

GENERAL

- A. USE THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND SHOP DRAWINGS.
- B. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONTRACT DOCUMENTS AND LATEST ADDENDA, AS WELL AS, SUBMITTING TO ALL SUBCONTRACTORS AND SUPPLIERS PRIOR TO SUBMITTING SHOP DRAWINGS.
- C. DO NOT SCALE DRAWINGS OR AUTO-DIMENSION ELECTRONIC FILES. NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES IN WRITING PRIOR TO FABRICATION OR CONSTRUCTION.
- D. COMPARE ALL CONTRACT DRAWINGS AND REPORT ANY DISCREPANCIES BETWEEN DISCIPLINES, AND WITHIN A GIVEN DISCIPLINE, TO THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND ERECTION.
- E. IF A CONFLICT EXISTS AMONG THE STRUCTURAL DRAWINGS OR GENERAL NOTES, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE ENGINEER, GOVERNS.
- F. COORDINATE ALL ELEVATIONS AND DIMENSIONS, INCLUDING BUT NOT LIMITED TO, OPENINGS IN WALLS AND IN ROOF AND FLOOR SYSTEMS, WITH THE ARCHITECTURAL, PLUMBING, ELECTRICAL, AND MECHANICAL PLANS.
- G. VERIFY ALL DIMENSIONS, ELEVATIONS, AND ANY OTHER EXISTING CONDITIONS. NOTIFY THE ARCHITECT AND ENGINEER OF DISCREPANCIES BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. DURING THE CONSTRUCTION PROCESS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE AND TO PROTECT FROM DAMAGE ANY PORTIONS THAT REMAIN. THE SHORING AND BRACING SHOWN (IF ANY) IS A PARTIAL AND SCHEMATIC REPRESENTATION. DETERMINE THE ERECTION PROCEDURE TO ENSURE THE STABILITY AND SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION.
- H. THE COMPLETED LATERAL-FORCE RESISTING SYSTEMS (LFRS), INCLUDING THE DIAPHRAGMS, ARE REQUIRED TO RESIST LATERAL LOADS AND PROVIDE STABILITY UNDER GRAVITY LOADS. DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR ALL BRACING DURING CONSTRUCTION TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS UNTIL THE LATERAL-LOAD RESISTING OR STABILITY-PROVIDING SYSTEM IS COMPLETELY INSTALLED AND THE STRUCTURE IS COMPLETELY TIED TOGETHER.
- I. UNLESS NOTED OTHERWISE, DETAILS SHOWN ARE TYPICAL FOR ALL SIMILAR CONDITIONS.
- J. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS, AS WELL AS SAFETY PRECAUTIONS AND PROGRAMS.
- K. BRITT, PETERS & ASSOCIATES, INC. IS NOT RESPONSIBLE FOR ACTS OR OMISSION OF THE CONTRACTOR, NOR FAILURE TO PERFORM WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- L. PERIODIC SITE OBSERVATION BY BRITT, PETERS & ASSOCIATES, INC. IS FOR DETERMINING IF THE WORK IS PROCEEDING IN ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. STRUCTURAL OBSERVATIONS ARE NOT INTENDED AS QUALITY CONTROL (CONTRACTOR'S RESPONSIBILITY), QUALITY ASSURANCE (SPECIAL INSPECTOR'S RESPONSIBILITY), NOR TO CONFIRM THE QUALITY OR QUANTITY OF THE WORK.
- M. THE BUILDING OWNER IS RESPONSIBLE FOR PERIODIC MAINTENANCE TO ENSURE STRUCTURAL INTEGRITY. MAINTENANCE INCLUDES, BUT IS NOT LIMITED TO, STEEL/CONCRETE COATINGS, SEALANTS, CAULKED JOINTS, EXPANSION JOINTS, CONTROL JOINTS, SPALLS AND CRACKS IN CONCRETE, AND CLEANING OF EXPOSED STRUCTURAL ELEMENTS.

