

GENERAL NOTES

- GENERAL CONSTRUCTION NOTES**
1. THESE NOTES COMPLEMENT THE DRAWINGS AND SPECS AND SHOULD NOT BE CONSIDERED INCLUSIVE OF ALL ITEMS. IF A CONFLICT EXISTS BETWEEN THE DRAWING AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL CONTROL.
 2. WHERE THE DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, EVEN THOUGH NOT SPECIFICALLY SHOWN ON THE DRAWINGS.
 3. CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE EXECUTING WORK.
 4. ALL WALLS RELYING ON TOP OF SLAB FOR SUPPORT SHALL BE BRACED UNTIL SLAB HAS CURED FOR A MINIMUM OF THREE DAYS.
 5. DRAWINGS ARE TO BE CAREFULLY COORDINATED AND UNITS ACCORDING TO THE STANDARD UNITS SCHEDULE ARE TO BE PROVIDED AT ALL MASONRY OPENINGS SHOWN ON ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND STRUCTURAL PLANS.
 6. SHOP DRAWINGS SHALL BE INDEPENDENTLY DEVELOPED. REPRODUCTION OF STRUCTURAL DESIGN DRAWINGS FOR USE AS SHOP DRAWINGS IS PROHIBITED; STEEL FABRICATION DRAWINGS SHALL BE SEALED BY AN ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.

- APPLICABLE CODES FOR DESIGN**
- | | |
|---|------------------------------------|
| 1. INTERNATIONAL BUILDING CODE | IBC 2018, WITH 2020 GA. AMENDMENTS |
| 2. AMERICAN INSTITUTE OF STEEL CONSTRUCTION | AISC 15th ED |
| 3. AMERICAN CONCRETE INSTITUTE | ACI 318-14 |
| 4. STEEL JOIST INSTITUTE | SJI 2015 |
| 5. BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES | ACI 530-16 |

- CLASSIFICATION OF RISK FOR BUILDING**
- | | |
|--------------------------|------|
| 1. RISK CATEGORY | III |
| 2. SEISMIC FACTOR, I_e | 1.25 |
| 3. SNOW FACTOR, I_s | 1.1 |
| 4. WIND FACTOR, I_w | 1.0 |

- DESIGN LOADS**
1. FLOOR LIVE LOAD: CLASSROOMS, RESTROOMS, CORRIDORS, STAIRS & ELEVATORS, STORAGE, MECHANICAL/ELECTRICAL, PLUMBING, ETC. UNLESS NOTED OTHERWISE, ALL FLOOR LOADS SHALL BE APPLIED WHERE THE LIVE LOAD EXCEEDS 80 PSF.
 2. ROOF LIVE LOAD: 20 PSF, REDUCED PER 2018 IBC SECTION 1607.1.2.
 3. WIND SPEED: IBC 2018, ASCE 7-16 (3 SECOND GUST)
 4. WIND EXPOSURE: IBC 2018, ASCE 7-16 (3 SECOND GUST)
 5. INTERNAL PRESSURE COEFFICIENTS: +0.18, -0.18
 6. REFER TO DRAWING 2018 FOR VELOCITY PRESSURE FOR CLADDING DESIGN.
 7. SEISMIC DESIGN DATA: $S_s = 0.117$, $S_1 = 0.117$, $S_d = 0.138$, $S_d = 0.117$
 8. SEISMIC SITE CLASS: D
 9. SEISMIC DESIGN CATEGORY: B
 10. SEISMIC BASE SHEAR: $V = 0.430 @ R = 4$
 11. SEISMIC FORCES DETERMINED BY: EQUIVALENT LATERAL FORCE PROCEDURE
 12. SEISMIC RESISTING SYSTEM: 1. BUILDING FRAME SYSTEM, INTERMEDIATE REINFORCED MASONRY SHEAR WALL ($R = 4$, $C = 4$)

