DESIGN CRITERIA:

APPLICABLE CODES, REGULATIONS & STANDARDS

1. THE 2020 FLORIDA BUILDING CODE, SPECIFICALLY CHAPTER 16 STRUCTURAL DESIGN, CHAPTER 20 ALUMINUM & CH. 23 WOOD.

2. AA ASM 35 & SPECIFICATIONS FOR ALUMINUM STRUCTURES, PART 1-A OF THE ALUMINUM DESIGN MANUAL PREPARED BY THE ALUMINUM ASSOCIATION, INC. WASHINGTON D.C. 2005 ED.

3. ASCE 7-16 & SE17

4. NDS NATIONAL DESIGN SPECIFICATION FOR WOOD.
5. ACI318 CONCRETE REFERENCE MANUAL.

1. BUILDING OCCUPANCY CATEGORY, PARAGRAPH 1604.5 & TABLE 1604.5: RISK CATEGORY 1.

2. BASIC WIND SPEED, TABLE 1609C, STATE OF FLORIDA DEBRIS REGION & BASIC WIND SPEED, PARAGRAPH 1609.3.1 & TABLE 1609.3.1 EQUIVALENT BASIC WIND SPEED: MPH EXPOSURE CATEGORY, PARAGRAPH 1609.4.3:

3. WIND LOADS PER FBC TABLE 2002.4 (MWFRS) VULT = 120 MPH & EXPOSURE = C

FOR 20 X 20 X 0.013" MESH SCREEN

HORIZONTAL PRESSURES ON WINDWARD SURFACES = 22 PSF 8 PSF HORIZONTAL PRESSURES ON LEEWARD SURFACES = VERTICAL PRESSURES ON SCREEN SURFACES = 23 PSF VERTICAL PRESSURES ON SOLID SURFACES =

FOR 18 X 14 X 0.013" MESH SCREEN, APPLIED FACTOR = FOR ALLOWABLE STRESS DESIGN, APPLIED FACTOR =

FOUNDATION DESIGN

FOOTING SIZE EXISTING CONCRETE SLAB. NO ADDITIONAL FOOTING OR FOUNDATION SYSTEM IS REQUIRED BY THE PROPOSED CONSTRUCTION IF A MINIMUM 4" CONCRETE SLAB IS PROVIDED IN SOUND CONDITION, FREE FROM STRUCTURAL CRACKING, SPALLING & OTHER DETERIORATION.

1. SCREENED ENCLOSURES CONTAINING SWIMMING POOLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF FBC R4501.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENTS.

2. 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 IS SO TO BE ENGINEERED SO THAT NO ADDITIONAL LOADING IS PLACED ON THE MANUFACTURED HOME.

FASTENER SPECIFICATIONS

1. FASTENERS ARE REQUIRED TO BE SAE GRADE 2 OR BETTER ZINC PLATED. (CONCRETE ANCHORS ARE TO BE TAPCONS

OR BETTER, INSTALLED TO MFG. SPECIFICATIONS)

2. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN THE SCREENS, FASTENERS AND SCREENS TO MANUFACTURING SPECIFICATIONS. 3. WHERE WOOD DECK IS PRESENT USE 1/4" X 3-1/2" GALV. LAG

SCREWS IN LIEU OF MASONRY ANCHORS. UNLESS OTHERWISE

4. 1"X2" NON STRUCTURAL MEMBERS ATTACHED TO HOST
A. FOR MASONRY/CONCRETE APPLICATION USE GALVANIZED 1/4" X 2-3/4" TAPCONS OR EQUAL AT 24" O.C. AND 6" FROM ENDS B. FOR WOOD APPLICATION USE #14 X 2-3/4" WOOD SCREW AT 24" O.C. AND 6" FROM ENDS.

C. FOR ALUMINUM APPLICATION USE #10 X 1-1/2" SMS OR TEK SCREW AT 24" O.C. AND 6" FROM ENDS

D. WHERE 1"X2" INSTALLED THROUGHOUT AN "OPEN VIEW" SPACING SHALL BE REDUCED TO 18" O.C. AND 6" FROM ENDS

 ALL SITE WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH APPLICABLE BUILDING CODES, LOCAL ORDANANCES, AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.

2. FOR FASTENERS WHICH ARE NOT VISIBLE AFTER INSTALLATION, THE CONTRACTOR SHALL VERIFY AND ENSURE INSTALLATION HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND IN ACCORDANCE WITH THE ATTACHED DETAILS.