DESIGN CRITERIA

- A. STRUCTURAL DRAWINGS ARE BASED ON THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE, 2021 MURFREESBORO CITY CODE AND THE REFERENCED SECTIONS WITHIN.
- B. DEAD LOADS:
1. ROOF SYSTEMS:
- a. WOOD (20 PSF TOTAL)
1. STRUCTURE 6 PSF
2. MEP 4 PSF
3. INSULATION AND ROOFING 10 PSF
- C. LIVE LOADS:
1. LIVE LOADS ARE BASED ON THE MORE RESTRICTIVE OF THE UNIFORM LOAD OR THE CONCENTRATED LOAD LISTED ACTING OVER A 6.25 SQUARE FOOT AREA. LIVE LOADS HAVE BEEN REDUCED AS PRESCRIBED IN THE AFOREMENTIONED BUILDING CODE.
- D. DESIGN SNOW LOADS:
1. GROUND SNOW LOAD: Pg 10 PSF
2. FLAT ROOF SNOW LOAD: P_f 7.7 PSF
3. SNOW EXPOSURE FACTOR: Ce 1.0
4. SNOW THERMAL FACTOR: Ct 1.1
5. SLOPE FACTOR: Cs 1.0
6. SNOW IMPORTANCE FACTOR: Is 1.0
7. DRIFT SURCHARGE: Ps 35 PSF
8. SNOW DRIFT WIDTH: Pd 9.2 FT
9. RAIN-ON-SNOW SURCHARGE: W 5 PSF
- E. DESIGN WIND LOADS:
1. BASIC WIND SPEED: V_{ULT} 115 MPH (3-SEC GUST)
2. BASIC WIND SPEED: V_{ASD} 90 MPH (3-SEC GUST)
3. RISK CATEGORY: II B
4. WIND EXPOSURE: B ±0.18
5. INTERNAL PRESSURE COEFF: GCp
6. COMPONENTS & CLADDING WIND PRESSURES (ULTIMATE):

Ultimate Design Wind Pressure (psf):								
			Effective Wind Area (sq ft)					
Walls:			10	20	50	100	177	500
Interior	Zone 4	+	17.8	17.1	16.0	16.0	16.0	16.0
		-	-19.3	-18.5	-17.5	-16.7	-16.1	-16.0
Edge	Zone 5	+	17.8	17.1	16.0	16.0	16.0	16.0
		-	-23.8	-22.2	-20.1	-18.5	-17.2	-16.0
Roof:			10	20	50	100	177	500
Interior	Zone 1	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-31.1	-29.0	-26.3	-24.3	-22.6	-19.5
Interior	Zone 1'	+	16.0	16.0	16.0	16.0	16.0	16.0
		-	-17.8	-17.8	-17.8	-17.8	-16.0	-16.0
Edge	Zone 2	+	17.8	17.1	16.0	16.0	16.0	16.0
		-	-41.0	-38.3	-34.9	-32.2	-30.1	-26.1
Corner	Zone 3	+	17.8	17.1	16.0	16.0	16.0	16.0
		-	-41.0	-38.3	-34.9	-32.2	-30.1	-26.1
Overhang:			10	20	50	100	177	500
Edge	Zone 2	+	17.8	17.1	16.0	16.0	16.0	16.0
		-	-38.0	-34.5	-29.8	-26.3	-23.4	-18.2
Corner	Zone 3	+	17.8	17.1	16.0	16.0	16.0	16.0
		-	-52.9	-46.7	-38.6	-32.5	-27.4	-18.2
Parapet Ultimate Design Pressure (psf):								
			Effective Wind Area (sq ft)					
Parapet:			10	20	50	100	177	500
Edge	Zone 2	+	66.1	61.9	56.2	51.9	48.4	42.0
		-	-39.1	-37.1	-34.5	-32.5	-30.9	-27.9
Corner	Zone 3	+	66.1	61.9	56.2	51.9	48.4	42.0
		-	-44.6	-41.7	-37.8	-34.8	-32.3	-27.9

