### A. CONCRETE &

## CONCRETE & FOUNDATION DESIGN: ALL CONCRETE GRADE BEAMS AND FOOTINGS SHALL BE 3000

- PSI MINIMUM.
- ALL CONCRETE FILLED SUPPORTED SLABS SHALL BE 2500 PSI
- MINIMUM, 3 1/2" NOMINAL THICKNESS.
- 3. FIBERMESH (3/4") PER CUBIC YARD MIN.) MEETING
  APPROPRIATE ACI AND ASTM REQUIREMENTS MAY BE USED
  IN LIEU OF WELLDED WIRE MESH
  4. ALL SLABS ON GRADE SHALL BE 4" THICK WITH FIBERMESH.
  5. ALL REINFORCING SHALL CONFORM TO ASTM A615, BE GRADE 60 (60 KSI MIN.) DEFORMED BARS, #3 BARS MAY BE GRADE 40
  6. ALL OVER POUR CONCRETE FILLED SUPPORTED SLABS SHALL
  BE 3000 PSI MIN., 2" MINIMUM. THICKNESS.
- .8.7 SOIL BEARING PRESSURE SHALL BE A MINIMUM OF 1500 PSF. THE CONCRETE SHALL CONFORM TO ASTM C94 FOR THE
- OPC (PORTLAND CEMENT TYPE 1,- ASTM C 150). AGGREGATES #6 STONE , ASTM C 33 SIZE NO. 67 LESS THAN
- AIR ENTRAINING +/- 1% ASTM C 260.
- CLEAN POTABLE WATER. WATER REDUCING AGENT - ASTM C 494.
- OTHER ADMIXTURES SHALL NOT BE PERMITTED.

  9. METAL WELDED WIRE SHALL CONFORM TO ASTM A 185.

  10. PREPARE & PLACE CONCRETE ACCORDING TO AMERICAN CONCRETE INSTITUTE MANUAL STANDARD PRACTICE, PART 1, 2, & 3 ALONG WITH HOT WEATHER CONDITIONS
- 11. IF UTILIZING EXISTING CONCRETE FOR FOUNDATION, CONCRETE SHALL BE A MINIMUM OF 4" IN THICKNESS, VISIBLY FREE OF ANY STRUCTURAL EXCESSIVE CRACKING, SPALLING OR OTHER DETERIORATION.

RECOMMENDATIONS.

#### В. MASONRY:

- .CONCRETE MASONRY UNITS (CMU) SHALL BE STANDARD TYPE M OR S MORTAR. HOLLOW UNITS AND SHALL BE 1900 PSI MINIMUM BASED ON
- 2.ALL MORTAR SHALL BE OF TYPE M OR S.
  3.ALL GROUT SHALL BE 2000 PSI MINIMUM AND HAVE
  MAXIMUM COARSE AGGREGATE SIZE OF 3/8".
- 4.PROVIDE CLEAN-OUTS FOR REINFORCED CELLS CONTAINING REINFORCEMENT WHEN GROUT POUR EXCEEDS 5'-0" IN

#### C. ALUMINUM: 1. ALL STRUCTURA

- 2. ALL STRUCTURAL ALUMINUM SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF 6005-T5 FOR ALLOY WITH A MINIMUM THICKNESS OF 0.040" FOR SUPPORTING MEMBERS. WHERE KICK PLATES ARE USED A MINIMUM THICKNESS OF
- w STRUCTURAL ALUMINUM DESIGN CONFORMS TO "PART 1-A 0.024" SHALL APPLY.
- SPECIFICATIONS FOR ALUMINUM STRUCTURES ALLOWABLE STRESS DESIGN" OR "PART 1-B SPECIFICATIONS FOR ALUMINUM STRUCTURES BUILDING LOAD AND RESISTANCE FACTOR DESIGN" OF THE ALUMINUM DESIGN MANUAL PREPARED BY THE ALUMINUM ASSOCIATION, INC. WASHINGTON D.C. THE FLORIDA BUILDING CODE 7TH EDITION (CHAPTER 16 STRUCTURAL DESIGN & CHAPTER 20
- 4. EDITION (CHAPTER 16 STRUCTURAL DESIGN & CHAPTER 20 ALUMINUM).

  WHERE ALUMINUM COMES INTO CONTACT WITH STEEL, OR PRESSURE TREATED LUMBER PROVIDE DIELECTRIC
- 6 S SEPARATION.

  ALUMINUM MEMBERS SHALL BE STITCHED WITH NO LESS THAN #10 SMS 6" FROM THE ENDS AND 12" ON CENTER, IF USING #12 SPACING MAY BE 24" ON CENTER.

  VINYL AND ACRYLIC PANELS SHALL BE REMOVABLE. THEY SHALL BE IDENTIFIED WITH A DECAL ESSENTIALLY STATING "REMOVABLE PANEL SHALL BE REMOVED WHEN WIND SPEEDS EXCEED 75 MPH". DECAL SHALL BE PLACED SO IT IS
- 1"X2"X0.045" NON-STRUCTURAL MEMBERS SHALL BE VISIBLE WHEN PANEL IS INSTALLED.
- 7. ATTACHED TO HOST WITH 1/4"Ø X 1-3/4" EMBEDMENT & 24" O.C. MASONRY SCREW FOR CONCRETE & EQUIVALENT SIZE WOOD SCREW WHEN IN WOOD & #10X 1/2" EMBEDMENT SMS OR TEK SCREWS IN ALUMINUM MEMBERS TYPICAL.

#### D. FASTENERS:

 ALL LAG BOLTS SHALL CONFORM TO STAINLESS STEEL TYPE 300 18-8, WITH STANDARD FLAT WASHER UNLESS MANUFACTURER GALVANIZES BOLTS SPECIFIES FOR USE WITH ACQ PRESSURE TREATED WOOD.

- HEX BOLTS HAS TO BE ASTM A 325, PLATED WITH STANDARD FLAT WASHERS AND NUTS.
  ALL CONCRETE SCREWS SHALL BE, SIMPSON, HILTI, RAWL, TAPCON, REDHEAD, DYNABOLT, PORTECT OR APPROVED EQUAL.

  ALL METAL TIES AND ASSOCIATED ACCESSORIES SHALL BE
- HOT DIPPED GALVANIZED.

  ALL LAG BOLTS SHALL HAVE A MINIMUM EMBEDMENT OF 8X BOLT DIAMETER INTO STRUCTURAL FRAMING (G=.42 MIN.).

  LAG BOLTS AND SCREWS INTO WOOD FRAMING SHALL BE
- THE BOLT OR SCREW. ALL LAG BOLTS AND SCREWS SHALL BE GREATER THAN 70 PERCENT OF THE THREAD DIAMETER OF PROVIDED WITH PILOT HOLES HAVING A DIAMETER NOT
- INSERTED IN PILOT HOLES BY TURNING AND UNDER NO CIRCUMSTANCES BY DRIVING WITH A HAMMER.
  ALL EXPANSION ANCHORS SHALL BE DESIGNED IN ACCORDANCE WITH THE SPECIFIC MANUFACTURER'S REQUIREMENTS AND ALLOWABLE LOADS AND SHALL ONLY BE APPLIED IN CONDITIONS ACCEPTABLE TO MANUFACTURER, FASTENERS SHALL BE A MINIMUM OF SAE
- GRADE #5 OR BETTER ZINC PLATED.

  ALL FASTENERS CONNECTING ALUMINUM COMPONENTS OR PRESSURE TREATED LUMBER ARE STAINLESS STEEL TYPE 300 18-8, UNLESS MANUFACTURER GALVANIZED BOLTS SPECIFIES
- FOR USE WITH ACQ PRESSURE TREATED WOOD, OR OTHERWISE NOTED ON PLANS.
- CLASS G-185. ALL FASTENERS SHALL COMPLY WITH ASTM A153.

  10. ALL CONNECTORS SHALL COMPLY WITH ASTM A653
- 11. FOR SMS, THE MINIMUM CENTER-TO-CENTER SPACING SHALL BE 3/4" AND MINIMUM CENTER-TO-EDGE SHALL BE 1/2" UNLESS NOTED OTHER WISE.