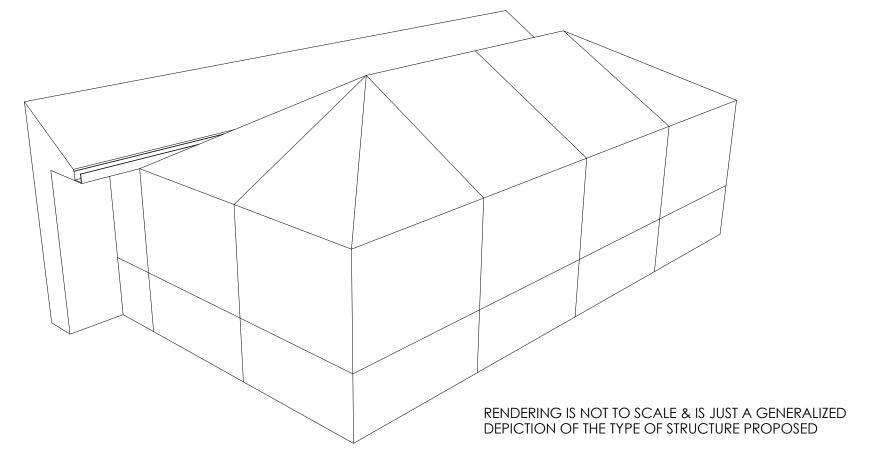
3. FOR "PICTURE WINDOW" MODIFICATION TO EXISTING SCREEN ENCLOSURES, ALL OTHER "EXISTING SCREEN ENCLOSURE" FEATURES ARE TO MEET THE TYPICAL DETAILS AS PROVIDED IN THESE DETAILS. CONTRACTOR IS TO VERIFY & ASSURE EXISTING SCREEN ENCLOSURE IS STRUCTURALLY SOUND 4. CONTRACTOR TO PROVIDE NOA'S & INSTALL ALL MATERIALS

AS PER MANUFACTURER'S SPECIFICATIONS.

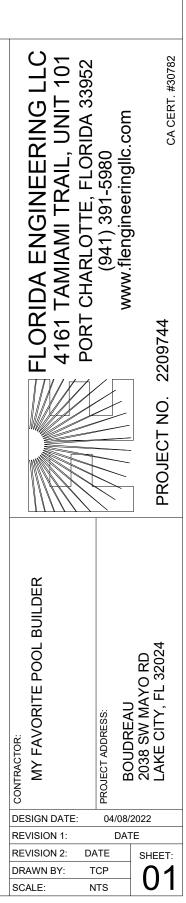
5. INTEGRITY OF EXISTING/ HOST STRUCTURE SHALL NOT BE COMPROMISED WITH THE ATTACHMENT OF THE PROPOSED STRUCTURE.

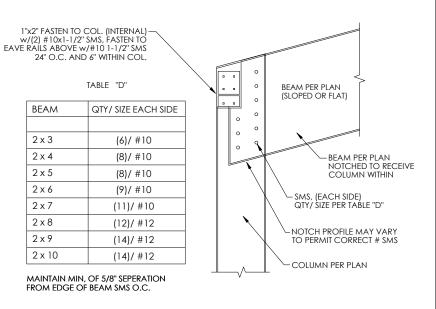
DRAWING INDEX
GENERAL NOTES
PLAN/ ELEVATIONS
DETAILS
DETAILS

This item has been electronically signed and sealed by Craig E. Gunderson, P.E. on date below using a Digital Signature. Printed copies of this document are not considered signed and sealed an the signature must be verified on electronic copies.



PROPOSED HIP GABLE SCREEN ENCLOSURE SEE FOUNDATION DESIGN SHEET-01





DETAIL E - UPRIGHT TO BEAM CONNECTION SCALE: NTS

(2) #10x3" SMS INTO SCREW BOSSES FOR EDGE MEMBER EDGE MEMBER -OR PURI IN -EDGE MEMBER OR PURLIN (2) #10x2" INTO BEAM BFAM -BRACE – 0.0625" 6063-T6 FLAT PLATE w/(8) #10x.75" SMS, MIN. .5" EDGE DISTANCE, PLATE MAY BE FASTENED INTERNALLY TO BRACE TO CORNER PURLIN DETAIL "D" - ROOF BRACING CONNECTION