WIDTH OF ZONE, a = 6.0 FT

- F. SEISMIC LOADS:
1. RISK CATEGORY: II
2. SEISMIC IMPORTANCE FACTOR: I_e 1.0
3. SHORT PERIOD SPECTRAL RESPONSE ACCELERATION: S_S 0.249 g
4. 1-SEC PERIOD SPECTRAL RESPONSE ACCELERATION: S₁ 0.124 g
5. SITE CLASS: B
6. SHORT PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION: SDS 0.149 g
7. 1-SEC PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION: SD1 0.066 g
8. SEISMIC DESIGN CATEGORY: A
9. BASIC SEISMIC-FORCE RESISTING SYSTEM: LIGHT FRAME WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE
10. DESIGN BASE SHEAR: V 7.0 K
11. SEISMIC RESPONSE COEFFICIENT: C_s 0.02
12. RESPONSE MODIFICATION FACTOR: R 6.5
- G. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
- H. VERIFY ALL MECHANICAL EQUIPMENT WEIGHTS, LOCATIONS AND ASSOCIATED OPENINGS WITH THE MECHANICAL CONTRACTOR AND SUBMIT INFORMATION PRIOR TO FABRICATION OF THE SUPPORTING STRUCTURE. NOTIFY THE ENGINEER IF THE ACTUAL WEIGHT EXCEEDS THE WEIGHT INDICATED ON THE STRUCTURAL DRAWINGS.
- I. DESIGN, DETAIL, AND CONSTRUCT WALLS, PARTITIONS, ROOFING, CLADDING AND OTHER COMPONENTS TO ACCOMMODATE VERTICAL DEFLECTIONS AND LATERAL DRIFTS.
- J. DETAIL WOOD CONSTRUCTION TO ACCOMMODATE ANTICIPATED SHRINKAGE. PLUMBING, HOLDOWN ROD SYSTEMS, MASONRY SHAFTS, MASONRY VENEER SUPPORTS, WINDOW SILLS WITH MASONRY VENEER, ETC MUST BE CONSTRUCTED TO ALLOW FOR WOOD SHRINKAGE.

FOUNDATIONS

- A. FOUNDATION DESIGN IS BASED ON THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT BY TERRACON (TERRACON PROJECT NO 18205154) DATED SEPTEMBER 30, 2020 TITLED "PROPOSED CFT RETAIL BUILDING #DE0086 MURFREESBORO, RUTHERFORD COUNTY, TN."
- B. REVIEW THE GEOTECHNICAL REPORT AND ADHERE TO ALL RECOMMENDATIONS WITHIN, INCLUDING CUT, SUBGRADE PREPARATION, FILL, ETC.
- C. FOUNDATION HAVE BEEN DESIGNED USING A NET SOIL BEARING PRESSURE OF 2,000 PSF
- D. ALL SOILS WORK, INCLUDING BACKFILL OF UTILITY TRENCHES AND THE VERIFICATION OF BEARING CAPACITY MUST BE UNDER THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER. PROXIMITY OF UTILITY TRENCHES TO BUILDING FOUNDATION SYSTEM MUST BE AS APPROVED BY THE GEOTECHNICAL ENGINEER TO ENSURE INTEGRITY OF THE BEARING SOILS.
- E. ALL FOUNDATIONS BEAR ON UNDISTURBED EARTH OR ENGINEERED FILL AT ELEVATIONS SHOWN ON PLANS AND DETAILS. COORDINATE FINAL TOP OF FOOTING ELEVATIONS WITH THE ARCHITECTURAL ELEVATIONS, MEP DRAWINGS AND CIVIL GRADING PLANS PRIOR TO PLACEMENT. FOUNDATION STEPS INDICATED ARE APPROXIMATE, UNLESS NOTED OTHERWISE, AND MUST BE FIELD COORDINATED. THE BOTTOM OF EXTERIOR FOUNDATION ELEVATIONS MUST BE BELOW THE FROST DEPTH ELEVATION 18" MEASURED FROM EXTERIOR FINISHED GRADE.
- F. BEAR FLOOR SLABS ON 4 INCH MINIMUM DRAINAGE COURSE (COMPACTED STONE) UNLESS NOTED OTHERWISE IN THE GEOTECHNICAL REPORT OR DRAWINGS. PLACE THE VAPOR RETARDER BETWEEN THE DRAINAGE COURSE AND THE SLAB. VAPOR RETARDER IS ASTM E1745, CLASS B, 10 MIL UNLESS NOTED OTHERWISE. PLACE, PROTECT AND REPAIR PER ASTM E1643 AND MANUFACTURER'S INSTRUCTIONS.
- G. DO NOT INSTALL FOUNDATION CONCRETE UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. NOTIFY THE ENGINEER OF ALL CONFLICTS BETWEEN FOUNDATIONS AND UTILITIES.
- H. ALL FOUNDATIONS, OR PORTIONS THEREOF BELOW GRADE, MAY BE EARTH FORMED BY NEAT EXCAVATIONS. DO NOT PLACE FOUNDATIONS, SLABS, OR OTHER CONCRETE ON FROZEN SUBGRADE OR IN STANDING WATER.
- I. CENTER ALL FOUNDATIONS ON WALLS AND/OR COLUMNS, UNLESS NOTED OTHERWISE.
- J. DETERMINE THE EXTENT OF CONSTRUCTION DEWATERING REQUIRED FOR THE EXCAVATIONS. SUBMIT THE PROPOSED CONSTRUCTION DEWATERING PLAN TO THE GEOTECHNICAL ENGINEER FOR REVIEW PRIOR TO EXCAVATION.

