Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0709-81 Date Received 9/28/07 By G Permit # 26332

Application Approved by - Zoning Official cfs Date 10/2/07 Plans Examiner OK JTH Date 9-28-07

Flood Zone N/A Development Permit — Zoning PRRD Land Use Plan Map Category A-3

Comments ~~FDC Needed~~

Applicants Name Vince Richardson Richardson Aluminum, LLC Phone 386-755-5779

Address 692 S.W. Arlington Blvd. Lake City, Fl 32025

Owners Name Barry Q. Groves Phone 850-528-2955

911 Address 1214 N.W. Blackberry Circle

Contractors Name Richardson Aluminum LLC Phone 386-755-5779

Address 692 S.W. Arlington Blvd Lake City, Fl 32025

Fee Simple Owner Name & Address NA

Bonding Co. Name & Address NA

Architect/Engineer Name & Address ~~NA~~ Lawrence E. Bennett

Mortgage Lenders Name & Address NA

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy

Property ID Number 17-3S-16-02168-129 HA Estimated Cost of Construction 9,900.00

Subdivision Name Blackberry farms Lot 29 Block ____ Unit ____ Phase ____

Driving Directions Nash Road to Blackberry farms. Go into blackberry farms. 1214 N.W. Blackberry Cirle. House on corner on left (TR Blackberry Circle)

Type of Construction Screen Enclosure Number of Existing Dwellings on Property 1

Total Acreage 2.45 Lot Size 204'x555' Do you need a - Culvert Permit or Culvert Waiver or (Have an Existing Drive)

Actual Distance of Structure from Property Lines - Front 95' Side 70' Side 127' Rear 414'

Total Building Height 12' Number of Stories 1 Heated Floor Area 0 Roof Pitch dome

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

Owner Builder or Agent (Including Contractor)

Vince Richardson
Contractor Signature

Contractors License Number ____

Competency Card Number 5129

STATE OF FLORIDA
COUNTY OF COLUMBIA

GALE TEDDER
MY COMMISSION # DD 333586
EXPIRES: June 28, 2008
Bonded Thru Notary Public Underwriters

NOTARY STAMP/SEAL

Sworn to (or affirmed) and subscribed before me this 28th day of Sept 2007.

Gale Tedder
Notary Signature

Personally known ✓ or Produced Identification ____

January 01, 2007

LAWRENCE E. BENNETT, P.E.
P.O. BOX 214368
SOUTH DAYTONA, FL 32121
386-767-4774

TO ALL BUILDING DEPARTMENTS

Re: Master File Engineering
"ALUMINUM STRUCTURES DESIGN MANUAL"
2004 edition & 2006 edition

Dear Building Official/Plans Examiner,

This is to certify that the following contractor/company is hereby authorized to use my "ALUMINUM STRUCTURES DESIGN MANUAL" during the year 2007. When we publish and distribute the 2006 ed of the "ALUMINUM STRUCTURES DESIGN MANUAL", they will be authorized to use that manual for the remainder of 2007.

Our authorization is based on a January to January basis requardless of the edition of the manual. This authorization also applies to contractor master file drawings, " ONE PERMIT ONLY" drawings or any "site specific" drawings that I may furnish the contractor.

Vince Richardson

Richardson Aluminum LLC
692 SW Arlington Blvd
Lake City, FL 32025

They are hereby added to my 2007 MASTERFILE LIST

Should you have any questions please contact me at your convenience.

Sincerely,

Lawrence E. Bennett, P.E. #16644

Barry Groves

CURVE TABLE

NO.	RADIUS	DELTA	ARC	TANGENT	CHORD	CHORD BEARING
1	690.00'	40°39'25"	489.62'	255.63'	479.41'	S.87°23'22"E.
PLAT	690.00'	40°39'33"	489.65'		479.44'	S.87°26'46"E.
2	25.00'	92°15'43"	40.26'	26.01'	36.05'	S.66°40'15"W.
PLAT	25.00'	91°09'44"	39.78'		35.71'	S.67°18'09"W.
3	570.00'	23°25'41"	233.07'	118.19'	231.45'	S.09°59'04"W.
PLAT	570.00'	23°25'49"	233.09'		231.47'	S.10°00'23"W.

SURVEYOR'S NOTES:

1. BOUNDARY BASED ON MONUMENTATION FOUND IN ACCORDANCE WITH THE RETRACEMENT OF THE ORIGINAL SURVEY FOR SAID PLAT OF RECORD.
2. BEARINGS ARE BASED ON SAID PLAT OF RECORD.
3. THIS PARCEL IS IN ZONE "X" AND IS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN AS PER FLOOD RATE MAP, DATED 6 JANUARY, 1988 COMMUNITY PANEL NUMBER 120070 0125 B. HOWEVER, THE FLOOD INSURANCE RATE MAPS ARE SUBJECT TO CHANGE.
4. THE IMPROVEMENTS, IF ANY, INDICATED ON THIS SURVEY DRAWING ARE AS LOCATED ON DATE OF FIELD SURVEY AS SHOWN HEREON.
5. IF THEY EXIST, NO UNDERGROUND ENCROACHMENTS AND/OR UTILITIES WERE LOCATED FOR THIS SURVEY EXCEPT AS SHOWN HEREON.
6. THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR A TITLE POLICY.

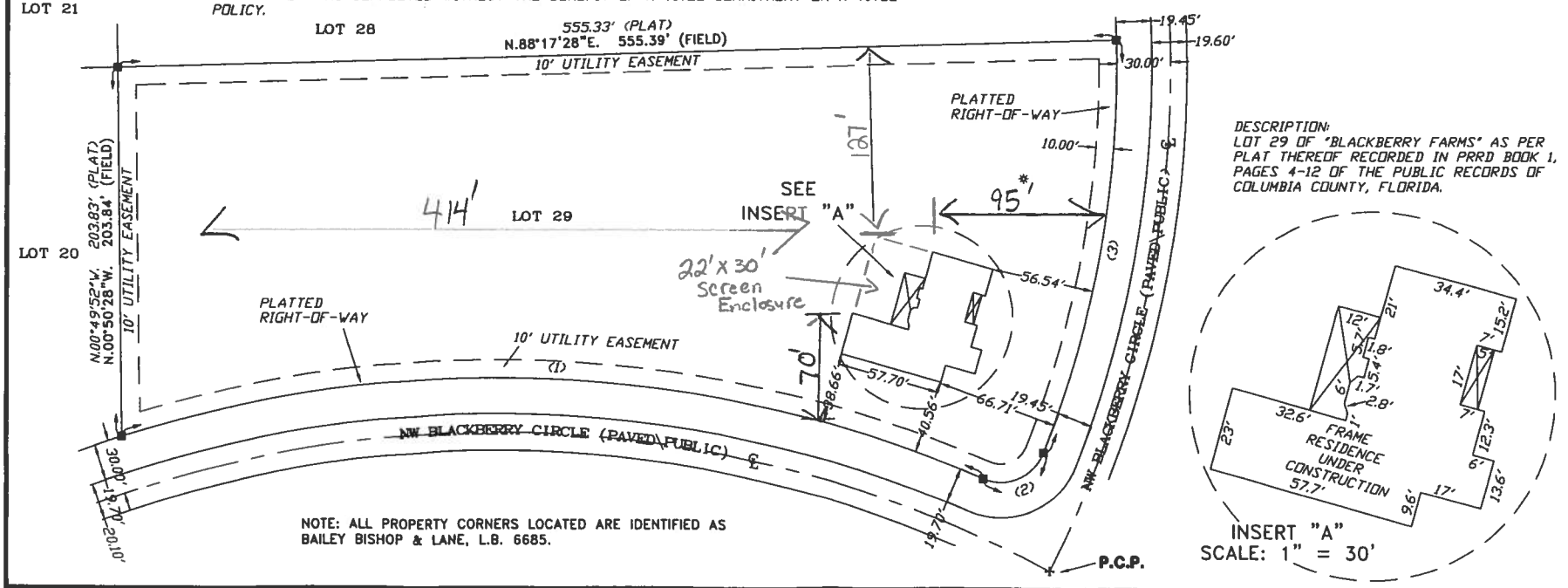
BOUNDARY SURVEY IN SECTION 17, TOWNSHIP 3 SOUTH, RANGE 16 EAST, COLUMBIA COUNTY, FLORIDA.

SYMBOL LEGEND:

- 4"X4" CONCRETE MONUMENT FOUND
- 4"X4" CONCRETE MONUMENT SET
- IRON PIPE FOUND
- IRON PIN AND CAP SET
- POWER POLE
- WATER METER
- CENTERLINE
- WELL
- SATELLITE DISH
- TELEPHONE BOX
- ELECTRIC LINES
- WIRE FENCE
- CHAIN LINK FENCE
- WOODEN FENCE

N

SCALE: 1" = 60'



NOTE: ALL PROPERTY CORNERS LOCATED ARE IDENTIFIED AS BAILEY BISHOP & LANE, L.B. 6685.

DESCRIPTION:
LOT 29 OF "BLACKBERRY FARMS" AS PER PLAT THEREOF RECORDED IN PRRD BOOK 1, PAGES 4-12 OF THE PUBLIC RECORDS OF COLUMBIA COUNTY, FLORIDA.

INSERT "A"
SCALE: 1" = 30'

CERTIFIED TO:
BARRY Q. GROVES
DENNIS H. PELLETIER
FIRST FEDERAL SAVINGS BANK OF FLORIDA
CHICAGO TITLE INSURANCE COMPANY
ABSTRACT AND TITLE SERVICES, INC.

FIELD BOOK: 272 PAGE(S): 57

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY RESPONSIBLE CHARGE AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

12/29/04 FIELD SURVEY DATE
01/01/05 DRAWING DATE
T. SCOTT BRITT, PSM CERTIFICATION # 5757

NOTE: UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER THIS DRAWING, SKETCH, PLAT OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

BRITT SURVEYING
LAND SURVEYORS AND MAPPERS
830 WEST DUVAL STREET LAKE CITY, FLORIDA 32055
(386)752-7163 FAX (386)752-5573

WORK ORDER # L-15659

Columbia County Property Appraiser

DB Last Updated: 8/2/2007

2007 Proposed Values

Tax Record | Property Card | Interactive GIS Map

New Super Homestead Taxable Value Calculator

Print

Parcel: 17-3S-16-02168-129 HA

Search Result: 1 of 3 Next >>

Owner & Property Info

Owner's Name	GROVES BARRY Q &		
Site Address	BLACKBERRY		
Mailing Address	DENNIS H PELLETIER (JTWRS) 1214 NW BLACKBERRY CIR LAKE CITY, FL 32055		
Use Desc. (code)	SINGLE FAM (000100)		
Neighborhood	17316.00	**Tax District**	3
UD Codes	MKTA01	**Market Area**	01
Total Land Area	2.450 ACRES		
Description	LOT 29 BLACKBERRY FARMS S/D. ORB 1000-688, WD 1111-2445		

GIS Aerial

Property & Assessment Values

Mkt Land Value	cnt: (1)	$44,100.00
Ag Land Value	cnt: (0)	$0.00
Building Value	cnt: (1)	$192,618.00
XFOB Value	cnt: (3)	$8,634.00
Total Appraised Value		$245,352.00

Just Value		$245,352.00
Class Value		$0.00
Assessed Value		$234,482.00
Exempt Value	(code: HA)	$25,000.00
Total Taxable Value		$209,482.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
11/19/2003	1000/688	WD	V	Q		$28,300.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	SINGLE FAM (000100)	2005	Vinyl Side (31)	2054	3358	$192,618.00
	Note: All S.F. calculations are based on exterior building dimensions.					

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0180	FPLC 1STRY	2005	$2,300.00	1.000	0 x 0 x 0	(.00)
0166	CONC,PAVMT	2005	$3,834.00	1917.000	0 x 0 x 0	(.00)
0169	FENCE/WOOD	2005	$2,500.00	1.000	0 x 0 x 0	(.00)

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000100	SFR (MKT)	2.450 AC	1.00/1.00/1.00/1.00	$18,000.00	$44,100.00

SECTION 1
SCREENED ENCLOSURES

General Notes and Specifications:

1. The following structures are designed to be married to block and wood frame structures of adequate structural capacity. The contractor / home owner shall verify that the host structure is in good condition and of sufficient strength to hold the proposed addition.
2. If there is a question about the host structure, the owner (at his own expense) shall hire an architect, engineer, or a certified home inspection company to verify host structure capacity.
3. The structures designed using this section shall be limited to a maximum combined span and upright height of 55' and a maximum upright height of 20'. Structures larger than these limits shall have site specific engineering.
4. Spans are for enclosures with mean roof heights less than 30'. For greater heights, consult engineer.
5. Connections to fascia shall be limited to overhangs of 24" or less unless site specific engineering is provided.
6. The proper structural name for a chair rail or top rail of an enclosure is a girt. Thus the terminology shall be interchangeable.
7. Screws that penetrate the water channel of the super gutter shall have ends clipped off for safety of cleaning gutter and the heads of screws through the gutter into the fascia shall be caulked.
8. Section 7 contains span tables and attachment details for pans and composite panels.
9. When using TEK screws in lieu of S.M.S., longer screws must be used to compensate for drill head.
10. An additional super gutter strap or ferrule is required to be located near the midpoint of the beam spacing. Straps shall be attached to each truss / rafter tail when a 2" sub-fascia does not exist. Straps at the beam are not required when straps are placed @ each truss / rafter tail and spacing of straps does not exceed 2'-0".
11. Super or extruded gutter details are applicable to all widths of super or extruded gutters, and gutters may be substituted. Gutter straps and/or ferrules shall be the width of the inside and outside of the super or extruded gutter respectively.
12. If the sub-fascia is 3/4", and the sub-fascia is in good repair, a 3/4" P.T.P. strip the width of the fascia may be added to the existing sub-fascia by attaching the plywood with (2) 3" 16d common nails or (2) 3" #8 screws. This gives the equivalent of a 2" fascia.
13. Spans may be interpolated between values but not extrapolated outside values.
14. For Design Check List and Inspection Guides for Screened Enclosures, see Appendix (Section 10).

Section 1 Design Statement:

The structures designed for Section 1 are framing systems with screen roofs & walls and are considered open structures. The design loads used are from Chapter 20 of the 2001 Florida Building Code. The loads assume a mean roof height of less than 30'; roof slope of 0° to 20°; I = 0.77. All loads are based on 20 / 20 screen or larger. Wall heights may be increased when using 18 / 14 screen. All pressures shown in the below table are in PSF (#/SF).

General Notes and Specifications for Section 1 Tables:

Section 1 Design Loads
for Structures with Screen Roof & Walls

Wind Velocity	Exposure 'B'		Exposure 'C'	
	Roofs Note 1	Walls Note 1	Roofs Note 1	Walls Note 1
100 M.P.H	10	10	10	13
110 M.P.H	10	11	10	16
120 M.P.H	10	14	10	19
123 M.P.H	10	14.6	10	19.9
130 M.P.H	10	16	10	22
140 M.P.H	10	18	10	26
150 M.P.H	10	21	10	30

Note 1: per Table 2002.4 or paragraph 1606.1.2
Note 2: Multipliers for 'C' exposure catagory are for wall loads only.

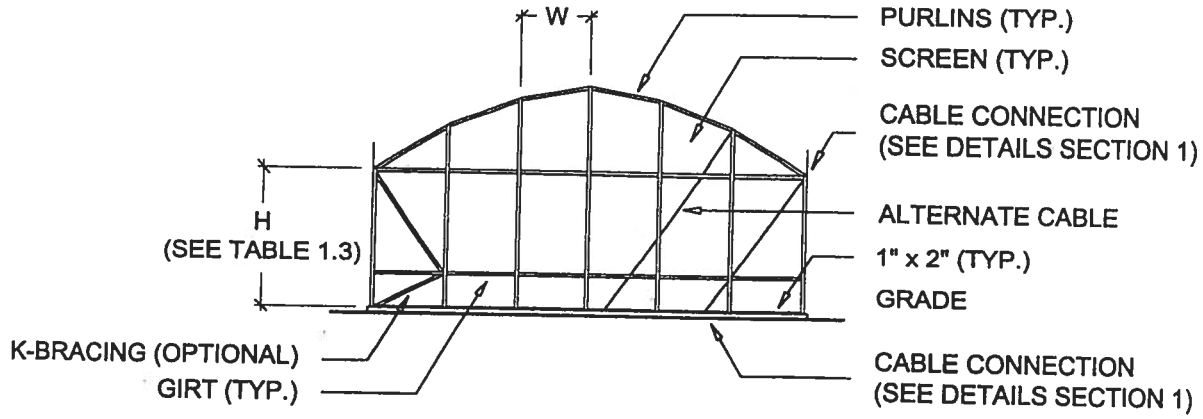
Conversion Table 1A
Wind Zone Conversions for Screen Wall Frame Members Only
From 120 MPH Wind Zone to Others

Wind Zone MPH	Applied Load #/ Sq. Ft.	Exposure 'B'	
		Deflection 'd'	Bending 'b'
100	10	1.12	1.18
110	11	1.08	1.13
120	14	1.00	1.00
123	15	0.99	0.98
130	16	0.96	0.94
140	18	0.92	0.88
150	21	0.87	0.82

Note:
Multipliers are for wall loads only, no conversions are necessary for roof frame members.

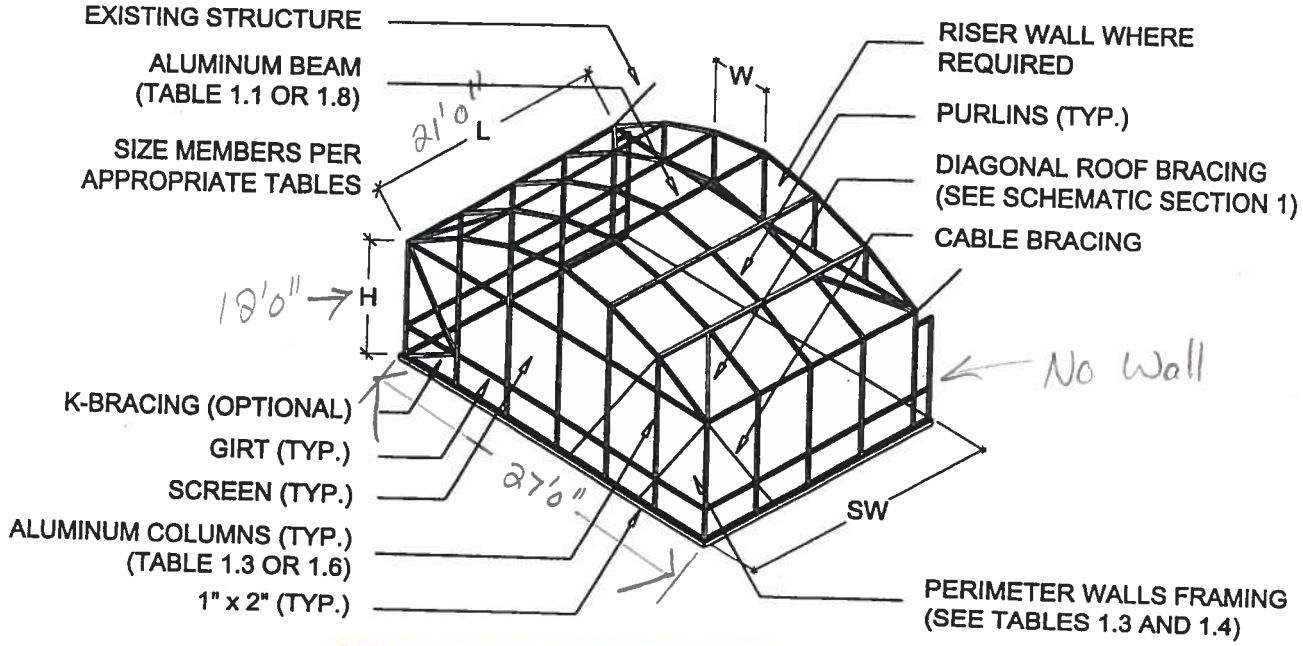
Conversion Table 1B
Conversion Based on Mean Height of Host Structure for Screen Wall Frame Members
From Exposure 'B' to 'C'

Mean Host Structure Height	Deflection 'd'	Bending 'b'
0 - 15'	0.91	0.94
15' - 20'	0.88	0.92
20' - 25'	0.86	0.91
25' - 30'	0.85	0.89



TYPICAL DOME ROOF - ELEVATION

SCALE: N.T.S.