## REFERENCE STANDARDS:

F

ASTM E 1300 **CURRENT ASCE 7** 

FOR ALUMINUM PART 1-A, & 1-B ASTM C94 CURRENT ALUMINUM DESIGN MANUAL-AA ASM35, AND SPEC.

ASTM C150 ASTM C33 ASTM C260 ASTM C494 ASTM A615 ASTM A185

FLORIDA BUILDING CODE 7TH EDITION (CHAPTERS 16, 20 & 23).

#### Ŧ ABBREVIATIONS:

THE FOLLOWING LIST OF ABBREVIATIONS IS NOT INTENDED TO REPRESENT ALL THOSE USED ON THESE DRAWINGS, BUT TO SUPPLEMENT THE MORE COMMON ABBREVIATIONS.

- TYP TYPICAL SIM SIMILAR
- UON -- UNLESS OTHERWISE NOTED
- CONT -- CONTINUOUS
- VIF VERIFY IN FIELD

#### ç, RESPONSIBILITY:

- ALL SITE WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH APPLICABLE BUILDING CODES, LOCAL ORDINANCES, ETC.
  CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DETAILS, NOTIFYING ENGINEER OF ANY DISCREPANCIES BETWEEN DRAWINGS, FABRICATED ITEMS, OR ACTUAL FIELD
- THESE DRAWINGS REPRESENT THE ACCEPTABILITY OF THE 'SUNROOM' ROOM ADDITION ELEMENTS AS PROVIDED BY THE CONTRACTOR.
- ANY DETAILS NOT SHOWN ARE TO BE ENGINEERED BY A LICENSED P.E. IN ACCORDANCE WITH STANDARD ALL DETAILS ON THESE DRAWINGS ARE ENGINEERED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR AND MANUFACTURER. ENGINEERING PRACTICES.

## H. MISCELLANEOUS:

ALUMINUM ADDITIONS ARE NOT TO BE INSTALLED ON A MANUFACTURED HOME, TRAILER HOME, OR PRE-FAB HOME. IF THE EXISTING STRUCTURE IS ONE OF THESE, A SEPARATE 4TH WALL SUPPORT SYSTEM MUST BE ENGINEERED SO THAT NO

ADDITIONAL LOADING IS PLACED ON THE MANUFACTURED

- IF ENCLOSURE CONTAINS A SWIMMING POOL OR SPA, THE ENCLOSURE SHALL COMPLY WITH RESIDENTIAL SWIMMING ITS ENTIRETY BARRIER REQUIREMENTS OF THE FBC 7TH EDITION R 4501.17 IN
- DOOR LOCATIONS MAY BE DETERMINED IN THE FIELD BY
- CONTRACTOR.

  IF PAVERS ARE UNDER ALUMINUM MEMBERS THEY SHALL HAVE EPOXY ADHESIVE TO CONCRETE OR IF USING GROUT, ENSURE BONDING AGENT IS USED FIRST AND ADHERED WITH MINIMUM 3000 PSI GROUT.

  SCREENING MATERIAL SHALL BE 18X14X0.013 OR
- EQUIVALENT DENSITY SCREEN MESH ONLY UNLESS NOTED
- 9 ALL STRUCTURAL POST SHALL BE ANCHORED TO AN ON DRAWING S-2 EXISTING/PROPOSED CONCRETE FOUNDATION FOR UPLIFT

## DESIGN DATA: ULTIMATE DESIGN WIND SPEED Vult, (3 SECOND GUST) NOMINAL DESIGN WIND SPEED Vasd: 120 MPH 93 MPH

 RISK CATEGORY:
 WIND EXPOSURE:
 WIND LOADS: SCREEN ROOF:

SCREEN WALLS (WINDWARD): SCREEN WALLS (LEEWARD): SOLID ROOF:

S. FACTOR APPLIED TO SCREEN WIND LOADS FOR 18X14X0.013
OR EQUIVALENT DENSITY SCREEN MESH:
6. FACTOR APPLIED TO SCREEN WIND LOADS FOR ALLOWABLE N/A 20 PSF 15 PSF 17 PSF