ALUMINUM MEMBERS DIMENSIONS

HOLLOW SECTIONS 2 x 2: 2" x 2" x 0.050" 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 0.044" 1 x 3: 1" x 3" 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 0.046" x 0.100" 2 x 5 SMB: 2" x 5" x 0.050" x 0.116" 2 x 6 SMB: 2" x 6" x 0.050" x 0.120" 2 x 7 SMB: 2" x 7" x 0.055" x 0.120" 2 x 8 SMB: 2" x 8" x 0.072" x 0.224' 2 x 9 SMB: 2" x 9" x 0.072" x 0.224" 2 x 9(H) SMB: 2" x 9" x 0.082" x 0.306 2 x 10 SMB: 2" x 10" x 0.092" x 0.374"

ALUMINUM INTERNAL OR EXTERNAL RECEIVING CHANNEL W/(4) #10x.75" INTO GIRT OR PURLIN & (2) #14x.75" INTO BEAM OR UPRIGHT 0.062 ANGLE

CLIPS MAYBE USED

UPRIGHT, BEAM-SNAP, SELF MATING, OR HOLLOW

DETAIL A

TAMIAMI TRAIL, UNIT 101 CHARLOTTE, FLORIDA 33952 (941) 391-5980 ENGINEERING TAMIAMI ORIDA 4161 PORT

MY FAVORITE POOL BUILDER

DESIGN DATE:

REVISION 1:

REVISION 2:

DRAWN BY:

SCALE:

CONTRACTOR

-(4) #10x1-1/2" SMS INTO SCREW BOSSES

PURLIN

101

CA CERT.

22097

PROJECT NO.

BOUDREAU 2038 SW MAYO RD LAKE CITY, FL 32024

PROJECT ADDRESS:

DATE

TCP

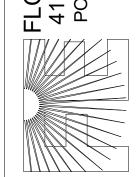
NTS

04/08/2022

DATE

SHEET:

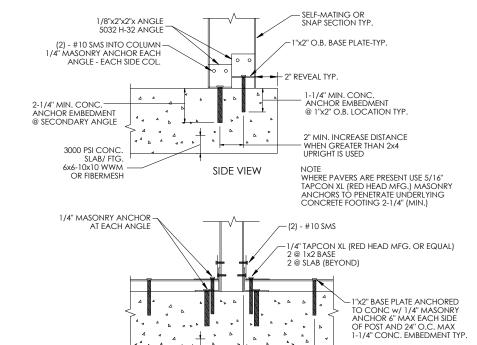
www.flengineeringllc.com



CONNECTION SCALE: NTS

MINIMUM NUMBER OF TAPCONS INTO CONCRETE & # 12 X 3/4" S.M.S. INTO UPRIGHT / EACH SIDE OF BEAM THROUGH SECONDARY 2" X 2" X 0.125" ANGLES (SEE BELOW) 2X4 S.M.B. (1) 1/4" X 2-1/4" S.S. TAPCON & (2) # 10 X 3/4" S.M.S. 2X5 S.M.B. (1) 1/4" X 2-1/4" S.S. TAPCON & (2) # 10 X 3/4" S.M.S. 2X6 S.M.B. (2) 1/4" X 2-1/4" S.S. TAPCON & (3) # 10 X 3/4" S.M.S.

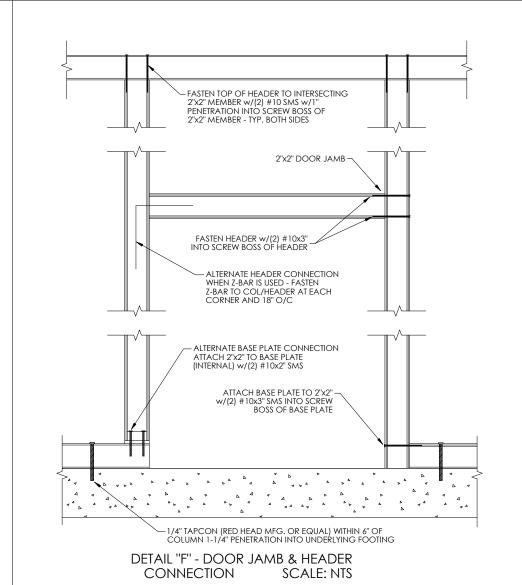
2X7 S.M.B. (2) 1/4" X 2-1/4" S.S. TAPCON & (3) # 10 X 3/4" S.M.S. 2X8 S.M.B. (3) 1/4" X 2-1/4" S.S. TAPCON & (4) # 10 X 3/4" S.M.S. 2X8 S.M.B. (3) 1/4" X 2-1/4" S.S. TAPCON & (5) # 10 X 3/4" S.M.S. 2X9 S.M.B. (4) 1/4" X 2-1/4" S.S. TAPCON & (6) # 10 X 3/4" S.M.S. 2X10 S.M.B. (5) 1/4" X 2-1/4" S.S. TAPCON & (7) # 10 X 3/4" S.M.S.