CONCRETE

- A. CONCRETE MUST CONFORM TO THE CONCRETE PROPERTIES SPECIFIED IN THE CONCRETE PROPERTIES TABLE.
- B. CONCRETE MUST HAVE ALLOWABLE UNIT SHRINKAGE OF 0.045% AT 28 DAYS. (SEE ASTM C157)
- C. SLABS TO RECEIVE MOISTURE SENSITIVE FLOOR COVERINGS MUST HAVE MAXIMUM WATER/CEMENTITIOUS MATERIAL RATIO OF 0.40.
- D. CONCRETE CONSTRUCTION MUST CONFORM TO THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE".
- E. CONCRETE MATERIALS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS:
1. PORTLAND CEMENT: ASTM C150, TYPE I OR II
2. AGGREGATE (NORMAL WEIGHT): ASTM C33
- F. ALL REINFORCEMENT MUST CONFORM TO THE FOLLOWING SPECIFICATIONS:
1. ALL REINFORCING, UNO: ASTM A615 GRADE 60
6. WELDED WIRE REINFORCEMENT (WWR):
- a. SMOOTH WIRE: ASTM A1064 (65 KSI)
- b. DEFORMED WIRE: ASTM A1064 (70 KSI)
- c. POLYPROPYLENE FIBRILLATED FIBER MAY BE USED TO SUBSTITUTE WWR IN SLABS ON GRADE WHEN ADDED TO CONCRETE MIX ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDED DOSAGES.
- d. STEEL AND POLYPROPYLENE FIBER BLEND MAY BE USED TO SUBSTITUTE WWR IN SLABS ON COMPOSITE DECK WHEN ADDED TO CONCRETE MIX IN ACCORDANCE WITH THE LATEST VERSION OF THE SPECIFICATION FOR COMPOSITE STEEL FLOOR DECK (ANSI/SDI C) BY THE STEEL DECK INSTITUTE (STEEL FIBERS HAVE 80 PSI RESIDUAL STRENGTH WHEN TESTED IN ACCORDANCE WITH ASTM C 1399).
- G. REINFORCEMENT DETAILING:
1. DETAIL AND PLACE REINFORCEMENT IN ACCORDANCE WITH ACI 315.
2. DEVELOPMENT AND SPLICE LENGTHS ARE IN TENSION UNLESS NOTED OTHERWISE. REFER TO THE REINFORCING BAR LAP LENGTH SCHEDULE ON THE TYPICAL DETAIL SHEETS.
3. LAP WWR ONE CROSSWIRE SPACING PLUS 2".
4. INSTALL CORNER BARS AT ALL FOOTINGS AND WALL INTERSECTIONS TO MATCH HORIZONTAL REINFORCING SIZE AND SPACING. AT INTERSECTIONS OF CONTINUOUS SPREAD FOOTINGS, EXTEND ALL BARS TO FAR SIDE OF INTERSECTING FOOTING.
5. INSTALL AND SECURE REINFORCEMENT TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. PROVIDE THE FOLLOWING CONCRETE COVER FOR REINFORCING ACI 318 SECTION 7.7 AND IBC TABLE 720.1, UNLESS SPECIFICALLY NOTED OTHERWISE:
- a. CAST AGAINST EARTH: 3"
- b. EXPOSED TO EARTH/WEATHER: #6 THRU #18 2"
- c. EXPOSED TO EARTH/WEATHER: #5 & SMALLER 1 1/2"
- d. SLABS: #11 & SMALLER 3/4"
6. INSTALL DOWELS TO MATCH REINFORCEMENT SIZE AND SPACING INDICATED, UNLESS NOTED OTHERWISE.
- H. CAST FOUNDATION WALLS, GRADE BEAMS AND FOOTINGS IN ALTERNATE PANELS NOT TO EXCEED 60'-0" IN LENGTH. INSTALL SHEAR KEYS AT EACH CONSTRUCTION JOINT AND LOCATED AT 1/3 POINTS OF SPANS.
- I. DO NOT USE HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS UNLESS SHOWN ON THE DRAWINGS. THE ENGINEER MUST APPROVE ALL DEVIATIONS OR ADDITIONAL JOINTS IN WRITING.
- J. CAST SLABS MONOLITHICALLY UNLESS NOTED OTHERWISE.
- K. CHAMFER ALL PERMANENTLY EXPOSED CONCRETE EDGES 3/4 INCH, UNLESS NOTED OTHERWISE.
- L. REFERENCE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF OPENINGS AND SLEEVES IN CONCRETE WALLS AND SUPPORTED FLOORS. SPREAD REINFORCEMENT AT OPENINGS AND SLEEVES UNLESS OTHERWISE INDICATED. DO NOT CUT REINFORCEMENT.
- M. SLOPE CONCRETE SLABS TO FLOOR DRAINS SHOWN ON MECHANICAL, PLUMBING, CIVIL AND ARCHITECTURAL DRAWINGS.
- N. BOND NEW CONCRETE TO HARDENED CONCRETE WITH A STRUCTURAL ADHESIVE BONDING AGENT PER ASTM C1059. INSTALL PER THE MANUFACTURER'S INSTRUCTIONS.
- O. NO HOLES OR OPENINGS THROUGH FOUNDATION WALLS AND/OR FOOTINGS WITHOUT ENGINEER'S APPROVAL.
- P. DO NOT EMBED ALUMINUM IN CONCRETE.

