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1. DRILL HOLE TO THE EMBEDMENT DEPTH NOTED ON PLANS, MINIMUM 9x ANCHOR/BAR DIAMETER. DRILL BIT DIAMETER TO BE DETERMINED PER ANCHOR DIAMETER IN

2. INSTALL ANCHORS PER MANUFACTURER'S REQUIREMENTS. THESE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO, HOLE PREPARATION, EPOXY PROPORTIONS AND QUANTITIES, INSTALLATION TEMPERATURE, AND CURE TIMES. CLEAR OUT ALL DUST AND FRAGMENTS FROM THE HOLE PRIOR TO INJECTION OF EPOXY

USING A WAND TO BLOW THE DUST FROM THE BACK OF THE HOLE FORWARD THROUGH THE OPENING. ENSURE ALL DUST HAS BEEN REMOVED PRIOR TO INJECTING EPOXY. 4. INJECT EPOXY INTO HOLE. AMOUNT OF EPOXY TO BE DETERMINED BY MANUFACTURER'S

REQUIREMENTS FOR ANCHOR DIAMETER AND EMBEDMENT DEPTH. 5. INSERT ANCHOR AND TWIST 1/2 ROTATION UNLESS NOTED OTHERWISE IN INSTALLATION

8. INSPECTIONS AS PER MANUFACTURER'S REQUIREMENTS.

#### PART VIII - CONCRETE MASONRY

MASONRY WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS. DATA LISTED HERE IS FOR REFERENCE ONLY. COORDINATE THE EXTENT OF MASONRY WALLS WITH B THE ARCHITECT'S DRAWINGS. NON-LOAD BEARING WALLS MAY NOT BE SHOWN ON THE STRUCTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR FINISH, HEIGHT, LAYING PATTERN AND JOINT TYPES OF BRICK MASONRY (VENEER). ALL CONCRETE MASONRY BLOCK SHALL BE LAYED IN RUNNING BOND PATTERN UNLESS NOTED OTHERWISE . DESIGN STRENGTH OF MASONRY (f'm) SHALL BE 2,500 PSI, MINIMUM, UNLESS NOTED

1. CONCRETE STRENGTH OF MASONRY UNITS, (f'cmu, BASED ON NET AREA) SHALL BE 3,250

2. UNITS SHALL CONFORM TO ASTM C 55 OR ASTM C 90 AND SAMPLED IN ACCORDANCE WITH 3. CONCRETE BLOCK SHALL HAVE ATTAINTED FULL COMPRESSIVE STRENGTH PRIOR TO

5. CONCRETE BLOCK SHALL BE DRY AT TIME OF PLACEMENT. WET OR FROZEN UNITS SHALL

1. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II, LOW ALKALI. 3. PROVIDE AN AVERAGE COMPRESSIVE STRENGTH AT 28 DAYS OF 2,500 PSI MINIMUM.

4. MORTAR AGGREGATES SHALL BE NATURAL SAND CONFORMING TO ASTM C144.

 FOR FILLING SPACES 4" OR LARGER IN BOTH HORIZONTAL DIRECTIONS, USE "COARSE GROUT" WITH A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI. THE GROUT SHALL BE 2. FOR FILLING SPACES LESS THAN 4" IN ONE HORIZONTAL DIRECTIONS, USE "FINE GROUT"

3. FOR FILLING SPACES 10" AND LARGER IN BOTH DIRECTIONS, USE 3,000 PSI NORMAL WEIGHT CONCRETE. THE GROUT SHALL BE TESTED IN ACCORDANCE WITH ASTM C 1019.

2. ALL GROUT MIX DESIGN SUBMITTALS SHALL INCLUDE THE TEST RESULTS PERFORMED IN 3. GROUT AGGREGATES SHALL BE NATURAL SAND AND ROCK CONFORMING TO ASTM C404.

4. SLUMP RANGE AT POINT OF FINAL DISCHARGE: 8" TO 11". 5. THE USE OF AIR ENTRAINING ADMIXTURES IS NOT ALLOWED.

6. STOP GROUT POUR 2" BELOW TOP OF BLOCK UNITS, BETWEEN GROUT LIFTS. 7. CLEANOUTS SHALL BE PROVIDED FOR ALL GROUT POURS OVER 5 FEET IN HEIGHT. 8. ALL GROUT POURS GREATER THAN 12" REQUIRE INTERNAL MECHANICAL VIBRATION AND

9. GROUT POURS 12" OR LESS SHALL BE MECHANICALLY VIBRATED OR PUDDLED. 1. HORIZONTAL LADDER TYPE JOINT REINFORCING SHALL CONFORM TO ASTM A951 WITH

2. LADDER TYPE JOINT REINFORCING SHALL BE USED HORIZONTALLY AT 48" O.C. IN ALL 3. REINFORCING SHALL BE LOCATED IN FULLY GROUTED CELLS.

4. THE FOLLOWING REINFORCING PROVISIONS SHALL BE MET: TYPICAL VERTICAL REINFORCING SHALL BE #5 @ 32" O.C.

TYPICAL HORIZONTAL REINFORCING #5 @ 48" O.C. IN H BLOCKS FOR A MINIMUM WALL

(MAXIMUM 16" SPACING) IN TYPICAL WALLS AND IN EVERY COURSE (MAXIMUM 8" SPACING) IN PARAPETS AND CANTILEVERED WALLS PROVIDE ONE-COURSE HORIZONTAL BOND BEAM REINFORCE WITH 2-#4 CONTINUOUS

AT EVERY FLOOR LEVEL, ROOF LEVEL, AND PARAPET, MINIMUM 5. MINIMUM LAP OF ALL REINFORCING STEEL SHALL BE AS FOLLOWS:

 REFER TO DETAILS AND SCHEDULES FOR OTHER LAP SPLICE LENGTH REQUIREMENTS. 6. DO NOT LAP VERTICAL REINFORCEMENT AT INTERSECTING BOND BEAMS.

7. REINFORCEMENT SHALL BE CONTINUOUS THROUGH INTERSECTING BOND BEAMS 8. ALL HORIZONTAL REINFORCEMENT AT ENDS OF BOND BEAMS SHALL HAVE STANDARD HOOK INTO VERTICAL GROUTED CELL. PROVIDE CORNER BARS SUCH THAT HORIZONTAL

9. COVER TO REINFORCING STEEL WITHIN MASONRY ELEMENTS SHALL NOT BE LESS THAN 1. EXPOSED TO EARTH OF WEATHER: 2" (#6 AND LARGER BARS), 1.5" (#5 AND SMALLER

3. LONGITUDINAL WIRES OF JOINT REINFORCEMENT SHALL BE FULLY EMBEDDED IN

. STABILITY AND BRACING OF MASONRY WALLS DURING CONSTRUCTION

1. ALL MASONRY WALLS SHOWN ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS HAVE

BEEN DESIGNED TO RESIST THE REQUIRED CODE VERTICAL AND LATERAL FORCES APPLIED TO THEM IN THE FINAL CONSTRUCTED CONFIGURATION ONLY ASSUMING FULL BRACING TOP, BOTTOM, AND/OR SIDE OF WALL AS SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROPERLY AND ADEQUATELY BRACE ALL MASONRY WALLS AT ALL STAGES DURING CONSTRUCTION TO RESIST ERECTION LOADS AND LATERAL LOADS THAT COULD POSSIBLY BE APPLIED PRIOR TO COMPLETION OF CONSTRUCTION.

1. UNLESS OTHERWISE NOTED, PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUN OF WALL EXCEEDS 25'. SEE ARCHITECTURAL FOR JOINT LOCATIONS. 2. PROVIDE FLEXIBLE JOINT FILLER AT CMU WALL JOINTS AND BETWEEN CMU WALLS AND

OTHER VERTICAL SURFACES TO SEAL JOINTS AIR-TIGHT. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED REQUIREMENTS OF JOINT MATERIALS.

8. SLIP JOINTS SHALL BE PROVIDED AT THE TOP OF ALL NON-LOAD BEARING WALLS. SEE DETAILS AND SPECIFICATIONS FOR CONNECTION REQUIREMENTS.

