

CONTRACTOR: GATOR ALUMINUM & WINDOW, INC.

DESIGN CRITERIA:

Applicable Codes, Regulations, and Standards

1. The 2010 Florida Building Code specifically Chapter 16 Structural Design, Chapter 20 Aluminum, and Chapter 23 Wood.
2. AA ASM 35 and Specifications for Aluminum Structures, Part I-A of the Aluminum Design Manual prepared by The Aluminum Association, Inc. Washington, D.C., 2005 Edition
3. ASCE 7-10.

Wind Loads

1. Building Occupancy Category, Paragraph 1604.5 and Table 1604.5: Risk Category I.
2. Basic Wind Speed, Table 1609C State of Florida Debris Region & Basic Wind Speed, Paragraph 1609.3.1 and Table 1609.3.1 Equivalent Basic Wind Speed: **120 MPH**.
3. Screen roof enclosure, Paragraph 1609.4.3: **C**.

Foundation Design

Footing Size: Existing foundation system. No additional foundation or footing is required by the construction of the proposed screen enclosure if a minimum 4" concrete slab or 8" x 10" continuous independent footing is provided.

Specifications

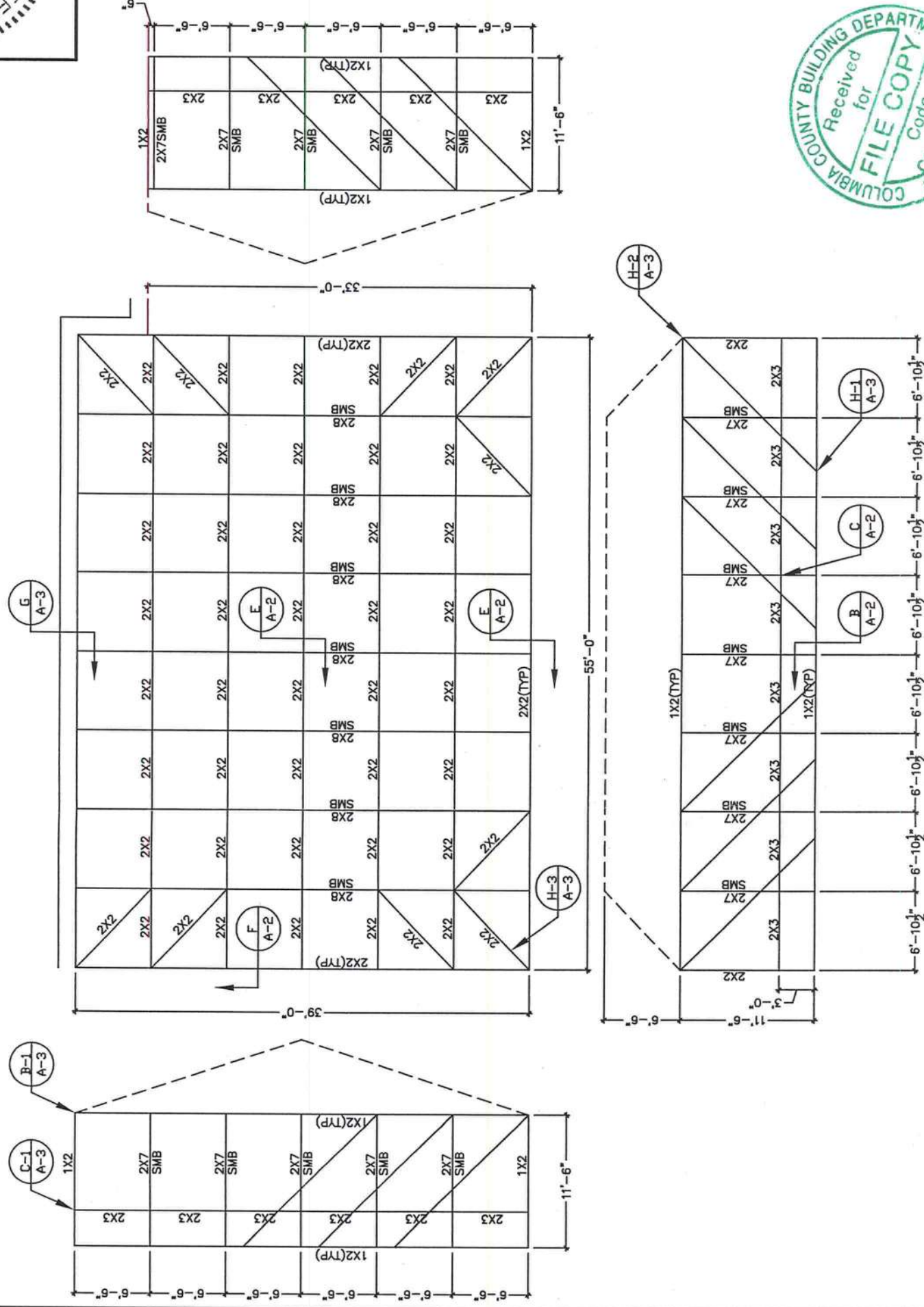
The following specifications are applicable to this project:

1. Where concrete specifications are required, whether in the screen enclosure scope or not, by one or more regulatory agency, the following specifications are applicable:

- a. Concrete shall conform to ASTM C94 for the following components:
 - i. Portland Cement Type 1, - ASTM C 150
 - ii. Aggregates - Large Aggregate 3/4" max - ASTM C 33
 - iii. Air entraining +/- 1% - ASTM C 260
 - iv. Water reducing agent - ASTM C 494
 - v. Clean Potable water
 - vi. Other admixtures not permitted
 - b. Metal accessories shall conform to:
 - i. Reinforcing Bars - ASTM A615, grade 60
 - ii. Welded wire fabric - ASTM A185
 - c. Concrete slump at discharge chute not less than 3" or more than 5". Water added after batching is not permitted.
 - d. Prepare and place concrete per American Concrete Institute Manual of Standard Practice, Parts 1, 2, and 3 including hot weather recommendations.
 - e. Moist cure or polyethylene curing permitted.
 - f. Prior to placing concrete, treat the entire subsurface area for termites in compliance with the FBC.
 - g. Concrete shall be placed over a polyethylene vapor barrier.
2. Aluminum extrusions shall be 6005 T5 Alloy
 3. Fasteners are required to be SAE Grade 2 or better zinc plated.
 4. All Self Mating Beam Sections are to be stitched with either #14 screws 6" from ends and 24" center to center or #12 screws 6" from ends and 12" center to center.
 5. The minimum nominal thickness of protector panels (kickplates) shall be an industry standard of 0.024 inches.
 6. Screened enclosures containing swimming pools shall comply with the applicable requirements of FBC R4101.17 Residential Swimming Barrier requirements.
 7. Screen material shall be 18/14 screen unless approved by Suncoast Architecture & Engineering, LLC.
 8. Door location shall be determined by contractor in the field.
 9. When pavers are under aluminum members contractor shall epoxy to deck or grout to deck w/ 3000 PSI grout with bonding agent.
 10. Design shall be based upon "pinned" upright analysis unless approved by Suncoast Architecture & Engineering.

Roof Type

Roof Type: **Hipped Gable**



PROJECT ADDRESS:
REL YEA
19394 SOUTH US. HWY. 441
HIGH SPRINGS, FL 32693

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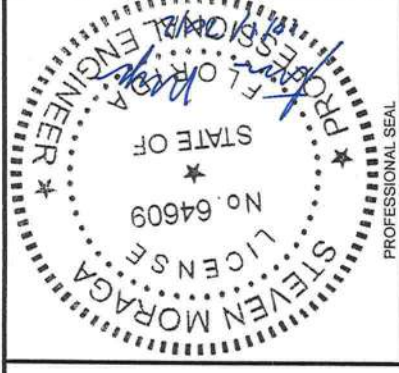
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REVISION
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SHEET NO:
A-1

SUNCOAST ARCHITECTURE
& ENGINEERING, LLC
13630 58TH STREET NORTH SUITE 101
CLEARWATER FL 33760
TEL: (727) 532-9000
FAX: (727) 532-9008
FLORIDA LICENSES: AA26001769 & CA #28841

PROFESSIONAL ENGINEER
STEVEN MORAGA, P.E.
FLORIDA LICENSE: 64609



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ALUMINUM MEMBERS DIMENSIONS

HOLLOW SECTIONS

2 x 2: 2" x 2" x 0.044"
2 x 3: 2" x 3" x 0.050"
2 x 4: 2" x 4" x 0.050"
2 x 5: 2" x 5" x 0.050"

OPEN BACK SECTIONS

1 x 2: 1" x 2" x 0.040"
1 x 3: 1" x 2" x 0.045"

