOND BEAM WITH (1) -

#5 CONT.

RE: 1/3.2 FOR ADDITIONAL

 $2 \frac{\text{FOUNDATION SECTION}}{3/4" = 1'-0"}$ 

INSTALL CORNER BAR TO

MATCH AND LAP WITH

INFORMATION.

- VERTICAL CONTROL JOINTS SHALL

TERMINATE AT TOP OF FOOTING

STANDARD ACI HOOK PLACED DIRECTLY ON FOOTING REINF.

FULLY GROUT ALL CELLS,

8" MASONRY WALL WITH

Ö.C. IN GROUTED CELLS

#4 VERT BARS AT 16"

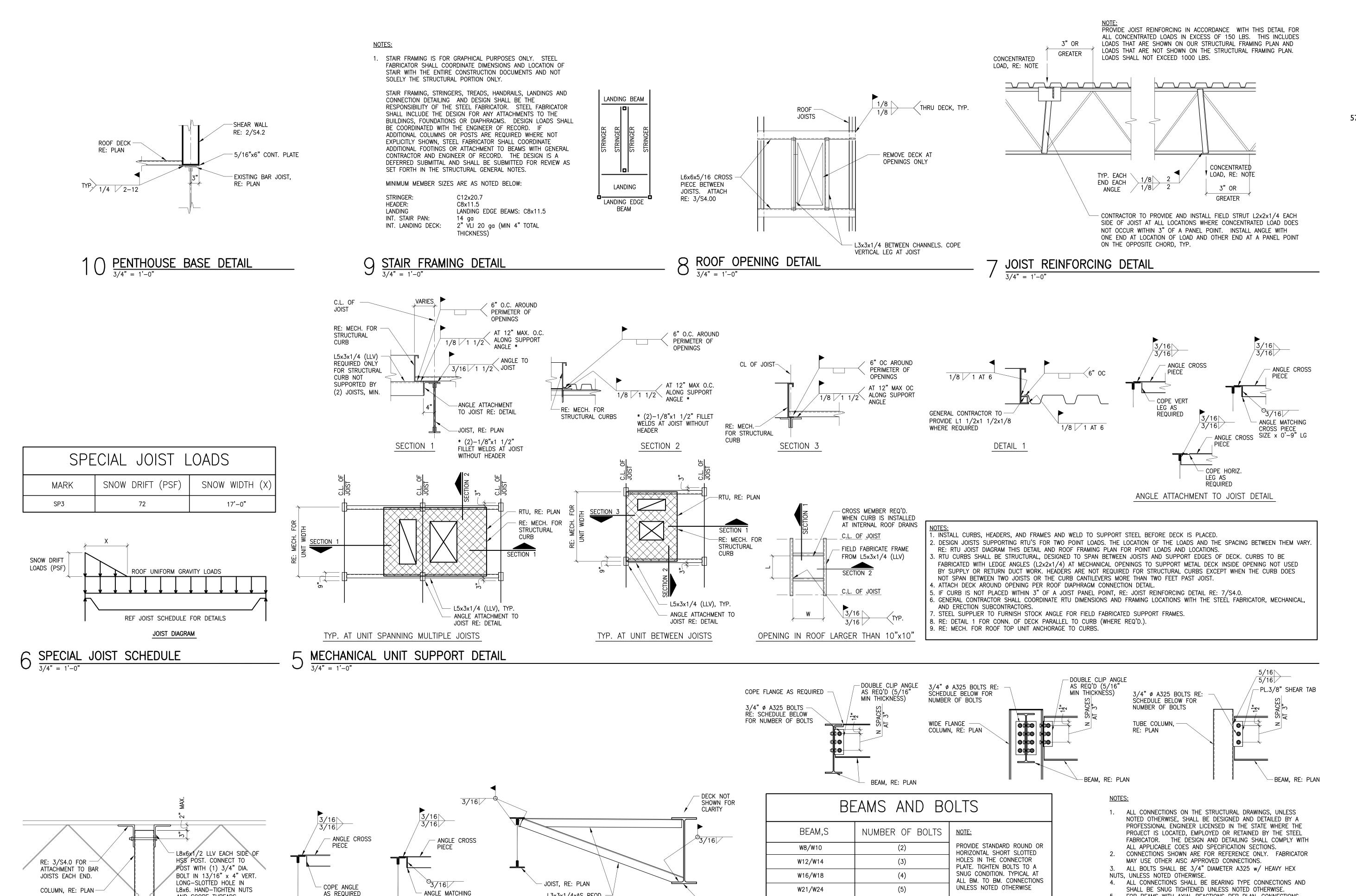
INCLUDING UNREINFORCED CELLS

T.O. SLAB ELEV. RE: PLAN

- #4x6'-0" VERTICAL DOWELS WITH STANDARD

HOOK INTO SLAB TO MATCH SPACING OF

 $\frac{\text{CMU WALL REINFORCING DIAGRAM}}{3/4" = 1'-0"}$ 



W27/W30

BEAM CONNECTION DETAIL

3/4" = 1'-0"

RE: PLAN

(6)

L3x3x1/4xAS REQD.

BRACE LOCATED AS

BOTTOM FLANGE BRACING DETAIL

SHOWN ON PLAN

AS REQUIRED

7 ANGLE CONNECTION DETAILS

CROSS PIECE SIZE x 0'-9" LG

AND SCORE THREADS.

EDGE ANGLE CONNECTION DETAIL

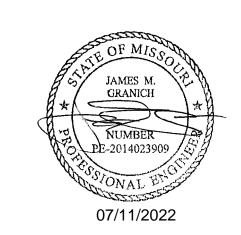
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ISSUE	DATE
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S4.0 FRAMING DETAILS

FOR BEAMS WITH AXIAL REACTIONS PER PLAN, CONNECTIONS

AISC SPECIFICATIONS.

SHALL BE DESIGNED AS FULLY TENSIONED SLIP CRITICAL PER



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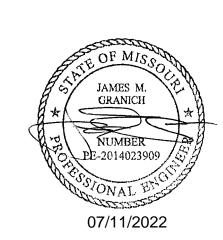




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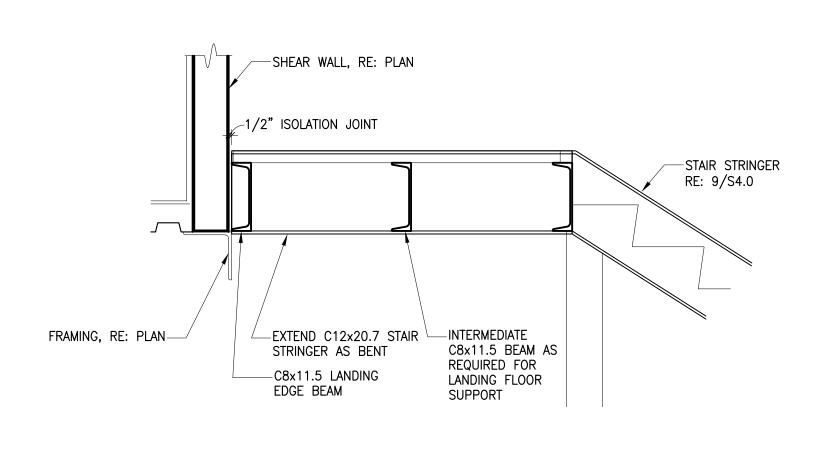
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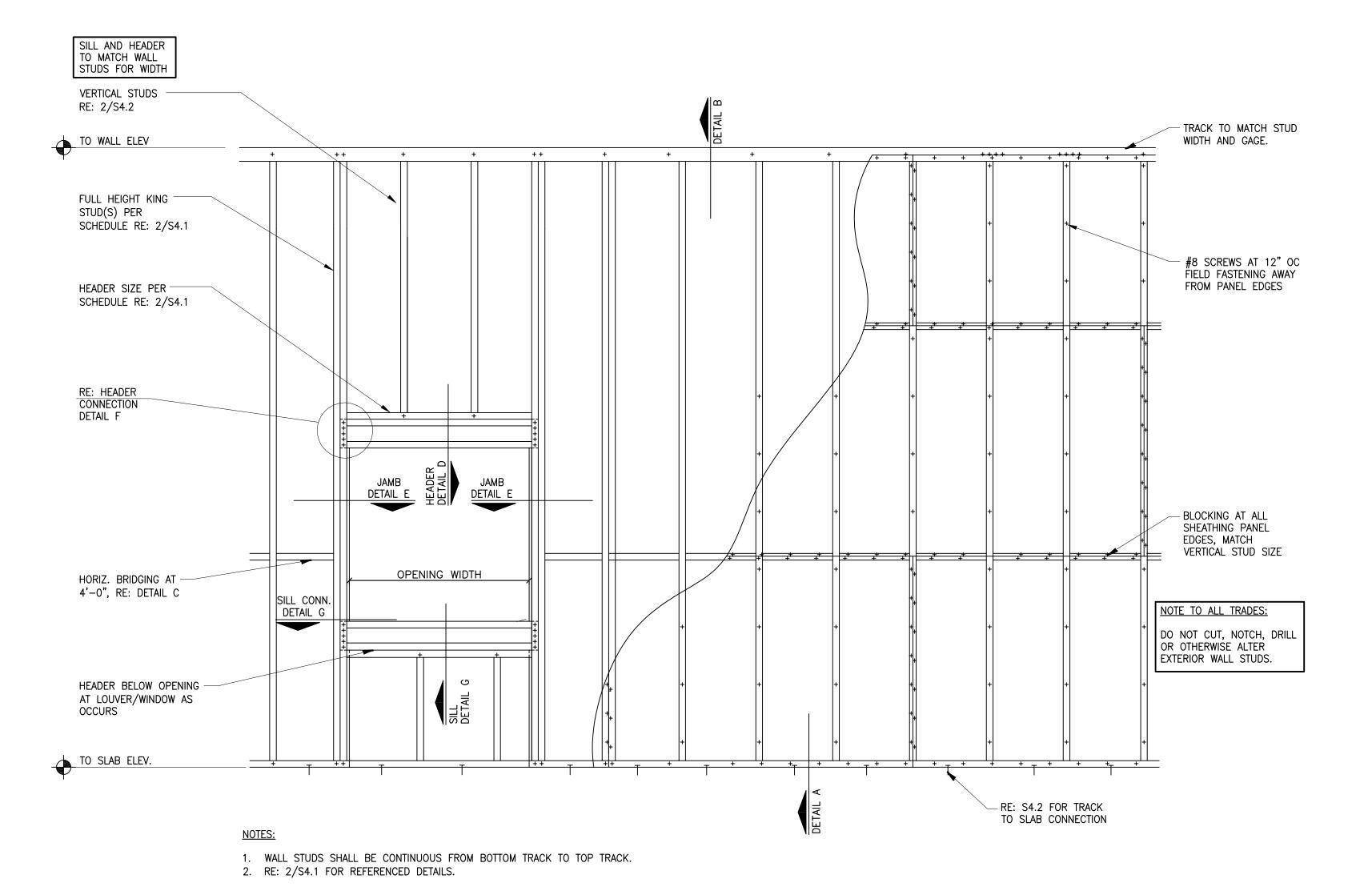
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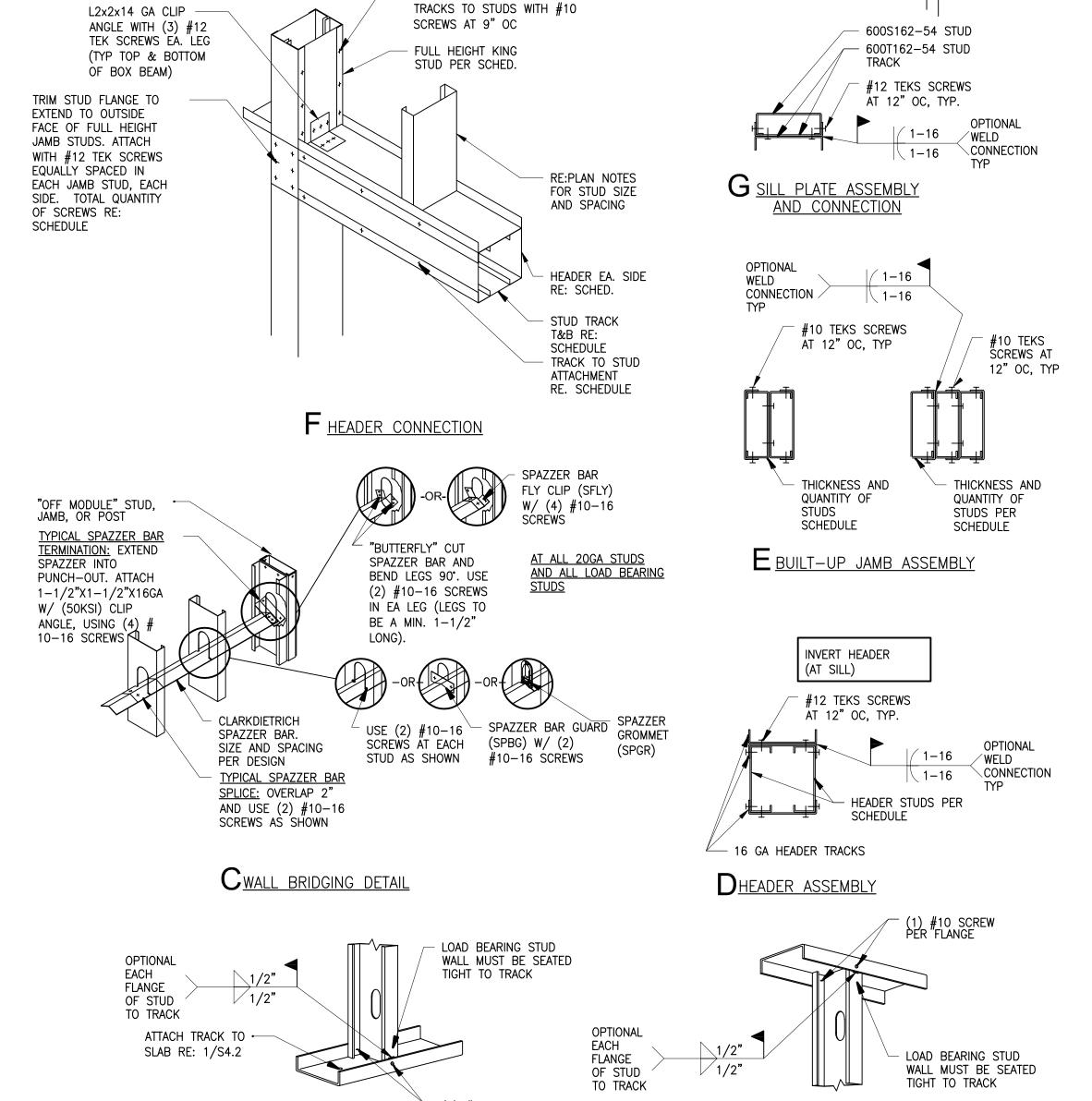
210300

S4.1 FRAMING DETAILS



# STAIR LANDING SECTION 3/4" = 1'-0"





STRUCTURAL HEADER AND JAMB SCHEDULE

KING STUDS

(2) 600S162-33

- AT DOUBLE KING STUD, PROVIDE

600T125-54 EA. SIDE. ATTACH

HEADER

(2) 600S162-33

ASTUD TO TRACK AT BOTTOM

 $2 \frac{\text{FRAMING SECTION}}{3/4" = 1'-0"}$ 

MARK

OPENING

RE: PLAN

SCREW QUANTITY

(8) 1/4" SCREWS

600T162-54 STUD TRACK

B STUD TO TRACK AT TOP

L2x2x14 GA CLIP

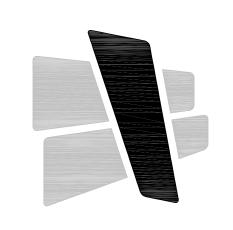
OF BOX BEAM)

SILLPLATE

ANGLE WITH (3) #12

TEK SCREWS EA. LEG (TYP TOP & BOTTOM

- 600S162-54 STUD



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DATE

07.11.2022

SHEAR WALL SCHEDULE SHEATHING ATTACHMENT PATTERN BOTTOM TRACK MARK SHEATHING WALL STUDS HOLDOWNS END POST AT PANEL EDGES ATTACHMENT AT INTERMEDIATE AND BOUNDARIES FRAMING MEMBERS 5/8" RATED 600S162-33 HILTI 0.157" X-8 SIMPSON S/HDU4 HOLDOWN #10 SELF-DRILLING #10 SELF-DRILLING SW1 (2)-600S162-33SHEATHING (OSB), SCREWS AT 6" O.C. | SCREWS AT 12" O.C. WITH 5/8" DIA. BOLT AT 16" O.C. AT 16" O.C. MIN. ONE SIDE

4" TSB 14 GA. ————

3-5/8" CSJ 16 GA.

SCREWS TO JOIST

RE: PLAN AND

OTHER DETAILS

LOAD BEARING WALL,-

(400T125-68), 33 KSI OR

(362S162-54), 50 KSI WEB

STIFFENER WITH (3)#10-16

→ WEB STIFFENER - STANDARD

(4) #10-16 SCREWS THROUGH  $^-$ 

(4) #8 SCREWS OR— EQUIVALENT

8'-0" O.C. (MAX.)

BETWEEN BRÌDGING LINES

TradeReady® STRUCTURAL BLOCKING INTO SOLIÓ BLOCK AS SHOWN

FASTEN JOIST TO BEARING

11.25"

SUPPORT WITH APPROPRIATE

NOTE: STIFFENER MUST EXTEND TO

WITHIN 1/8" OF TOP AND

BOTTOM FLANGE OF JOIST.

TABLE T.1

-DIETRICH S54X WITH (3) #10-16

SCREWS PER LEG, SUPPORT CLIP

LENGTH (X) PER TABLE T.1

- SOLID BLOCKING AT 12' O.C.

(MAX.) AND AT EACH END

-(1) #10-16 SCREW TO JOIST AT

FradeReady® BRIDGING

TradeReady® STRUCTURAL

BRIDGING, STAGGER AS SHOWN

JOIST DEPTH | CLIP LENGTH (X)

- REFER TO FOUNDATION PLANS FOR ANCHOR BOLT AND HOLD DOWN LOCATIONS. ANCHOR BOLTS SHALL BE CAST IN PLACE FOR EMBEDMENT DEPTH SHOWN IN SCHEDULE.
- ALL VERTICAL WALL SHEATHING TO BE 5/8" RATED SHEATHING (OSB).

NOTES:
1. ATTACH BLOCKING TO

SHEATHING WITH (4) #8

SCREWS OR EQUIVALENT.

BLOCK LENGTH SHALL BE

1/8" (MIN.) TO 1" (MAX.)

SPACE BLOCKS AT 12'O.C.

(MAX.), AND EA. END OF

AS SHÓWÑ AT JOIST LAP.

4. USE (4) #10-16 SCREWS

ĴOIST RUN.

TradeReady® JOIST PER PLAN

SHORTÈR THAN JOIST SPÁCE

- HOLDOWN POSTS SHALL BE ATTACHED TOGETHER PER BUILT-UP SECTION DETAIL.
- PANEL BLOCKING SHALL BE A 1 1/2"x16 GA. FLAT STRAP CENTERED ON THE JOINT WHERE REQUIRED. SHEARWALL SHEATHING SHALL RUN CONTINUOUS THROUGH BREAKS CAUSED BY INTERSECTING WALLS.

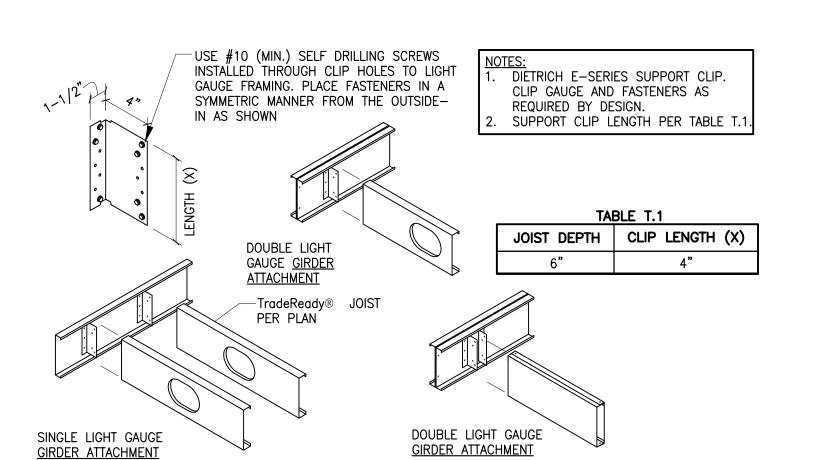


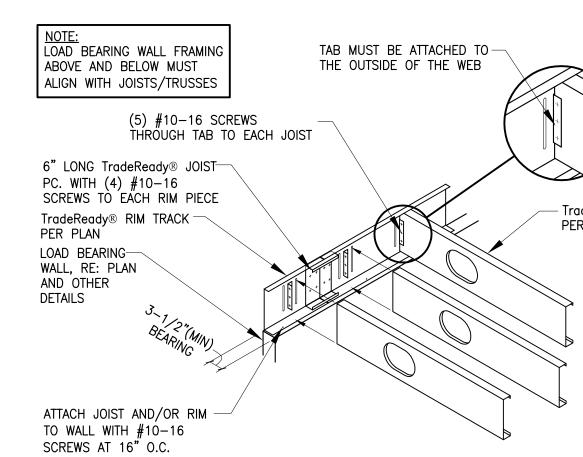
(4) FASTENERS THROUGH BLOCK -BOTTOM FLANGE TO BEARING (1) FASTENER THROUGH JOIST SUPPORT WITH #10-16 SCREWS BOTTOM FLANGE TO BEARING LOAD BEARING-SUPPORT WITH #10-16 SCREWS WALL, RE: PLAN AND OTHER DETAILS BLOCK LENGTH SHALL BE 1/8" (MIN.) TO 1" (MAX.) SHORTER THAN JOIST SPACE. SPACE BLOCKS AT 12'O.C. (MAX.), PER PLAN AND EA. END OF JOIST RUN.



PER PLAN

LIGHT GAUGE





JOIST RIM - RIM SPLICE

(4) FASTENERS THROUGH BLOCK-

SUPPORT WITH #10-16 SCREWS

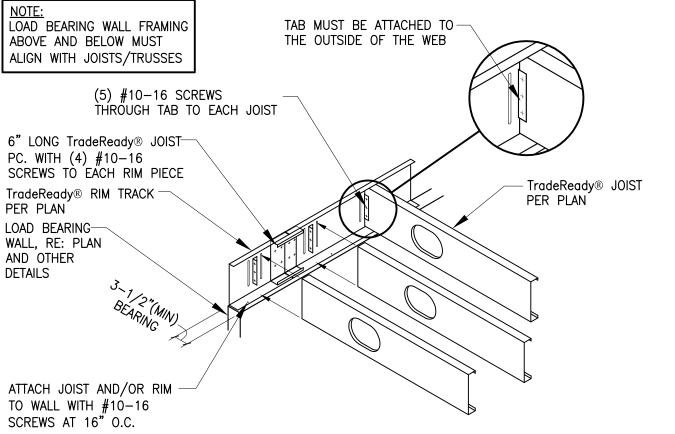
8 JOIST LAP - STANDARD

BOTTOM FLANGE TO BEARING

LOAD BEARING— WALL, RE: PLAN

AND OTHER

DETAILS



BRIDGING — STANDARD

PER PLAN

NOTE:

TYPICAL BRIDGING SHALL BE

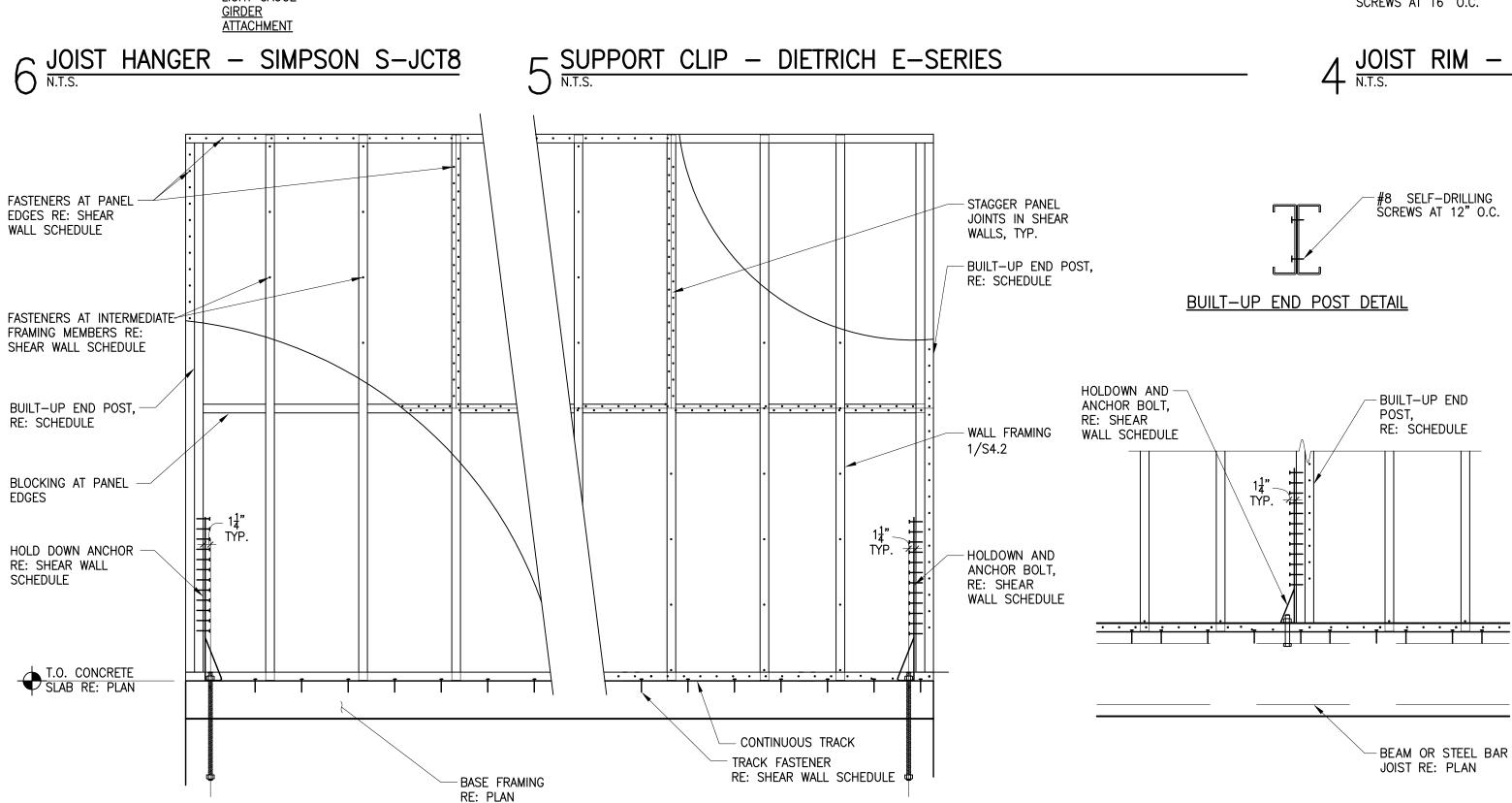
7/8" HAT CHANNELS AT 48" O.C., RE: ARCH

1/8"(MIN) TO 1"(MAX) GAP-

BÉTWÈEN BLOCK AND JOIST

DECK, RE: PLAN-

TradeReady® JOIST-



NOTES:

PROVIDE GALVANIZED SCREWS AT EXTERIOR FACE OF WALL.

HOLD DOWN ANCHORS SHALL BE APPROVED BY THE SPECIAL STRUCTURAL INSPECTION AS REQUIRED BY BUILDING CODE.

PLUMBING / MECHANICAL ACCESS HOLES IN STUDS OR TRACKS TO BE PLACED IN CENTER LINE OF MEMBER, SPACED NO CLOSER THAN 10'-0" AND NOT EXCEED 2 1/2" DIA. FOR 6" WALLS - 1 1/2" DIA. FOR 3 5/8" WALLS. AT TRACKS AND HOLDOWN MEMBERS, STRAP ACROSS HOLE WITH SIMPSON ST2115, NO SCREWS AT HOLE. 9. SHÉAR WALL SHEATHING AND FASTÉNING SHALL BE CONTINUOUS BETWEEN HOLDOWN LOCATIONS AS SHOWN ON PLAN.

HOLDOWN DETAIL AT FOUNDATION

 $2 \frac{\mathsf{SHEAR}}{3/4"} = 1'-0"$ 

DOUBLE JOIST ATTACHMENT