7. LIVE LOAD: STRESS DESIGN:

0.6

300 Ib. VERTICAL DOWNLOAD ON PRIMARY SCREEN ENCLOSURE MEMBERS.
200 Ib. VERTICAL DOWNLOAD ON SCREEN ENCLOSURE PURLINS.
10 PSF VERTICAL DOWNLOAD ON SOLID ROOF.
SCREEN ROOF TYPE: N/A
SOLID ROOF TYPE: ELITE EPS COMPOSITE PANEL ROOF, FLORIDA PRODUCT
APPROVAL, FL 7561-R5.

90,00

10. PROPOSED FOUNDATION (SEE S-2 FOR SIZE AND LOCATION) SHALL BE ADEQUATE TO RESIST THE UPLOADS FOR THE PROPOSED STRUCTURE

ALUMINUM STRUCTURAL MEMBERS

HOLLOW SECTIONS .2" x 2" x 0.044"

2 x 2: ---2 x 3: ---2 x 4: ---2 x 5: ---3 x 3: ----2" x 4" x 0.050" .2" x 3" x 0.050"

1 x 2:-1 x 3:-**BACK SECTIONS** 1" x 3" x 0.045" x 2" x 0.040"

2 x 2 SMS:-2 x 3 SMS:-2 x 4 SMS:-3 x 3 SMS:-SNAP SECTIONS ----2" x 3" x 0.072" 2" x 4" x 0.045" 2" x 2" x 0.045"

2 x 6 SMB:---2 x 7 SMB:---2 x 8 SMB:---2 x 9 SMB:---2 x 10 SMB:---2 x 4 SMB:-2 x 5 SMB:-SELF MATING (SMB) 2" x 7" x 0.057" x 0.120" 2" x 8" x 0.072" x 0.224" 2" x 9" x 0.072" x 0.224" 2" x 6" x 0.050" x 0.120" 2" x 5" x 0.050" x 0.118" 2" x 4" x 0.044" x 0.100" 3" x 3" x 0.090"

2 x 2: TUBE SECTIONS x 2" x 0.090"

S

H

2" x 10" x 0.092" x 0.374"

2" x 5" x 0.050" ' x 0.125" S-1 GENERAL NOTES S-4 DETAILS S-3 DETAILS S-2 DRAWING



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FLORIDA LICENSE: 77605 FLORIDA LICENSE: 70667 Erik Stuart P.E. oel Falardeau P.E.

Services, Inc. **FBC Plans & Engineering** 

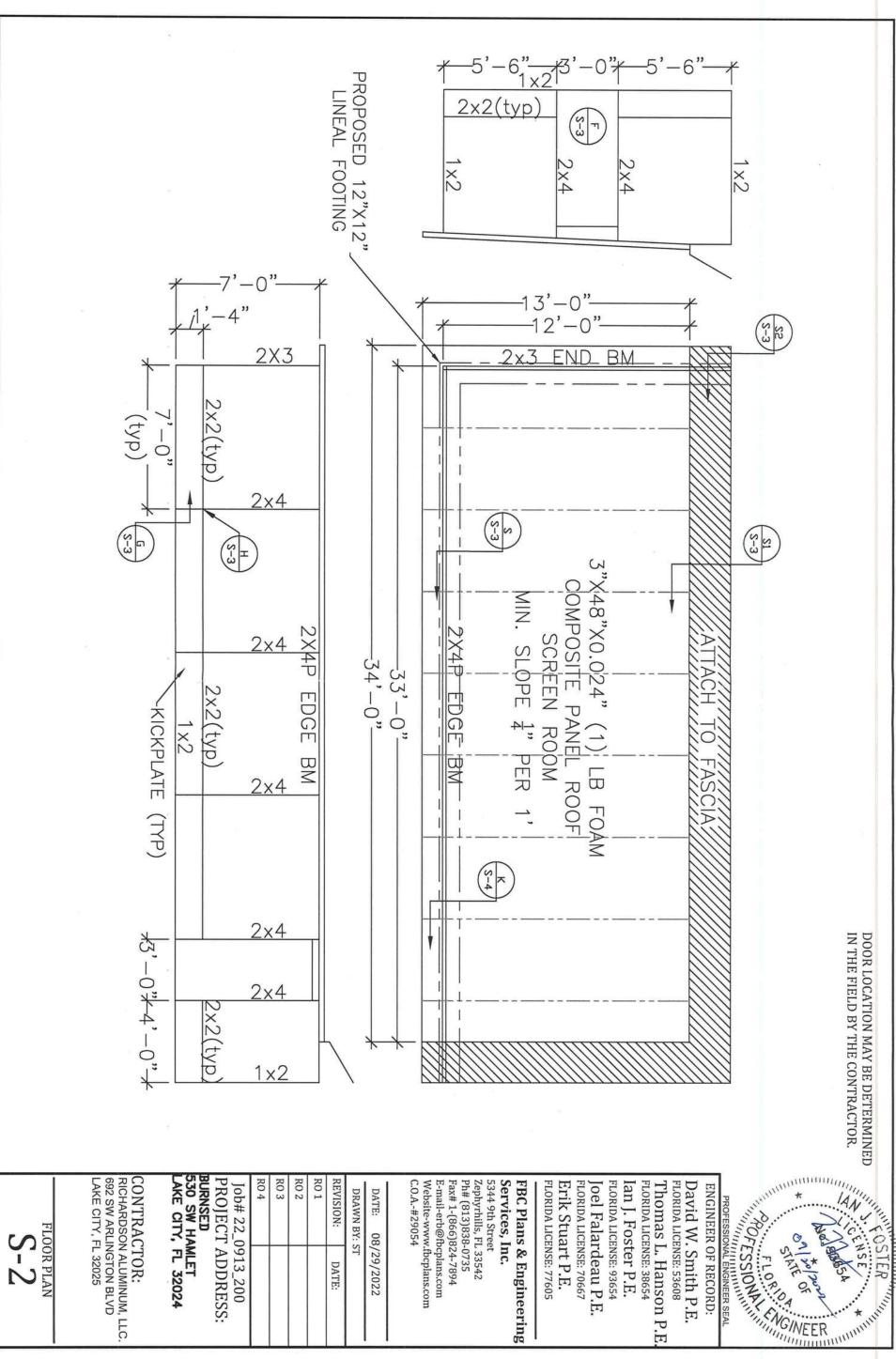
5344 9th Street C.O.A.-#29054 Website-www.fbcplans.com Ph# (813)838-0735 E-mail-erb@fbcplans.com Fax# 1-(866)824-7894 Zephyrhills, FL 33542

RO3 RO 2 RO 1 REVISION: DATE: DRAWN BY: ST 08/29/2022 DATE:

BURNSED 530 SW HAMLET LAKE CITY, FL 32024 PROJECT ADDRESS: ob# 22\_0913\_200

RO 4

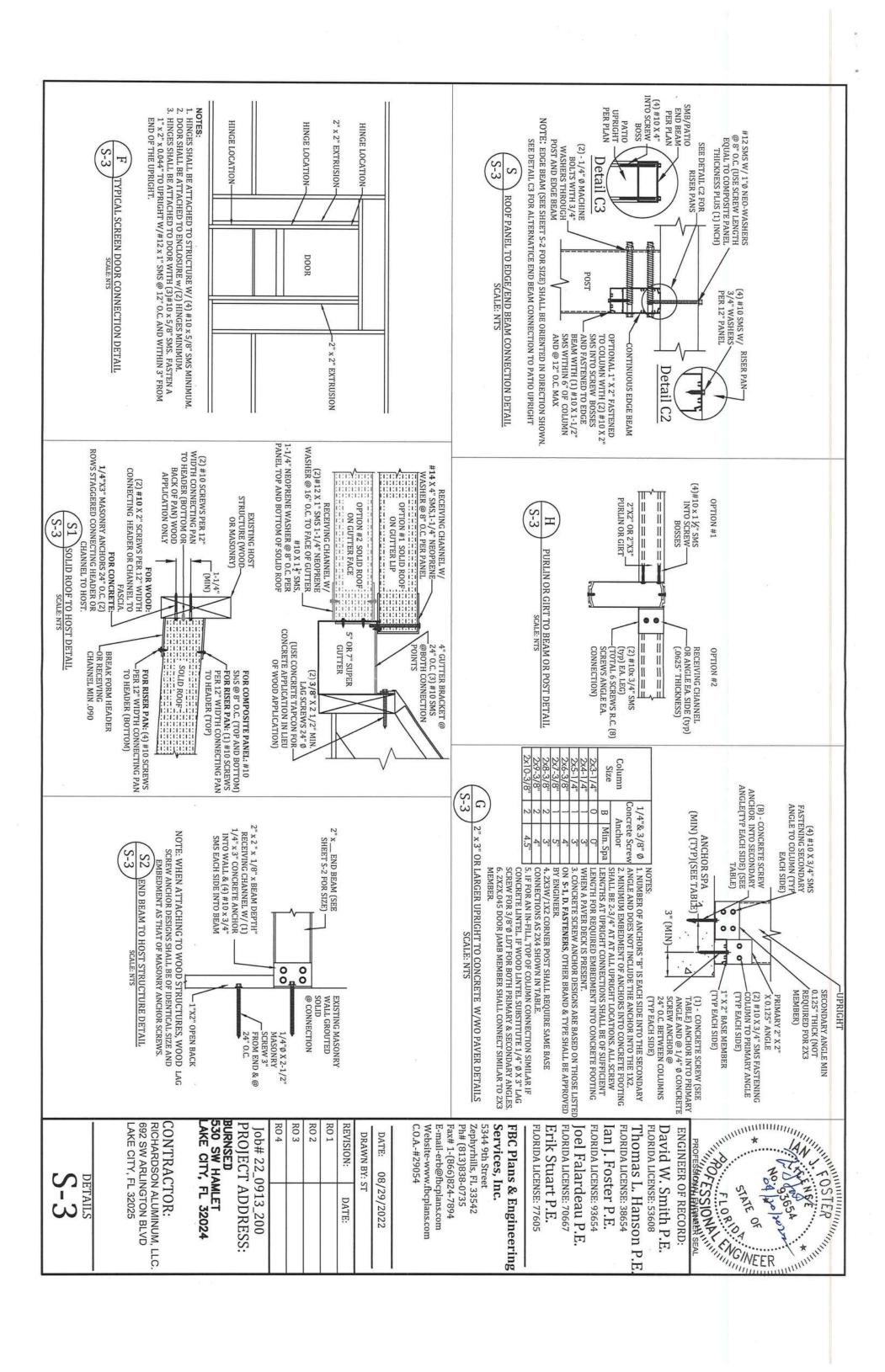
CONTRACTOR: 692 SW ARLINGTON BLVD RICHARDSON ALUMINUM, LLC. AKE CITY, FL 32025

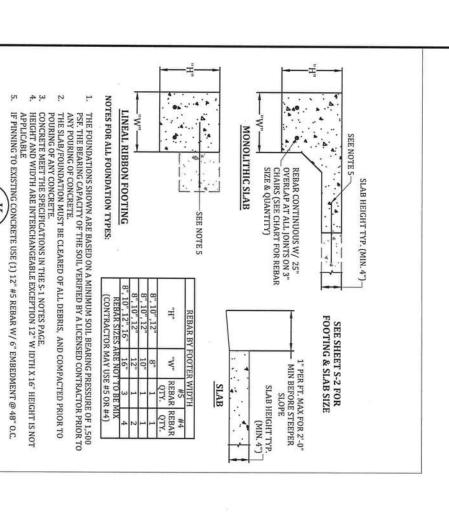


ENGINEER OF RECORD:

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BURNSED 530 SW HAMLET LAKE CITY, FL 32024 PROJECT ADDRESS: Job# 22\_0913\_200

RO3

RO 4

RICHARDSON ALUMINUM, LLC. 692 SW ARLINGTON BLVD LAKE CITY, FL 32025 CONTRACTOR:

DETAILS

FOUNDATION DETAIL