CONCRETE PROPERTIES				
USAGE	STRENGTH (PSI)	TYPE	COMMENTS	DURABILITY CLASSIFICATION
ALL CONCRETE NOT OTHERWISE SPECIFIED	4000	NWT		F0, S0, W0, C1
FOOTINGS	3000	NWT		F0, S0, W0, C1
FOUNDATION WALLS	4000	NWT		F1, S0, W0, C1
SLAB-ON-GRADE INTERIOR	3500	NWT		F0, S0, W0, C0

CONCRETE PROPERTIES TABLE NOTES:

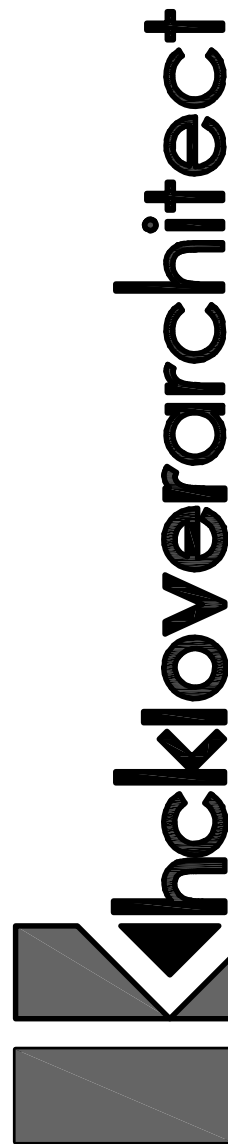
1. MINIMUM STRENGTH AND MAXIMUM DENSITY MEASURED AT 28 DAYS.
2. NWT = NORMAL WEIGHT CONCRETE
3. DURABILITY CLASSIFICATION INDICATES CONCRETE REQUIREMENTS BY EXPOSURE CLASS. REFER TO TABLE 19.3.2.1 OF ACI 318.