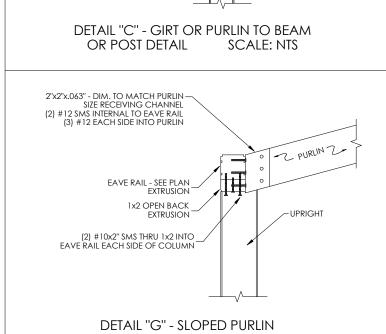
DETAIL "B" - 2"x4" OR LARGER SELF MATING UPRIGHT TO DECK DETAILS SCALE: NTS

FRONT VIEW

3000 PSI CONC. SLAB/ FTG. 6x6-10x10 WWM



SCALE: NTS



ALUMINUM SPECIFICATIONS

1. ALUMINUM EXTRUSIONS SHALL BE 6005 T5 ALLOY UNLESS OTHERWISE NOTED.

2. ALL SELF MATING BEAM SECTIONS ARE TO BE STITCHED WITH #12 SCREWS 6" FROM ENDS & 24" CENTER TO CENTER. #10 SCREW 6" FROM ENDS & 12" CENTER TO CENETER.

3. ROOF BRACING SHALL BE A MINIMUM 2"X2"X.050".

4. THE MINIMUM NORMAL THICKNESS OF PROTECTOR PANELS (KICKPLATES) SHALL BE AN INDUSTRY STANDARD OF 0.024 INCHES.

5. VINYL AND ACRYLIC PANELS SHALL BE REMOVED WHEN WIND SPEEDS EXCEED 75 MPH PER FBC.

6. SCREEN MATERIAL SHALL BE 18/14 SCREEN UNLESS APPROVED BY FLORIDA ENGINEERING LLC.

7. 1"X2" & 1"X3" NON STRUCTURAL MEMBERS MAY BE USED INTERCHANGEABLY.

8. DOOR LOCATION MAY BE DETERMINED/ RELOCATED BY CONTRACTOR IN THE FIELD. RESIDENCE HOST 16" O/H STRUCT. GUTTER 2X2 TYP. O/H STRUCT. GUTTER RESIDENCE 2X2 TYP. HOST 16" 2X2 TYP. -35'-8" 1X2 + 2X2HOUSE WALL 2X2 DJ 2X2 DJ 2X3 TYP. 1X2 TYP. -5'-11 3" -5'-11

HOUSE WALL

-8--2

-8'-2

-8'-2"— 1X2 TYP.

1X2 2X2

2X5SMB

2X5SMB

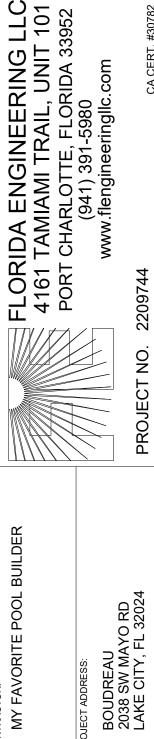
2X5SMB

1X2 -12'-0"

1X2 + 2X2

4'-0" MAX.