> **CONTRACT DOCUMENTS SUBMISSION FULLY SPRINKLERED**

**Project Number** 437-316 CONSTRUCT MENTAL HEALTH OUTPATIENT BLDG 52 ADDITION **Building Number Drawing Number** S-001 05/26/2023 DWG 26 of 188

#### STRUCTURAL GENERAL NOTES PART X - OPEN WEB STEEL JOISTS (CONTINUED) PART IX - STRUCTURAL STEEL PART XII - COLD FORMED METAL FRAMING PART XIV - SPECIAL INSPECTIONS FOUNDATION ANNOTATION SYMBOLS A. ALL WORK WITH STRUCTURAL STEEL SHALL BE COMPLETED IN ACCORDANCE WITH THE A. DESIGN A. STATEMENT OF SPECIAL INSPECTIONS A. COLD-FORMED STEEL (CFS) REQUIREMENTS PER THE SPECIFICATIONS. ADDITIONAL INFORMATION THE FOLLOWING STRUCTURAL ANNOTATIONS MAY APPEAR ON THE FOUNDATION PLANS: 1. REFER TO SPECIFICATION SECTION 014529 FOR TYPE AND EXTENT OF EACH SPECIAL INSPECTION LISTED HERE FOR REFERENCE ONLY. ALL STRUCTURAL STEEL GAUGE FRAMING MEMBERS, JOISTS, SPECIFICATIONS. DATA LISTED HERE IS FOR REFERENCE ONLY. 1. ALL JOISTS SHALL CARRY THE DESIGN LOADS AS SPECIFIED IN THE SJI LOAD TABLES AS THE B. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE MINIMUM REQUIREMENT. ADDITIONALLY, THE JOISTS SHALL BE DESIGNED TO CARRY ANY OTHER STUDS, TRACKS, BRIDGING, ETC. SHALL BE OF THE TYPE, SIZE, AND EQUIVALENT STRUCTURAL AND EACH TEST. THE SPECIFICATION ALSO INDICATES WHETHER CONTINUOUS OR PERIODIC AISC MANUAL OF STEEL CONSTRUCTION AND THE AISC CODE OF STANDARD PRACTICE CURRENT LOAD TYPES AND PATTERNS AS INDICATED ON THE DRAWINGS PROPERTIES TO THOSE SHOWN AS COMPUTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AISI INSPECTION IS REQUIRED FOR THE ITEMS LISTED ABOVE ADDITIONAL INFORMATION. SPREAD, STRIP, OR COMBINED FOOTING MARK 2. STEEL JOISTS, BRIDGING, AND THEIR CONNECTIONS SHALL BE DESIGNED FOR A NET UPLIFT 2. CONTRACTOR SHALL READ AND UNDERSTAND THEIR DUTIES IN THE SPECIFICATIONS FOR SPECIAL EDITION. A CERTIFIED WELDER APPROVED BY THE AUTHORITY HAVING JURISDICTION IN "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS. C12 - COLUMN MARK (IF PROVIDED) ACCORDANCE WITH AWS, STRUCTURAL WELDING CODE D1.1, SHALL PERFORM ALL WELDING. EQUAL TO THE UPWARD COMPONENT AND CLADDING WIND PRESSURES SHOWN ON THE . $\,$ COLD FORMED STEEL FRAMING SHALL BE FABRICATED BY A CURRENT MEMBER OF THE STEEL STUD STRUCTURAL DRAWINGS MINUS 5 PSF OF DEAD LOAD. 3. THE SPECIAL INSPECTORS SHALL BE PROVIDED AND SHALL ONLY USE APPROVED SHOP DRAWINGS . ASTM SPECIFICATION AND GRADE: CLEARLY MARK THE GRADE OF STEEL ON EACH PIECE, WITH A MANUFACTURERS ASSOCIATION (SSMA). DISTINGUISHING MARK VISIBLE FROM FLOOR SURFACES, FOR THE PURPOSE OF FIELD INSPECTION 3. STEEL JOISTS, BRIDGING, AND THEIR CONNECTIONS SHALL BE DESIGNED FOR ADDITIONAL DOWN FRAMING SPECIFIED SHALL HAVE MINIMUM PROPERTIES NOTED IN THE CURRENT SSMA PUBLICATION. 4. THE GENERAL CONTRACTOR SHALL PROVIDE TIMELY NOTICE TO THE SPECIAL INSPECTOR AND OF PROPER GRADE OF STEEL FORCE RESULTING FROM WIND AS SHOWN ON THE STRUCTURAL DRAWINGS. DOWN FORCE WIND L — + — J C. COLD FORM STEEL MATERIAL CRITERIA SUFFICIENT TIME FOR THE INSPECTOR TO PERFORM THEIR INSPECTION D. HOT ROLLED STRUCTURAL MEMBERS: ALL HOT ROLLED STEEL PLATES, SHAPES, SHEET PILING, AND LOADING IN COMBINATION WITH DEAD AND LIVE LOADS MAY CONTROL THE DESIGN OF THESE . SEE SHEET S-003 FOR SCHEDULE OF REQUIRED SPECIAL INSPECTIONS. 1. STUD AND TRACK PROFILES SHALL BE STANDARD SECTIONS USED BY MEMBERS OF THE STEEL BARS SHALL BE NEW STEEL CONFORMING TO ASTM SPECIFICATION A 6. ELEMENTS. STUD MANUFACTURERS ASSOCIATION (SSMA), SSMA MEMBER DESIGNATIONS AS SHOWN ON THE C. SPECIAL INSPECTIONS AND STRUCTURAL TESTING SHALL BE PROVIDED BY AN INDEPENDENT AGENCY E. STRUCTURAL STEEL MATERIAL: 4. LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN /240 AT SIMPLE SPAN ROOF MEMBERS AND FOLLOWING EXAMPLE: EMPLOYED BY THE CONTRACTOR FOR THE ITEMS IDENTIFIED IN THIS SECTION AND IN OTHER AREAS OF 1. UNLESS NOTED OTHERWISE ON THE DRAWINGS, STRUCTURAL STEEL SHALL BE AS FOLLOWS: 2X SPAN /240 AT CANTILEVER ROOF MEMBERS 600 S 162-43 REPRESENTS A 6.00" DEEP, STUD SECTION, 1.625" WIDE FLANGE, 0.043" (43 MILS) THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS. W- AND WT-SHAPES: ASTM A 992 GRADE 50. 5. ALL CONCENTRATED LOADS TO STEEL JOISTS SHALL OCCUR WITHIN 6 INCHES OF A PANEL POINT MINIMUM STEEL THICKNESS. D. THE NAMES AND CREDENTIALS OF THE SPECIAL INSPECTORS TO BE USED SHALL BE SUBMITTED FOR M- AND S-SHAPES: ASTM A 36. NOTES: TO ACCOUNT FOR ADDITIONAL CONCENTRATED LOADS, MANUFACTURER SHALL ADD ADDITIONAL C-SHAPES: ASTM A 36. WEB MEMBERS, AS REQUIRED, AND ADJUST CHORD AND WEB SIZES ACCORDINGLY, BUT SHALL 1. S = STUD SECTION . DUTIES OF THE SPECIAL INSPECTOR: C12 TOP OF PIER TIP ELEVATION (IF PROVIDED) NOT ALTER DEPTH OF JOISTS 2. T = TRACK SECTION 1. THE SPECIAL INSPECTOR SHALL REVIEW ALL WORK LISTED ABOVE FOR CONFORMANCE WITH THE L-SHAPES: ASTM A 36 +640'-0" COLUMN MARK (IF PROVIDED) 6. WHERE CROSS BRIDGING INTERFERES WITH MECHANICAL INSTALLATIONS, REMOVE THIS CROSS APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS. ROUND HSS: ASTM A 500, GRADE B (FY=42 KSI). 3. U = CHANNEL SECTION ~600'-0" ESTIMATED PIER TIP ELEVATION (IF PROVIDED) 4. F = FURRING CHANNEL 2. THE SPECIAL INSPECTOR SHALL FURNISH SPECIAL INSPECTION REPORTS TO CONTRACTOR OR RECTANGULAR HSS: ASTM A 500, GRADE B (FY=46 KSI). BRIDGING AFTER ROOF / FLOOR DECK IS IN PLACE AND REPLACE WITH HORIZONTAL ANGLES 2" X 20'-0" RS — COLUMN UNFACTORED REACTION IN KIPS (IF PROVIDED) MORE FREQUENTLY AS REQUIRED. COMPLIANCE SHALL BE BROUGHT TO THE IMMEDIATE STEEL PIPES: ASTM A 53 (TYPES E OR S), GRADE B. 2" X 3/16" INCHES AT TOP AND BOTTOM CHORDS. COORDINATE WITH JOIST MANUFACTURER 2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, MEMBERS SHALL HAVE THE FOLLOWING YIELD 1200K - REQUIRED ROCK SOCKET (IF PROVIDED) BASE PLATES: 7. WHERE STEEL JOISTS BEAR ON STRUCTURAL STEEL FRAMING, THE JOIST NEAREST EACH STRENGTHS: ATTENTION OF THE CONTRACTOR FOR CORRECTION, AND IF UNCORRECTED, TO THE OWNER AND 1. PLATES TO 4" THICK INCLUSIVE: ASTM A 572 GRADE 50. COLUMN ON EACH SIDE OF THE BEAM SHALL BE BOLTED TO THE BEAM 1. STUDS: 33, 43 MIL THICKNESS FY = 33 KSI 2. STUDS: 54, 68, 97 MIL THICKNESS FY = 50 KSI 8. JOIST SUPPLIER SHALL SUBMIT CALCULATIONS FOR ALL NON-UNIFORMLY LOADED JOISTS. 3. ONCE CORRECTIONS HAVE BEEN MADE BY THE CONTRACTOR, THE SPECIAL INSPECTOR SHALL 2. PLATES OVER 4" THICK TO 6" THICK INCLUSIVE: ASTM A 572, GRADE 42. EDGE ANGLES, BENT PLATES, ANGLE HANGERS, AND ANGLE KICKERS: ASTM A 36. 