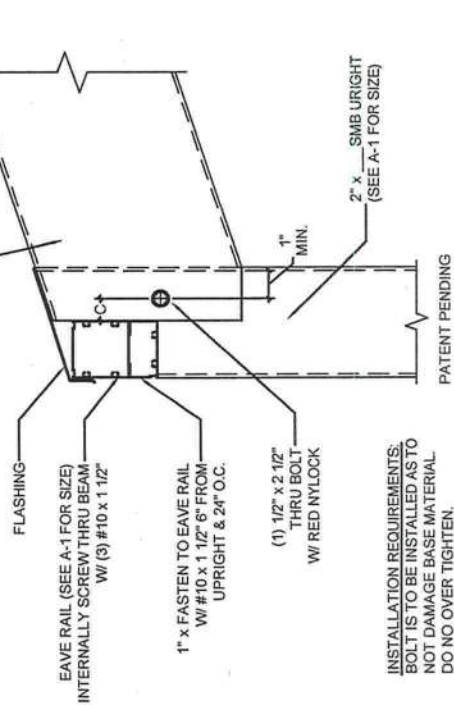
SNAP SECTIONS

2 x 2 Snap: 2" x 2" x 0.045"
2 x 3 Snap: 2" x 3" x 0.050"
2 x 4 Snap: 2" x 4" x 0.045"

SELF-MATING (SMB)

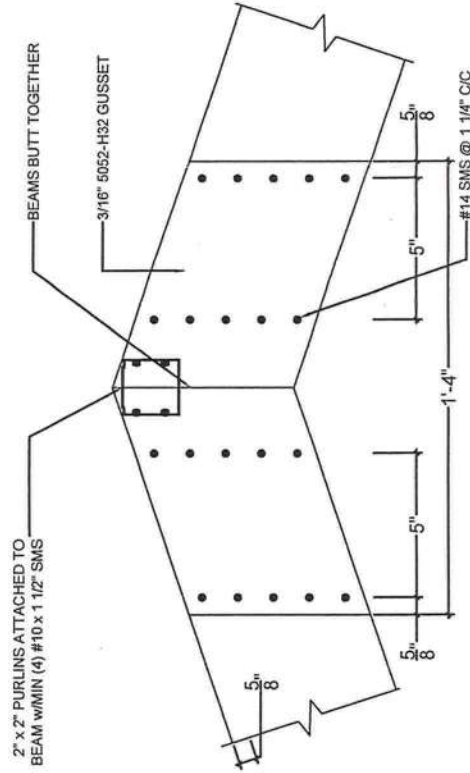
2 x 4 SMB: 2" x 4" x 0.044" x 0.100"
2 x 5 SMB: 2" x 5" x 0.050" x 0.100"
2 x 6 SMB: 2" x 6" x 0.050" x 0.120"
2 x 7 SMB: 2" x 7" x 0.057" x 0.120"
2 x 8 SMB: 2" x 8" x 0.072" x 0.124"
2 x 9 SMB: 2" x 9" x 0.072" x 0.124"
2 x 10 SMB: 2" x 10" x 0.092" x 0.398"

MEMBER SIZE	EDGE "C"
2X4	1/2"
2X5	1"
2X6 - 2X10	1 1/2"



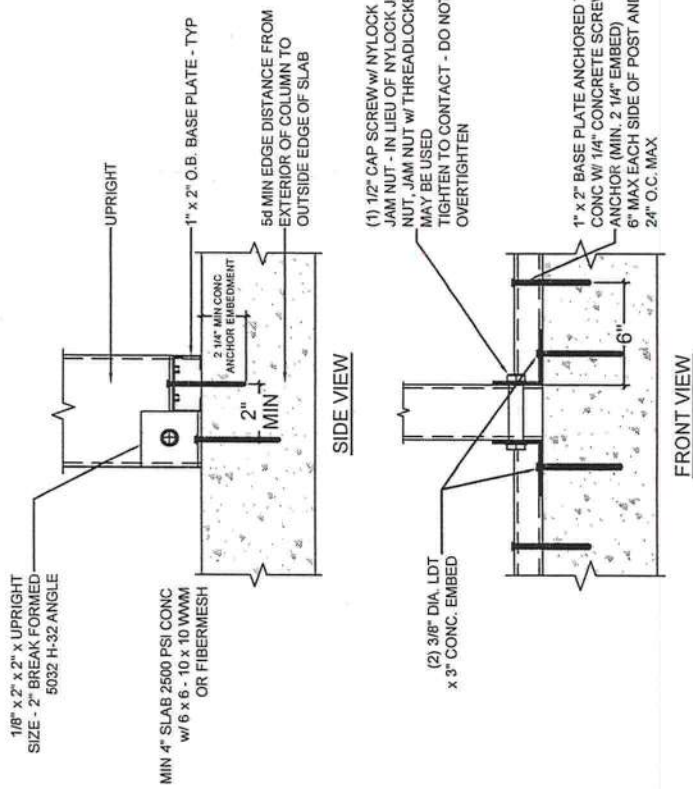
INSTALLATION REQUIREMENTS:
BOLT IS TO BE INSTALLED AS TO
NOT DAMAGE BASE MATERIAL.
DO NOT OVER TIGHTEN.

D UPRIGHT TO BEAM CONNECTION
SCALE: NTS

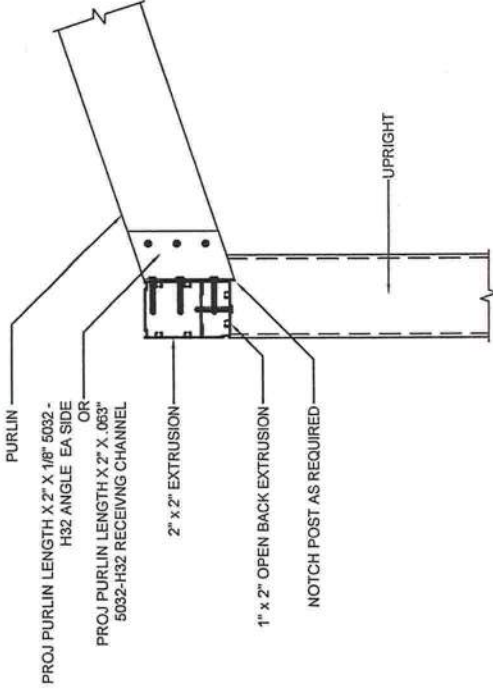


- NOTES:
- GUSSET DIMENSIONS ARE MINIMUM (2) REQ'D - (1) EA SIDE OF BEAM - MAY BE INTERNAL OR EXTERNAL
 - AS BEAM SIZE CHANGES, ADD OR SUBTRACT SCREWS TO MAINTAIN 1 1/4" C/C SPACING.
 - GUSSET LENGTHS REMAIN CONSTANT, WIDTHS CHANGE TO MATCH BEAM SIZE.

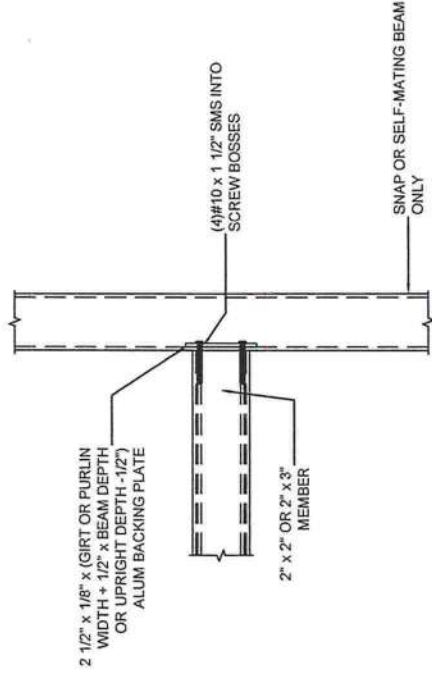
E TYPICAL INTERNAL OR EXTERNAL GUSSET DETAIL - RIGID MEDIUM
SCALE: NTS



B 2" x 4" OR LARGER UPRIGHT TO DECK DETAILS
SCALE: NTS



F SLOPED PURLIN CONNECTION DETAIL
SCALE: NTS



C PURLIN OR GIRT TO BEAM OR POST DETAIL
SCALE: NTS

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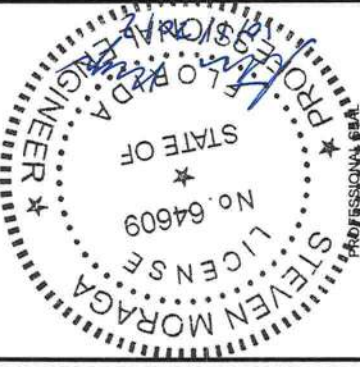
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C-1 1X2 TO HOST STRUCTURE DETAIL
A-3 SCALE: NTS