- FOUNDATION**
1. IF AFTER EXCAVATION, THE CONDITION OF SOIL INDICATES A SAFE BEARING CAPACITY OF LESS THAN 2500 PSF, THE ARCHITECT/ENGINEER SHALL BE NOTIFIED PRIOR TO PLACEMENT OF ANY FOUNDATION.
 2. FOUNDATIONS AND RETAINING WALLS HAVE BEEN DESIGNED FOR ACTIVE PRESSURE OF 40 PSF AT REST PRESSURE OF 60 PSF, PASSIVE PRESSURE OF 300 PSF, AND A COEFFICIENT OF FRICTION OF 0.50. THESE VALUES ARE BASED ON SOIL REPORTS AND TYPICAL VALUES FOR SOILS IN THIS AREA.
 3. ALL BACKFILL SHALL BE COMPACTED TO THE REQUIREMENTS OF THE EARTHWORK SPECIFICATION.

- CONCRETE & REINFORCING**
1. ALL CONCRETE TO HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 psi WITH A MAXIMUM AGGREGATE SIZE OF 1" UNLESS NOTED OTHERWISE ON PLANS. ALL CONCRETE IS NORMAL WEIGHT (NW) CONCRETE.
 2. CONTROL JOINTS SHALL BE PROVIDED IN FLOOR SLABS ON GRADE SUCH THAT THE MAXIMUM SPAN BETWEEN JOINTS IS 12.0 ft. OR AS NOTED ON THE DRAWINGS.
 3. CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE EXECUTING WORK.
 4. ALL WALLS RELYING ON TOP OF SLAB FOR SUPPORT SHALL BE BRACED UNTIL SLAB HAS CURED FOR A MINIMUM OF THREE DAYS.
 5. DRAWINGS ARE TO BE CAREFULLY COORDINATED AND UNITS ACCORDING TO THE STANDARD UNITS SCHEDULE ARE TO BE PROVIDED AT ALL MASONRY OPENINGS SHOWN ON ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND STRUCTURAL PLANS.
 6. CORNER BARS ARE TO BE PROVIDED AT ALL CORNERS AND INTERSECTIONS OF DRAWINGS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

- CONCRETE MASONRY WALL**
1. THE DESIGN COMPRESSIVE STRENGTH, F_m , IS 1500 psi.
 2. GROUT FOR MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 psi @ 28 DAYS. COMPLY WITH PROPORTIONS BY VOLUME OF 1 PART PORTLAND CEMENT TO 2 1/2 PARTS AGGREGATE.
 3. ALL MASONRY JOINTS SHALL BE REINFORCED AT 16" O.C. VERTICALLY.
 4. ALL REINFORCING BARS SHALL BE TYPE S.
 5. REINFORCING BARS SHALL BE PROVIDED AT ALL CORNERS AND INTERSECTIONS OF WALLS SHOWN ON PLANS. REINFORCED WALLS MUST BE REINFORCED AS SHOWN ON PLANS.
 6. UNLESS NOTED OTHERWISE, ALL BAR SPLICES SHALL BE AS NOTED IN DETAIL 9 / S301. PLACE OF BAR SPLICES, ANY OF THE FOLLOWING MECHANICAL SPLICES MAY BE USED: R.L.T. S-SERIES COUPLER (BAR-LOCK COUPLER SYSTEMS INC. 1-800-246-2877), R.L.T. S-SERIES COUPLER (BAR-LOCK COUPLER SYSTEMS INC. 1-800-755-4888), D. C. MARKEL ZAP SCREW/LOCK (BAR SPLICE SYSTEMS, INC. - SOLD THROUGH REBAR SUPPLIER).
 7. OTHER COUPLERS TO BE APPROVED BY THE ENGINEER OF RECORD.