STRUCTURAL STEEL

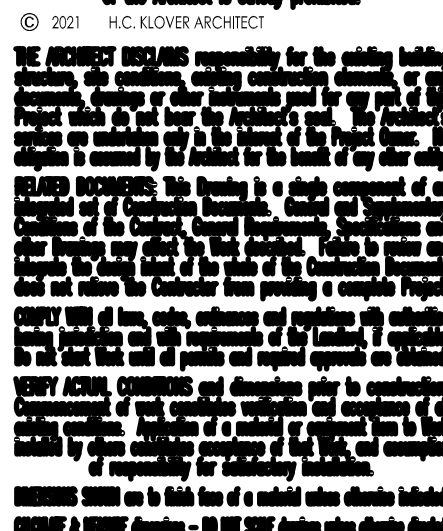
- A. HOT ROLLED STEEL BARS, PLATES, SHAPES AND SHEET PILING MUST BE NEW STEEL CONFORMING TO ASTM A6. FABRICATE AND INSTALL STEEL IN ACCORDANCE WITH AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS".
- B. STRUCTURAL STEEL IS AS FOLLOWS, UNLESS NOTED OTHERWISE:
1. WIDE FLANGE AND WT-SHAPES ASTM A992 F_y = 50 KSI
2. RECTANGULAR AND SQUARE HSS ASTM A500, GRADE B [C] F_y = 46 KSI [50 KSI]
3. ALL OTHER STRUCTURAL STEEL ASTM A36 F_y = 36 KSI
4. ANCHOR RODS ASTM F1554, GRADE 36
5. STIFFENER PLATES AND DOUBLER PLATES ASTM A572, GRADE 50
6. ASTM A572 GRADE 50 IS ACCEPTABLE AS A SUBSTITUTE FOR A992.
- C. CENTER COLUMNS AND BEAMS ON GRID LINES UNLESS NOTED OTHERWISE.
- D. CONNECTIONS:
- DESIGN ALL STEEL CONNECTIONS NOT COMPLETELY DETAILED ON THESE DRAWINGS FOR THE FACTORED LOAD AND RESISTANCE FACTOR DESIGN (LRFD) FORCES INDICATED. SUBMIT CONNECTION CALCULATIONS AND DETAILS SEALED BY A REGISTERED PROFESSIONAL ENGINEER. CONNECTION ENGINEER MUST REVIEW STEEL SHOP DRAWINGS FOR CONNECTION SCOPE ITEMS AND SUBMIT A SEALED LETTER SUMMARIZING THE REVIEW PER AISC 303. SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED AS AN INCOMPLETE SUBMITTAL. CONNECTION ECCENTRICITY MUST BE TAKEN INTO ACCOUNT WHEN DESIGNING AND DETAILING THE CONNECTIONS.
- E. BOLT CONNECTIONS (UNLESS OTHERWISE NOTED OR REQUIRED):
1. BOLTS - ASTM F3125, GRADE A325
2. WASHERS - ASTM F436, TYPE 1
3. NUTS - ASTM A563, GRADE DH
4. CONNECT A MINIMUM OF ONE-HALF (1/2) THE DEPTH OF THE MEMBER
5. UNLESS NOTED OTHERWISE, BOLTS MAY BE TIGHTENED TO THE "SNUG TIGHT" CONDITION IN LIEU OF PRETENSIONING, USE BEARING CONNECTIONS WITH THREADS INCLUDED FOR ALL OTHER CONNECTIONS.
6. CENTER BOLT IN SLOTTED HOLES.
- F. WELD CONNECTIONS (UNLESS NOTED OTHERWISE):
1. WELDING IN ACCORDANCE WITH AWS D1.1, "STRUCTURAL WELDING CODE - STEEL".
2. USE E70XX (SMAW), E7XX-EXXX (SAW), E70S-X (GMAW), OR E7XT-X (FCAW) ELECTRODES FOR WELDING, UNLESS NOTED OTHERWISE.
3. SHOW ALL FIELD WELDS REQUIRED ON ERECTION DRAWINGS.
4. FIELD CONTINUOUS WELDS UNLESS NOTED OTHERWISE.
- G. CUTS INDICATED ON THE DRAWINGS, OR AS REQUIRED FOR OTHER TRADES, MUST BE MADE IN THE SHOP AND SHOWN ON THE SHOP DRAWINGS. FIELD PERFORMED HOLES OR CUTS ARE NOT PERMITTED WITHOUT ENGINEER APPROVAL.
- H. INSTALL NONMETALLIC SHRINKAGE-RESISTANT GROUT BELOW BASE PLATES, IN ACCORDANCE WITH ASTM C1107 AND A MINIMUM STRENGTH OF 6,000 PSI.
- I. FABRICATE STRUCTURAL STEEL WITH ONE COAT OF SHOP PRIMER EXCEPT THE FOLLOWING MEMBERS: GALVANIZED SURFACES, SLIP-CRITICAL SURFACES, SURFACES TO BE FIELD WELDED, SURFACES TO RECEIVE FIRE PROOFING, OR UNLESS NOTED OTHERWISE. COORDINATE AREAS TO BE FIREPROOFED WITH ARCHITECTURAL DRAWINGS PRIOR TO FABRICATION.
- J. GALVANIZED STRUCTURAL STEEL: ASTM A123 OR ASTM A153. GALVANIZE AFTER FABRICATION. GALVANIZE ALL EXTERIOR EXPOSED STEEL, UNLESS NOTED OTHERWISE. REPAIR DAMAGED GALVANIZED COATINGS IN ACCORDANCE WITH ASTM A780.
- K. UNLESS NOTED OTHERWISE, THE TOP OF ALL STEEL COLUMNS ARE FABRICATED WITH A STEEL CAP PLATE - MINIMUM CAP PLATE DIMENSIONS MATCH COLUMN WIDTH AND DEPTH, AND MINIMUM THICKNESS OF CAP PLATE EQUALS COLUMN WEB THICKNESS (1/2" MIN).
- L. COORDINATE THE EXACT LOCATION AND SIZE OF ALL OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION.
- M. REFERENCE THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL STEEL (IF ANY) NOT INDICATED ON THE STRUCTURAL DRAWINGS.

