GENERAL NOTES:

(THESE SPECIFICATIONS ARE IN ADDITION TO AND DO NOT EXCLUDE ANY FOUND IN THE GENERAL SPECIFICATIONS FOR THE PROJECT)

1. THE CONTRACT STRUCTURAL DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. PROVIDE ALL MEASURES REQUIRED TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION; INCLUDING BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, FORMS AND SCAFFOLDING, SHORING OF RETAINING WALLS AND OTHER TEMPORARY SUPPORTS REQUIRED. COMPLY WITH APPLICABLE REQUIREMENTS OF OSHA AND OTHER GOVERNING BODIES HAVING JURISDICTION AT THE SITE.

2. SHOP DRAWINGS FOR STRUCTURAL STEEL, JOIST, DECKING, AND COLD FORMED METAL TRUSSES SUBMITTALS SHALL COMPLY WITH THE FOLLOWING:

A. CONTRACTOR SHALL FURNISH COMPLETE AND DETAILED SHOP DRAWINGS PREPARED UNDER SUPERVISION OF A REGISTERED STRUCTURAL ENGINEER. THESE DRAWINGS SHALL SHOW SIZES, LOCATION, TYPE AND EXTENT OF ALL MEMBERS, BOLTS AND WELDS.

B. INDICATE THE DATE OF THE STRUCTURAL DRAWINGS USED FOR SHOP DRAWING PREPARATION.

C. INDICATE WELDS BY STANDARD AWS SYMBOLS AND SHOW SIZE LENGTH AND TYPE OF EACH WELD.

D. PROVIDE SETTING DRAWINGS, TEMPLATES AND DIRECTIONS FOR INSTALLATION OF ANCHOR BOLTS AND OTHER ANCHORAGES TO BE INSTALLED BY OTHERS.

E. CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMITTAL FOR ENGINEERING REVIEW.

F. CONTRACTOR SHALL HAVE AN APPROVED SET OF STRUCTURAL STEEL SHOP DRAWINGS AND PROOF OF WELDER CERTIFICATION AT THE JOBSITE AT ALL TIMES.

G. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

H. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR BUILDING LOCATION AND ORIENTATION. COORDINATE ALL DIMENSIONS WITH ARCH. DRAWINGS. DO NOT SCALE DRAWING.

I. SECTIONS CUTS INDICATED ON THE DRAWINGS APPLY TO ALL LIKE AND SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE PLANS. COORDINATE SIMILAR CONDITIONS WITH ARCHITECTURAL, MECHANICAL, AND CIVIL DRAWINGS.

3. DESIGN LOADS:
THE BUILDING STRUCTURE DESCRIBED IN THESE PLANS SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE 2024 INTERNATIONAL BUILDING CODE w/ ALL GEORGIA STATE AMENDMENTS. USE ASCE 7-22 CHAPTER 2 FOR ALL LOAD COMBINATIONS AND LOADS NOT INDICATED HEREIN.

A. GRAVITY LOADS
DEAD LOADS:
ROOF: PER METAL BUILDING MANUFACTURER

LIVE LOADS:
ROOF: 20 PSF (REDUCED PER CODE)
FLOOR: 125 PSF (LIGHT STORAGE)
CATEGORY 1 FORKLIFTS (10 KIP AXLE LOAD FORKLIFT TRUCK WITH A DESIGN INDEX OF 4)

B. SNOW LOADS:
GROUND SNOW LOAD (Pg): 16 PSF
BALANCED ROOF SNOW LOAD (Pf+RAIN): 24 PSF
SNOW EXPOSURE FACTOR (Ce): 0.9
THERMAL FACTOR (Ct): 1.0

C. WIND LOADS:
BASIC WIND SPEED(3 SEC. GUST): 105 MPH (ULTIMATE DESIGN WIND SPEED)
RISK CATEGORY: II
EXPOSURE CATEGORY: B
INTERNAL PRESSURE (GCpi): +/-0.18

REFER TO ASCE-7-22 FOR COMPONENT & CLADDING LOADS

DRIFT LIMIT FOR P.E.M.B w/ MASONRY VENEER H/200

D. SEISMIC DESIGN CRITERIA:
SEISMIC IMPORTANCE FACTOR (Ie): 1.00
RISK CATEGORY: II
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
Ss: 0.250
S1: 0.092
SITE CLASS: D
S(DS): 0.207g
S(D1): 0.127g
SEISMIC DESIGN CATEGORY: B
BASIC SEISMIC FORCE RESISTING SYSTEM:
STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
SEISMIC RESPONSE COEFFICIENT (Cs): 0.0689
RESPONSE MODIFICATION FACTORS (R): 3.0
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

4. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE AND SIMILIAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY MARKED ON THE DRAWINGS.

FOUNDATION NOTES:

1. SEE REINFORCED CONCRETE NOTES FOR CONCRETE STRENGTH REQUIRMENTS. EXTERIOR CONCRETE SHALL BE AIR ENTRAINED TO 6% +/- 1 1/2%

2. SEE ARCHITECTURAL DRAWINGS FOR SIDE WALK EXTENTS, PLANTER, AND PAVER LOCATIONS, CONCRETE PADS STAIRS, SEE ARCH. FOR DIMENSIONS AT INTERIOR MASONRY PARTITIONS, AND DETAILS.

3. COORDINATE FINISHED FLOOR ELEVATIONS (F.F.E.) WITH ARCH. AND CIVIL DRAWINGS.

4. REFERENCE FFE = 0.0'

5. FOUNDATION DESIGN IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2000 PSF .

6. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY A GEORGIA REGISTERED GEOTECHNICAL ENGINEER OR TESTING AGENCY PRIOR TO PLACING ANY FOUNDATION CONCRETE. CONTACT STRUCTURAL ENGINEER IF THE ALLOWABLE SOIL BEARING PRESSURE IS LESS THAN 2000 PSF.

7. ALL EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 1'-8" BELOW F.F.E. AND A MINIMUM OF 0'-8" BELOW ADJACENT EXTERIOR FINISH GRADE, UNLESS NOTED OTHERWISE

8. PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WORK WITH ANY EXISTING OR NEW UTILITIES. LOWER FOUNDATION AS REQUIRED TO AVOID INTERFERENCE WITH UTILITIES, EXCEPT WHERE ZERO LOT LINE FOOTINGS ARE LOCATED PARALLEL TO ADJACENT BUILDINGS. REFER TO THE FOUNDATION FOUNDATION PLAN FOR FOOTING STEPS AT ADJACENT BUILDINGS - CONTACT ARCH./STRUCTURAL ENGINEER IF A CONFLICT OCCURS.

9. CONSULT WITH A GEORGIA REGISTERED GEOTECHNICAL REPORT FOR GENERAL REQUIREMENTS OF EARTHWORK, OVEREXCAVATION, SUBGRADE PREPARATION, FILL AND COMPACTION, WATERPROOFING AND OTHER PERTINENT REQUIREMENTS AND INFORMATION. IF THERE IS A CONFLICT BETWEEN GEOTECHNICAL ENGINEEER AND STRUCTURAL PLANS THEN THE MORE STRINGENT CRITERIA SHALL APPLY UNLESS OTHERWISE DIRECTED BY AN RFI.

11. PROTECT PIPES AND CONDUITS RUNNING THROUGH WALLS AND SLABS WITH 1/2" INCH EXPANSION MATERIAL. LOWER CONTINUOUS FOOTING AND GRADE BEAMS PERPENDICULAR TO PIPE RUNS TO ALLOW PIPES TO PASS ABOVE THE FOOTINGS OR THROUGH THE GRADE BEAMS. ALTERNATIVELY, PROVIDE A CONCRETE JACKET IF PIPES ARE LOW ENOUGH TO BE PLACED BELOW THE FOOTINGS AND GRADE BEAMS PARALLEL TO PIPE RUNS TO AVOID SURCHARGE ONTO ADJACENT TRENCH EXCAVATIONS.