9. OPEN WEB STEEL JOIST BEARINGS THAT SLOPE 1/4" PER FOOT OR MORE SHALL BE PROVIDED SUBMIT A FINAL SIGNED REPORT TO THE OWNER AND ENGINEER STATING THAT THE WORK 3. TRACKS: 33, 43, 54, 68, 97 MIL FY = 33 KSI WF5.0 -WALL FOOTING MARK CONNECTION MATERIAL: WITH BEVELED STEEL SHIMS WELDED TO JOIST AND SUPPORT. 4. U-CHANNELS, FURRING CHANNELS: FY = 33 KSI REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE SPECIAL INSPECTOR'S KNOWLEDGE, IN MW2 <del>-</del> WALL MARK (IF PROVIDED) 1. BEAM COLUMN CONTINUITY PLATES AND DOUBLER PLATES: ASTM A 572, GRADE 50 10. ALL OPEN WEB JOISTS CROSS BRIDGING SHALL BE WELDED AT JOIST AND AT CROSS OVER 3. $\,$ ALL COLD-FORMED STEEL FRAMING MATERIALS SHALL HAVE A MINIMUM G60 GALVANIZED COATING. CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS AS WELL AS THE 2. ALL CONNECTION MATERIAL, EXCEPT AS NOTED OTHERWISE HEREIN OR ON THE D. COLD FORM STEEL CONNECTION CRITERIA: APPLICABLE WORKMANSHIP PROVISIONS OF THE SPECIFICATIONS. DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR: DRAWINGS, INCLUDING BEARING PLATES, GUSSET PLATES, STIFFENER PLATES, FILLER 11. THE CONTRACTOR IS TO UNDERSTAND THAT OSHA IS INTERPRETING 29CFR-1926.751(C)2 TO 1. CONNECTIONS NOT FULLY DETAILED ON THE CONTRACT DOCUMENTS SHALL BE DESIGNED BY THE MEAN ALL JOISTS 40 FEET AND LONGER REQUIRE A ROW OF BOLTED BRIDGING TO BE IN PLACE - WALL FOOTING MARK PLATES, ANGLES, ETC. SHALL CONFORM TO ASTM A 36 UNLESS A HIGHER GRADE OF CONTRACTOR PER THE SPECIFICATION 1. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE OWNER AND FOOTING STEEL IS REQUIRED BY STRENGTH AND PROVIDED THE RESULTING SIZES ARE BEFORE SLACKENING OF HOISTING LINES AND SHALL COMPLY WITH THIS REQUIREMENT. 2. SCREWS: UNLESS NOTED OTHERWISE SCREWS SHALL BE AS FOLLOWS: THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK. IN ACCORDANCE WITH THE COMPATIBLE WITH THE CONNECTED MEMBERS 12. NO LOADING OF JOISTS IS TO OCCUR BEFORE ALL STABILITY BRIDGING IS INSTALLED. SHEET STEEL TO SHEET STEEL: #10-16, 5/8 INCH LONG SELF DRILLING SCREWS SPECIFICATIONS, THE STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF OTHER STEEL: ANY OTHER STEEL NOT INDICATED OTHERWISE SHALL CONFORM TO ASTM SHEET STEEL TO STRUCTURAL STEEL: #12-24, 1-1/2 INCH LONG SELF DRILLING SCREWS WITH NO THE SPECIAL INSPECTION REQUIREMENTS CONTAINED WITHIN THIS "STATEMENT OF SPECIAL 5 TIP STYLE A992 OR ASTM A 572, GRADE 50, EXCEPT PLATES AND ANGLES THAT SHALL BE ASTM A 36. PART XI - STEEL DECKS INSPECTIONS." 2. THE CONTRACTOR SHALL NOTIFY THE RESPONSIBLE SPECIAL INSPECTOR THAT WORK IS READY STRUCTURAL STEEL BOLTS AND THREADED FASTENERS: 3. POWDER ACTUATED FASTENERS: UNLESS NOTED OTHERWISE, PAF SHALL BE AS FOLLOWS: 1. A325 BOLTS: ALL BOLTS IN STRUCTURAL CONNECTIONS SHALL CONFORM TO ASTM A 325 TYPE 1 FOR INSPECTION AT LEAST ONE WORKING DAY (24 HOURS MINIMUM) BEFORE SUCH INSPECTION IS SHEET STEEL TO CONCRETE: 0.145" DIAMETER, 1-1/4" LONG, SMOOTH SHANK. STEEL DECK SHALL COMPLY WITH THE SPECIFICATIONS. SPECIFIC INFORMATION LISTED HERE FOR STEEL ANNOTATION SYMBOLS UNLESS NOTED OTHERWISE. SHEET STEEL TO POST-TENSIONED CONCRETE: 0.145" DIAMETER, 3/4" LONG, SMOOTH SHANK. REFERENCE ONLY. SEE ICC REPORT ER2078-P (VERCO MANUFACTURING CO.), ICC REPORT ER3415 2. A490 BOLTS: SEE DRAWINGS FOR LOCATIONS REQUIRING ASTM A 490 TYPE 1 BOLTS. SHEET STEEL TO STRUCTURAL STEEL: 0.145" DIAMETER, 3/4" LONG, KNURLED SHANK. 3. ALL WORK REQUIRING SPECIAL INSPECTION SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS (VULCRAFT), OR HAVE CURRENT ICC APPROVAL. STEEL DECK SHALL BE DESIGNED, FABRICATED AND 3. A307 BOLTS: ALL COMMON BOLTS IN MASONRY CONNECTIONS SHALL BE GRADE A. 4. WELDING: BEEN OBSERVED BY THE SPECIAL INSPECTOR. ERECTED IN ACCORDANCE WITH THE STANDARDS OF THE STEEL DECK INSTITUTE (SDI). ADDITIONAL INFORMATION MAY BE SPECIFIED ON STEEL BEAMS FOR THE PURPOSES OF 4. THREADED ROUND STOCK: WELDING PROCEDURES FOR SHEET STEEL TO BE IN ACCORDANCE WITH AWS D1.3. WELDERS 4. PLEASE SEE THE "SPECIAL INSPECTION SCHEDULE" FOR THE TYPES, EXTENTS, AND FREQUENCY B. $\,$ STEEL DECK AND ACCESSORIES SHALL CONFORM TO ASTM A1008 OR A653 WITH A MINIMUM YIELD DELEGATED CONNECTION DESIGN. IN THOSE CASES, FORCES AND MOMENTS WILL BE PROVIDED OF SPECIFIC ITEMS REQUIRING SPECIAL INSPECTIONS AND STRUCTURAL TESTS AS PART OF THIS ASTM A 36. SHALL BE CERTIFIED FOR SHEET STEEL IN ALL POSITIONS REQUIRED PER AWS D1.3 STRENGTH OF 40 KSI. AS APPROPRIATE AT THE ENDS OF THE BEAMS AS INDICATED BELOW 2. ASTM A 588 (CORROSION RESISTANT). SEE DRAWINGS FOR LOCATIONS SUGGESTED WELD METAL AND PROCESS FOR SHOP WELDING ARE: 60KSI WELD METAL C. ALL STEEL DECKING PERMANENTLY EXPOSED TO WEATHER OR MOISTURE AND COMPOSITE METAL G. STRUCTURAL STEEL CONNECTION CRITERIA STRENGTH (MINIMUM) - MIG. DECKING SHALL BE GALVANIZED. GALVANIZED COATING SHALL CONFORM TO G60 OR G90. 1. $\,$ CONNECTION DETAILS NOT COMPLETELY DETAILED ON THE DRAWINGS INCLUDING MATERIAL SUGGESTED METHODS FOR FIELD WELDING: 1/8 INCH E60XX (MINIMUM) ELECTRODE -SMAW.D. **ABBREVIATIONS** D. STEEL DECK GAGES ARE SHOWN ON THE CONSTRUCTION DOCUMENTS. THESE ARE BASED ON 3-SPAN BEAM MARK AS SCHEDULED GRADE AND SIZES, WELD SIZES, AND NUMBER OF BOLTS SHALL BE DESIGNED BY THE MINIMUM WELD THROAT THICKNESS (T) MUST MATCH OR EXCEED THE BASE STEEL THICKNESS UNSHORED CONDITIONS. DECKING LAYOUT THAT DOES NOT MEET THESE CONDITIONS MAY NEED TO BEAM SIZE AS SCHEDULED OF THE THINNEST CONNECTED STEEL SHEET UNLESS NOTED OTHERWISE CONTRACTOR PER THE SPECIFICATIONS. CONCEPTUAL CONNECTION DETAILS WITH THE BE INCREASED IN GAGE. P160/-100 REQUIRED MEMBER DESIGN FORCES ARE SHOWN ON THE DRAWINGS AND ARE APPLICABLE TO AFTER WELDING ALL FLUX SHALL BE REMOVED, AND A ZINC-RICH PAINT, WITH A DRY FILM STEEL DECK WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 "STRUCTURAL WELDING CODE SHEET R30 — VERTICAL SHEAR REACTION (KIPS) ALL CONNECTIONS NOT DESIGNED AND FULLY DETAILED ON THE DRAWINGS. THE CONCEPTUAL CONTAINING 94% ZINC DUST BY WEIGHT, SHALL BE APPLIED TO THE WELD AREA TO RESTORE B1000 (W16x26) STEEL". WELDERS SHALL BE QUALIFIED BY WABO LIGHT GAGE CERTIFICATION DETAILS ARE PROVIDED ONLY TO INDICATE THE CONNECTION TYPE REQUIRED AND MAY NOT CORROSION RESISTANCE. ANCHOR BOLT CONTRACTOR SHALL PROVIDE DECK ACCESSORIES INCLUDING CLOSURE PLATES, FLASHING AND ALL M260/-150 FULLY REPRESENT THE COMPLEXITY OF THE CONNECTION AS REQUIRED BY THE FINAL AFF ABOVE FINISH FLOOR MISCELLANEOUS LIGHT GAGE METAL SHAPES NECESSARY TO COMPLETE THE WORK. DECK SUPPLIER CONNECTION DESIGN FOR THE FORCES THEY MUST RESIST. ADDITIONAL CONNECTION PART XIII - DEFERRED SUBMITTALS ARCHITECT / ARCHITECTURAL SHALL PROVIDE CLOSURES TO MATCH ADJACENT DECK GAGE AS REQUIRED TO COMPLETE ALL ELEMENTS MAY NOT BE SPECIFICALLY SHOWN IN THE CONCEPTUAL DETAILS BUT MAY BE **BOTTOM OF FOOTING** DIAPHRAGM CONNECTIONS. REQUIRED BY THE FINAL CONNECTION DESIGN, SUCH AS STIFFENER PLATES, DOUBLER PLATES, BLDG BUILDING MINIMUM BEARING OF DECKING SHALL BE 1 1/2" AT SUPPORTS. SUBMITTAL LIST AND SCHEDULE THE FOLLOWING DIAGRAM PROVIDES INFORMATION REGARDING THE ORIENTATION OF THE SUPPLEMENT/ REINFORCING PLATES OR OTHER CONNECTION MATERIAL. THE FABRICATOR IS BLKG BLOCKING 1. THE GENERAL CONTRACTOR SHALL PREPARE A DETAILED LIST AND SCHEDULE OF ALL SUBMITTAL H. MINIMUM DECKING LAP SHALL BE 2". BEARING REACTIONS PROVIDED. THE DIAGRAM BELOW APPLIES TO ALL NON-SLOPING MEMBERS RESPONSIBLE FOR ENGAGING THE SERVICES OF A CONNECTION SPECIALTY ENGINEER TO ITEMS TO BE SENT TO THE STRUCTURAL ENGINEER PRIOR TO THE START OF CONSTRUCTION. THIS STEEL DECKING SHALL BE ATTACHED TO ALL SUPPORTING STEEL MEMBERS BY WELDING OR PREPARE A FINAL CONNECTION DESIGN FOR SUBMISSION THAT MEETS THE REQUIREMENTS OF BW **BOTTOM OF WALL** REGARDLESS OF THE INDIVIDUAL MEMBER ORIENTATION (FOR EXAMPLE, AN HSS ORIENTED LONG-LIST SHALL BE UPDATED AND REVISED AND KEPT CURRENT AS THE JOB PROGRESSES. THE SCREWING AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER'S THE CONCEPTUAL CONNECTION DETAILS AND RESISTS THE INDICATED DESIGN FORCES. CFS/CFMF COLD FORMED STEEL/COLD FORMED METAL FRAMING SIDE HORIZONTAL). REFER TO THE DETAILS FOR ADDITIONAL INFORMATION ON LOADING OF SUBMITTAL LIST SHALL BE ORGANIZED AS SHOWN BELOW: RECOMMENDATIONS 2. REACTIONS NOTED ON THE PLANS ARE BASED ON FACTORED LOADS AND ARE INTENDED FOR SHOP DRAWINGS CAST-IN-PLACE SLOPED MEMBERS. STEEL DECKING SHALL BE FASTENED TO DEVELOP A MINIMUM SERVICE DIAPHRAGM SHEAR OF 675 PLF. CONTROL JOINT, CONSTRUCTION JOINT USE WITH THE LOAD AND RESISTANCE FACTOR DESIGN METHOD. DESIGN CALCULATIONS K. DO NOT SUSPEND HANGERS FOR CONDUIT, SPRINKLERS, LIGHT FIXTURES, OR OTHER FIXTURES FROM CJP COMPLETE JOINT PENETRATION FOR ALL LOADING, REACTIONS ARE TO BE APPLIED AT THE CENTERLINE OF THE MEMBER AT THE H. WELDING CRITERIA: PRODUCT DATA, CERTIFICATES, REPORTS, AND OTHER LITERATURE THE STEEL DECKING. 1. UNLESS NOTED OTHERWISE, ELECTRODES FOR WELDING SHALL CONFORM TO E70XX (SMAW). CLR WORK POINT, UNLESS NOTED OTHERWISE. IF ONLY A SINGLE VALUE IS SHOWN, THE LOAD SHALL SUBMITTALS TO BE PROVIDED TO STRUCTURAL ENGINEER STEEL DECKING SHALL BE CONTINUOUS ON MAIN ROOF BELOW ALL OVERFRAMED AREAS. F7XX-EXXX (SAW), ER70S-X (GMAW), OR E7XT-X (FCAW). CMU BE ASSUMED TO ACT IN BOTH DIRECTIONS WITH EQUAL MAGNITUDE. FOR AXIAL LOAD REACTIONS, CONCRETE MASONRY UNIT 1. STRUCTURAL SUBMITTALS: IN ADDITION TO THE SUBMITTALS REQUIRED BY THE STRUCTURAL M. OPENINGS IN STEEL DECK SHALL BE FRAMED OUT WITH ANGLES AS SHOWN ON DRAWINGS. 2. ELECTRODES FOR GRADE 60 OR GRADE 65 MATERIAL SHALL CONFORM TO E80XX (SMAW), F8XX-CONC A POSITIVE VALUE INDICATES TENSION. FOR VERTICAL MOMENTS, A POSITIVE VALUE WILL CAUSE CONCRETE SPECIFICATIONS. THE FOLLOWING SUBMITTALS SHALL BE PROVIDED: N. NON-COMPOSITE DECK EXX-XX (SAW), ER80S-X (GMAW), OR E8XT-X (FCAW). CONST CONSTRUCTION COMPRESSION IN THE TOP OF THE BEAM AND TENSION IN THE BOTTOM. LAYOUT OF EMBEDDED ITEMS (PLATES, ANGLES, BOLTS, ETC.) OR ITEMS ATTACHED TO THE 1. ALL DECK SHALL BE 40 KSI UNLESS NOTED OTHERWISE. CONT ANCHOR ROD CRITERIA: STRUCTURAL FRAME FOR BUILDING CLADDING ATTACHMENT OR FOR ATTACHMENT OF OTHER CONTINUOUS 2. CONCRETE ON METAL DECK SHALL BE TOTAL 3" (INCLUDING DECK) NORMAL WEIGHT 3000 PSI AND COR CONTRACTING OFFICER'S REPRESENTATIVE 1. UNLESS INDICATED OTHERWISE IN THE COLUMN SCHEDULE OR ON THE DRAWINGS, ANCHOR VERTICAL AXIS REINFORCED WITH WWF 4 X 4 X W2.9 X W2.9 WIRE MESH CHAIRED TO MID-DEPTH OF SLAB. RODS SHALL CONFORM TO ASTM F 1554 GRADE 55 (WITH SUPPLEMENTARY REQUIREMENT S1) DWG DRAWING LAYOUT OF MECHANICAL, ELECTRICAL, AND PLUMBING OPENINGS IN FLAT SLABS. 3. ATTACHMENT OF DECK: VERTICAL SHEAR REACTION (R) HORIZONTAL SHEAR AND THE SIZE SHALL BE 3/4" DIAMETER AND SHALL EMBED INTO THE CONCRETE FOUNDATION A EACH LAYOUT OF PENETRATIONS IN BEAMS AND JOISTS MINIMUM ATTACHMENT AT SUPPORTS: STEEL DECK UNITS SHALL BE WELDED TO THE SUPPORT **OCCURS ALONG VERTICAL AXIS** REACTION (H) **EACH FACE** DISTANCE OF 1'-0" WITH A HEAVY HEX NUT AT THE EMBEDDED END. STRIKE BOLT THREADS AT DEFERRED SUBMITTALS: THE FOLLOWING ITEMS ARE CONSIDERED DEFERRED SUBMITTALS BY THE MEMBERS WITH 5/8" DIAMETER PUDDLE WELDS AT EACH END OF SHEET AND EACH THE EMBEDDED END AT TWO PLACES BELOW THE NUT. **EXPANSION JOINT** REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE: INTERMEDIATE SUPPORT AT EACH LOW FLUTE. UNLESS NOTED OTHERWISE. AT MEMBERS HORIZONTAL MOMENT REACTION (MH) GROUT CRITERIA: **ELEVATION** COLD-FORMED METAL FRAMING (S&S) PARALLEL TO DECK SPAN, SPACING OF PUDDLE WELDS SHALL BE 12". A SHEAR CONNECTOR OCCURS ABOUT VERTICAL AXIS **ELEV ELEVATOR** 1. GROUT BELOW STRUCTURAL STEEL BASE PLATES SHALL BE NON-METALLIC, NON-SHRINK GROUT COLD-FORMED METAL TRUSSES (S&S) WELDED THROUGH THE DECK CAN REPLACE A REQUIRED DECK WELD. WITH A MINIMUM STRENGTH OF 6,000 PSI WHEN BEARING ON 3,000 PSI CONCRETE OR LESS, A **EQUAL** EXCAVATION RETENTION (PERMANENT) (S&S) MINIMUM ATTACHMENT AT SIDE LAPS: SIDE LAPS OF ADJACENT UNITS SHALL BE FASTENED BY STRENGTH OF 8,000 PSI WHEN BEARING ON CONCRETE BETWEEN 3,000 AND 4,000 PSI, AND, EW **EACH WAY** EXCAVATION RETENTION (TEMPORARY) (S&S, REC) WELDING, SHEET METAL SCREWS, OR BUTTON PUNCHING AT A MAXIMUM OF ONE-HALF THE TORSION REACTION (T) AXIAL REACTION (P) ALONG MEMBER EXP **EXPANSION** UNLESS NOTED OTHERWISE ON THE DRAWINGS, A STRENGTH OF 8,000 PSI WHEN BEARING ON EXTERIOR WINDOW WALL SYSTEM (S&S, REC) SPAN OR 36", WHICHEVER IS LESS, UNLESS NOTED OTHERWISE. **EXISTING** VERTICAL MOMENT REACTION (M) CONCRETE GREATER THAN 4,000 PSI. FORMWORK, SHORING, AND BACKSHORING (S&S, REC 4. NON-COMPOSITE DECK CRITERIA AND SCHEDULE AS FOLLOWS: BEAM K. MISCELLANEOUS REQUIREMENTS: FINISHED FLOOR METAL FABRICATIONS, RAILINGS, AND GRATINGS (S&S) **FOUNDATION** 1. STRUCTURAL STEEL SHALL BE COATED WITH A RUST INHIBITED PRIMER. DO NOT PRIME BEAMS FDN PRECAST ARCHITECTURAL CONCRETE (S&S) **ELEVATION SECTION** NON-COMPOSITE FLOOR DECK SCHEDULE FTG FOOTING COATED WITH FIRE SPRAY PROTECTION, ENCASED IN CONCRETE, SURFACES TO BE WELDED, ROOF TOP EQUIPMENT AND ANCHORAGES (S&S) GENERAL CONTRACTOR AND TOPS OF BEAMS IN COMPOSITE CONSTRUCTION. STEEL JOISTS (S&S) DECK TYPE LOCATION ON BUILDING | DECK DEPTH | DECK GAUGE HAS 2. ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO WEATHER SHALL BE GALVANIZED OR STEEL STAIRS (S&S, REC) HEADED ANCHOR STUD 9/16" 0.6C-26 FLOOR 26 HORIZ HORIZONTAL PAINTED WITH A HIGH PERFORMANCE PAINT SYSTEM PER PROJECT SPECIFICATIONS. STRUCTURAL STEEL CONNECTIONS (S&S, REC) BRACED FRAME DESIGNATION 3. ALL MEMBERS SHALL BE ERECTED WITH NATURAL MILL CAMBER OR INDUCED CAMBER UP, **HOLLOW STRUCTURAL SECTION** WINDOW WASHING AND FALL ARREST SYSTEMS (S&S, REC) ROOF DECK CRITERIA AND SCHEDULE AS FOLLOWS UNLESS NOTED OTHERWISE ELEVATORS (S&S. REC) - BRACES CONTINUING ABOVE ARE 4. NO CUTTING OR BURNING OF STEEL IS ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE LONG LEG BACK-TO-BACK NOTES: ROOF DECK SCHEDULE INDICATED BY HIDDEN LINES LLH STRUCTURAL ENGINEER LONG LEG HORIZONTAL 1. (S&S) ITEMS MARKED THUS SHALL HAVE THE SHOP DRAWINGS AND DELEGATED DESIGN BRACED FRAME BF-1 **ABOVE BEAM** LLV LONG LEG VERTICAL 5. NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED ARE ALLOWED IN THE STRUCTURAL SUBMITTALS (INCLUDING CALCULATIONS) SEALED PER THE PROJECT SPECIFICATIONS BY AN LOCATION ON BUILDING | DECK DEPTH | DECK GAUGE DECK TYPE STEEL. NO SPLICING OF STRUCTURAL STEEL IS PERMITTED UNLESS APPROVED IN WRITING BY MAX MAXIMUM ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED 1.5B-20 1.5" 20 ENGINEER. MECH MECHANICAL 2. (REC) ITEMS MARKED THUS SHALL BE SUBMITTED TO ENGINEER FOR RECORD ONLY AND MANUFACTURER BRACES CONTINUING BELOW ARE WILL NOT HAVE THE ENGINEER'S SHOP DRAWING STAMP AFFIXED 1. ATTACHMENT OF DECK: PART X - OPEN WEB STEEL JOISTS INDICATED BY HIDDEN LINES MIN MINIMUM 3. DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED MINIMUM ATTACHMENT AT SUPPORTS: STEEL DECK UNITS SHALL BE FASTENED TO ALL SUPPORT MISC MISCELLANEOUS **BELOW BEAM** DESIGN PROFESSIONAL AND SHALL BE FORWARDED TO THE BUILDING OFFICIAL. MEMBERS IN A 32/10 PATTERN WITH HILTI X-ENP-19-L15 POWDER ACTUATED FASTENERS (OR METAL A. ALL INFORMATION LISTED HERE IS FOR REFERENCE. SEE SPECIFICATIONS FOR REQUIREMENTS OF 4. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL APPROVED EQUIVALENT), UNLESS NOTED OTHERWISE. AT MEMBERS PARALLEL TO DECK SPAN, NTS NOT TO SCALE OPEN WEB STEEL JOISTS DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL SPACING OF FASTENERS SHALL BE 6". **ON-CENTER** B. STEEL BAR JOISTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH STEEL 3. SUBMITTALS WITH IMPACT TO STRUCTURE MINIMUM ATTACHMENT AT SIDE LAPS: SIDE LAPS OF ADJACENT UNITS SHALL BE FASTENED BY REINF JOIST INSTITUTE (SJI) SPECIFICATION. JOIST BRIDGING SHALL CONFORM TO SJI SPECIFICATIONS REINFORCING CONSTRUCTION AND CONTROL JOINT LOCATIONS IN INSULATING CONCRETE HILTI S-SLC 01 M HWH SIDELAP SCREWS (OR APPROVED EQUIVALENT) AT A MAXIMUM OF 12", SLIP CRITICAL UNLESS OTHERWISE SHOWN ON PLANS. INSULATING CONCRETE MIX DESIGNS UNLESS NOTED OTHERWISE. LINE OF BRIDGING SIM SIMILAR C. JOIST SUPPLIER SHALL VERIFY THAT METAL DECK, JOISTS, AND JOIST GIRDERS MEET ANY SIZE MECHANICAL EQUIPMENT WEIGHTS 2. FLAT, RIDGE, AND VALLEY PLATES +---<del>-</del> SLBB SHORT LEGS BACK-TO-BACK SPACING, SUPPORT AND/OR BRIDGING RESTRICTIONS IMPOSED BY UNDERWRITERS LABORATORIES 4. SUBMITTAL REQUIREMENTS a. UNLESS NOTED OTHERWISE, CONTRACTOR SHALL PROVIDE FLAT PLATES (18 GAGE MINIMUM) SOG DESIGNATED FLOOR OR ROOF SYSTEMS LISTED IN THE ARCHITECTURAL DRAWINGS. SLAB-ON-GRADE ALL SHOP DRAWINGS MUST BE REVIEWED AND ELECTRONICALLY STAMPED BY THE GENERAL AT ALL LOCATIONS WHERE ROOF DECK CHANGES DIRECTION AND RIDGE OR VALLEY PLATES **SPECS SPECIFICATIONS** D. INSTALL ALL BRIDGING AND MISCELLANEOUS STEEL PRIOR TO INSTALLING DECK. CONTRACTOR PRIOR TO SUBMITTAL LOCATION OF CROSS-BRIDGING (18 GAGE MINIMUM) AT ALL LOCATIONS WHERE ROOF SLOPE EXCEEDS 1/2" PER FOOT. STD STANDARD E. FABRICATION AND ERECTION CRITERIA CONTRACTOR SHALL SUBMIT THREE SETS OF PRINTS FOR ALL SHOP DRAWINGS SPECIFIED TO (IF PROVIDED) 1. PROVIDE STANDARD DEPTH OF BEARING FOR ALL JOISTS AS SHOWN BELOW UNLESS NOTED STRUC STRUCTURAL BE RETURNED BY THE ENGINEER. OTHERWISE ON THE DRAWINGS: SYM SYMMETRICAL CONTRACTOR SHALL PROVIDE THE SUBMITTAL IN ELECTRONIC PORTABLE DOCUMENT FORMAT ALL K SERIES: 2 1/2" TOP OF CONCRETE (PDF) PER THE SPECIFICATIONS. TOP OF FOOTING ALL LH SERIES: 5" THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIALS REQUIRED BY THE CONTRACT THICKNESS DLH SERIES THROUGH CHORD SIZE 17: 5 DOCUMENTS TO BE FURNISHED SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY BOTTOM FLANGE BRACE TOP OF MASONRY DLH SERIES FOR CHORD SIZES 18 AND 19: 7 1/2" OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP TOP OF PLATE ALL OTHERS, UNLESS NOTED OTHERWISE: 2 1/2" DRAWINGS HAVE BEEN REVIEWED AND APPROVED. - STEEL BEAM PROVIDE FLAT BEARING FOR ALL JOISTS UNLESS NOTED OTHERWISE ON DRAWINGS. TOP OF STEEL 5. REPRODUCTION 3. INCREASE THE SEAT DEPTH ON THE HIGH END OF SLOPED JOISTS AS REQUIRED TO PROVIDE TW TOP OF WALL A. THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY T&B CLEARANCE FOR THE CONNECTION. TOP AND BOTTOM CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF INDICATOR SYMBOL POINTS TYP **TYPICAL** PREPARATION OF SHOP DRAWINGS SIGNIFIES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN \_ \_ \_ \_ \_ \_ AWAY FROM BOTTOM FLANGE **UNLESS NOTED OTHERWISE** HEREON AS CORRECT, AND OBLIGATES THEMSELVES TO ANY JOB EXPENSE, REAL OR IMPLIED, OF BEAM BEING BRACED WITH ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON. WORK POINT WEIGHT BRACING ATTACHED DIRECTLY TO FLOOR SYSTEM WELDED WIRE REINFORCEMENT POUNDS **CONTRACT DOCUMENTS SUBMISSION FULLY SPRINKLERED Drawing Title Project Title** 100% BID DOCUMENTS **Project Number CONSULTANTS:** ARCHITECT/ENGINEERS: STAMP: 437-316 **CONSTRUCT MENTAL HEALTH** STRUCTURAL GENERAL NOTES 100% BID DOCUMENTS **VALHALLA OUTPATIENT BLDG 52 ADDITION Building Number ENGINEERING** LUNDY \_GROUP, LLC FRANKE **Approved: Project Director Drawing Number** SHAWN J. FRANKE 2101 ELM STREET, FARGO, ND 58102 U.S. Department ENGINEERING 750 W HAMPDEN AVE S-002 SUITE 300 Checked 549 HEIMER ROAD PH. (210) 979-7900 of Veterans Affairs ENGLEWOOD, CO 80110 SAN ANTONIO, TEXAS 78232 FX. (210) 979-7800 05/26/2023 (720) 550-6307 DWG 27 of 188 Number: Revisions Date: TX FIRM REG. #3388 WWW.VALHALLAENGINEERING.COM

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	CONTINUOUS	PERIODIC	REFERENCED STANDARD
LEVEL 1 INSPECTION CONT.: ENGINEERED MASON FACILITIES AND EMPIRICALLY DESIGNED MASON			IBC 1704.5.1, IBC 1704.5.2
H. POST INSTALLED REINFORCING & ANCHORS (EXPANSION ANCHORS, SCREW ANCHORS ADHESIVE ANCHORS, ECT.).	-	-	ACI 318 APPENDIX D-CH. D.9.1
THE SPECIAL INSPECTOR SHALL BE ON THE JOB SITE CONTINUOUSLY DURING ANCHOR INSTALLATION TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, MASONRY TYPE AND COMPRESSION STRENGTH, PRE-DRILLED HOLE DIMENSIONS, ANCHOR SPACING, EDGE DISTANCES, MASONRY THICKNESS AND ANCHOR EMBEDMENT.	Х	-	
<b>LEVEL 2 INSPECTION:</b> ENGINEER ESSENTIAL FACILITI			IBC 1704.5.3
A. FROM THE BEGINNING OF MASONRY CONSTRUCTION, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:		-	
1. PROPORTIONS OF SITE-PREPARED MORTAR, GROUT, AND	<u>-</u>	X	
PRESTRESSING GROUT FOR BONDED TENDONS.  2. PLACEMENT OF MASONRY UNITS AND CONSTRUCTION OF MORTAR JOINTS	-	X	
MORTAR JOINTS.  3. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.	-	X	
4. GROUT SPACE PRIOR TO GROUTING.	X	<u>-</u>	
5. PLACEMENT OF GROUT.	X	-	
6. PLACEMENT OF PRESTRESSING GROUT.	X	-	
B. THE INSPECTION PROGRAM SHALL VERIFY:	-	-	
1. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	-	X	
2. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.	х	-	
3. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT.	-	X	
4. WELDING OF REINFORCEMENT.	Х	-	
PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES F) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES F).	-	X	
6. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.	X	-	
C. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSEREVED.	-	-	
VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS.	Х	-	
<b>D.</b> COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.	-	X	
E. TESTING OF GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS.	-	-	
1. TEST ONE SET OF MORTAR CUBES PER 2000 sf OR PORTION THEREOF. 2. TEST ONE SET OF GROUT CYLINDERS PER 2000 sf OR PORTION THEREOF. 3. TEST ONE PRISM PER 6000 sf OR PORTION THEREOF. (SUBMITTED PRISM WILL BE ACCEPTABLE FOR FIRST PRISM TEST).	X	-	