WOOD SHEATHING

- A. GENERAL
1. WOOD SHEATHING REFERS TO WOOD STRUCTURAL PANELS, OF EITHER PLYWOOD OR ORIENTED STRAND BOARD (OSB).
2. WOOD SHEATHING IS APAP-RATED SHEATHING, COMPLYING WITH PRODUCT STANDARD DOC P51 OR DOC P52. WOOD SHEATHING MANUFACTURER MUST BE A MEMBER OF THE AMERICAN PLYWOOD ASSOCIATION (APA).
3. PROTECT WOOD SHEATHING FROM WEATHER AND PROVIDE FOR AIR CIRCULATION AROUND STACKS AND UNDER COVERINGS.
4. PANELS MUST HAVE FACTORY MARKS INDICATING COMPLIANCE WITH APPLICABLE STANDARDS.
5. THICKNESS NOT LESS THAN INDICATED, AND AS REQUIRED TO COMPLY WITH SPECIFIED REQUIREMENTS.
6. INSTALL SHEATHING WITH THE STRENGTH DIRECTION (TYPICALLY LONG DIMENSION) PERPENDICULAR TO FRAMING AND WITH END JOINTS STAGGERED.
7. DO NOT USE MATERIALS WITH DEFECTS IMPAIRING THE QUALITY OF SHEATHING OR PIECES TOO SMALL TO USE WITH MINIMUM NUMBER OF JOINTS. LAYOUT PANELS TO SPAN BETWEEN AT LEAST THREE SUPPORT MEMBERS.
8. COORDINATE SHEATHING INSTALLATION WITH FLASHING AND JOINT-SEALANT INSTALLATION SO MATERIALS ARE INSTALLED IN A SEQUENCE AND MANNER PREVENTING EXTERIOR MOISTURE FROM PASSING THROUGH THE COMPLETED ASSEMBLY.
9. DO NOT BRIDGE BUILDING EXPANSION JOINTS.
10. WHERE EITHER 2 INCH OR 2 1/2 INCH FASTENER SPACINGS ARE SPECIFIED TO 2 INCH OR LESS FRAMING MEMBERS, THE FRAMING MEMBER AT ADJOINING PANEL EDGES MUST BE 2 1/2 INCH WIDE OR GREATER. STAGGER FASTENERS AT PANEL EDGES IN TWO LINES.
- B. WALL SHEATHING
1. SPAN RATING: NOT LESS THAN 32/16
2. NOMINAL THICKNESS: NOT LESS THAN 1/2 INCH
3. EXPOSURE AND DURABILITY CLASSIFICATION: EXPOSURE 1
4. FASTENING METHOD, UNLESS NOTED OTHERWISE:
- a. FASTENERS: 10d RING SHANK NAILS
- b. BOUNDARY EDGE SPACING: 6 INCHES OC
- c. PANEL EDGE SPACING: 6 INCHES OC
- d. FIELD SPACING: 12 INCHES OC
5. REFERENCE SHEARWALL DETAILS FOR SHEARWALL SHEATHING FASTENING, BLOCKING AND OTHER DETAILS.