- STEEL**
1. ALL WIDE FLANGE STRUCTURAL STEEL TO HAVE A MINIMUM YIELD STRENGTH OF 50 ksi (ASTM A992), UNLESS NOTED. STRUCTURAL TUBE ARE TO HAVE A MINIMUM YIELD STRENGTH OF 50 ksi (ASTM A500). ANGLES AND CHANNELS SHALL BE ASTM A36.
 2. ALL WELDS ARE TO BE MADE WITH E70XX ELECTRODES.
 3. ALL CONNECTIONS, EXCEPT THOSE INDICATED ON THE DRAWINGS AS "WELDED CONNECTIONS," ARE TO BE MADE USING 3/4" DIA. A325 BOLTS. CONNECTIONS DESIGNATED AS SLIP CRITICAL SHALL BE MADE USING LOAD-INDICATING WASHERS OR TENSION CONTROL BOLTS. DESIGN ALL CONNECTIONS FOR REACTIONS SHOWN ON THE PLANS.

- METAL DECK**
1. ROOF METAL DECKING SHALL BE 1/2" 22 GA. WIDE RIB WITH $F_y = 33.0$ ksi.
 2. AT THE ROOF DECK ATTACHMENT, IN LIEU OF THE 5/8" PUDDLE WELDS, THE HLTI DECK FASTENING SYSTEM CAN BE USED WITH THE X-ENP-19 L15 PIN. ONE ADDITIONAL SIDELAP PER SPAN MUST BE INSTALLED WHEN THE HLTI FASTENING SYSTEM IS USED. SEE PLANS FOR THE NUMBER OF SIDELAPS REQUIRED WHEN THE DECKING IS ATTACHED USING THE 5/8" PUDDLE WELD.
 3. FLOOR COMPOSITE METAL DECKING SHALL BE 1/2" 22 GA. MEETING THE FOLLOWING CRITERIA: $I_x = 0.156 \text{ in}^4$, $S_x = 0.184 \text{ in}^3$, $S_y = 0.199 \text{ in}^3$, $F_y = 40.0$ ksi.
 4. AT THE COMPOSITE FLOOR DECK ATTACHMENT, IN LIEU OF THE 5/8" PUDDLE WELDS, THE HLTI DECK FASTENING SYSTEM CAN BE USED WITH X-ENP-19 L15 PIN AS AN EQUIVALENT (NO ADDITIONAL SIDELAPS REQUIRED ATTACHMENT TO THE 5/8" PUDDLE WELD).

- BAR JOISTS**
1. JOIST MANUFACTURER IS TO CHECK ADEQUACY OF THE JOIST DESIGN AND BRIDGING SYSTEM MODIFY SYSTEM AS REQUIRED FOR A NET UPLIFT (0.60 + 0.60) BASED ON THE STRENGTH LEVEL LOADS SHOWN IN THE WIND PRESSURE PLAN ON DRAWING 2018 COMBINED WITH A DEAD LOAD OF 5 psf ($0.60 + 5 \text{ psf}$).
 2. IN STEEL FRAMING, WHERE BAR JOISTS ARE UTILIZED, AND COLUMNS NOT A FREED IN AT LEAST TWO DIRECTIONS WITH STRUCTURAL STEEL MEMBERS, A BAR JOIST SHALL BE FIELD-BOLT AT COLUMNS TO PROVIDE LATERAL STABILITY DURING CONSTRUCTION.
 3. WHERE POINT LOADS ARE APPLIED TO TOP OR BOTTOM CHORD OF JOISTS BETWEEN PANEL POINTS, AN L2 X 2 X 1/8 ANGLE SHALL BE WELDED BETWEEN POINT LOAD OPPOSITE CHORD PANEL POINT.

- SPECIAL INSPECTIONS**
1. SEE SPECIFICATIONS SECTION 01 41 00 FOR REQUIREMENTS.

BASE PLATE SCHEDULE

MARK	A	B	Y	ANCHOR BOLT DIAMETER	PLATE TYPE
BP-1	1'-2"	1'-2"	0'-0.34"	0'-0.34"	A
BP-2	0'-11 1/2"	0'-11 1/2"	0'-0.34"	0'-0.34"	A

FOOTING SCHEDULE

MARK	DIMENSIONS	REINFORCEMENT
F-4	4'-0" x 4'-0" x 1'-0"	6 #4 @ 12" O.C. EACH WAY, BOT
F-5	4'-0" x 4'-0" x 1'-0"	6 #5 @ 12" O.C. EACH WAY, BOT

BEAM & PLATE LINTEL SCHEDULE

MARK	BEAM SIZE	PLATE SIZE	DETAIL
L-1	HS 8x8x14	3/8" x 13"	6/S302

LAP SPLICES FOR CONCRETE REINFORCEMENT (CLASS B TENSION SPLICE)

BAR SIZE	$f_c = 3000 \text{ psi}$		$f_c = 3500 \text{ psi}$		$f_c = 4000 \text{ psi}$		$f_c = 4500 \text{ psi}$	
	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM
#4	37"	29"	35"	27"	33"	25"	31"	24"
#5	47"	36"	43"	33"	41"	31"	38"	30"
#6	56"	43"	52"	40"	49"	37"	46"	35"
#7	61"	47"	58"	44"	54"	41"	51"	39"
#8	69"	52"	66"	49"	62"	46"	59"	44"

NOTE: TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS

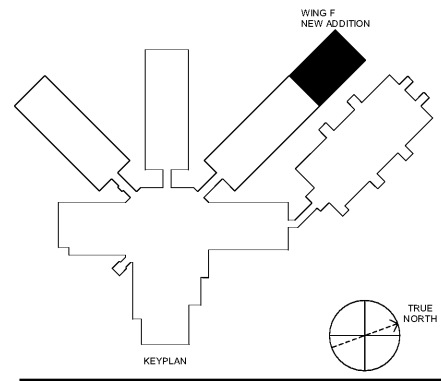
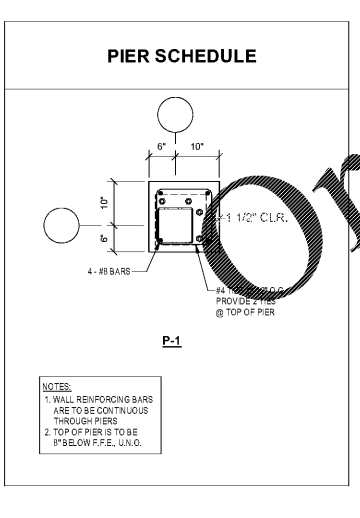
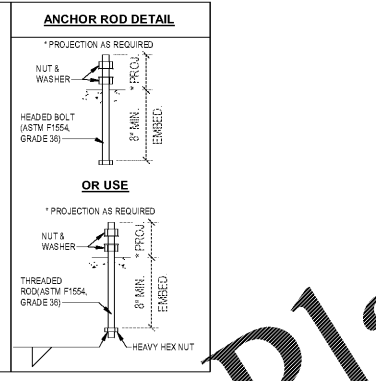
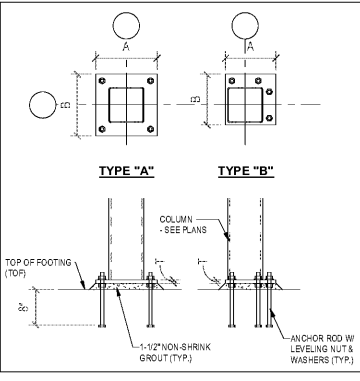
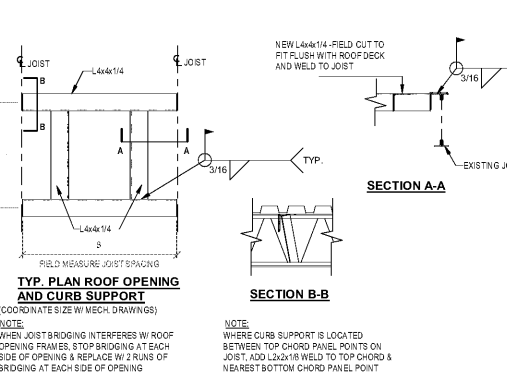
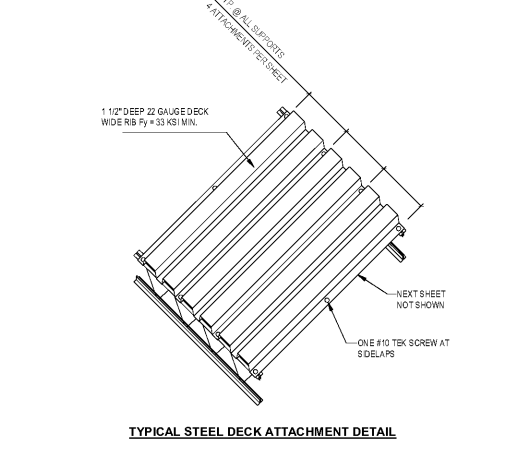
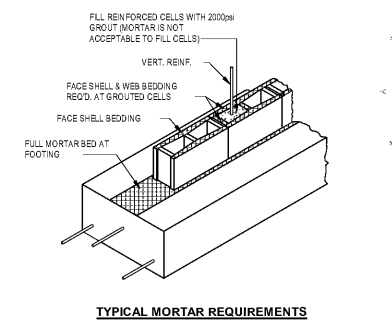
U-BLOCK LINTELS (NON-LOAD BEARING WALLS)