12. ARRANGE FOR OWNER'S INDEPENDENT TESTING AGENCY TO MONTIOR CUT AND FILL OPERATIONS AND PERFORM FIELD DENSITY AND MOISTURE CONTENT TESTS TO VERIFY COMPACTION AND APPROVE FOOTING SUBGRADES PRIOR TO PLACING CONCRETE.

CONCRETE SLAB NOTES:

1. SEE REINFORCED CONCRETE NOTES FOR CONCRETE STRENGTH REQUIREMENTS.

2. FLOOR SLABS ON GRADE SHALL BE FLOOR SLAB SHALL BE 6" THICK 4000 PSI CONCRETE REINFORCED w/ 6X6-W2.1/W2.1 WWR. SEE CIVIL PLANS FOR FINISHED FLOOR ELEVATIONS, COORDINATE VAPOR BARRIER REQUIREMENTS w/ ARCHITECTURAL AND GEOTECHNICAL ENGINEER REQUIREMENTS, PROVIDE 10 MIL (MIN) POLYETHYLENE VAPOR BARRIER WITH JOINTS LAPPED 6" AND TAPED UNDER ALL INTERIOR SLABS. REFER TO GEOTECHNICAL ENGINEER FOR BELOW SLAB ON GRADE, SUBGRADE PREPARATION REQUIREMENTS.

3. WHERE SPECIFIC CONTROL JOINT LOCATIONS ARE NOT INDICATED, PROVIDE CONTROL/CONSTRUCTION JOINTS SUCH THAT NO AREA EXCEEDS 324 SQUARE FEET NOR SHALL THE LENGTH OF ANY PANEL EXCEED 1.5 TIMES THE WIDTH. SEE DETAILS ON S3.1 AND ARCHITECTURAL CONCRETE PLACEMENT PLAN.

4. CONDUITS AND PIPES EMBEDDED IN SLABS:
SHALL NOT BE LARGER IN OUTSIDE DIMENSION THAN ONE-THIRD THE OVERALL THICKNESS OF THE SLAB. SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS OR WIDTHS ON CENTER. A MINIMUM SLAB THICKNESS OF 2 1/2" MUST BE MAINTAINED OVER THE EMBEDDED CONDUITS OR PIPES.

5. COORDINATE THE EXACT LOCATION AND EXTENTS OF ALL FLOOR SLOPES, RECESSED AREAS AND DRAIN LOCATIONS WITH ARCHITECTURAL AND PLUMBING DRAWINGS.

REINFORCED CONCRETE NOTES:

1. STRUCTURAL MEMBERS OF REINFORCED CONCRETE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI318.

2. ALL CONCRETE SHALL HAVE A SLUMP OF 4" (+/-1") (SUPER PLASTICIZER/WATER REDUCING ADMIXTURES MAY BE ADDED TO ANY MIX PER THE PROJECT SPECIFICATIONS AND THE APPROVED MANUFACTURERS SPECIFICATIONS TO INCREASE WORKABILITY AND/OR TO IMPROVE THE FLOW CHARACTERISTICS OF CONCRETE. KEYSTONE STRUCTURAL ENGINEERING, P.C. HAS NO CONTROL OVER OR PREDICTION OF THE IMPACT ON SLUMP OF ADDING SUCH SUPER PLASTICIZER/WATER REDUCING ADMIXTURES.) AND A MINIMUM 28 DAY COMPRESSIVE STRENGTH:
A. FOOTINGS: 3000 PSI (0.50 MAXIMUM WATER/CEMENT RATIO)
B. WALLS: 3000 PSI (0.50 MAXIMUM WATER/CEMENT RATIO)
C. SLAB ON GRADE: 4000 PSI (540 LBS/CUBIC YARD MINIMUM CEMENTITIOUS MATERIAL & 0.50 MAXIMUM WATER/CEMENT RATIO)

3. LIMIT PERCENTAGE, BY WEIGHT, OF CEMENTITIOUS MATERIALS OTHER THAN PORTLAND CEMENT IN CONCRETE TO 25%.

4. AIR CONTENT: 6% (+/- 1.5%) AT POINT OF DELIVERY FOR 1" NOMINIAL MAXIMUM AGGREGATE SIZE.

5. AIR CONTENT: DO NOT ALLOW AIR CONTENT OF TROWEL-FINISHED FLOORS TO EXCEED 3%.

6. ALL STEEL REINFORCEMENT SHALL BE ASTM 615-GRADE 60. ALL WELDED STEEL REINFORCEMENT SHALL BE ASTM A706-GRADE 60. WELDED WIRE REINFORCEMNET SHALL BE ASTM A185. ALL WELDED REINFORCEMENT SHALL BE IN ACCORDANCE WITH AWS D1.4.

7. MINIMUM CONCRETE COVER FOR REINFORCING STEEL: (UNO)

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"

B. CONCRETE EXPOSED TO EARTH AND WEATHER:
#5 REBAR AND SMALLER: 1 1/2"
#6 REBAR AND LARGER: 2"

C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH.
SLABS, WALLS, AND JOISTS:
#14 OR #18 REBARS: 1 1/2"
#11 REBAR AND SMALLER: 3/4"
BEAMS AND COLUMNS: 1 1/2"

8. UNLESS NOTED OTHERWISE, CAST IN PLACE CONCRETE SHALL HAVE THE FOLLOWING STEEL ADDED AROUND ALL OPENINGS:
2-#5 (LENGTH OF OPENING+ 48") ALONG EACH SIDE OF OPENING AND TWO (2)-#5x5'-0" DIAGONALLY AT EACH CORNER.

9. ALL CONCRETE COMPRESSIVE STRENGTH TESTS SHALL BE AVAILABLE AT JOB SITE.

10. ALL LAP SPLICE LENGTHS SHALL BE AS SHOWN IN TABLE 2 THIS SHEET

STEEL NOTES:

1. STRUCTURAL STEEL:
A. SHALL CONFORM TO THE LATEST STANDARDS OF ASTM:
WIDE FLANGE BEAMS: A992
OTHER STRUCTURAL STEEL SHAPES, PLATES AND BARS: A36
HOLLOW STRUCTURAL STEEL SECTIONS (ROUND AND RECTANGULAR): A500 GRADE B
STRUCTURAL STEEL PIPE: A53 GRADE B

B. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC 360-16) USING ALLOWABLE STRESS DESIGN.

2. WELDS:
A. PROVIDE MINIMUM SIZE OF FILLET WELDS AS SPECIFIED IN TABLE J2.4 OF THE AISC MANUAL.

B. HEADED STUDS (SHEAR AND ANCHOR) AND DEFORMED ANCHORS:
PROVIDE HEADED STUDS (SHEAR AND ANCHOR) MADE OF MATERIAL CONFORMING TO ASTM A 108.
(1) PROVIDE DEFORMED ANCHORS MADE OF MATERIAL CONFORMING TO ASTM A 496.
(2) WELD STUDS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MANUAL ARC (STICK) WELDING OF HEADED STUDS AND/OR DEFORMED ANCHORS IS NOT ALLOWED.

3. COLD FORMED STEEL FRAMING
A. COLD FORMED STEEL FRAMING STRENGTH CRITERIA:
(1) 18 MIL-43 MIL - 33 KSI MIN. YIELD STRESS
(2) 54 MIL-97 MIL - 50 KSI MIN. YIELD STRESS
(3) RUNNER TRACK - 33 KSI MIN. YIELD STRESS (UNO)

B. ATTACH METAL FRAMING TO PRIMARY STRUCTURE WITH A DEFLECTION TRACK OR A STEEL NETWORK INC. VERTICAL DEFLECTION CLIPS CAPABLEOF ALLOWING 1" OF VERTICAL DEFLECTION IF WALL FRAMING IS SUPPORTED BY SLAB ON GRADE OR OTHER RIGID SUPPORT.

C. PLACE ALL COLD-FORMED STEEL STUD WALL BRIDGING HORIZONTALLY WITH A MAXIMUM VERTICAL SPACING OF 4 FEET UNLESS NOTED OTHERWISE. AS AN OPTION, CONTINUOUS COLD-FORMED CHANNELS MAY BEPOSITIONED THROUGH THE STUD PUNCH OUTS AS BRIDGING PROVIDED THE CHANNEL IS PROPERLY FASTENED TO EACH STUD. PROVIDE MANUFACTURERS RECOMMENDED BRIDGING TO BOTH FLANGES OF MEMBER IF FLANGE IS NOT PERMANENTLY BRACED WITH GYPSUM OR PLYWOOD SHEATHING.

D. PLUMB, ALIGN, AND SECURELY ATTACH STUDS TO THE FLANGES OF BOTH UPPER AND LOWER RUNNERS. SPLICES IN STUDS ARE NOT PERMITTED.

E. PROVIDE HEADERS AND SUPPORTING STUDS FOR FRAMING OF WALL OPENINGS.

F. STABILITY BRIDGING SHALL BE INSTALLED AT A MAXIMUM 4'-0" O.C. FOR SUSPENDED SOFFITS UNLESS NOTED OTHERWISE.

4. METAL STUD FASTENERS:
A. SCREW CONNECTIONS
USE #10-16 KWIK-FLEX SELF-DRILLING SCREWS OR APPROVED EQUAL UNLESS OTHERWISE NOTED. 4 SCREWS PER CONNECTION MIN., UNLESS NOTED OTHERWISE OR A PRE-ENGINEERED TRUSS.

B. POWER DRIVEN FASTENERS:
(1) FASTENING TO CONCRETE:
USE 0.145" DIA. DOME HEAD NAIL TYPE "X-ZF" BY HILTI OR APPROVED EQUAL UNLESS NOTED OTHERWISE.
MIN. EMBEDMENT = 1 1/4"MIN. EDGE DISTANCE = 2"
MIN. SPACING = 3" MAX. SPACING = 12"
(2) FASTENING TO STEEL:
USE 0.145" DIA. DOME HEAD KNURLED SHANK FASTENER TYPE "X-EDNI" BY HILTI OR APPROVED EQUAL UNLESS NOTED OTHERWISE.
MIN. EMBEDMENT = FULL PENETRATION
MIN. EDGE DISTANCE = 1/2"
MIN. SPACING = 1 1/2" MAX. SPACING 12"
(3) PINS SHALL BE LOCATED 1/2" FROM OUTSTANDING LEG OF CLIP ANGLES WHERE ATTACHING TO STRUCTURAL STEEL ANGLES.

5. PRE-ENGINEERED METAL STUD TRUSSES:
A. PRE-ENGINEERED TRUSSES AND THEIR ATTACHMENT TO THE STRUCTURAL STEEL FRAMING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF GEORGIA. SHOP DRAWINGS SHALL BE SUBMITTED TO ARCH. FOR REVIEW.

B. METAL STUD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH AISI-TRUSS.

POST-INSTALLED ANCHORS:

1) EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC.

a) **ANCHORAGE TO CONCRETE**
i) ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
(1) **HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM** WITH HAS-E THREADED ROD PER ICC ESR-3187.

b) **REBAR DOWELING INTO CONCRETE**
i) ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
(1) **HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM** WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR-3187.

c) **ANCHORAGE TO SOLID GROUTED MASONRY**
i) ADHESIVE ANCHORS USE:
(1) **HILTI HIT-HY 200 MASONRY ADHESIVE ANCHORING SYSTEM**.
(2) STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR

d) **ANCHORAGE TO HOLLOW / MULTI-WYTHE MASONRY**
i) ADHESIVE ANCHORS USE:
(1) **HILTI HIT-HY 70 MASONRY ADHESIVE ANCHORING SYSTEM** PER ICC ESR-3342.
(2) STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR
(3) THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S RECOMMENDATION

2) ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR SUCH OTHER METHOD AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.

3) INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.

4) THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

6) ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS AND IN MANUFACTURERS INSTALLATION INSTRUCTIONS.

7) ALL POST INSTALLED ANCHORS SHALL BE INSPECTED BY THE SPECIAL INSPECTOR TO INSURE INSTALLATION PROCEDURES ARE FOLLOWED AND ANCHORS ARE INSTALLED PER THE CONTRACT DOCUMENTS.

1. STANDARD SSMA METAL FRAMING;

A. METAL STUD STRENGTH CRITERIA:
1. 18 MIL TO 43 MIL - 33 KSI MIN. YIELD STRESS
2. 54 MIL TO 118 MIL - 50 KSI MIN. YIELD STRESS
3. RUNNER TRACK - 33 KSI MIN. YIELD STRESS (UNO)
DO NOT USE STUDS LESS THAN 43 MIL FOR ANY EXTERIOR WALL USED TO BACK-UP BRICK VENEER.

B. ATTACH METAL FRAMING TO PRIMARY STRUCTURE WITH A DEFLECTION TRACK OR A STEEL NETWORK INC. VERTICAL DEFLECTION CLIPS CAPABLE OF ALLOWING 1" OF VERTICAL DEFLECTION.

2. METAL STUD FASTENERS:
A. SCREW CONNECTIONS
USE #10-16 KWIK-FLEX SELF-DRILLING SCREWS OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
4 SCREWS PER CONNECTION MIN., UNLESS NOTED OTHERWISE OR A PRE- ENGINEERED TRUSS.
B. POWER DRIVEN FASTENERS:

1. FASTENING TO CONCRETE:
USE 0.145" DIA. DOME HEAD NAIL TYPE "X-ZF" BY HILTI OR APPROVED EQUAL UNLESS NOTED OTHERWISE.
MIN. EMBEDMENT = 1 1/4" MIN. EDGE DISTANCE = 2"
MIN. SPACING = 3" MAX. SPACING = 12"

2. FASTENING TO STEEL:
USE 0.145" DIA. DOME HEAD KNURLED SHANK FASTENER TYPE "X-EDNI" BY HILTI OR APPROVED EQUAL UNLESS NOTED OTHERWISE.
MIN. EMBEDMENT = FULL PENETRATION
MIN. EDGE DISTANCE = 1/2"
MIN. SPACING = 1 1/2" MAX. SPACING 12"

SPECIAL INSPECTION NOTES:

A. THE SPECIAL INSPECTOR SHALL BE ENGAGED BY THE OWNER. SPECIAL INSPECTOR SHALL BE FULLY QUALIFIED, APPROVED BY THE BUILDING OFFICIAL, REGISTERED BY APPLICABLE REGISTRATION BOARD IF REQUIRED BY THE LOCAL BUILDING OFFICIAL, AND SHALL BE ACCEPTABLE TO THE ARCHITECT.

B. THE SPECIAL INSPECTOR SHALL PROVIDE VERIFICATION OF CONSTRUCTION QUALITY CONTROL INSPECTIONS AND TESTING. THE SPECIAL INSPECTOR SHALL CERTIFY THAT ALL WORK REQUIRING INSPECTION IS PERFORMED IN COMPLIANCE WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS, BUILDING CODE REQUIREMENTS AND LOCAL BUILDING DEPARTMENT REQUIREMENTS.

C. SPECIAL INSPECTIONS ARE REQUIRED FOR THE ITEMS NOTED IN THE STATEMENT OF SPECIAL INSPECTIONS AND THE 2024 IBC CHAPTER 17. THE CONTRACTOR SHALL OBTAIN A COPY OF THE STATEMENT OF SPECIAL INSPECTIONS AND NOTIFY THE SPECIAL INSPECTOR WHEN WORK IS READY TO BE INSPECTED.