- C. ROOF SHEATHING
1. SPAN RATING: NOT LESS THAN 40/20
2. NOMINAL THICKNESS: NOT LESS THAN 5/8 INCH
3. EXPOSURE AND DURABILITY CLASSIFICATION: EXPOSURE 1
4. FASTENING METHOD, UNLESS NOTED OTHERWISE:
- a. FASTENERS: 8d RING SHANK NAILS
- b. BOUNDARY EDGE SPACING: 4 INCHES OC
- c. PANEL EDGE SPACING: 6 INCHES OC
- d. FIELD SPACING: 12 INCHES OC
5. UNLESS NOTED OTHERWISE, INSTALL BLOCKING AT ALL SHEATHING EDGES AND FASTEN SHEATHING EDGES TO BLOCKING ACCORDING TO PANEL EDGE SPACING.
- D. FASTENERS
1. AS A MINIMUM, FASTENING TO COMPLY WITH THE "FASTENING SCHEDULE" OF THE REFERENCED BUILDING CODE AND THE ICC-ES EVALUATION REPORT FOR FASTENERS.
2. USE STEEL COMMON NAILS INTO WOOD FRAMING AND SCREWS INTO COLD-FORMED METAL FRAMING, UNLESS NOTED OTHERWISE.
3. NAILS, BRADS, AND STAPLES: ASTM F1667.
4. SCREWS FOR FASTENING SHEATHING TO WOOD FRAMING: ASTM C1002.
5. FOR ROOF, PARAPET, AND WALL SHEATHING, USE FASTENERS WITH HOT-DIP ZINC COATING COMPLYING WITH ASTM A153 OR TYPE 304 STAINLESS STEEL.
6. FOR ROOF, PARAPET, AND WALL SHEATHING WITH ORGANIC-POLYMER OR OTHER CORROSION-PROTECTION COATINGS, USE FASTENERS WITH A SALT-SPRAY RESISTANCE OF MORE THAN 800 HOURS ACCORDING TO ASTM B117.



8813 PENROSE LANE, SUITE 400 • LENEXA, KS 66219
ph: 913.649.8181 • fx: 913.649.1275 • www.hcklover.net



project title

CFT RETAIL BUILDING

2901 S. CHURCH STREET
MURFREESBORO, TN 37127

project number

20045.003

drawing issuance

PERMIT/BID SET 6.1.2021

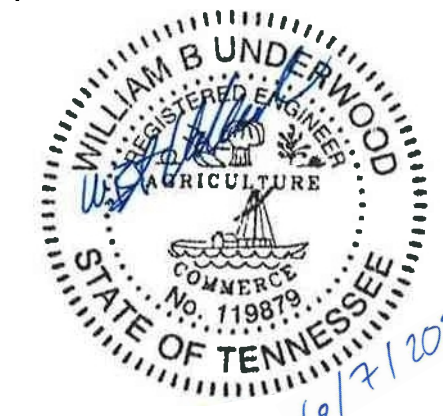
drawing revisions

No. Description Date:



BRITT PETERS
AND
ASSOCIATES
INC.
consulting engineers
101 Falls Park Drive
Suite 601
Greenville, SC 29601
(864) 271-8869
(864) 233-5140 Fax
www.brittpeters.com
BPA Job No. 210395

professional seal



drawing title

GENERAL NOTES

drawing number

S000