MAX SPAN	8" LIGHT WEIGHT BLOCK		8" LIGHT WEIGHT BLOCK		12" LIGHT WEIGHT BLOCK	
	BOTT. REINF.	TOP REINF.	BOTT. REINF.	TOP REINF.	BOTT. REINF.	TOP REINF.
4'-0"	1-#4	---	1-#4	---	1-#4	---
6'-0"	1-#4	1-#4	1-#4	1-#4	1-#5	1-#4
8'-0"	1-#5	1-#5	1-#5	1-#5	2-#5	2-#5

STEEL LINTELS (NON-LOAD BEARING WALLS)

MAX SPAN	PER 4" THICKNESS BLOCK OR BLOCK	8" LIGHT WEIGHT BLOCK	8" LIGHT WEIGHT BLOCK	12" LIGHT WEIGHT BLOCK
5'-0"	L3 1/2x3 1/2x1/4	(2L3 1/2x1/4)	(2L3 1/2x1/4)	(2L5x5x5/16)
6'-0"	L5x3 1/2x1/4	(2L3 1/2x1/4)	(2L3 1/2x1/4)	(2L5x5x5/16)
7'-0"	L5x3 1/2x1/4	(2L3 1/2x1/4)	(2L3 1/2x1/4)	(2L5x5x5/16)
8'-0"	L5x3 1/2x1/4	(2L3 1/2x1/4)	(2L3 1/2x1/4)	(2L5x5x5/16)
9'-0"	L5x3 1/2x1/4	WT 7x11	(2L5x3 1/2x1/4)	(2L5x5x5/16)
10'-0"	L7x4x3/8	WT 7x11	(2L5x3 1/2x1/4)	(2L5x5x5/16)

ALL UNEQUAL LEG ANGLES SHALL HAVE LONG LEG VERTICAL. MINIMUM BEARING 8" ON EACH END. FILL CELLS OF BLOCK W/ GROUT DOWN TO TOP OF FOOTING.



SA&E PROJECT NUMBER: 01-632-056
 BID PACKAGE: BP-1
 ISSUED FOR CONSTRUCTION: FEB. 4, 2020
Southern AE
 7951 Tricon Circle
 Austell, Ga 30168
 (770) 519-7777
 architects & engineers

FACILITY CODE NUMBER: 672-0109
 (6) CLASSROOM ADDITION TO:
CREEKSIDE MIDDLE SCHOOL
 CATAULA, GEORGIA
HARRIS COUNTY BOARD OF EDUCATION
 HAMILTON, GEORGIA

GENERAL NOTES & LEGENDS

DRAWING NUMBER: **S001**

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