- ADSC THE INTERNATIONAL ASSOCIATION OF FOUNDATION DRILLING
- ASNT AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING ASTM - AMERICAN SOCIETY FOR TESTING MATERIALS
- AWS AMERICAN WELDING SOCIETY CWI - CERTIFIED WELDING INSPECTOR
- CRSI CONCRETE REINFORCING STEEL INSTITUTE PCI - PRECAST/PRESTRESSED CONCRETE INSTITUTE PTI - POST-TENSIONING INSTITUTE
- N/A NOT APPLICABLE

Number: Revisions:

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\*TESTING AND INSPECTION DIRECTED BY ASTM E329 GUIDELINES.

#### REQUIRED THIRD PARTY VERIFICATION AND INSPECTIONS FOR **COLD-FORMED STEEL CONSTRUCTION - 2018 IBC**

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
PRE-FABRICATED COLD-FORMED STEEL STRUCTURAL ELEMENTS AND ASSEMBLIES.				
A. SIZE, SPACING	X	-	-	SEC. 1704.2.5.1, 1705.11.2., 1705.12.3
B. CONNECTIONS AND WELDS	X	-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
2. SITE BUILT ASSEMBLIES				
A. GRADE, SIZE, SPACING	Х	-		SEC 1705 11 2
B. CONNECTIONS AND WELDS	X	-	-	SEC. 1705.11.2, 1705.12.3
C. BLOCKING	Х	-		
3. DIAPHRAGMS				
A. MEMBER SIZE AT PANEL EDGES	Х	-		050 4705 44.0
B. FASTENER DIAMETER AND LENGTH	Х	-	·	SEC. 1705.11.2, 1705.12.3
C. FASTENER SPACING	X	-		

### REQUIRED THIRD PARTY SPECIAL INSPECTIONS OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS - 2018 IBC

	TYPE	TYPE CONTINUOUS PERIODIC SPECIAL INSPECT		REFERENCED STANDARD		
1.	INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS.	-	-			
	A. END CONNECTIONS - WELDING OR BOLTED.	-	Х	SJI specifications listed in Section 2207.1.		
	B. BRIDGING - HORIZONTAL OR DIAGONAL.	-	-			
	1. STANDARD BRIDGING.	-	X	SJI specifications listed in Section 2207.1.		
	2. BRIDGING THAT DIFFERS FROM THE SJI SPECIFICATIONS LISTED IN SECTION 2207.1.	-	Х			

### REQUIRED THIRD PARTY VERIFICATION AND INSPECTION FOR MASONRY CONSTRUCTION - 2018 IBC

	CONTINUOUS	PERIODIC	REFERENCED STANDARD
LEVEL 1 INSPECTION: ENGINEERED MASONRY IN NOT AND EMPIRICALLY DESIGNED MASONRY IN ESSI		ITIES	IBC 1705.4
A. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFFIED TO ENSURE COMPLIANCE:	-	-	
1. PROPORTIONS OF SITE-PREPARED MORTAR	-	X	
2. CONSTRUCTION OF MORTAR JOINTS.	-	Х	
3. LOCATION OF REINFORCEMENT AND CONNECTORS.	-	Х	
4. PRESTRESSING TECHNIQUE	-	Х	
5. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES.	-	Х	
<b>B.</b> THE INSPECTION PROGRAM SHALL VERIFY:	-	-	
1. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	-	Х	
2. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTUCTION.	-	X	
3. SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT.	Х	-	
4. WELDING OF REINFORCING BARS	-	-	
5. PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES F) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES F).	-	х	
6. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE.	-	-	
C. PRIOR TO GROUTING THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:	-	-	
1. GROUT SPACE IS CLEAN.	-	Х	
PLACEMENT OF REINFORCEMENT AND CONNECTORS AND PRESTRESSING TENDONS AND ANCHORAGES.	-	Х	
3. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.	-	Х	
4. CONSTRUCTION OF MORTAR JOINTS.	-	Х	
D. GROUT PLACEMENT:	-	-	
VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION     DOCUMENTS PROVISIONS.	X	-	
GROUTING OF PRESTRESSING BONDED TENDONS.	X	-	
<i>E.</i> PREPARATION OF ANY REQUIRED GROUT SPECIMENS , MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED:	-	-	
1. VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS.	Х		
F. COMPLIANCE WITH REQUIRED INSPECTION PROVISION OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED:	-	-	
VERIFY COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS.	-	Х	
G. TESTING OF GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS:	-	-	
TEST ONE SET OF MORTAR CUBES PER 2000 sf OR PORTION THEREOF.     TEST ONE SET OF GROUT CYLINDERS PER 2000 sf OR PORTION THEREOF.     TEST ONE PRISM PER 6000 sf OR PORTION THEREOF. (SUBMITTED)	-	X	
PRISM WILL BE ACCEPTABLE FOR FIRST PRISM TEST).			

# REQUIRED THIRD PARTY VERIFICATION AND INSPECTION FOR STEEL CONSTRUCTION - 2018 IBC

	CONTINUOUS	PERIODIC	STAND
	ON TASKS PRIOR TO WEL	·	
WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	-	X	
WPS AVAILABLE	X	-	
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	X	-	
MATERIAL IDENTIFICATION (TYPE/GRADE)	-	X	
WELDER IDENTIFICATION SYSTEM [1]	-	X	
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY)	-	X	AISC 360 TABL
FIT-UP OF CJP GROOVE WELDS OF HSS T-, Y- AND K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY)	-	X	AISC 360 TABL
CONFIGURATION AND FINISH OF ACCESS HOLES	-	Х	
FIT-UP OF FILLET WELDS	-	X	AISC 360 TABL
INSPECTI	ON TASKS DURING WELI	DING	
CONTROL AND HANDLING OF WELDING CONSUMABLES	-	X	AISC 360 TABL
NO WELDING OVER CRACKED TACK WELDS	-	X	
ENVIRONMENTAL CONDITIONS	-	X	AISC 360 TABL
WPS FOLLOWED	-	X	AISC 360 TABL
WELDING TECHNIQUES	-	X	AISC 360 TABL
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	ION TASKS AFTED WELD		
WELDS CLEANED	ION TASKS AFTER WELD	ING X	
SIZE, LENGTH AND LOCATION OF WELDS	<u>.</u> X	_	
WELDS MEET VISUAL ACCEPTANCE CRITERIA	X	_	AISC 360 TABL
ARC STRIKES	X	_	AISC 300 TABL
K-AREA [2]	X	_	
WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-	Λ	_	
UP HEAVY SHAPES [3]	X	-	
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	X	-	
REPAIR ACTIVITIES	X	-	
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	X	_	
NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE	-	X	
APPROVAL OF THE EOR			
	TION TASKS PRIOR TO B	OLTING 	
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	X	-	
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	-	X	
CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	-	X	
CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	-	Х	
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	-	Х	
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	<u>-</u>	X	
PROTECTED STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS	_	X	
AND OTHER FASTENER COMPONENTS  INSPE	CTION TASKS DURING BO		
FASTENER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS AND NUTS ARE POSITIONED AS REQUIRED	<u>.</u>	X	
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE		X	
PRETENSIONING OPERATION	<u>-</u>	^	
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	-	X	
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	<u>-</u>	х	
	CTION TASKS AFTER BO	LTING	
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	X	-	
INSPECTION OF STEEL FR	AME, DECK AND JOINT D		CE
PLACEMENT AND INSTALLATION OF STEEL DECK	-	X	
DETAILS SUCH AS BRACING AND STIFFENING	-	X	
MEMBER LOCATIONS	-	X	
APPLICATION OF JOINT DETAILS AT EACH CONNECTION	_	X	

- 2. WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE k-AREA, VISUALLY INSPECT THE WEB k-AREA FOR CRACKS
- 3. AFTER ROLLED HEAVY SHAPES (PER AISC 360 SECTION A3.1c) AND BUILT-UP HEAVY SHAPES (PER AISC 360 SECTION A3.1d) ARE WELDED, VISUALLY INSPECT THE

### STATEMENT OF SPECIAL INSPECTIONS - 2018 IBC

- SPECIAL INSPECTIONS AND STRUCTURAL TESTING SHALL BE PROVIDED BY A THIRD PARTY AGENCY EMPLOYED BY THE GENERAL CONTRACTOR. SPECIAL INSPECTIONS AND TESTING SHALL BE PROVIDED, AS REQUIRED, IN CHAPTER 17 OF THE IBC AND BY THE ENGINEER OF RECORD. REQUIREMENTS ARE NOTED IN CHARTS PROVIDED ON THE CONSTRUCTION DOCUMENTS. AS WELL AS IN THE SPECIFICATIONS.
- THE NAMES AND CREDENTIALS OF THE SPECIAL INSPECTORS TO BE USED SHALL BE SUBMITTED TO THE COR. A. ALL SPECIAL INSPECTORS SHALL BE QUALIFIED TO INSPECT MATERIALS BASED ON CERTIFICATION, TRAINING OR EXPERIENCE, AS REQUIRED, AND MUST MEET
- A. SPECIAL INSPECTOR SHALL REVIEW ALL WORK REQUIRED ON THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.
- B. SPECIAL INSPECTOR SHALL FURNISH SPECIAL INSPECTION REPORTS TO THE COR, ENGINEER OF RECORD, ARCHITECT, CONTRACTOR, OWNER, ON A WEEKLY BASIS OR MORE FREQUENTLY. ALL ITEMS NOT IN COMPLIANCE SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF UNCORRECTED,
- E. SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT.

F. SPECIAL INSPECTOR SHALL FURNISH A FINAL LETTER TO THE COR AT THE COMPLETION OF THE PROJECT STATING THAT ALL INSPECTIONS HAVE BEEN COMPLETED AND

- A. CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE OWNER PRIOR TO THE COMMENCEMENT OF WORK. THE STATEMENT SHALL CONTAIN ACKNOWLEDGEMENT OF THE SPECIAL INSPECTION REQUIREMENTS ON THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.
- B. CONTRACTOR SHALL NOTIFY THE RESPONSIBLE SPECIAL INSPECTOR AND COR THAT WORK IS READY FOR INSPECTION A MINIMUM OF 24 HOURS BEFORE SUCH
- ALL WORK, INCLUDING REPAIRS, SHALL REMAIN ACCESSIBLE AND EXPOSED UNTIL IT HAS BEEN OBSERVED BY THE SPECIAL INSPECTOR. CONTRACTOR SHALL PROVIDE CURRENT DRAWINGS AND SPECIFICATIONS TO THE SPECIAL INSPECTOR AND COR. THIS INCLUDES ALL STRUCTURAL OBSERVATIONS,
- REPORTS, AND REPAIR DOCUMENTATION. E. ALL REPAIRS SHALL BE INSPECTED AT THE COST OF THE CONTRACTOR. NON-COMPLIANCE ITEMS SHALL BE RESOLVED IN A TIMELY MANNER.

### REQUIRED THIRD PARTY SPECIAL INSPECTIONS AND TESTS OF **CONCRETE CONSTRUCTION - 2018 IBC**

	TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1.	INSPECT REINFORCMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	Х	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2.	REINFORCING BAR WELDING:	-	-	AWS D1.4 ACI 318: 26.6.4	-
	A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706.	-	х	AWS D1.4 ACI 318: 26.6.4	-
	<ul><li>B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"</li></ul>	-	х	AWS D1.4 ACI 318: 26.6.4	-
	C. INSPECT ALL OTHER WELDS.	X	-	AWS D1.4 ACI 318: 26.6.4	-
3.	INSPECT ANCHORS CAST IN CONCRETE.	-	X	ACI 318: 17.8.2	-
4.	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	-	-	ACI 318: 17.8.2	-
	A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATATIONS TO RESIST SUSTAINED TENSION LOADS.	X	-	ACI 318: 17.8.2.4	-
	B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	-	X	ACI 318: 17.8.2	-
5.	VERIFYING USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	x	-	ASTM C 172 ASTM C 31 ACI 318: 26.4, 26.12	1908.10
7.	INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	Х	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	Х	ACI 318: 26.5.3-26.5.5	1908.9
9.	INSPECT PRESTRESSED CONCRETE FOR:	-	-		-
	A. APPLICATION OF PRESTRESSING FORCES; AND	X	-	ACI 318: 26.10	-
	B. GROUTING OF BONDED PRESTRESSING TENDONS.	X	-	ACI 318: 26.10	-
10.	INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	Х	ACI 318: Ch. 26.8	-
11.	VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	Х	ACI 318: 26.11.2	-
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	Х	ACI 318: 26.11.1.2 (b)	-

# REQUIRED THIRD PARTY SPECIAL INSPECTIONS AND TESTS OF SOILS - 2018 IBC

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	ТҮРЕ	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION			
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	-	X			
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X			
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X			
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-			
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X			

# **CONTRACT DOCUMENTS SUBMISSION**

100% BID DOCUMENTS

CONSULTANTS: ENGINEERING 549 HEIMER ROAD PH. (210) 979-7900 SAN ANTONIO, TEXAS 78232 FX. (210) 979-7800 TX FIRM REG. #3388 ARCHITECT/ENGINEERS:

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	Drawing Title
	SPECIAL INSPEC
	Approved: Project Director
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				<u>FULLY</u>	<u>SPRINKLERED</u>
PECIAL INSPECTIONS SCHEDULE	Phase 100% BID DOCUMENTS	Project Title  CONSTRUCT M	ENTAL HEA	LTH	Project Number 437-316
		OUTPATIENT BI	LDG 52 ADD	ITION	Building Number 52
oved: Project Director		Location 2101 ELM STREET, FARGO, ND 58102			Drawing Number
		Issue Date	Checked	Drawn	S-003
		05/26/2023	SJF	JH	DWG 28 of 188