D. FAILURE TO NOTIFY THE SPECIAL INSPECTOR PRIOR TO OBSCURING AN ITEM REQUIRING INSPECTION MAY RESULT IN THE CONTRACTOR REMOVING OTHER WORK TO ALLOW INSPECTION. THIS WORK WILL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE. FAILURE TO HAVE REQUIRED ITEMS INSPECTED IS REASON FOR REJECTION OF THE WORK.

E. PREMATURE NOTIFICATION FOR INSPECTIONS WILL RESULT IN ADDITIONAL INSPECTION WITH ALL EXPENSES AND FEES PAID FOR BY THE CONTRACTOR.

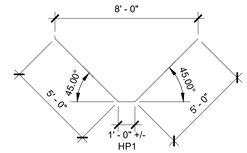
F. SEE SHEET S5.1 FOR SPECIAL INSPECTION CHECKLIST.

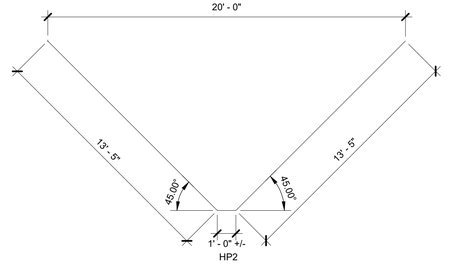
REINFORCED CONCRETE
TENSION LAP SPLICE LENGTHS
TABLE 2
(INCHES)

BAR SIZE	f'c=3000 PSI	f'c=4000 PSI
#3	25	21.3
#4	33	29
#5	41	36
#6	49	43
#7	72	62

LIST OF ABBREVIATIONS

FOB: FACE OF BRICK	LO: LOW CONDITION
FOA: FACE OF ANGLE	HI: HIGH CONDITION
FOS: FACE OF STUD	TOW: TOP OF WALL
TOB: TOP OF BEAM	SDS: SELF DRILLING SCREW
BOC: BOTTOM OF CHANNEL	FOC: FACE OF CHANNEL
T&B: TOP AND BOTTOM	TOF: TOP OF FOOTING
TOA: TOP OF ANGLE	SIM: SIMILAR CONDITION
BOA: BOTTOM OF ANGLE	W.P.: WORKING POINT
LLV: LONG LEG VERTICAL	UNO : UNLESS NOTED OTHERWISE
LLH: LONG LEG HORIZONTAL	B.P.: BASE PLATE
SW: MASONRY SHEAR WALL	PAF: POWER ACTUATED FASTENERS
TOS: TOP OF SLAB	S.F: STEP FOOTING
T/COL: TOP OF COLUMN	B/COL: BOTTOM OF COLUMN
P.E.M.B: PRE-ENGINEERED METAL BUILDING	FOT: FACE OF TUBE





1 S0.1 HAIRPIN DETAIL
1/4" = 1'-0"

Keystone Structural Engineering
Professional Consultants
531 Roselane Street
Suite 150
Marietta, GA 30060
(404) 483 6921

GEORGIA REGISTERED No 130747 PROFESSIONAL ENGINEER BRENDAN F. CROMEY

Rev. No.	Date	Name

ISSUED FOR CONSTRUCTION

PROJECT
DRYWALL WAREHOUSE HWY 81

ADDRESS
257 Highway 81
Oxford, GA 30054

CLIENT
CSC DESIGN, INC.
ARCHITECTS & ENGINEERS

ADDRESS
135 P. Rickman Industrial Dr.
Suite 100, Canton, GA 30115

SHEET TITLE
STRUCTURAL GENERAL NOTES & SCHEDULES

Date:
04/20/2026

PROJECT NUMBER
26-149

SHEET NUMBER
S0.1

4/20/2026 11:52:47 AM
C:\Users\EMILY\Desktop_Keystone Structural Engineering\
C:\Users\EMILY\Desktop_Keystone Structural Engineering\Projects\26-149_Drywall Warehouse HWY 81\Drawings\26-149_Drywall Warehouse HWY 81.rvt