2X8SMB

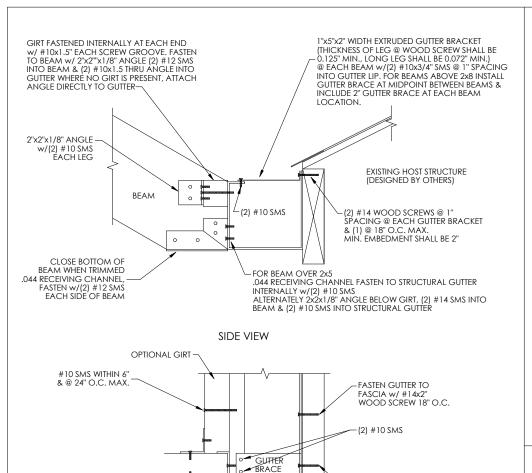


CA CERT. #30782

MY FAVORITE POOL BUILDER PROJECT ADDRESS: CONTRACTOR

DESIGN DATE: 04/08/2022 REVISION 1: REVISION 2: DATE SHEET: DRAWN BY: TCP

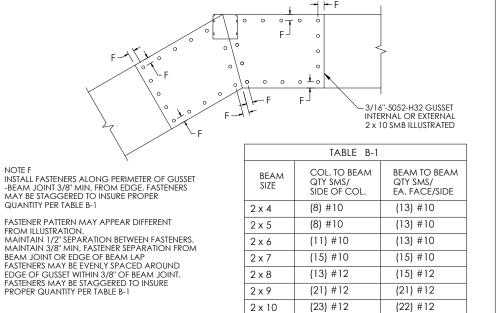
SCALE: NTS



DETAIL "H" BEAM TO GUTTER CONNECTION SCALE: NTS

TOP VIEW

2x2x1/8" ANGLE EA. SIDE OF BEAM W/(2) #10 SMS EACH LEG EACH SIDE

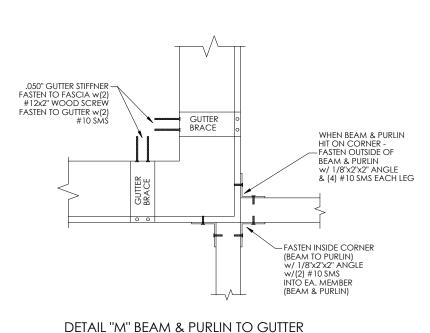


-(2) #14x2" WOOD SCREW

STRUCTURAL

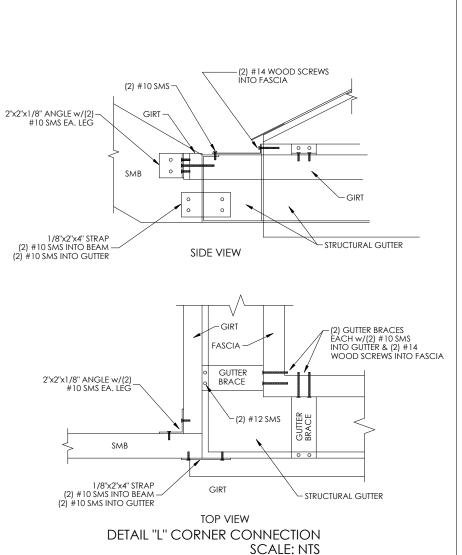
FASCIA (2"x6" MIN. EXISTING)

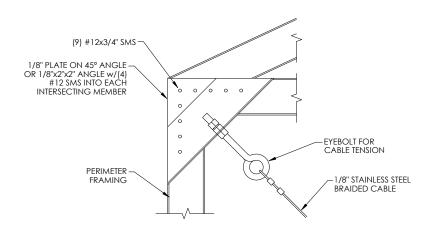
DETAIL "K" GUSSET CONNECTION **SCALE: NTS**



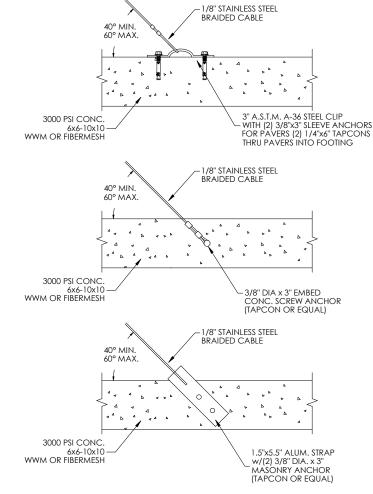
SCALE: NTS

CONNECTION

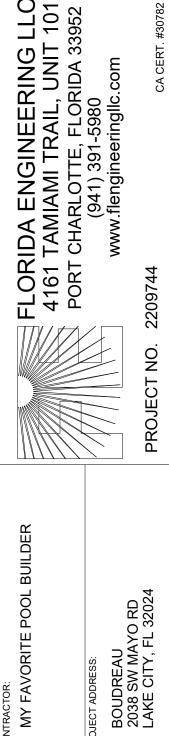




DETAIL "I-2" CABLE CONNECTION SCALE: NTS AT CORNER



DETAIL "I-1" CABLE CONNECTION AT FOUNDATION SCALE: NTS



PROJECT ADDRESS:

DATE

TCP

04/08/2022

DATE

SHEET:

CONTRACTOR

DESIGN DATE:

REVISION 1:

REVISION 2:

DRAWN BY:

SCALE: