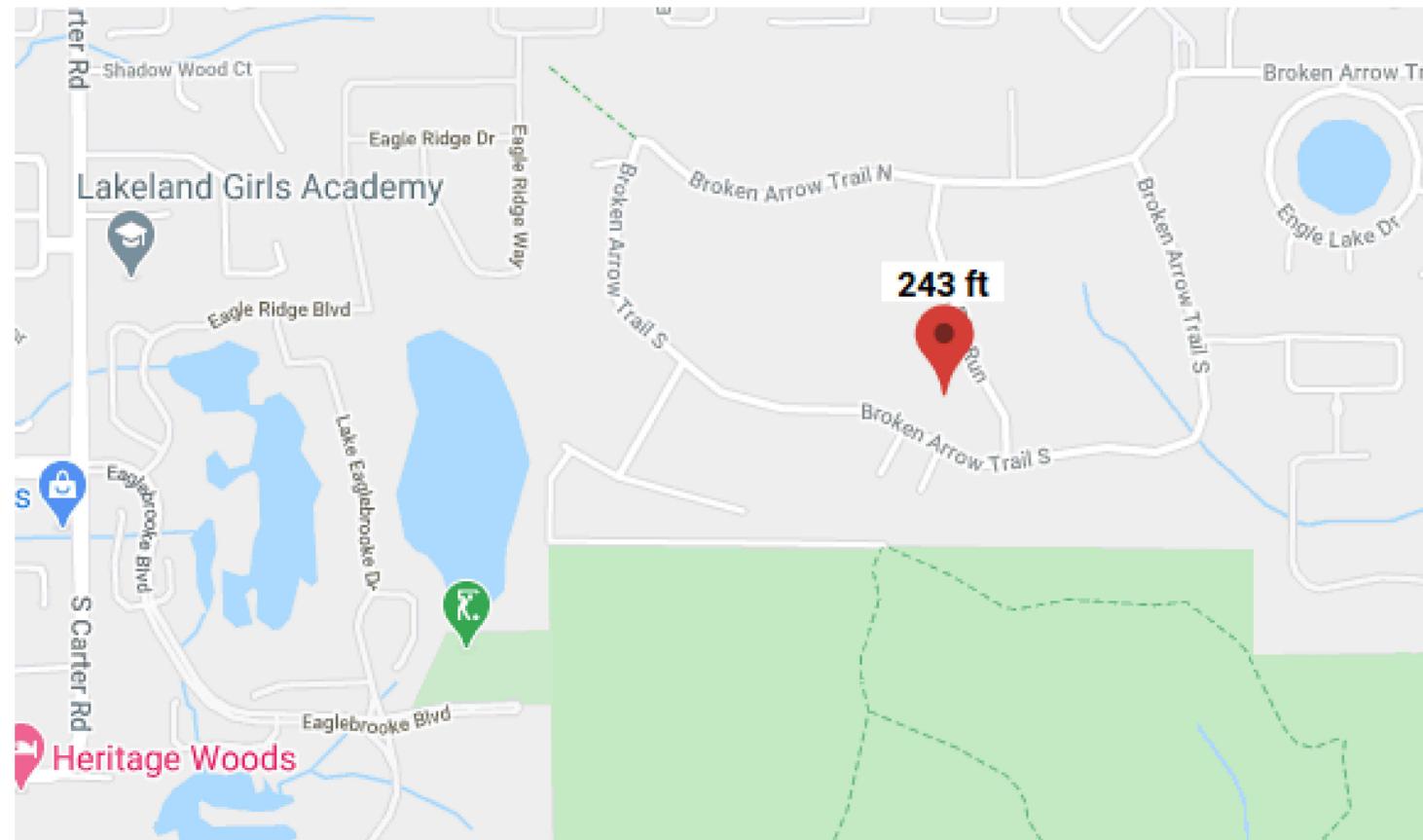


LEE ALI

6817 BROKEN ARROW TRAIL S LAKELAND, FL 33813

- C-1: COVER SHEET
- S-1: GENERAL NOTES
- S-2: TYPICAL SECTION
- S-3: FOUNDATION
- S-4: TRUSS LAYOUT
- A-3: ELEVATIONS



Digitally signed by GREGORY S HURD
Reason: This item has been electronically signed and sealed by Gregory Hurd P.E. using a Digital Signature and date.
Printed copies of this document are not considered signed and sealed and all signatures must be verified on any electronic copies.
Date: 2021.02.26 08:18:41 -05'00'



REVISIONS

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813



GREG HURD, P.E.
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY ENGINEERING KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.

THIS DRAWING IS SUPERSEDED BY ANY LATER DATED DRAWING. THE ENGINEER IS NOT RESPONSIBLE FOR ANY CHANGES OR FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

COVER SHEET

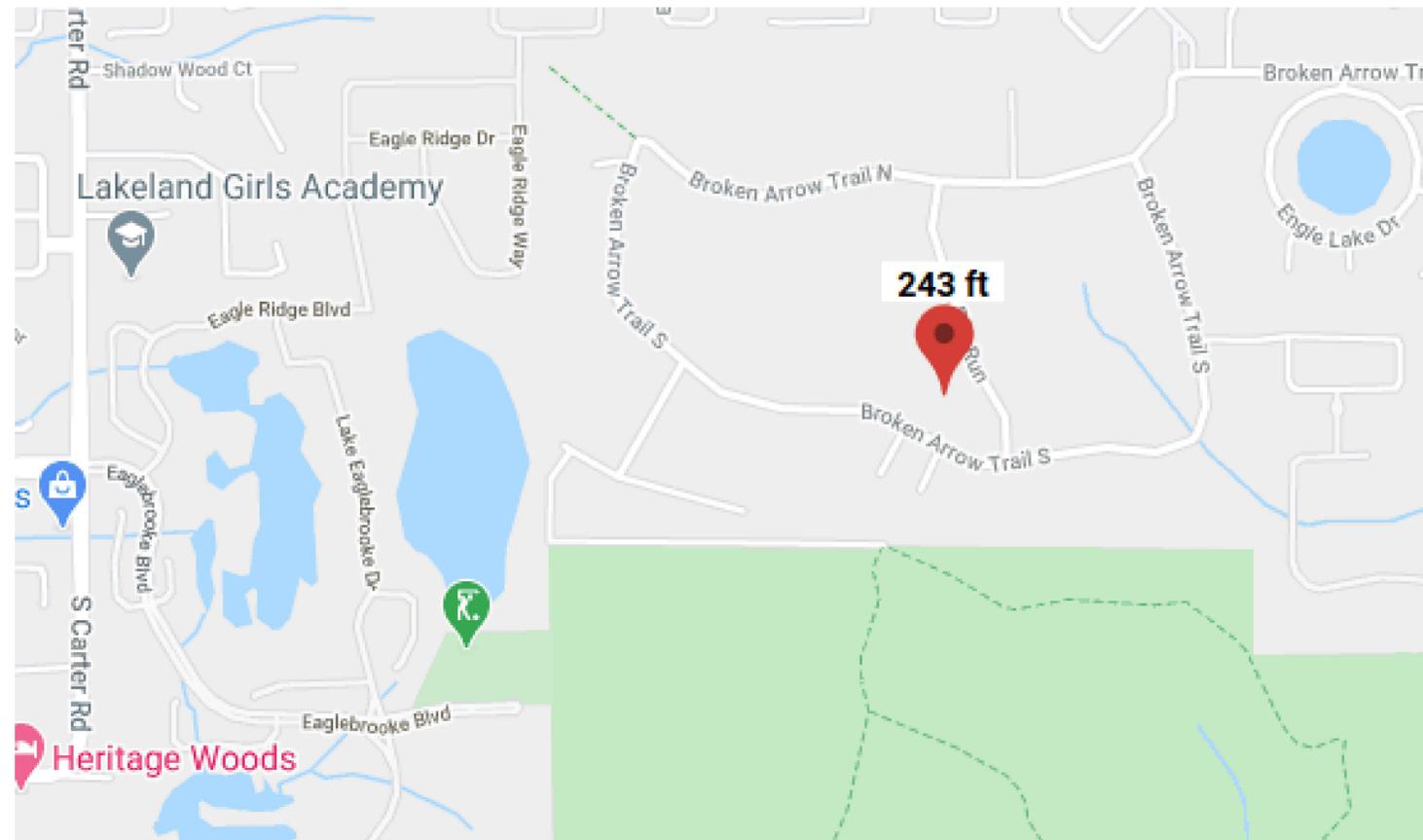
SCALE: N/A

SHEET #
C-1

LEE ALI

6817 BROKEN ARROW TRAIL S LAKELAND, FL 33813

- C-1: COVER SHEET
- S-1: GENERAL NOTES
- S-2: TYPICAL SECTION
- S-3: FOUNDATION
- S-4: TRUSS LAYOUT
- A-3: ELEVATIONS



Digitally signed by GREGORY S HURD
Reason: This item has been electronically signed and sealed by Gregory Hurd P.E. using a Digital Signature and date.
Printed copies of this document are not considered signed and sealed and all signatures must be verified on any electronic copies.
Date: 2021.02.26 08:18:41 -05'00'



REVISIONS

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813



GREG HURD, P.E.
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY ENGINEERING KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.

THIS DRAWING IS SUPERSEDED BY ANY SUBSEQUENT REVISED DRAWINGS AND THE ENGINEER SHALL BE RESPONSIBLE FOR ANY ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND SITE DETAILS SHOWN AND FOR NOTING THE SAME AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.

THE ENGINEER IS NOT RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

COVER SHEET

SCALE: N/A

SHEET #
C-1

GENERAL DESIGN NOTES:

A. GENERAL:

- WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODE: THE FLORIDA BUILDING CODE 2020, 7th EDITION. WHERE MORE STRINGENT CODES AREA ADOPTED, THEY SHALL GOVERN THE WORK.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON DRAWINGS. NOTES ON STRUCTURAL PLANS SHALL TAKE PRECEDENCE OVER THE STRUCTURAL GENERAL NOTES ON THIS SHEET.
- EXCEPT AS SHOWN ON STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL, ELECTRICAL, PLUMBING AND MECHANICAL DRAWINGS FOR DIMENSIONS, LOCATIONS, SIZES AND CONDITIONS, INCLUDING WINDOWS, DOORS, WALLS, CONCRETE CURBS, PITS, DRAINS, TRENCHES, FLOOR AND ROOF SLOPES, DEPRESSED AREAS, CHANGES IN LEVEL, FLOOR AND ROOF OPENINGS, STAIRS, PIPE AND DUCT RUNS, SLEEVES AND HANDERS, ELECTRICAL, CONDUITS AND OUTLETS, ITEMS EMBEDDED OR ATTACHED TO STRUCTURAL MEMBERS, EQUIPMENT, BASES AND ANCHORAGE, ETC.
- THE ENGINEERS SEAL APPLIES ONLY TO THE STRUCTURAL COMPONENTS ON THIS DOCUMENT. THE SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, OR SAFETY PRECAUTIONS, WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL DIMENSIONS ARE TO BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS. ANY DEVIATIONS OR DISCREPANCIES ON THESE PLANS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD.
- ASTM SPECIFICATIONS INDICATED SHALL BE THE LATEST EDITIONS OF THE STANDARDS, UNLESS NOTED OTHERWISE.
- ALL STRUCTURAL DEAD AND LIVE LOADS (PSF) WILL BE CALCULATED USING VALUES BELOW UNLESS OTHERWISE SPECIFIED IN THE PLAN SET.

| | | | |
|------------------|--------|-------------------|--------|
| ROOF DEAD LOAD = | 5 PSF | FLOOR DEAD LOAD = | 20 PSF |
| ROOF LIVE LOAD = | 10 PSF | FLOOR LIVE LOAD = | 40 PSF |

B. WIND DESIGN CRITERIA / COMPONENTS & CLADDING:

WIND SPEED: 128 MPH ULTIMATE DESIGN WIND SPEED (ASCE 7-16)
 RISK CATEGORY: I (AGRICULTURAL / MINOR STORAGE FACILITY)
 EXPOSURE CATEGORY: B

Wind Pressures for C&C Ch 30 Pt 1

All wind pressures include a load factor of 0.6

| Description | Zone | Width | Span | Area | 1/3 Rule | Ref Fig | G _{Cp} Max | G _{Cp} Min | p Max | p Min |
|-------------|------|-------|-------|-------|----------|---------|---------------------|---------------------|-------|---------|
| ft | | ft | ft | sq ft | | | | | psf | psf |
| Zone 1 | 1 | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -2,000 | 24.17 | -59.88 |
| Zone 2e | 2e | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -2,000 | 24.17 | -59.88 |
| Zone 2n | 2n | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,000 | 24.17 | -87.35 |
| Zone 2r | 2r | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,000 | 24.17 | -87.35 |
| Zone 3e | 3e | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,000 | 24.17 | -87.35 |
| Zone 3r | 3r | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,600 | 24.17 | -103.84 |
| Zone 4 | 4 | 1,000 | 1,000 | 1,000 | No | 30.3-1 | 1,000 | -1,100 | 32.41 | -35.16 |
| Zone 5 | 5 | 1,000 | 1,000 | 1,000 | No | 30.3-1 | 1,000 | -1,400 | 32.41 | -43.40 |

Area = Span Length x Effective Width
 1/3 Rule = Effective width need not be less than 1/3 of the span length
 G_{Cp} = External Pressure Coefficients taken from Figures 30.3-1 through 30.3-7
 p = Wind Pressure: qh*(G_{Cp} - G_{Cpi}) [Eqn 30.3-1]
 * Per Para 30.2.2 the Minimum Pressure for C&C is 9.60 psf [0.460 kPa] (Includes LF)

Wind Pressures for C&C per Section 30.9 & Figure 30.3-2

All wind pressures include a load factor of 0.6

| Description | Zone | Width | Span | Area | 1/3 Rule | Ref Fig | G _{Cpi} +/- | G _{Cp} Max | G _{Cp} Min | p Max | p Min |
|-------------|-------|-------|-------|-------|----------|---------|----------------------|---------------------|---------------------|-------|---------|
| ft | | ft | ft | sq ft | | | | | | psf | psf |
| Zone 1_OH | 1_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -2,500 | 9.60 | -68.67 |
| Zone 2e_OH | 2e_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -2,500 | 9.60 | -68.67 |
| Zone 2n_OH | 2n_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -3,500 | 9.60 | -96.14 |
| Zone 2r_OH | 2r_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -3,500 | 9.60 | -96.14 |
| Zone 3e_OH | 3e_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -4,100 | 9.60 | -112.63 |
| Zone 3r_OH | 3r_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -4,700 | 9.60 | -129.11 |

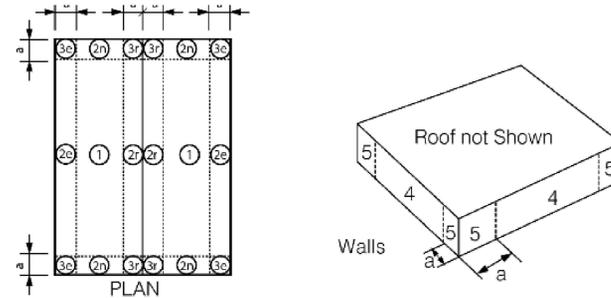
#_OH = Zone # on Overhang with Zero Internal Pressure (G_{Cpi} = 0)
 Area = Span Length x Effective Width
 1/3 Rule = Effective width need not be less than 1/3 of the span length
 p = Wind Pressure: qh*(G_{Cp} - G_{Cpi})*LF [Eqn 30.3-1]
 * Per Para 30.2.2 the Minimum Pressure for C&C is 9.60 psf [0.460 kPa] (Includes LF)
 Values of G_{Cp} for overhangs include contributions from both upper and lower surfaces.

C. FOUNDATION:

- FOUNDATION IS DESIGNED BASED ON PRESUMPTIVE SAFE MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2500 PSF. THE CONTRACTOR SHALL VERIFY THAT THE MINIMUM BEARING CAPACITY OF 2500 PSF IS PRESENT PRIOR TO FOOTING PLACEMENT.
- ALL FILL SHALL BE CLEAN COARSE SAND COMPACTED TO 98% BY HEAVY VIBRATORY ROLLER IN MAXIMUM LIFTS OF 8" CONFORM TO ASTM D 1557.
- GRADING, SOIL PREPARATION AND FOUNDATION CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT AND THE FLORIDA BUILDING CODE 2017.
- FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS PER GEOTECHNICAL REPORT. FLOODING WILL NOT BE PERMITTED.
- ABANDONED FOOTINGS, UTILITIES, ECT. THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
- PROVIDE MIN 6 MIL. APPROVED VAPOR BARRIER. ALL JOINTS TO BE LAPPED MIN 6" AND SEALED.

E. CONCRETE:

- CONCRETE SHALL CONFORM TO THE "BUILDING REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318 LATEST EDITION) WITH MODIFICATIONS AS NOTED IN THE DRAWINGS AND SPECIFICATIONS.
- DESIGN BASED ON 3000 PSI, 28 DAY STRENGTH, UNLESS OTHERWISE NOTED.
- PROTECTION COVER (CLEAR) SHALL BE AS FOLLOWS (U.N.O.):
 - CONCRETE PLACED AGAINST EARTH - 3 INCHES CLEAR
 - STRUCTURAL SLABS ON GROUND - 1.5 INCHES CLEAR
 - FORMED CONCRETE WITH EARTH BACKFILL - 3 INCHES CLEAR
 - WELDED WIRE MESH (WWM) USED IN SLABS SHALL BE FULLY SUPPORTED USING CHAIR APPROVED BY THE MANUFACTURE AT MINIMUM OF 2 FOOT SPACING OR IN ACCORDANCE WITH MANUFACTURES SPECIFICATIONS.
- ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE SECURED IN POSITIONS PRIOR TO PLACING CONCRETE
- PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT.
- CONCRETE PLACEMENT SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301, ACI 318 AND ACI 332.
- SLABS ARE DESIGNED AS UN-REINFORCED PLAIN CONCRETE SLABS ON GROUND.
- CONTRACTION JOINTS SHALL BE CUT OR TOOLED IN THE SLAB 1/3 THE SLAB THICKNESS. ALL SAW CUTS ARE TO BE MADE WITHIN 24 HOURS OF THE CONCRETE PLACEMENT.
- CONCRETE IS PRONE TO CRACKING AND THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR ANY AND ALL CRACKS RESULTING FROM CONCRETE CONTRACTION OR WEAKENING OF CONCRETE DUE TO IMPROPER HANDLING.



- SLAB SAW CUTS ARE NOT ADDRESSED BY THE CURRENT FLORIDA RESIDENTIAL BUILDING CODE. THE SAW CUTS SHOWN HAVE BEEN INCLUDED FOR CONSISTENCY OF CONSTRUCTION.
- BASED ON EMPIRICAL DATA PROVIDED BY THE ACI, CONCRETE SHRINKS AT A RATE OF 5/8" PER 100 FEET. ACI 332 HAS THE FOLLOWING CONTRACTION JOINT REQUIREMENT AND THIS SPACING MAY BE USED IF EXCESSIVE CRACKING IS EXPERIENCED AT THE CONTRACTORS DIGRESSION.
 - CONTRACTION JOINTS IN A 3.5" SLAB SHALL BE PLACED NO MORE THAN 8 FEET APART IN BOTH DIRECTIONS.
 - CONTRACTION JOINTS IN A 4.0" SLAB SHALL BE PLACED NO MORE THAN 10 FEET APART IN BOTH DIRECTIONS.

F. MASONRY WALL CONSTRUCTION:

- MASONRY UNITS SHALL MEET ASTM C-90, GRADE N-1 FOR HOLLOW LOAD BEARING TYPE II MASONRY WITH UNIT STRENGTH OF 1,900 PSI ON THE NET AREA (F'M = 1,500 PSI). UNITS SHALL BE NORMAL WEIGHT 8"X8"X16", TWO HOLES, SQUARE END BLOCKS UNLESS NOTED OTHERWISE. UNITS SHALL HAVE A ROUGH TEXTURE FOR STUCCO APPLICATION.
- ALL MORTAR SHALL CONFORM TO ASTM C 270, TYPE "S" OR "M".
- COURSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.
- VERTICAL REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS, WITH FILLED CELLS FILLED WITH COURSE GROUT.
- VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND THE BOTTOM AND AT A MAXIMUM SPACING OF 8'-0" UNLESS OTHERWISE NOTED. REINFORCEMENT SHALL BE PLACED IN THE CENTER OF THE MASONRY CELL, TYPICAL, UNLESS OTHERWISE NOTED.
- REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 30 INCHES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- HOOKS AT TOP AND BOTTOM OF VERTICAL REINFORCING BARS TO BOND COURSE AND FOOTING TO BE NO LESS THAN 12 BAR DIAMETERS, EXCLUDING BEND.
- EXPANSION TYPE ANCHORS ARE NOT TO BE USED IN BOND COURSE, EMBEDDED ANCHORS OR EPOXY FASTENED STUDS SHALL BE USED.
- ALL MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE.
- OVER ALL MASONRY OPENINGS IN WALLS PROVIDE LINTELS, CAST-IN-PLACE CONCRETE BEAMS, OR OTHER HEADERS AS NOTED ON PLANS.
- VERTICAL FILLED CELLS SHALL HAVE A MINIMUM OF (1) #5 REBAR LAPPED AND TIED TO THE FOUNDATION DOWEL, AND A STANDARD ACI HOOK AT THE TOP, LAPPED AND TIED TO THE HORIZONTAL REINFORCING IN THE TOP OF THE WALL. SEE CHART BELOW FOR MINIMUM LAP AND HOOK LENGTHS.
- HORIZONTAL JOINT REINFORCING (WIRE TYPE WITH 9 GAUGE EQUAL TO DUR-O-WAL) SHALL BE PLACED AT 16" O.C. VERTICALLY AND SHALL EXTEND ATLEAST 6" INTO VERTICAL COLUMNS OR PILASTERS. HORIZONTAL REINFORCEMENT SHALL NOT BE CONTINUOUS ACROSS CONTROL JOINTS AND SHALL BE PLACED FULLY EMBEDDED IN FACE-SHELL MORTAR BEDS FOR THEIR ENTIRE LENGTH (MINIMUM MORTAR COVER OF 3/8").
- THE FINAL SELECTION OF ANY CONCRETE LINTEL WILL BE VERIFIED BY THE EOR AFTER TRUSS ENGINEERING AND LAYOUT PROVIDED BY ROOF AND FLOOR SYSTEM ENGINEER.

G. REINFORCING STEEL:

- WALL BARS AND COLUMN BARS SHALL CONFORM TO ASTM A-615, GRADE 60. FOOTING BARS AND BOND BEAM BARS SHALL CONFORM TO ASTM A-615, GRADE 60.
- BAR BENDS SHALL BE MADE COLD, IN STRICT ACCORDANCE WITH THE DRAWINGS AND C.R.S.I. LATEST EDITION. NO KINKS ALLOWED. SEE CHART FOR STANDARD HOOK SIZES.
- REBAR LAP SPLICES ARE TO BE: CLASS "B" MINIMUM LAP LENGTH SHALL BE PER CHART UNLESS NOTED OTHERWISE. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL AND HALF MESH, WHICHEVER IS GREATER.
- FIELD WELDING OF REINFORCING BARS IN NOT PERMITTED, UNLESS NOTED OTHERWISE
- DOWELS BETWEEN FOOTINGS SHALL BE THE SAME SIZE AND SPACING OR NUMBER AS THE HORIZONTAL REINFORCING.
- DOWELS BETWEEN FOOTING AND WALLS OR COLUMNS SHALL BE THE SAME SIZE AND SPACING OR NUMBER AS THE VERTICAL REINFORCEMENT.

| BAR SIZE | MIN LAP | MIN BEND DIA. | MIN AGI HOOK |
|----------|---------|---------------|--------------|
| #4 | 20" | 3" | 10" |
| #5 | 25" | 3-3/4" | 10" |
| #6 | 34" | 4-1/2" | 11" |
| #7 | 42" | 5-1/4" | 13" |

H. WOOD FRAMING:

- FRAMING LUMBER SHALL BE SURFACE DRY AND HAVE A MAXIMUM MOISTURE CONTENT WHEN USED OF 19%. ALLOWABLE STRESS REQUIREMENTS OF ALL WOOD MEMBERS SHALL BE IN ACCORDANCE WITH THE 2001 EDITION OF THE NDS SUPPLEMENT TABLES 4A, 4D AND 5A.
- ALL FRAMING LUMBER USED FOR EXTERIOR WALLS SHALL BE SOUTHERN PINE NUMBER 2 OR BETTER @ 16" O.C. MAX. LUMBER IN CONTACT WITH GROUND, CONCRETE, OR MASONRY SHALL BE SOUTHERN PINE PRESSURE TREATED. ENGINEERED LUMBER SHALL BE I-LEVEL PRODUCTS OR EQUAL. TYPE, SIZE PER PLANS. FB = 3,100 PSI MINIMUM
- WOOD STUDS FOR INTERIOR LOAD BEARING WALLS SHALL BE SPRUCE PINE FIR (SPF) OR BETTER AT 16" O.C. AND WOOD OR METAL STUDS FOR NON-LOAD BEARING WALLS SHALL BE 24" (MAX) ON UNLESS NOTED OTHERWISE ON WALL FRAMING.
- WALL FRAMING:
 - FOR 2X4 STUD WALL PROVIDE: (1) 2X4 KING STUD AND (1) 2X4 TRIMMER AT EACH END OF (2) PLY HEADER, UNLESS NOTED OTHERWISE.
 - FOR 2X6 STUD WALL PROVIDE: (1) 2X6 KING STUD AND (1) 2X6 TRIMMER AT EACH END OF (3) PLY HEADER, UNLESS NOTED OTHERWISE.
 - ADD DOUBLE 2X STUDS UNDER BEARING POINTS OF GIRDER TRUSSES OR BEAMS, UNLESS NOTED OTHERWISE. AT MULTIPLE 2X STUDS OR TRIMMERS, USE FACE NAIL 16D G.N. AT 8" O.C. FOR EACH, UNLESS NOTED OTHERWISE.
 - ALL BEAMS AND HEADERS, DIMENSIONAL AND ENGINEER WOOD, SHALL BE A MINIMUM OF (2) PLY UNLESS NOTED OTHERWISE.
 - ALL TOP LOADED BEAMS AND HEADERS SHALL BE NAILED WITH (3) ROWS 16D GUN NAILS OR 12D COMMON NAILS (MIN) AT 12" O.C. UNLESS NOTED OTHERWISE.
- STUCCO INSTALLED ON WOOD FRAMED WALLS SHALL BE INSTALLED PER 2020 FBC, FBCR, ASTM C926 AMD ASTM C1063.
- THE FINAL SELECTION OF ANY WOOD FRAMED HEADER WILL BE VERIFIED BY THE EOR AFTER TRUSS ENGINEERING AND LAYOUT PROVIDED BY ROOF AND FLOOR SYSTEM ENGINEER.

I. PREFABRICATED WOOD TRUSSES & FLOOR JOISTS:

- THE ROOF PLAN DEPICTED IS NOT INTENDED TO SERVE AS A TRUSS DESIGN. SEE THE TRUSS ENGINEERING AND LAYOUT PROVIDED BY THE DELEGATED ROOF AND FLOOR SYSTEMS ENGINEER.
- TOP PLATE HEIGHTS MAY VARY. SEE BUILDING SECTIONS, WALL SECTIONS AND ELEVATIONS FOR BEARING HEIGHTS.
- TRUSS SPACING SHALL BE 24" O.C. MAX UNLESS NOTED OTHERWISE. CONVENTIONAL FRAMING SHALL BE 16 INCHES O.C. MAX UNLESS NOTED OTHERWISE.
- FRAME WALLS UP TO UNDERSIDE OF ROOF TRUSSES AT ALL NON-BEARING WALLS AND AT VOLUME AREA UNLESS NOTED OTHERWISE.
- ALIGN TRUSSES AND HAND FRAMING SO ALL GYPSUM WALL BOARD WILL BE CONTINUOUS FROM FLOOR TO CEILING. ENSURE TRUSSES AND WALL FRAMING ARE LEVEL TO PREVENT BOWING OR WAVING OF GYPSUM WALL AND CEILING BOARD.
- PROVIDE BRACING AND BLOCKING PER HIB-91 IN ADDITION TO BRACING AND BLOCKING SHOWN ON TRUSS LAYOUTS PROVIDED BY THE DELEGATED TRUSS SYSTEM ENGINEER.
- PROVIDED APPROVED MOISTURE BARRIER AT ALL CONTACT POINTS BETWEEN TRUSS / NON-P.T. WOOD AND MASONRY.
- ROOF TRUSSES SHALL BE DESIGNED FOR A 10 PSF NON-CONCURRENT BOTTOM CHORD LIVE LOAD.
- ALL ROOF TRUSS AND FLOOR JOIST CONNECTIONS TO BE VERIFIED AFTER TRUSS ENGINEERING AND LAYOUT PROVIDED BY ROOF AND FLOOR SYSTEM ENGINEER.

J. ROOFING:

- ALL ROOF UNDERLAYMENT APPLICATIONS WILL FOLLOW 2020 FBC SECTION 1507.2.8 AND R905.2.7.

2. CONTRADICTIONS:

- IN THE EVENT OF CONTRADICTIONS BETWEEN DRAWINGS NOTES AND THE SPECIFICATIONS ON THIS SHEET THE ENGINEER OF RECORD IS TO BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.

BR-2021-2693

APPROVED DATE

 POLK COUNTY
 Florida's Crossroads of Opportunity
 Dewayne Thomas
 5/19/2021 8:00:19 AM

REVISIONS

PROJECT INFORMATION

LEE ALI
 6817 BROKEN ARROW TRAILS
 LAKELAND, FL 33813

GREGORY S. HURD
 LICENSE
 No 83244
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 02.26.2021

G S H
 ENGINEERING & CONSTRUCTION SERVICES

GREG HURD, P.E.
 GSHURD84@GMAIL.COM
 WWW.GSHURD.COM
 727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.
 THIS DRAWING IS SIGNED AND SEAL FOR STRUCTURAL ENGINEERING AND IS NOT VALID FOR ANY OTHER PROFESSIONAL ENGINEERING DISCIPLINE.
 ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR INFORMATION ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.
 THE ENGINEER IS NOT RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

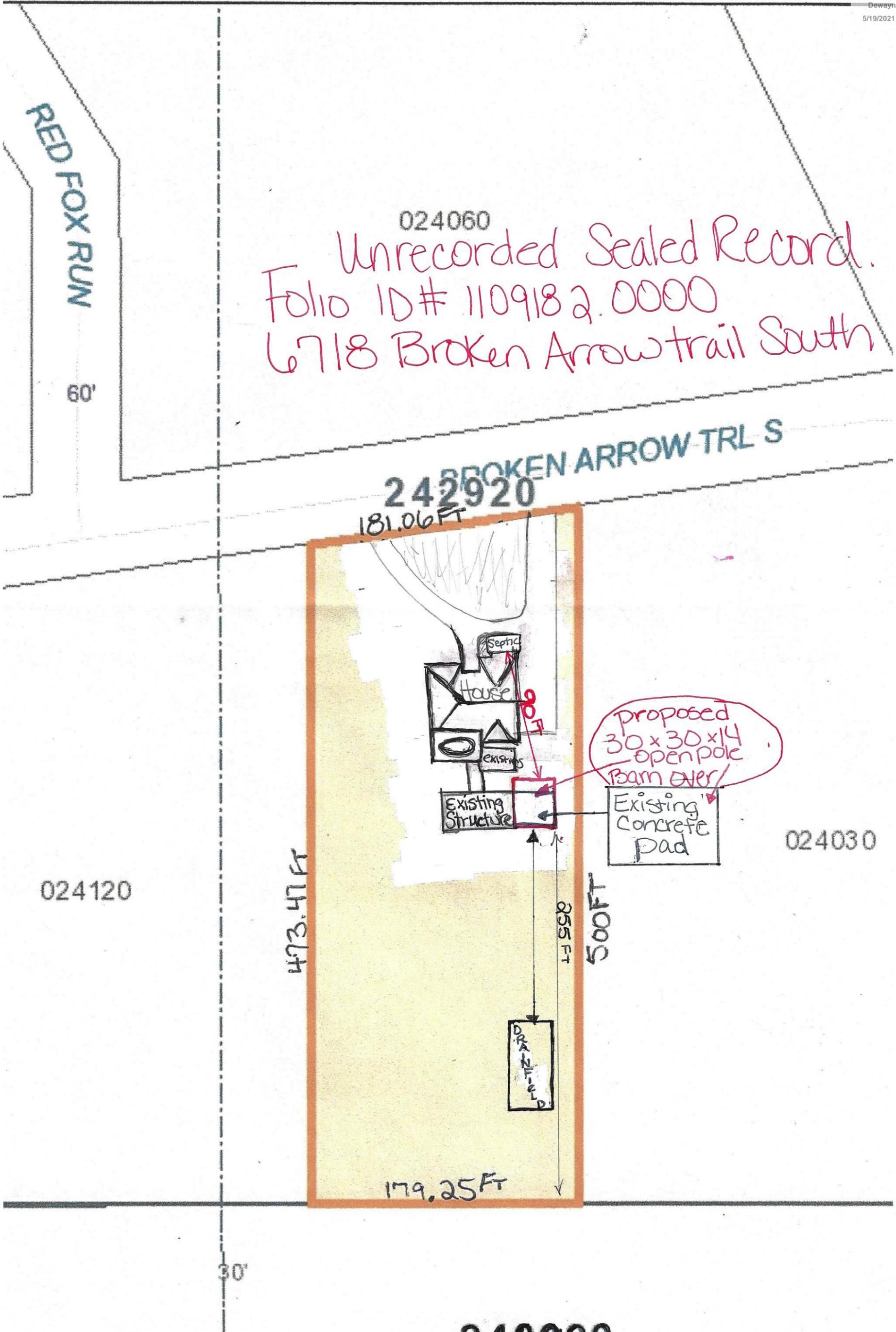
DRAWING TITLE

GENERAL NOTES

SCALE: N/A

SHEET #
 S-1

ALi



RED FOX RUN

60'

024060

Unrecorded Sealed Record.
Folio ID# 1109182.0000
6718 Broken Arrow trail South

242920 BROKEN ARROW TRL S
181.06 FT



Proposed 30 x 30 x 14 open pole Barn over



024030

024120

473.47 FT

855 FT

500 FT



179.25 FT

30'

242029

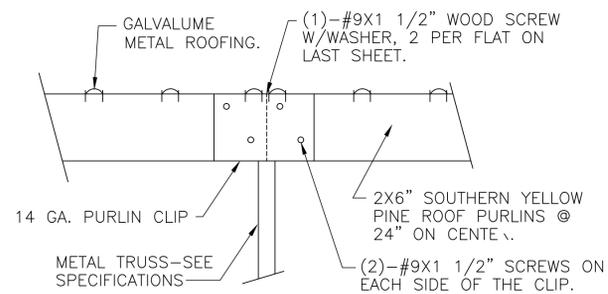
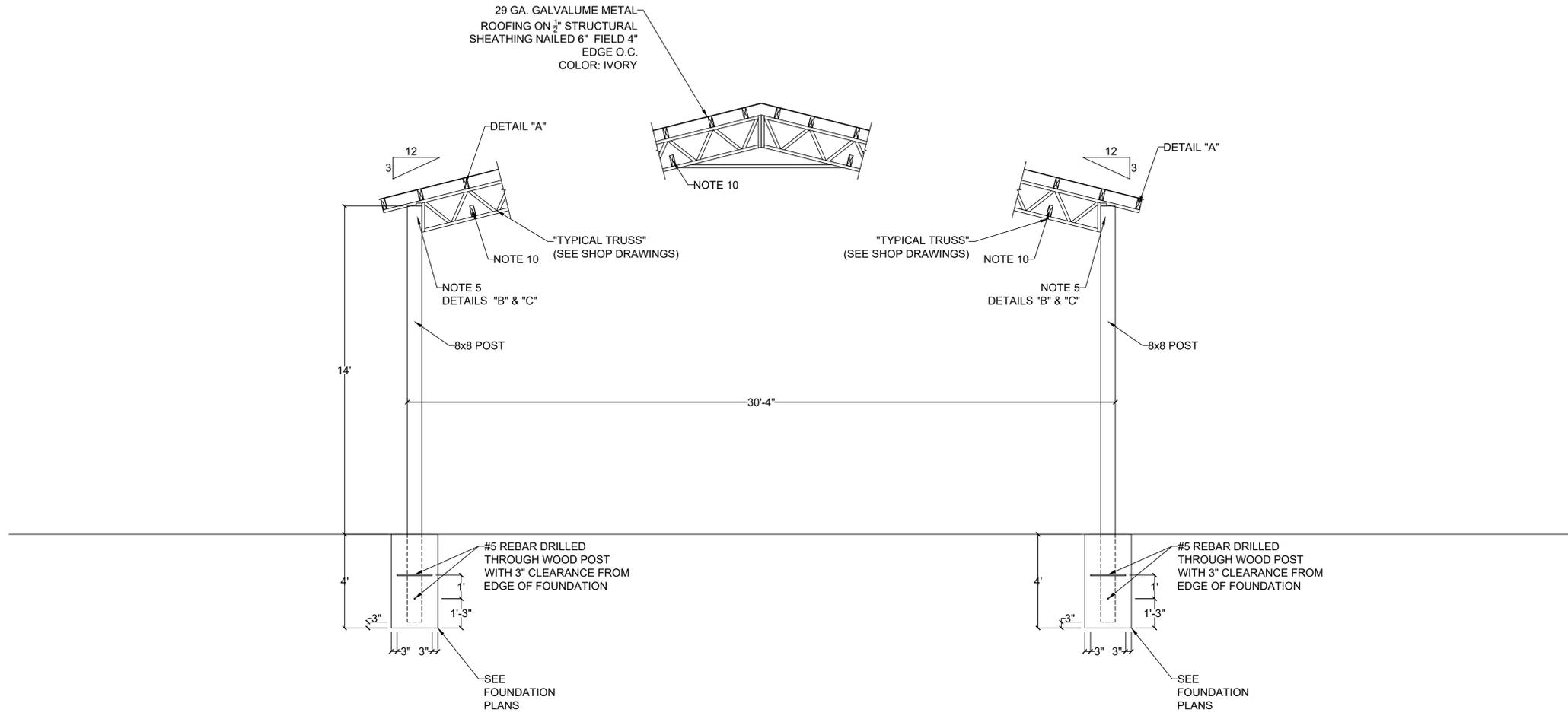
NOTES:

- USE #14 SDS SCREWS AT EACH 2X6 AT 6" FIELD & 4" EDGE O.C. FOR METAL SHEATHING.
- SCREW 2X6 TO STEEL JOIST.
- SCREW 2X6 TO EACH PURLIN WITH 94) SDS25 SCREWS.
- USE (3) 1/2" X 1 1/2" THRU BOLTS AT EACH STEEL JOIST END PLATE CONNECTION.
- USE (2) 1/2" X 9" THRU BOLTS AT EACH STEEL JOIST TO WOOD POST CONNECTION.
- COLLAR TIE BOLTS TO BE 1/2" X 13" X 1" MACHINE BOLTS, (2) REQUIRED AT EACH END.
- REQUIRED BOLTS AND SDS CREWS ARE SUPPLIED BY THE MANUFACTURE.
- SOIL FLOOR UNLESS OTHERWISE NOTED.
- ALL WOOD TO BE PRESSURE TREATED SOUTHERN PINE NO.2 UNLESS OTHERWISE NOTED.
- TYPICAL RAT RUNNERS FASTENED TO THE 16 GA BUCKETS WITH (4) SDS SCREWS (2 EACH SIDE). THE BUCKETS ARE WELDED TO THE STEEL JOISTS. MAX 10' O.C.
- AUGURED CONCRETE FOUNDATION BY THE CONTRACTOR
 - 18" DIAMETER X 4' DEEP FOR WINDZONES 120-139 MPH
 - 24" DIAMETER X 4' DEEP FOR WINDZONES 140-159 MPH
 - 36" DIAMETER X 4' DEEP FOR WINDZONES 160-180 MPH.
 - 12" DIAMETER X 4' DEEP INTERIOR POSTS
- REQUIRED BOLTS AND SDS SCREWS ARE SUPPLIED BY THE MANUFACTURE.
- VARIOUS FLOORING PER CLIENT, NOT SUPPLIED BY MANUFACTURE.
- OWNER AND/OR CONTRACTOR TO CHECK LOCAL BUILDING CODES AND SETBACKS BEFORE STARTING CONSTRUCTION.
- ALL WOOD POSTS TO BE GROUND CONTACT LUMBER RATED.
- CONCRETE SLAB:
 - 6" SLAB RATED FOR VEHICLE LOADING.
 - 4" SLAB RATED FOR OCCUPANCY LOADING

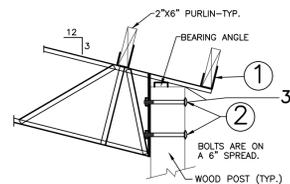
| APL LIST | |
|-------------|--|
| APL # | DESCRIPTION |
| FL 9555.6 | 26 GA MASTER RIB PANELS |
| FL 23507 | THERMA-TRU TRADITIONS AND PROFILES STEEL DOORS |
| FL 14039-R5 | 4712/4812 SINGLE HUNG |
| FL 8888.1 | 203 WINDLOCK COMMERCIAL SHEET DOOR |

NOTE: NOT ALL PRODUCTS LISTED ARE USED IN PLANS.

29 GA. GALVALUME METAL ROOFING ON 3/8" STRUCTURAL SHEATHING NAILED 6" FIELD 4" EDGE O.C. COLOR: IVORY



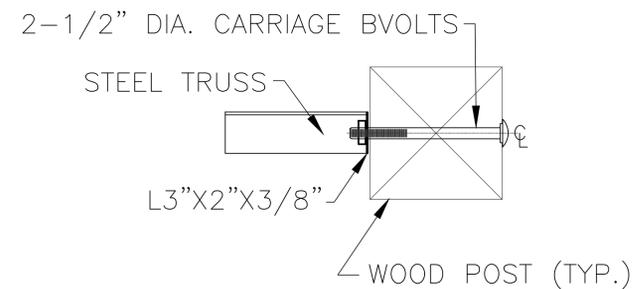
A PURLIN CONNECTION



B POLE TO TRUSS CONNECTION

NOTES

- SCREW 2X6" TO EACH PURLIN WITH 4 - SDS25 SCREWS. NOTE NO. 3 ON SHEET 2
- USE (2) 1/2" X 7" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 8" X 6" POST CONNECTION. NOTE NO. 5 ON SHEET 2
- USE (2) 1/2" X 9" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 8" X 8" POST CONNECTION. NOTE NO. 5 ON SHEET 2



C TRUSS TO POLE CONNECTION (TOP VIEW)

REVISIONS

BR-2021-2693
POLK COUNTY
 Florida's Crossroads of Opportunity
 Dewayne Thomas
 5/19/2021 8:00:19 AM

PROJECT INFORMATION

LEE ALI
 6817 BROKEN ARROW TRAIL S
 LAKELAND, FL 33813



G S H
 GREG HURD, P.E.
 GSHURD84@GMAIL.COM
 WWW.GSHURD.COM
 727-492-5986

HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE. THIS DRAWING IS SUPERSEDED BY ANY SUBSEQUENT REVISIONS AND THE ENGINEER IS NOT RESPONSIBLE FOR ANY STRUCTURAL, MECHANICAL, ELECTRICAL, OR SITE DETAILS SHOWN AND FOR OBTAINING PERMITS AND IS NOT COVERED UNDER THE ENGINEER'S SEAL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION. THE OWNER IS SOLELY RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

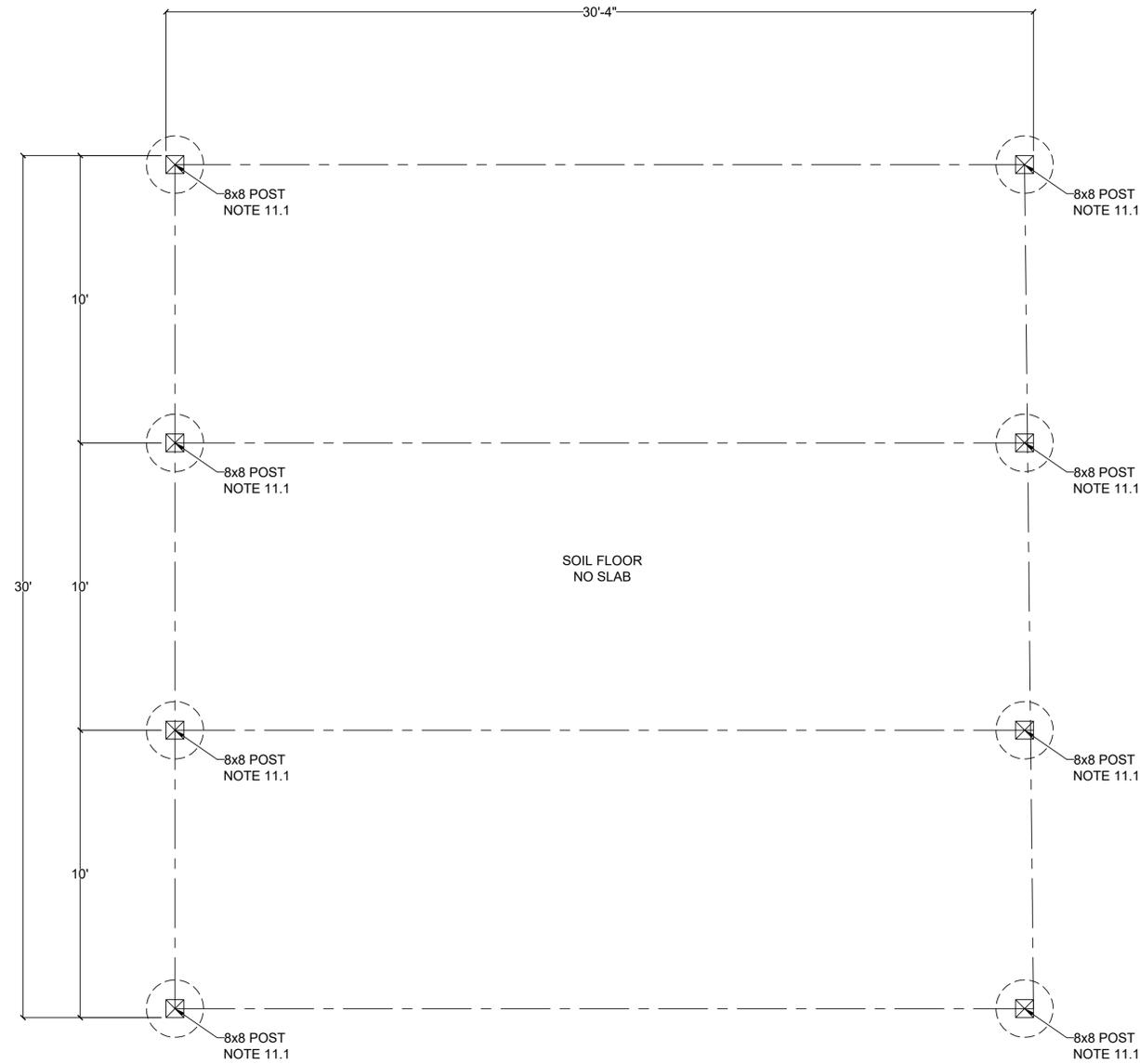
TYPICAL SECTIONS

SCALE: N/A

SHEET #
 S-2

NOTES:

1. USE #14 SDS SCREWS AT EACH 2X6 AT 6" FIELD & 4" EDGE O.C. FOR METAL SHEATHING.
2. SCREW 2X6 TO STEEL JOIST.
3. SCREW 2X6 TO EACH PURLIN. WITH 94) SDS25 SCREWS.
4. USE (3) 1/2" X 1 1/2" THRU BOLTS AT EACH STEEL JOIST END PLATE CONNECTION.
5. USE (2) 1/2" X 9" THRU BOLTS AT EACH STEEL JOIST TO WOOD POST CONNECTION.
6. COLLAR TIE BOLTS TO BE 1/2" X 13" X 1" MACHINE BOLTS, (2) REQUIRED AT EACH END.
7. REQUIRED BOLTS AND SDS CREWS ARE SUPPLIED BY THE MANUFACTURE.
8. SOIL FLOOR UNLESS OTHERWISE NOTED.
9. ALL WOOD TO BE PRESSURE TREATED SOUTHERN PINE NO.2 UNLESS OTHERWISE NOTED.
10. TYPICAL RAT RUNNERS FASTENED TO THE 16 GA BUCKETS WITH (4) SDS SCREWS (2 EACH SIDE). THE BUCKETS ARE WELDED TO THE STEEL JOISTS. MAX 10' O.C.
11. AUGURED CONCRETE FOUNDATION BY THE CONTRACTOR
 - 11.1. 18" DIAMETER X 4' DEEP FOR WINDZONES 120-139 MPH
 - 11.2. 24" DIAMETER X 4' DEEP FOR WINDZONES 140-159 MPH
 - 11.3. 36" DIAMETER X 4' DEEP FOR WINDZONES 160-180 MPH.
 - 11.4. 12" DIAMETER X 4' DEEP INTERIOR POSTS
12. REQUIRED BOLTS AND SDS SCREWS ARE SUPPLIED BY THE MANUFACTURE.
13. VARIOUS FLOORING PER CLIENT, NOT SUPPLIED BY MANUFACTURE. OWNER AND/OR CONTRACTOR TO CHECK LOCAL BUILDING CODES AND SETBACKS BEFORE STARTING CONSTRUCTION.
14. ALL WOOD POSTS TO BE GROUND CONTACT LUMBER RATED.
15. CONCRETE SLAB:
 - 16.1. 6" SLAB RATED FOR VEHICLE LOADING.
 - 16.2. 4" SLAB RATED FOR OCCUPANCY LOADING



BR-2021-2693

POLK COUNTY
Florida's Crossroads of Opportunity
Dewayne Thomas
5/19/2021 8:00:19 AM

REVISIONS

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813

G S H
ENGINEERING & CONSTRUCTION SERVICES

GREG HURD, P.E.
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY ENGINEERING KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.

THIS DRAWING IS SUPERSEDED BY ANY SUBSEQUENT REVISIONS OR ADDENDUMS. THE ENGINEER IS NOT RESPONSIBLE FOR ANY CHANGES OR OMISSIONS IN THE ORIGINAL DRAWING.

ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR REFERENCE ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE COMMENCING CONSTRUCTION.

THE ENGINEER IS NOT RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

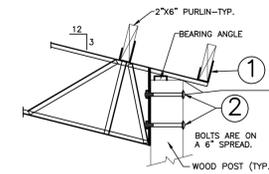
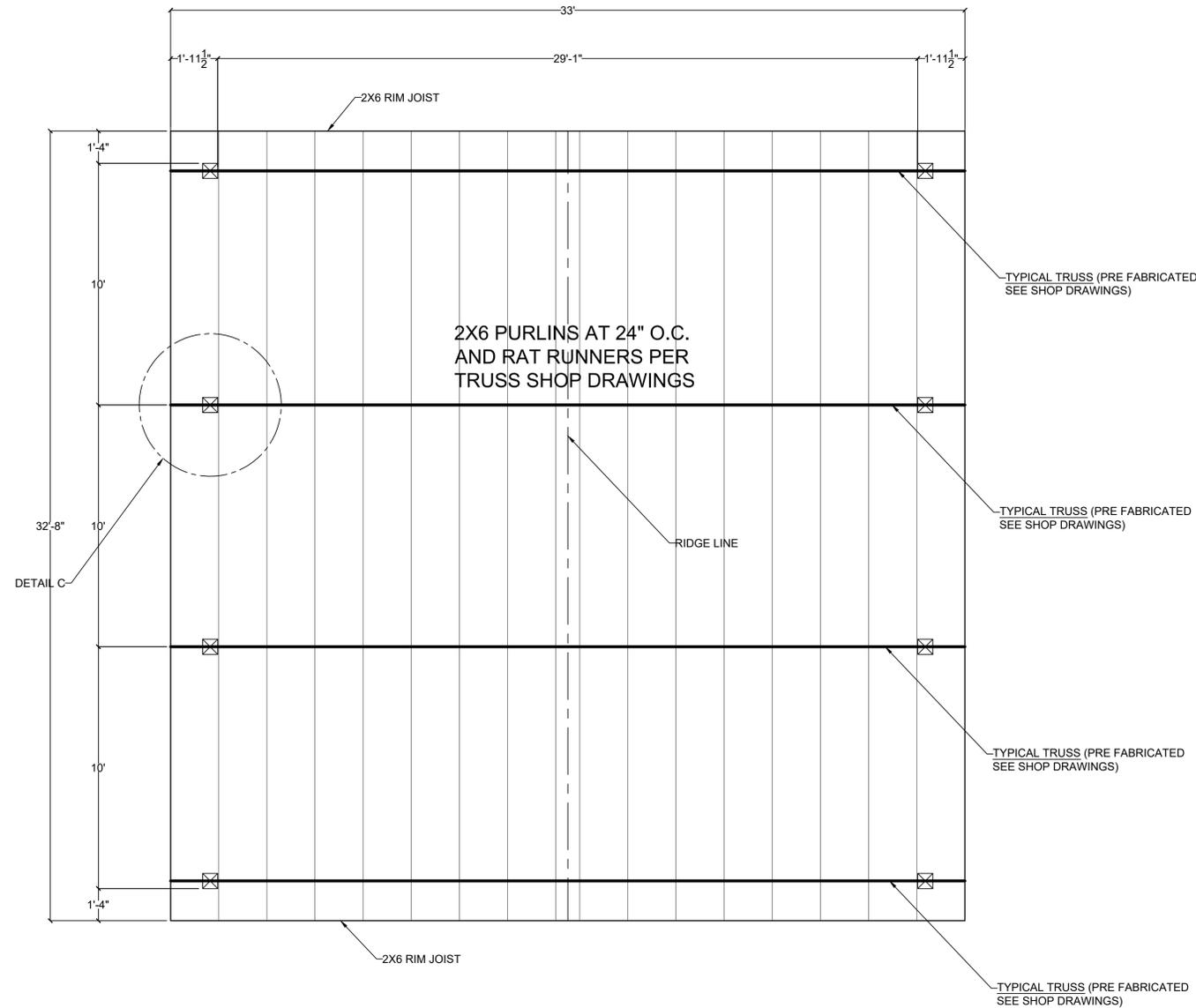
DRAWING TITLE
FOUNDATION PLAN

SCALE: N/A

SHEET #
S - 3

NOTES:

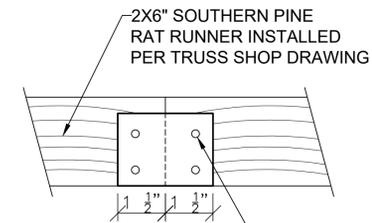
1. USE #14 SDS SCREWS AT EACH 2X6 AT 6" FIELD & 4" EDGE O.C. FOR METAL SHEATHING.
2. SCREW 2X6 TO STEEL JOIST.
3. SCREW 2X6 TO EACH PURLIN. WITH 94) SDS25 SCREWS.
4. USE (3) 1/2" X 1 1/2" THRU BOLTS AT EACH STEEL JOIST END PLATE CONNECTION.
5. USE (2) 1/2" X 9" THRU BOLTS AT EACH STEEL JOIST TO WOOD POST CONNECTION.
6. COLLAR TIE BOLTS TO BE 1/2" X 13" X 1" MACHINE BOLTS, (2) REQUIRED AT EACH END.
7. REQUIRED BOLTS AND SDS CREWS ARE SUPPLIED BY THE MANUFACTURE.
8. SOIL FLOOR UNLESS OTHERWISE NOTED.
9. ALL WOOD TO BE PRESSURE TREATED SOUTHERN PINE NO.2 UNLESS OTHERWISE NOTED.
10. TYPICAL RAT RUNNERS FASTENED TO THE 16 GA BUCKETS WITH (4) SDS SCREWS (2 EACH SIDE). THE BUCKETS ARE WELDED TO THE STEEL JOISTS. MAX 10' O.C.
11. AUGURED CONCRETE FOUNDATION BY THE CONTRACTOR
 - 11.1. 18" DIAMETER X 4' DEEP FOR WINDZONES 120-139 MPH
 - 11.2. 24" DIAMETER X 4' DEEP FOR WINDZONES 140-159 MPH
 - 11.3. 36" DIAMETER X 4' DEEP FOR WINDZONES 160-180 MPH.
 - 11.4. 12" DIAMETER X 4' DEEP INTERIOR POSTS
12. REQUIRED BOLTS AND SDS SCREWS ARE SUPPLIED BY THE MANUFACTURE.
13. VARIOUS FLOORING PER CLIENT, NOT SUPPLIED BY MANUFACTURE.
14. OWNER AND/OR CONTRACTOR TO CHECK LOCAL BUILDING CODES AND SETBACKS BEFORE STARTING CONSTRUCTION.
15. ALL WOOD POSTS TO BE GROUND CONTACT LUMBER RATED.
16. CONCRETE SLAB:
 - 16.1. 6" SLAB RATED FOR VEHICLE LOADING.
 - 16.2. 4" SLAB RATED FOR OCCUPANCY LOADING



C TYPICAL TRUSS TO POST CONNECTION NTS

NOTES

1. SCREW 2X6" TO EACH PURLIN WITH 4 - SDS25 SCREWS. NOTE NO. 3 ON SHEET 2
2. USE (2) 1/2" Ø X 7" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 6" X 6" POST CONNECTION. NOTE NO. 5 ON SHEET 2
- USE (2) 1/2" Ø X 9" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 8" X 8" POST CONNECTION. NOTE NO. 5 ON SHEET 2



D RAT RUNNER CONNECTION NTS

BR-2021-2693

APPROVED DATE
POLK COUNTY
Florida's Crossroads of Opportunity
Dewayne Thomas
5/19/2021 8:00:19 AM

REVISIONS

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813

GREGORY S. HURD
LICENSE
No 83244
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
02.26.2021

G S H
ENGINEERING & CONSTRUCTION SERVICES

GREG HURD, P.E.
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.

THIS DRAWING IS SUPERSEDED BY ANY LATER DATED DRAWING. THE ENGINEER IS NOT RESPONSIBLE FOR ANY CHANGES OR FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

TRUSS PLAN

SCALE: N/A

SHEET #

S - 4

GENERAL DESIGN NOTES:

A. GENERAL:

- WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODE: THE FLORIDA BUILDING CODE 2020, 7th EDITION. WHERE MORE STRINGENT CODES AREA ADOPTED, THEY SHALL GOVERN THE WORK.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON DRAWINGS. NOTES ON STRUCTURAL PLANS SHALL TAKE PRECEDENCE OVER THE STRUCTURAL GENERAL NOTES ON THIS SHEET.
- EXCEPT AS SHOWN ON STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL, ELECTRICAL, PLUMBING AND MECHANICAL DRAWINGS FOR DIMENSIONS, LOCATIONS, SIZES AND CONDITIONS, INCLUDING WINDOWS, DOORS, WALLS, CONCRETE CURBS, PITS, DRAINS, TRENCHES, FLOOR AND ROOF SLOPES, DEPRESSED AREAS, CHANGES IN LEVEL, FLOOR AND ROOF OPENINGS, STAIRS, PIPE AND DUCT RUNS, SLEEVES AND HANDERS, ELECTRICAL, CONDUITS AND OUTLETS, ITEMS EMBEDDED OR ATTACHED TO STRUCTURAL MEMBERS, EQUIPMENT, BASES AND ANCHORAGE, ETC.
- THE ENGINEERS SEAL APPLIES ONLY TO THE STRUCTURAL COMPONENTS ON THIS DOCUMENT. THE SEAL DOES NOT INCLUDE CONSTRUCTION MEANS, METHODS, TECHNIQUES, OR SAFETY PRECAUTIONS, WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL DIMENSIONS ARE TO BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS. ANY DEVIATIONS OR DISCREPANCIES ON THESE PLANS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD.
- ASTM SPECIFICATIONS INDICATED SHALL BE THE LATEST EDITIONS OF THE STANDARDS, UNLESS NOTED OTHERWISE.
- ALL STRUCTURAL DEAD AND LIVE LOADS (PSF) WILL BE CALCULATED USING VALUES BELOW UNLESS OTHERWISE SPECIFIED IN THE PLAN SET.

| | | | |
|------------------|--------|-------------------|--------|
| ROOF DEAD LOAD = | 5 PSF | FLOOR DEAD LOAD = | 20 PSF |
| ROOF LIVE LOAD = | 10 PSF | FLOOR LIVE LOAD = | 40 PSF |

B. WIND DESIGN CRITERIA / COMPONENTS & CLADDING:

WIND SPEED: 128 MPH ULTIMATE DESIGN WIND SPEED (ASCE 7-16)
 RISK CATEGORY: I (AGRICULTURAL / MINOR STORAGE FACILITY)
 EXPOSURE CATEGORY: B

Wind Pressures for C&C Ch 30 Pt 1

All wind pressures include a load factor of 0.6

| Description | Zone | Width | Span | Area | 1/3 Rule | Ref Fig | G _{Cp} Max | G _{Cp} Min | p Max | p Min |
|-------------|------|-------|-------|-------|----------|---------|---------------------|---------------------|-------|---------|
| ft | | ft | ft | sq ft | | | | | psf | psf |
| Zone 1 | 1 | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -2,000 | 24.17 | -59.88 |
| Zone 2e | 2e | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -2,000 | 24.17 | -59.88 |
| Zone 2n | 2n | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,000 | 24.17 | -87.35 |
| Zone 2r | 2r | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,000 | 24.17 | -87.35 |
| Zone 3e | 3e | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,000 | 24.17 | -87.35 |
| Zone 3r | 3r | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.700 | -3,600 | 24.17 | -103.84 |
| Zone 4 | 4 | 1,000 | 1,000 | 1,000 | No | 30.3-1 | 1,000 | -1,100 | 32.41 | -35.16 |
| Zone 5 | 5 | 1,000 | 1,000 | 1,000 | No | 30.3-1 | 1,000 | -1,400 | 32.41 | -43.40 |

Area = Span Length x Effective Width
 1/3 Rule = Effective width need not be less than 1/3 of the span length
 G_{Cp} = External Pressure Coefficients taken from Figures 30.3-1 through 30.3-7
 p = Wind Pressure: qh*(G_{Cp} - G_{Cpi}) [Eqn 30.3-1]
 * Per Para 30.2.2 the Minimum Pressure for C&C is 9.60 psf [0.460 kPa] (Includes LF)

Wind Pressures for C&C per Section 30.9 & Figure 30.3-2

All wind pressures include a load factor of 0.6

| Description | Zone | Width | Span | Area | 1/3 Rule | Ref Fig | G _{Cpi} +/- | G _{Cp} Max | G _{Cp} Min | p Max | p Min |
|-------------|-------|-------|-------|-------|----------|---------|----------------------|---------------------|---------------------|-------|---------|
| ft | | ft | ft | sq ft | | | | | | psf | psf |
| Zone 1_OH | 1_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -2,500 | 9.60 | -68.67 |
| Zone 2e_OH | 2e_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -2,500 | 9.60 | -68.67 |
| Zone 2n_OH | 2n_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -3,500 | 9.60 | -96.14 |
| Zone 2r_OH | 2r_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -3,500 | 9.60 | -96.14 |
| Zone 3e_OH | 3e_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -4,100 | 9.60 | -112.63 |
| Zone 3r_OH | 3r_OH | 1,000 | 1,000 | 1,000 | No | 30.3-2B | 0.00 | 0.000 | -4,700 | 9.60 | -129.11 |

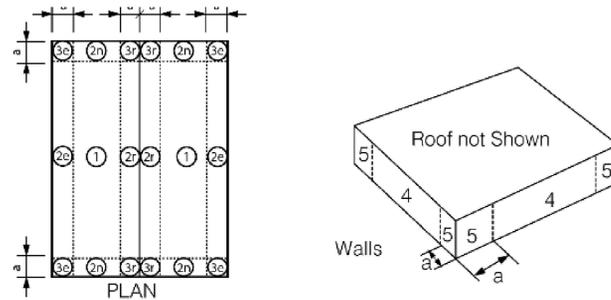
#_OH = Zone # on Overhang with Zero Internal Pressure (G_{Cpi} = 0)
 Area = Span Length x Effective Width
 1/3 Rule = Effective width need not be less than 1/3 of the span length
 p = Wind Pressure: qh*(G_{Cp} - G_{Cpi})*LF [Eqn 30.3-1]
 * Per Para 30.2.2 the Minimum Pressure for C&C is 9.60 psf [0.460 kPa] (Includes LF)
 Values of G_{Cp} for overhangs include contributions from both upper and lower surfaces.

C. FOUNDATION:

- FOUNDATION IS DESIGNED BASED ON PRESUMPTIVE SAFE MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 2500 PSF. THE CONTRACTOR SHALL VERIFY THAT THE MINIMUM BEARING CAPACITY OF 2500 PSF IS PRESENT PRIOR TO FOOTING PLACEMENT.
- ALL FILL SHALL BE CLEAN COARSE SAND COMPACTED TO 98% BY HEAVY VIBRATORY ROLLER IN MAXIMUM LIFTS OF 8" CONFORM TO ASTM D 1557.
- GRADING, SOIL PREPARATION AND FOUNDATION CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT AND THE FLORIDA BUILDING CODE 2017.
- FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS PER GEOTECHNICAL REPORT. FLOODING WILL NOT BE PERMITTED.
- ABANDONED FOOTINGS, UTILITIES, ECT. THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
- PROVIDE MIN 6 MIL. APPROVED VAPOR BARRIER. ALL JOINTS TO BE LAPPED MIN 6" AND SEALED.

E. CONCRETE:

- CONCRETE SHALL CONFORM TO THE "BUILDING REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318 LATEST EDITION) WITH MODIFICATIONS AS NOTED IN THE DRAWINGS AND SPECIFICATIONS.
- DESIGN BASED ON 3000 PSI, 28 DAY STRENGTH, UNLESS OTHERWISE NOTED.
- PROTECTION COVER (CLEAR) SHALL BE AS FOLLOWS (U.N.O.):
 - CONCRETE PLACED AGAINST EARTH - 3 INCHES CLEAR
 - STRUCTURAL SLABS ON GROUND - 1.5 INCHES CLEAR
 - FORMED CONCRETE WITH EARTH BACKFILL - 3 INCHES CLEAR
 - WELDED WIRE MESH (WWM) USED IN SLABS SHALL BE FULLY SUPPORTED USING CHAIR APPROVED BY THE MANUFACTURE AT MINIMUM OF 2 FOOT SPACING OR IN ACCORDANCE WITH MANUFACTURES SPECIFICATIONS.
- ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE SECURED IN POSITIONS PRIOR TO PLACING CONCRETE
- PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT.
- CONCRETE PLACEMENT SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301, ACI 318 AND ACI 332.
- SLABS ARE DESIGNED AS UN-REINFORCED PLAIN CONCRETE SLABS ON GROUND.
- CONTRACTION JOINTS SHALL BE CUT OR TOOLED IN THE SLAB 1/3 THE SLAB THICKNESS. ALL SAW CUTS ARE TO BE MADE WITHIN 24 HOURS OF THE CONCRETE PLACEMENT.
- CONCRETE IS PRONE TO CRACKING AND THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR ANY AND ALL CRACKS RESULTING FROM CONCRETE CONTRACTION OR WEAKENING OF CONCRETE DUE TO IMPROPER HANDLING.



- SLAB SAW CUTS ARE NOT ADDRESSED BY THE CURRENT FLORIDA RESIDENTIAL BUILDING CODE. THE SAW CUTS SHOWN HAVE BEEN INCLUDED FOR CONSISTENCY OF CONSTRUCTION.
- BASED ON EMPIRICAL DATA PROVIDED BY THE ACI, CONCRETE SHRINKS AT A RATE OF 5/8" PER 100 FEET. ACI 332 HAS THE FOLLOWING CONTRACTION JOINT REQUIREMENT AND THIS SPACING MAY BE USED IF EXCESSIVE CRACKING IS EXPERIENCED AT THE CONTRACTORS DIGRESSION.
 - CONTRACTION JOINTS IN A 3.5" SLAB SHALL BE PLACED NO MORE THAN 8 FEET APART IN BOTH DIRECTIONS.
 - CONTRACTION JOINTS IN A 4.0" SLAB SHALL BE PLACED NO MORE THAN 10 FEET APART IN BOTH DIRECTIONS.

F. MASONRY WALL CONSTRUCTION:

- MASONRY UNITS SHALL MEET ASTM C-90, GRADE N-1 FOR HOLLOW LOAD BEARING TYPE II MASONRY WITH UNIT STRENGTH OF 1,900 PSI ON THE NET AREA (F'M = 1,500 PSI). UNITS SHALL BE NORMAL WEIGHT 8"X8"X16", TWO HOLES, SQUARE END BLOCKS UNLESS NOTED OTHERWISE. UNITS SHALL HAVE A ROUGH TEXTURE FOR STUCCO APPLICATION.
- ALL MORTAR SHALL CONFORM TO ASTM C 270, TYPE "S" OR "M".
- COURSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.
- VERTICAL REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS, WITH FILLED CELLS FILLED WITH COURSE GROUT.
- VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND THE BOTTOM AND AT A MAXIMUM SPACING OF 8'-0" UNLESS OTHERWISE NOTED. REINFORCEMENT SHALL BE PLACED IN THE CENTER OF THE MASONRY CELL, TYPICAL, UNLESS OTHERWISE NOTED.
- REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 30 INCHES UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- HOOKS AT TOP AND BOTTOM OF VERTICAL REINFORCING BARS TO BOND COURSE AND FOOTING TO BE NO LESS THAN 12 BAR DIAMETERS, EXCLUDING BEND.
- EXPANSION TYPE ANCHORS ARE NOT TO BE USED IN BOND COURSE, EMBEDDED ANCHORS OR EPOXY FASTENED STUDS SHALL BE USED.
- ALL MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE.
- OVER ALL MASONRY OPENINGS IN WALLS PROVIDE LINTELS, CAST-IN-PLACE CONCRETE BEAMS, OR OTHER HEADERS AS NOTED ON PLANS.
- VERTICAL FILLED CELLS SHALL HAVE A MINIMUM OF (1) #5 REBAR LAPPED AND TIED TO THE FOUNDATION DOWEL, AND A STANDARD ACI HOOK AT THE TOP, LAPPED AND TIED TO THE HORIZONTAL REINFORCING IN THE TOP OF THE WALL. SEE CHART BELOW FOR MINIMUM LAP AND HOOK LENGTHS.
- HORIZONTAL JOINT REINFORCING (WIRE TYPE WITH 9 GAUGE EQUAL TO DUR-O-WAL) SHALL BE PLACED AT 16" O.C. VERTICALLY AND SHALL EXTEND ATLEAST 6" INTO VERTICAL COLUMNS OR PILASTERS. HORIZONTAL REINFORCEMENT SHALL NOT BE CONTINUOUS ACROSS CONTROL JOINTS AND SHALL BE PLACED FULLY EMBEDDED IN FACE-SHELL MORTAR BEDS FOR THEIR ENTIRE LENGTH (MINIMUM MORTAR COVER OF 3/8").
- THE FINAL SELECTION OF ANY CONCRETE LINTEL WILL BE VERIFIED BY THE EOR AFTER TRUSS ENGINEERING AND LAYOUT PROVIDED BY ROOF AND FLOOR SYSTEM ENGINEER.

G. REINFORCING STEEL:

- WALL BARS AND COLUMN BARS SHALL CONFORM TO ASTM A-615, GRADE 60. FOOTING BARS AND BOND BEAM BARS SHALL CONFORM TO ASTM A-615, GRADE 60.
- BAR BENDS SHALL BE MADE COLD, IN STRICT ACCORDANCE WITH THE DRAWINGS AND C.R.S.I. LATEST EDITION. NO KINKS ALLOWED. SEE CHART FOR STANDARD HOOK SIZES.
- REBAR LAP SPLICES ARE TO BE: CLASS "B" MINIMUM LAP LENGTH SHALL BE PER CHART UNLESS NOTED OTHERWISE. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL AND HALF MESH, WHICHEVER IS GREATER.
- FIELD WELDING OF REINFORCING BARS IN NOT PERMITTED, UNLESS NOTED OTHERWISE
- DOWELS BETWEEN FOOTINGS SHALL BE THE SAME SIZE AND SPACING OR NUMBER AS THE HORIZONTAL REINFORCING.
- DOWELS BETWEEN FOOTING AND WALLS OR COLUMNS SHALL BE THE SAME SIZE AND SPACING OR NUMBER AS THE VERTICAL REINFORCEMENT.

| BAR SIZE | MIN LAP | MIN BEND DIA. | MIN AGI HOOK |
|----------|---------|---------------|--------------|
| #4 | 20" | 3" | 10" |
| #5 | 25" | 3-3/4" | 10" |
| #6 | 34" | 4-1/2" | 11" |
| #7 | 42" | 5-1/4" | 13" |

H. WOOD FRAMING:

- FRAMING LUMBER SHALL BE SURFACE DRY AND HAVE A MAXIMUM MOISTURE CONTENT WHEN USED OF 19%. ALLOWABLE STRESS REQUIREMENTS OF ALL WOOD MEMBERS SHALL BE IN ACCORDANCE WITH THE 2001 EDITION OF THE NDS SUPPLEMENT TABLES 4A, 4D AND 5A.
- ALL FRAMING LUMBER USED FOR EXTERIOR WALLS SHALL BE SOUTHERN PINE NUMBER 2 OR BETTER @ 16" O.C. MAX. LUMBER IN CONTACT WITH GROUND, CONCRETE, OR MASONRY SHALL BE SOUTHERN PINE PRESSURE TREATED. ENGINEERED LUMBER SHALL BE I-LEVEL PRODUCTS OR EQUAL. TYPE, SIZE PER PLANS. FB = 3,100 PSI MINIMUM
- WOOD STUDS FOR INTERIOR LOAD BEARING WALLS SHALL BE SPRUCE PINE FIR (SPF) OR BETTER AT 16" O.C. AND WOOD OR METAL STUDS FOR NON-LOAD BEARING WALLS SHALL BE 24" (MAX) ON UNLESS NOTED OTHERWISE ON WALL FRAMING.
- WALL FRAMING:
 - FOR 2X4 STUD WALL PROVIDE: (1) 2X4 KING STUD AND (1) 2X4 TRIMMER AT EACH END OF (2) PLY HEADER, UNLESS NOTED OTHERWISE.
 - FOR 2X6 STUD WALL PROVIDE: (1) 2X6 KING STUD AND (1) 2X6 TRIMMER AT EACH END OF (3) PLY HEADER, UNLESS NOTED OTHERWISE.
 - ADD DOUBLE 2X STUDS UNDER BEARING POINTS OF GIRDER TRUSSES OR BEAMS, UNLESS NOTED OTHERWISE. AT MULTIPLE 2X STUDS OR TRIMMERS, USE FACE NAIL 16D G.N. AT 8" O.C. FOR EACH, UNLESS NOTED OTHERWISE.
 - ALL BEAMS AND HEADERS, DIMENSIONAL AND ENGINEER WOOD, SHALL BE A MINIMUM OF (2) PLY UNLESS NOTED OTHERWISE.
 - ALL TOP LOADED BEAMS AND HEADERS SHALL BE NAILED WITH (3) ROWS 16D GUN NAILS OR 12D COMMON NAILS (MIN) AT 12" O.C. UNLESS NOTED OTHERWISE.
- STUCCO INSTALLED ON WOOD FRAMED WALLS SHALL BE INSTALLED PER 2020 FBC, FBCR, ASTM C926 AMD ASTM C1063.
- THE FINAL SELECTION OF ANY WOOD FRAMED HEADER WILL BE VERIFIED BY THE EOR AFTER TRUSS ENGINEERING AND LAYOUT PROVIDED BY ROOF AND FLOOR SYSTEM ENGINEER.

I. PREFABRICATED WOOD TRUSSES & FLOOR JOISTS:

- THE ROOF PLAN DEPICTED IS NOT INTENDED TO SERVE AS A TRUSS DESIGN. SEE THE TRUSS ENGINEERING AND LAYOUT PROVIDED BY THE DELEGATED ROOF AND FLOOR SYSTEMS ENGINEER.
- TOP PLATE HEIGHTS MAY VARY. SEE BUILDING SECTIONS, WALL SECTIONS AND ELEVATIONS FOR BEARING HEIGHTS.
- TRUSS SPACING SHALL BE 24" O.C. MAX UNLESS NOTED OTHERWISE. CONVENTIONAL FRAMING SHALL BE 16 INCHES O.C. MAX UNLESS NOTED OTHERWISE.
- FRAME WALLS UP TO UNDERSIDE OF ROOF TRUSSES AT ALL NON-BEARING WALLS AND AT VOLUME AREA UNLESS NOTED OTHERWISE.
- ALIGN TRUSSES AND HAND FRAMING SO ALL GYPSUM WALL BOARD WILL BE CONTINUOUS FROM FLOOR TO CEILING. ENSURE TRUSSES AND WALL FRAMING ARE LEVEL TO PREVENT BOWING OR WAVING OF GYPSUM WALL AND CEILING BOARD.
- PROVIDE BRACING AND BLOCKING PER HIB-91 IN ADDITION TO BRACING AND BLOCKING SHOWN ON TRUSS LAYOUTS PROVIDED BY THE DELEGATED TRUSS SYSTEM ENGINEER.
- PROVIDED APPROVED MOISTURE BARRIER AT ALL CONTACT POINTS BETWEEN TRUSS / NON-P.T. WOOD AND MASONRY.
- ROOF TRUSSES SHALL BE DESIGNED FOR A 10 PSF NON-CONCURRENT BOTTOM CHORD LIVE LOAD.
- ALL ROOF TRUSS AND FLOOR JOIST CONNECTIONS TO BE VERIFIED AFTER TRUSS ENGINEERING AND LAYOUT PROVIDED BY ROOF AND FLOOR SYSTEM ENGINEER.

J. ROOFING:

- ALL ROOF UNDERLAYMENT APPLICATIONS WILL FOLLOW 2020 FBC SECTION 1507.2.8 AND R905.2.7.

2. CONTRADICTIONS:

- IN THE EVENT OF CONTRADICTIONS BETWEEN DRAWINGS NOTES AND THE SPECIFICATIONS ON THIS SHEET THE ENGINEER OF RECORD IS TO BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.

BR-2021-2693

APPROVED

 POLK COUNTY
 Florida's Crossroads of Opportunity
 Dewayne Thomas
 5/19/2021 8:00:19 AM

REVISIONS

PROJECT INFORMATION

LEE ALI
 6817 BROKEN ARROW TRAILS
 LAKELAND, FL 33813

GREGORY S. HURD
 LICENSE
 No 83244
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 02.26.2021

G S H
 ENGINEERING & CONSTRUCTION SERVICES

GREG HURD, P.E.
 GSHURD84@GMAIL.COM
 WWW.GSHURD.COM
 727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.
 THIS DRAWING IS SIGNED AND SEAL FOR STRUCTURAL PURPOSES AND IS NOT VALID FOR ANY OTHER PURPOSES.
 ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR REFERENCE ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.
 THE ENGINEER IS NOT RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

GENERAL NOTES

SCALE: N/A

SHEET #
 S-1

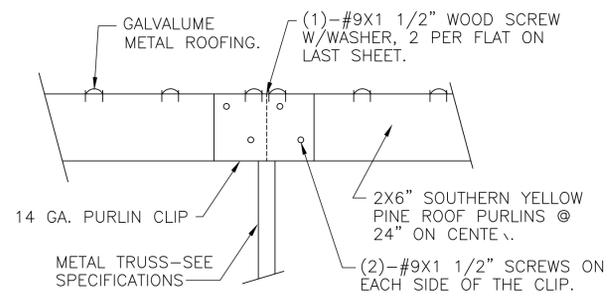
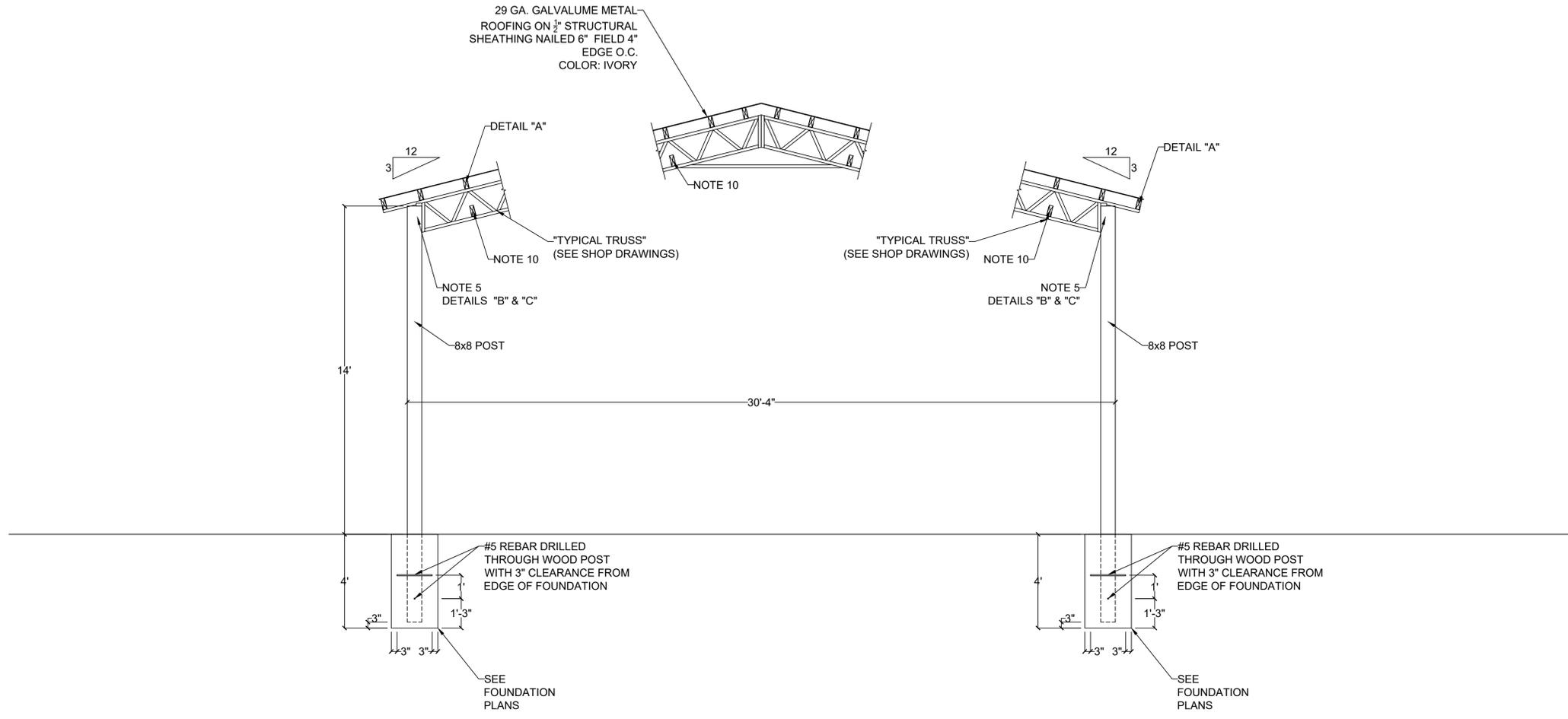
NOTES:

- USE #14 SDS SCREWS AT EACH 2X6 AT 6" FIELD & 4" EDGE O.C. FOR METAL SHEATHING.
- SCREW 2X6 TO STEEL JOIST.
- SCREW 2X6 TO EACH PURLIN WITH 94) SDS25 SCREWS.
- USE (3) 1/2" X 1 1/2" THRU BOLTS AT EACH STEEL JOIST END PLATE CONNECTION.
- USE (2) 1/2" X 9" THRU BOLTS AT EACH STEEL JOIST TO WOOD POST CONNECTION.
- COLLAR TIE BOLTS TO BE 1/2" X 13" X 1" MACHINE BOLTS, (2) REQUIRED AT EACH END.
- REQUIRED BOLTS AND SDS CREWS ARE SUPPLIED BY THE MANUFACTURE.
- SOIL FLOOR UNLESS OTHERWISE NOTED.
- ALL WOOD TO BE PRESSURE TREATED SOUTHERN PINE NO.2 UNLESS OTHERWISE NOTED.
- TYPICAL RAT RUNNERS FASTENED TO THE 16 GA BUCKETS WITH (4) SDS SCREWS (2 EACH SIDE). THE BUCKETS ARE WELDED TO THE STEEL JOISTS. MAX 10' O.C.
- AUGURED CONCRETE FOUNDATION BY THE CONTRACTOR
 - 18" DIAMETER X 4' DEEP FOR WINDZONES 120-139 MPH
 - 24" DIAMETER X 4' DEEP FOR WINDZONES 140-159 MPH
 - 36" DIAMETER X 4' DEEP FOR WINDZONES 160-180 MPH.
 - 12" DIAMETER X 4' DEEP INTERIOR POSTS
- REQUIRED BOLTS AND SDS SCREWS ARE SUPPLIED BY THE MANUFACTURE.
- VARIOUS FLOORING PER CLIENT, NOT SUPPLIED BY MANUFACTURE.
- OWNER AND/OR CONTRACTOR TO CHECK LOCAL BUILDING CODES AND SETBACKS BEFORE STARTING CONSTRUCTION.
- ALL WOOD POSTS TO BE GROUND CONTACT LUMBER RATED.
- CONCRETE SLAB:
 - 6" SLAB RATED FOR VEHICLE LOADING.
 - 4" SLAB RATED FOR OCCUPANCY LOADING

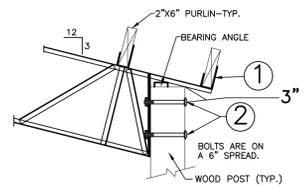
| APL LIST | |
|-------------|--|
| APL # | DESCRIPTION |
| FL 9555.6 | 26 GA MASTER RIB PANELS |
| FL 23507 | THERMA-TRU TRADITIONS AND PROFILES STEEL DOORS |
| FL 14039-R5 | 4712/4812 SINGLE HUNG |
| FL 8888.1 | 203 WINDLOCK COMMERCIAL SHEET DOOR |

NOTE: NOT ALL PRODUCTS LISTED ARE USED IN PLANS.

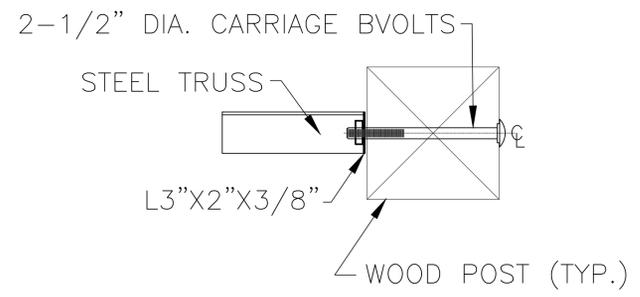
29 GA. GALVALUME METAL ROOFING ON 3/8" STRUCTURAL SHEATHING NAILED 6" FIELD 4" EDGE O.C. COLOR: IVORY



A PURLIN CONNECTION NTS



B POLE TO TRUSS CONNECTION NTS



C TRUSS TO POLE CONNECTION (TOP VIEW) NTS

NOTES

- SCREW 2X6" TO EACH PURLIN WITH 4 - SDS25 SCREWS. NOTE NO. 3 ON SHEET 2
- USE (2) 1/2" X 7" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 8" X 6" POST CONNECTION. NOTE NO. 5 ON SHEET 2
- USE (2) 1/2" X 9" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 8" X 8" POST CONNECTION. NOTE NO. 5 ON SHEET 2

BR-2021-2693

POLK COUNTY
Florida's Crossroads of Opportunity
Dewayne Thomas
5/19/2021 8:00:19 AM

REVISIONS

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813

GREGORY S. HURD
LICENSE
No 83244
STATE OF FLORIDA
PROFESSIONAL ENGINEER
02.26.2021

G S H
ENGINEERING & CONSTRUCTION SERVICES

GREG HURD, P.E.
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.

THIS DRAWING IS SUPERSEDED BY ANY SUBSEQUENT REVISED DRAWINGS AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DISCREPANCIES, OMISSIONS, OR ERRORS IN THESE DRAWINGS.

ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR REFERENCE ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.

THE ENGINEER IS NOT RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

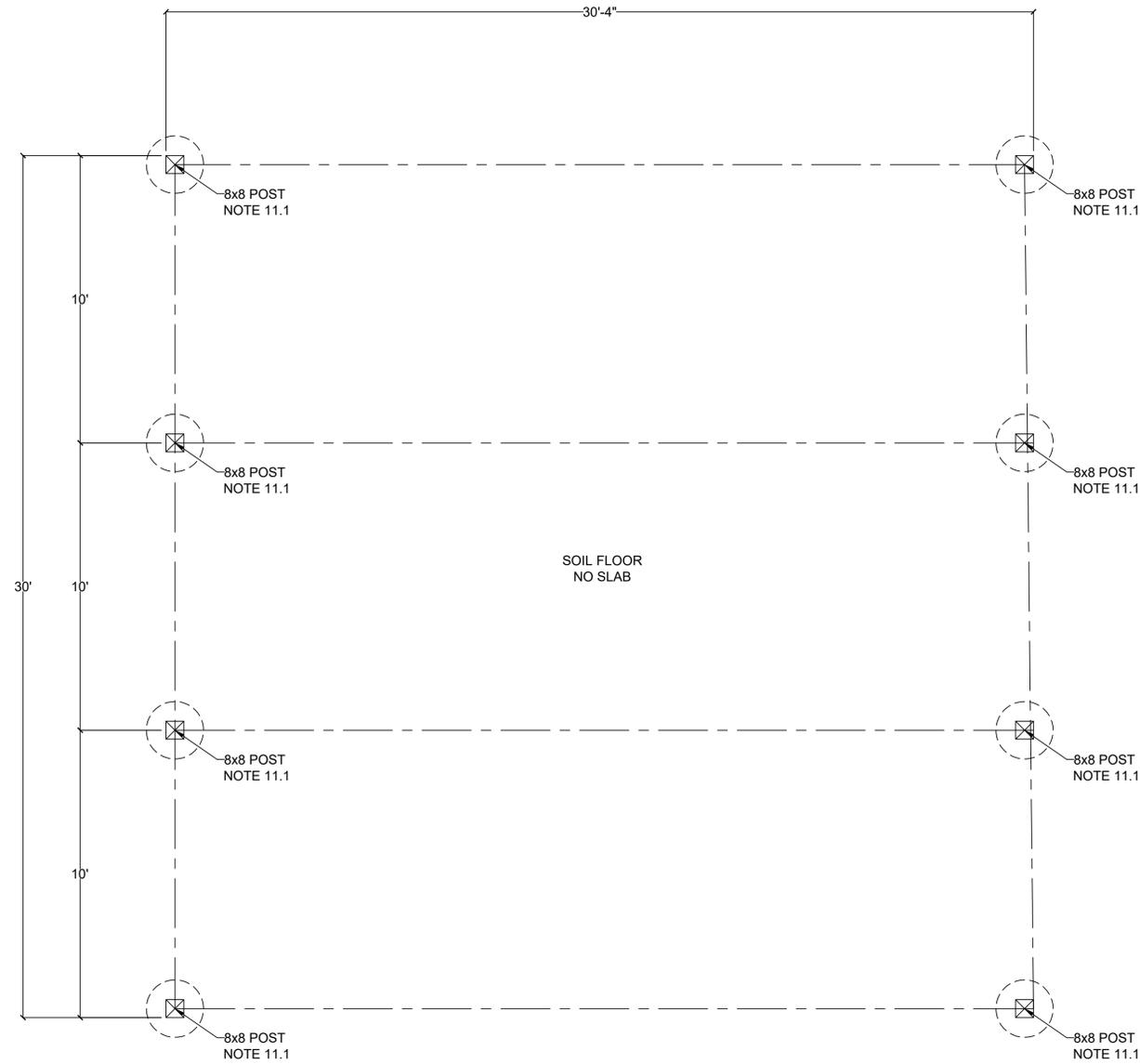
DRAWING TITLE
TYPICAL SECTIONS

SCALE: N/A

SHEET #
S-2

NOTES:

1. USE #14 SDS SCREWS AT EACH 2X6 AT 6" FIELD & 4" EDGE O.C. FOR METAL SHEATHING.
2. SCREW 2X6 TO STEEL JOIST.
3. SCREW 2X6 TO EACH PURLIN. WITH 94) SDS25 SCREWS.
4. USE (3) 1/2" X 1 1/2" THRU BOLTS AT EACH STEEL JOIST END PLATE CONNECTION.
5. USE (2) 1/2" X 9" THRU BOLTS AT EACH STEEL JOIST TO WOOD POST CONNECTION.
6. COLLAR TIE BOLTS TO BE 1/2" X 13" X 1" MACHINE BOLTS, (2) REQUIRED AT EACH END.
7. REQUIRED BOLTS AND SDS CREWS ARE SUPPLIED BY THE MANUFACTURE.
8. SOIL FLOOR UNLESS OTHERWISE NOTED.
9. ALL WOOD TO BE PRESSURE TREATED SOUTHERN PINE NO.2 UNLESS OTHERWISE NOTED.
10. TYPICAL RAT RUNNERS FASTENED TO THE 16 GA BUCKETS WITH (4) SDS SCREWS (2 EACH SIDE). THE BUCKETS ARE WELDED TO THE STEEL JOISTS. MAX 10' O.C.
11. AUGURED CONCRETE FOUNDATION BY THE CONTRACTOR
 - 11.1. 18" DIAMETER X 4' DEEP FOR WINDZONES 120-139 MPH
 - 11.2. 24" DIAMETER X 4' DEEP FOR WINDZONES 140-159 MPH
 - 11.3. 36" DIAMETER X 4' DEEP FOR WINDZONES 160-180 MPH.
 - 11.4. 12" DIAMETER X 4' DEEP INTERIOR POSTS
12. REQUIRED BOLTS AND SDS SCREWS ARE SUPPLIED BY THE MANUFACTURE.
13. VARIOUS FLOORING PER CLIENT, NOT SUPPLIED BY MANUFACTURE. OWNER AND/OR CONTRACTOR TO CHECK LOCAL BUILDING CODES AND SETBACKS BEFORE STARTING CONSTRUCTION.
14. ALL WOOD POSTS TO BE GROUND CONTACT LUMBER RATED.
15. CONCRETE SLAB:
 - 16.1. 6" SLAB RATED FOR VEHICLE LOADING.
 - 16.2. 4" SLAB RATED FOR OCCUPANCY LOADING



BR-2021-2693

POLK COUNTY
Florida's Crossroads of Opportunity
Dewayne Thomas
5/19/2021 8:00:19 AM

REVISIONS

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813

G S H
ENGINEERING & CONSTRUCTION SERVICES

GREG HURD, P.E.
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY ENGINEERING KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.

THIS DRAWING IS SUPERSEDED BY ANY SUBSEQUENT REVISIONS OR ADDENDUMS. THE ENGINEER IS NOT RESPONSIBLE FOR ANY CHANGES OR OMISSIONS IN THE ORIGINAL DRAWING.

ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR REFERENCE ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BEFORE COMMENCING CONSTRUCTION.

THE ENGINEER IS NOT RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

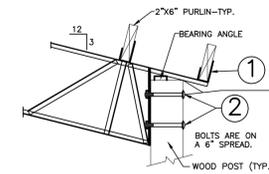
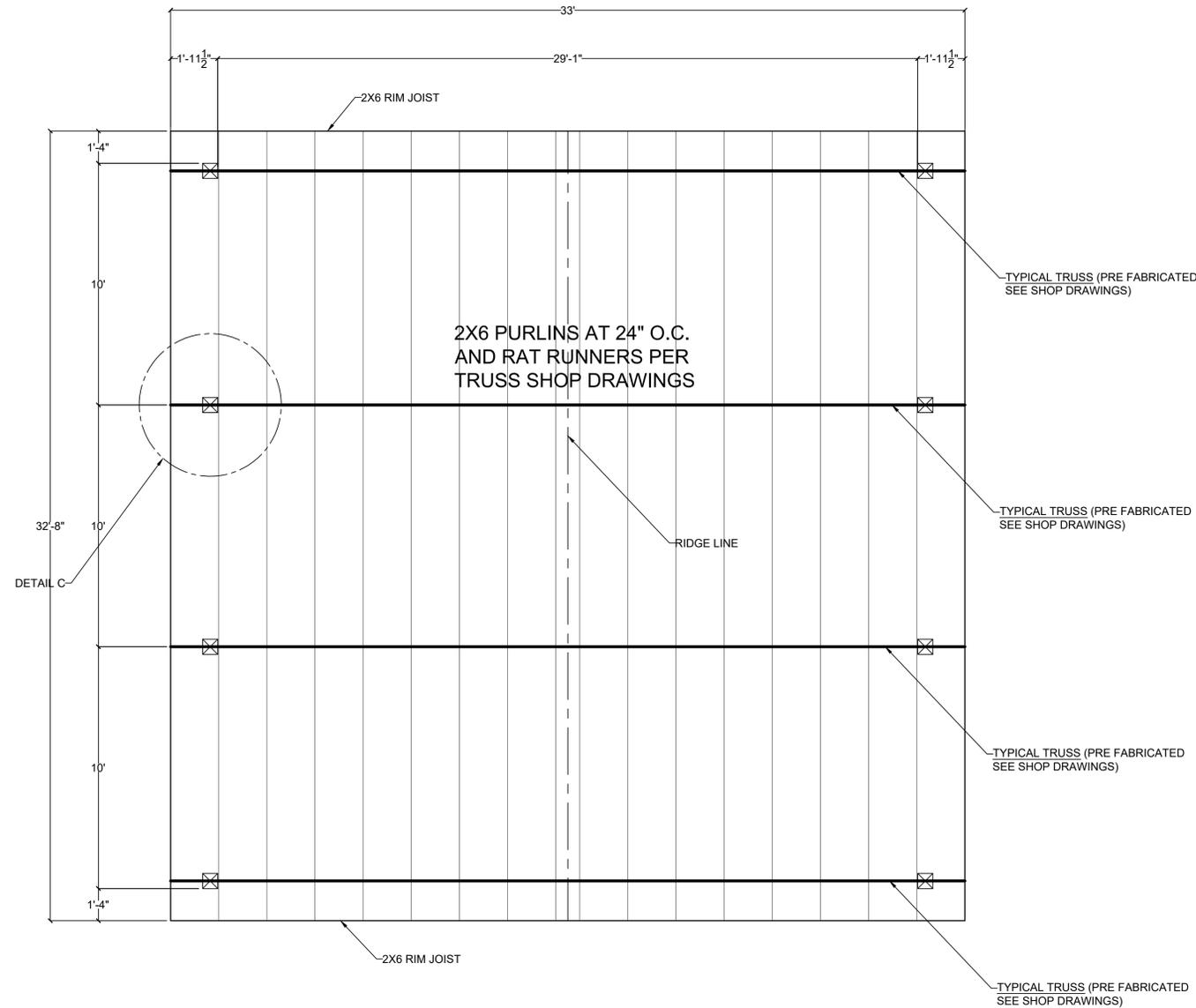
DRAWING TITLE
FOUNDATION PLAN

SCALE: N/A

SHEET #
S - 3

NOTES:

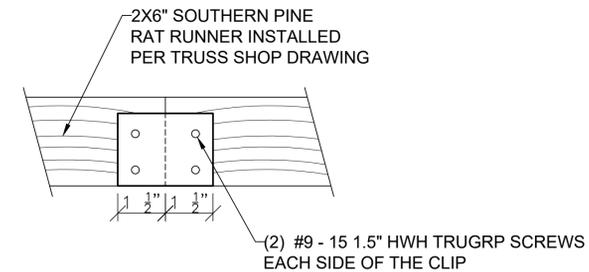
1. USE #14 SDS SCREWS AT EACH 2X6 AT 6" FIELD & 4" EDGE O.C. FOR METAL SHEATHING.
2. SCREW 2X6 TO STEEL JOIST.
3. SCREW 2X6 TO EACH PURLIN. WITH 94) SDS25 SCREWS.
4. USE (3) 1/2" X 1 1/2" THRU BOLTS AT EACH STEEL JOIST END PLATE CONNECTION.
5. USE (2) 1/2" X 9" THRU BOLTS AT EACH STEEL JOIST TO WOOD POST CONNECTION.
6. COLLAR TIE BOLTS TO BE 1/2" X 13" X 1" MACHINE BOLTS, (2) REQUIRED AT EACH END.
7. REQUIRED BOLTS AND SDS CREWS ARE SUPPLIED BY THE MANUFACTURE.
8. SOIL FLOOR UNLESS OTHERWISE NOTED.
9. ALL WOOD TO BE PRESSURE TREATED SOUTHERN PINE NO.2 UNLESS OTHERWISE NOTED.
10. TYPICAL RAT RUNNERS FASTENED TO THE 16 GA BUCKETS WITH (4) SDS SCREWS (2 EACH SIDE). THE BUCKETS ARE WELDED TO THE STEEL JOISTS. MAX 10' O.C.
11. AUGURED CONCRETE FOUNDATION BY THE CONTRACTOR
 - 11.1. 18" DIAMETER X 4' DEEP FOR WINDZONES 120-139 MPH
 - 11.2. 24" DIAMETER X 4' DEEP FOR WINDZONES 140-159 MPH
 - 11.3. 36" DIAMETER X 4' DEEP FOR WINDZONES 160-180 MPH.
 - 11.4. 12" DIAMETER X 4' DEEP INTERIOR POSTS
12. REQUIRED BOLTS AND SDS SCREWS ARE SUPPLIED BY THE MANUFACTURE.
13. VARIOUS FLOORING PER CLIENT, NOT SUPPLIED BY MANUFACTURE.
14. OWNER AND/OR CONTRACTOR TO CHECK LOCAL BUILDING CODES AND SETBACKS BEFORE STARTING CONSTRUCTION.
15. ALL WOOD POSTS TO BE GROUND CONTACT LUMBER RATED.
16. CONCRETE SLAB:
 - 16.1. 6" SLAB RATED FOR VEHICLE LOADING.
 - 16.2. 4" SLAB RATED FOR OCCUPANCY LOADING



NOTES

1. SCREW 2X6" TO EACH PURLIN WITH 4 - SDS25 SCREWS. NOTE NO. 3 ON SHEET 2
2. USE (2) 1/2" X 7" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 6" X 6" POST CONNECTION. NOTE NO. 5 ON SHEET 2
- USE (2) 1/2" X 9" CARRIAGE BOLTS THRU EACH STEEL JOIST TO 8" X 8" POST CONNECTION. NOTE NO. 5 ON SHEET 2

C TYPICAL TRUSS TO POST CONNECTION NTS



D RAT RUNNER CONNECTION NTS

REVISIONS

BR-2021-2693

APPROVED DATE
POLK COUNTY
Florida's Crossroads of Opportunity
Dewayne Thomas
5/19/2021 8:00:19 AM

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813



G S H
GREGORY S. HURD
ENGINEERING & CONSTRUCTION SERVICES
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

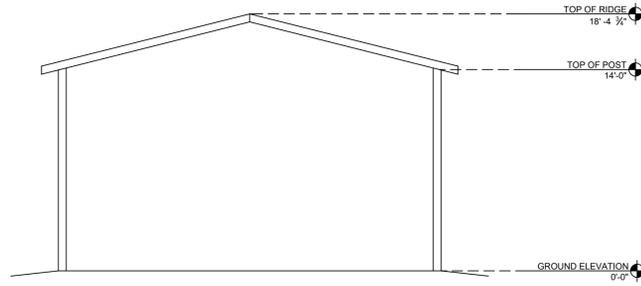
I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.
THIS DRAWING IS SUPERSEDED BY ANY LATER DATED DRAWING. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY INTERFERENCES, SEPARATIONS, OR COLLISIONS ON THESE DRAWINGS.
ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR REFERENCE ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.
THE ENGINEER IS NOT RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

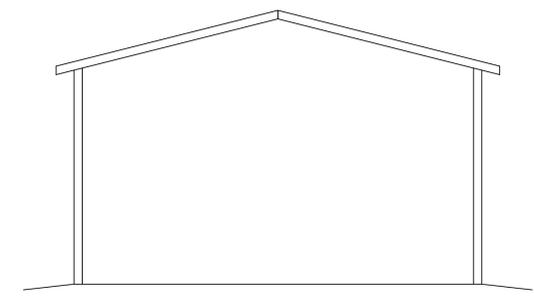
TRUSS PLAN

SCALE: N/A

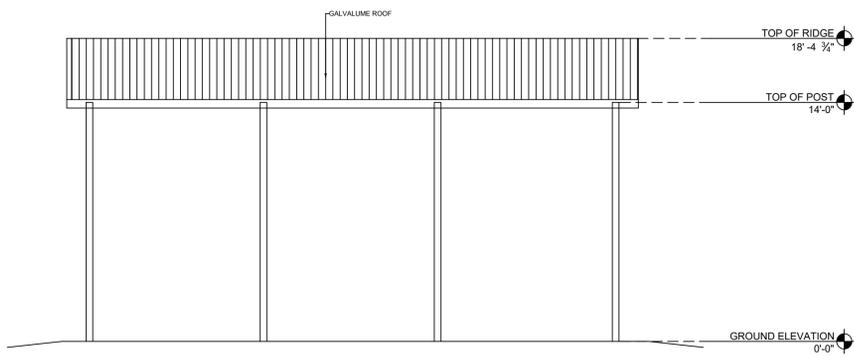
SHEET #
S - 4



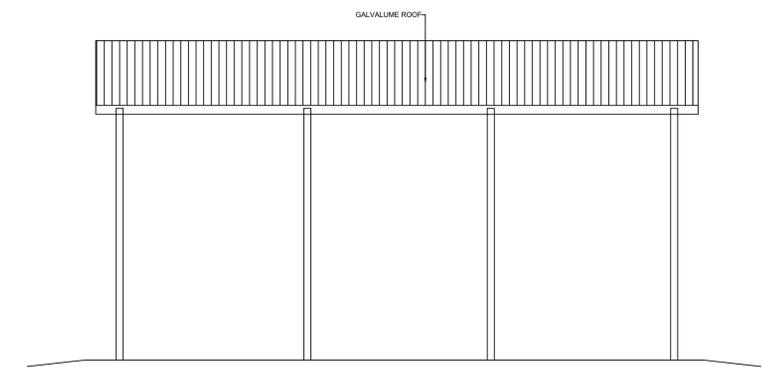
○ FRONT VIEW NTS



○ REAR VIEW NTS



○ LEFT VIEW NTS



○ RIGHT VIEW NTS

REVISIONS

BR-2021-2693

APPROVED DATE

POLK COUNTY
Florida's Crossroads of Opportunity
Dewayne Thomas
5/19/2021 8:00:19 AM

PROJECT INFORMATION

LEE ALI
6817 BROKEN ARROW TRAIL S
LAKELAND, FL 33813



GREG HURD, P.E.
GSHURD84@GMAIL.COM
WWW.GSHURD.COM
727-492-5986

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY ENGINEERING KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.

THIS DRAWING IS SUPERSEDED BY ANY SUBSEQUENT REVISED DRAWINGS AND THE ENGINEER SHALL BE RESPONSIBLE FOR ANY PROFESSIONAL LIABILITY ARISING FROM THESE DRAWINGS.

ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR REFERENCE ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.

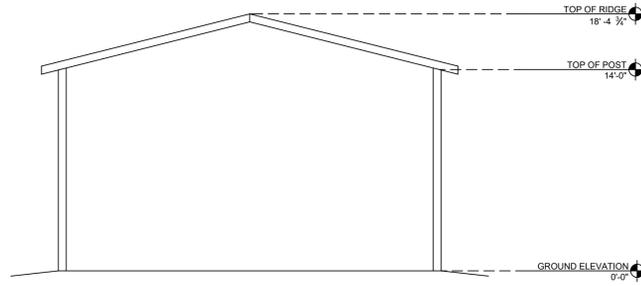
THE ENGINEER SHALL BE RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

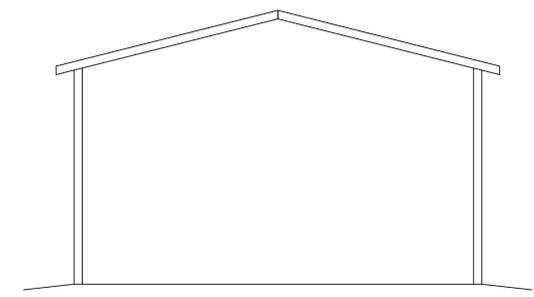
ELEVATIONS

SCALE: N/A

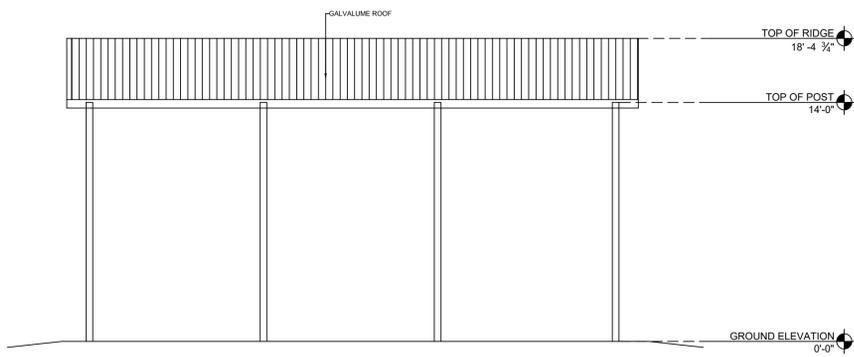
SHEET #
A-3



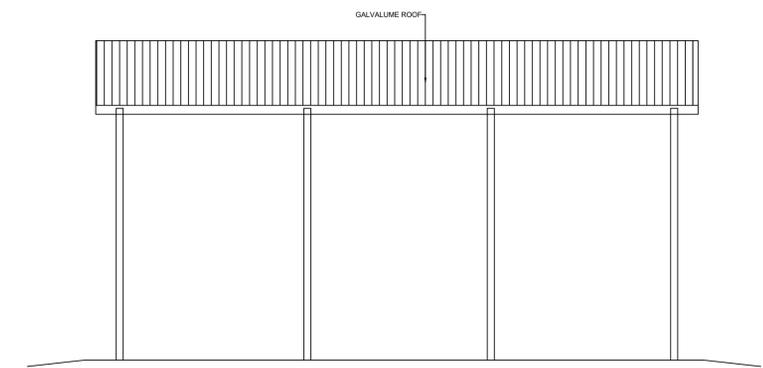
○ FRONT VIEW NTS



○ REAR VIEW NTS



○ LEFT VIEW NTS



○ RIGHT VIEW NTS

REVISIONS

BR-2021-2693
APPROVED DATE
POLK COUNTY
 Florida's Crossroads of Opportunity
 Dewayne Thomas
 5/19/2021 8:00:19 AM

PROJECT INFORMATION

LEE ALI
 6817 BROKEN ARROW TRAIL S
 LAKELAND, FL 33813



GREG HURD, P.E.
 GSHURD84@GMAIL.COM
 WWW.GSHURD.COM
 727-492-5986

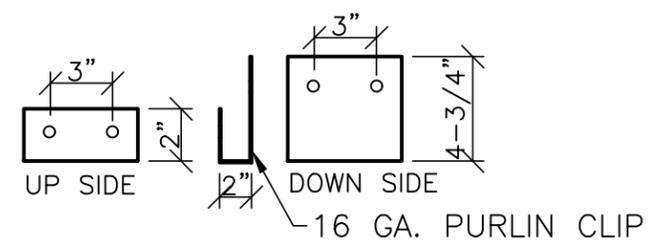
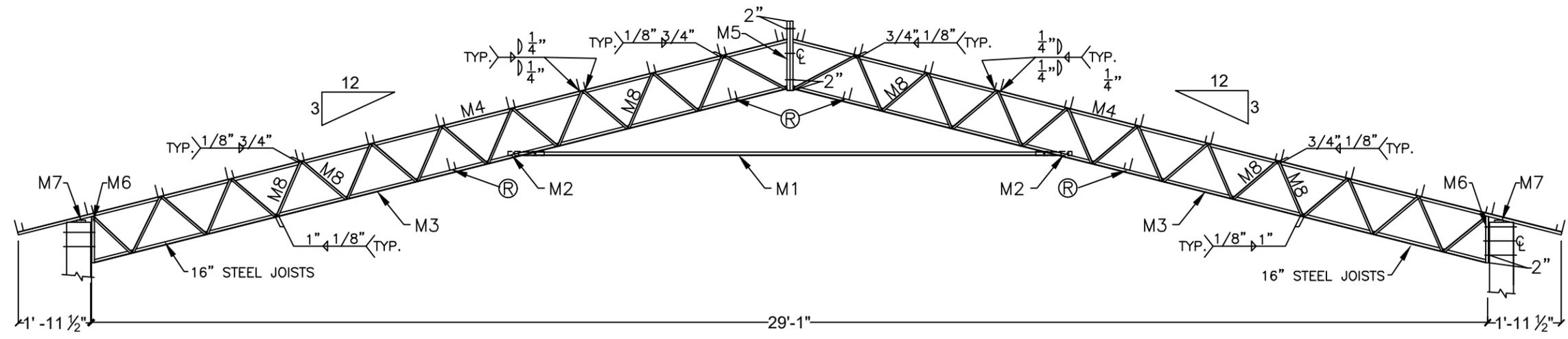
I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION TO THE BEST OF MY ENGINEERING KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM REQUIREMENTS OF THE LATEST FLORIDA BUILDING CODE.
 THIS DRAWING IS SUPERSEDED BY ANY SUBSEQUENT REVISIONS AND THE ENGINEER SHALL BE RESPONSIBLE FOR ANY PROFESSIONAL, REPUTATIONAL, OR FINANCIAL LOSS OR INJURY TO ANY PERSON OR ENTITY ARISING FROM THE USE OF THIS DRAWING.
 ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND SITE DETAILS SHOWN ARE FOR REFERENCE ONLY AND ARE NOT COVERED UNDER THE ENGINEER'S SEAL.
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS FOR ACCURACY AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.
 THE ENGINEER SHALL BE RESPONSIBLE FOR THE PROPOSED STRUCTURAL CHANGES AND NOT RESPONSIBLE FOR ANY EXISTING STRUCTURAL COMPONENTS OF THE PROJECT.

DRAWING TITLE

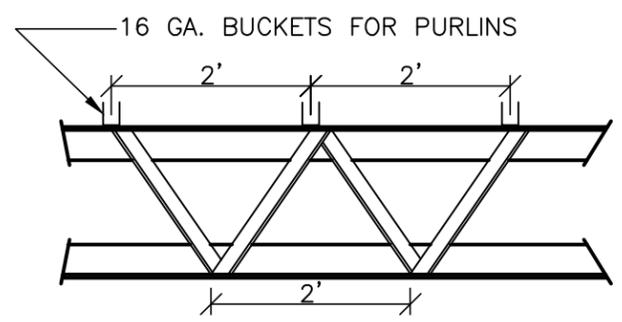
ELEVATIONS

SCALE: N/A

SHEET #
 A-3



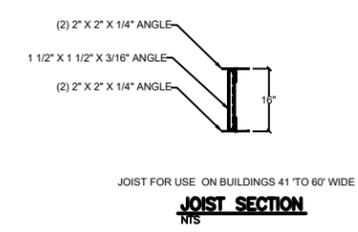
VIEW OF PURLIN CLIPS
 NTS



TYPICAL JOIST SIDE SECTION
 NTS USED FOR 12" AND 16" JOISTS

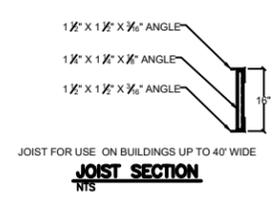
LEGEND

- $\frac{1}{4}'' \text{D}$ - MEANS 1/4" BEAD WELD
- $\frac{1}{4}'' \text{D}$ / $\frac{1}{4}'' \text{D}$ - MEANS 1/4" BEAD WELD ON EACH SIDE OF THE PURLIN CLIP.
- (R) - RAT RUNNERS INSTALLED AT FIRST WEB OPENING CLOSEST TO RIDGE AND CENTER OF EACH TRUSS OR 10' O.C. MAX SPLIT EVENLY.



STEEL SECTION TABLE 41' TO 60' WIDE BUILDINGS

| NO. | ELEMENT | MATERIAL (KSI) | DESCRIPTION |
|-----|---------------------|----------------|-----------------------|
| M1 | ANGLE IRON 15" LONG | ASTM 513 | L 2" X 2" X .25" |
| M2 | COLLAR TIE | ASTM 513 | L 2" X 2" X .25" |
| M3 | TOP CHORD | ASTM 513 | (2) L 2" X 2" X .25" |
| M4 | BOTTOM CHORD | ASTM 513 | (2) L 2" X 2" X .25" |
| M5 | CENTER VERTICAL | ASTM 513 | L 16" X 2" X .25" |
| M6 | END VERTICAL | ASTM 513 | L 16" X 2" X .25" |
| M7 | BEARING ANGLE | ASTM 513 | L 3" X 2" X .250" |
| M8 | DIAGONAL WEB | ASTM 513 | L 1.5" X 1.5" X 3/16" |



STEEL SECTION TABLE UP TO 40' WIDE BUILDINGS

| NO. | ELEMENT | MATERIAL (KSI) | DESCRIPTION |
|-----|---------------------|----------------|----------------------------|
| M1 | ANGLE IRON 10" LONG | ASTM 513 | L 1.5" X 1.5" X .1875" |
| M2 | COLLAR TIE | ASTM 513 | L 1.5" X 1.5" X .1875" |
| M3 | TOP CHORD | ASTM 513 | (2) L 1.5" X 1.5" X .1875" |
| M4 | BOTTOM CHORD | ASTM 513 | (2) L 1.5" X 1.5" X .1875" |
| M5 | CENTER VERTICAL | ASTM 513 | L 16" X 1.5" X .1875" |
| M6 | END VERTICAL | ASTM 513 | L 16" X 1.50" X 1.50" |
| M7 | BEARING ANGLE | ASTM 513 | L 3" X 1.50" X 1.50" |
| M8 | DIAGONAL WEB | ASTM 513 | L 1.25" X 1.25" X .125" |



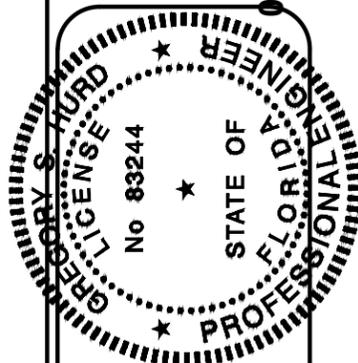
Digitally signed by GREGORY S HURD
 Reason: This item has been electronically signed and sealed by Gregory Hurd P.E. using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and all signatures must be verified on any electronic copies..
 Date: 2021.02.26 08:19:32 -05'00'

REVISIONS

PROJECT INFORMATION

LEE ALI
 6817 BROKEN ARROW TRAIL S
 LAKELAND, FL 33813

02.26.2021



SEALED FOR STRUCTURE ONLY
G S H
 GREGORY S. HURD
 ENGINEERING & CONSTRUCTION SERVICES
 GREG HURD, P.E.
 GSHURD04@GMAIL.COM
 WWW.GSHURD.COM
 727-482-5886
ISSUED BY: M. J. HURD, PROJECT SUPERVISOR

DRAWING TITLE
 SHOP DRAWINGS
 TYPICAL TRUSS

SCALE: N/A

SHEET #
 1 OF 1