TYPICAL DOME ROOF - ISOMETRIC

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES.

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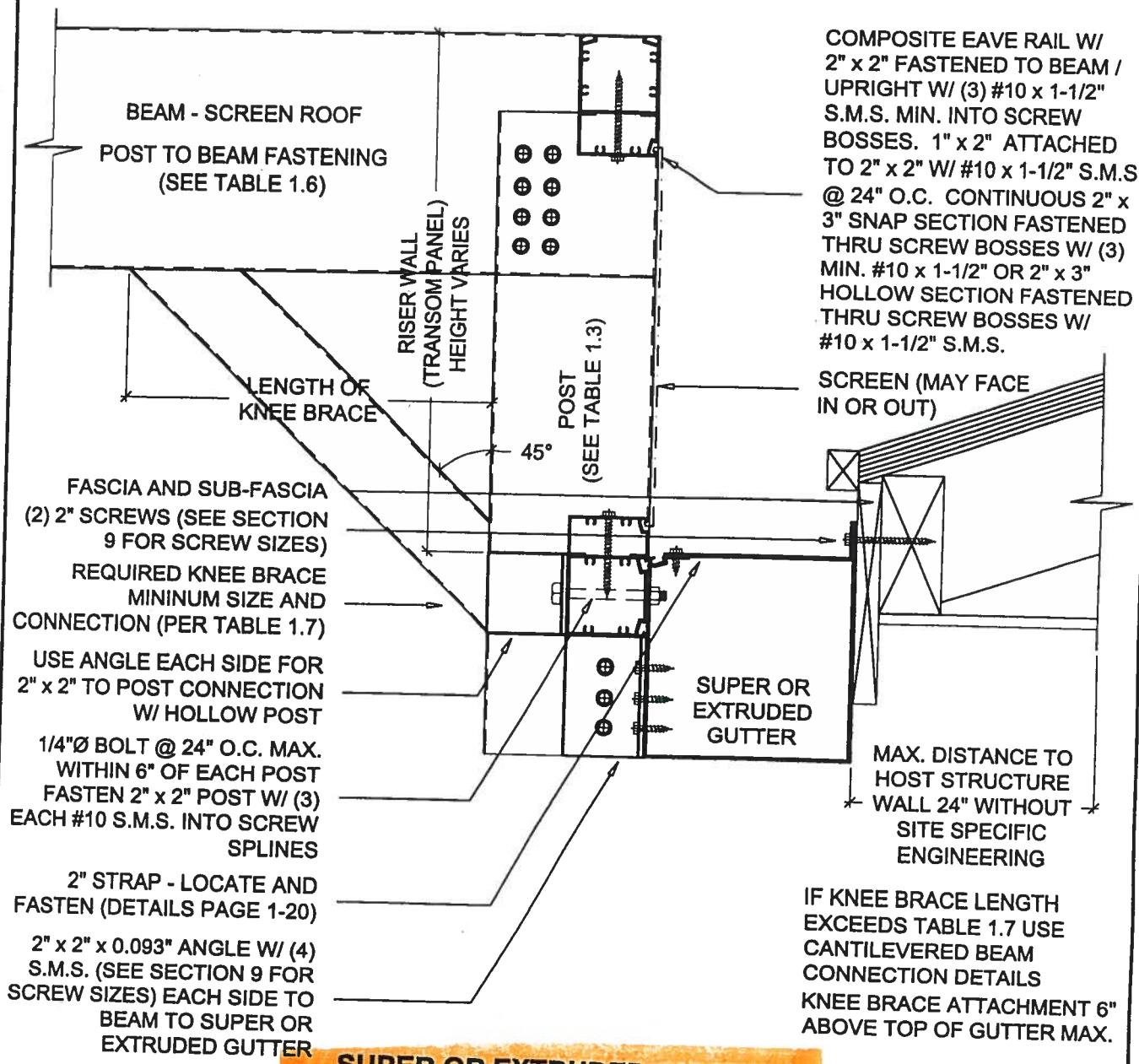

SUPER OR EXTRUDED GUTTER RISER (OR TRANSOM) WALL @ FASCIA - DETAIL 1

SCALE: 3" = 1'-0"

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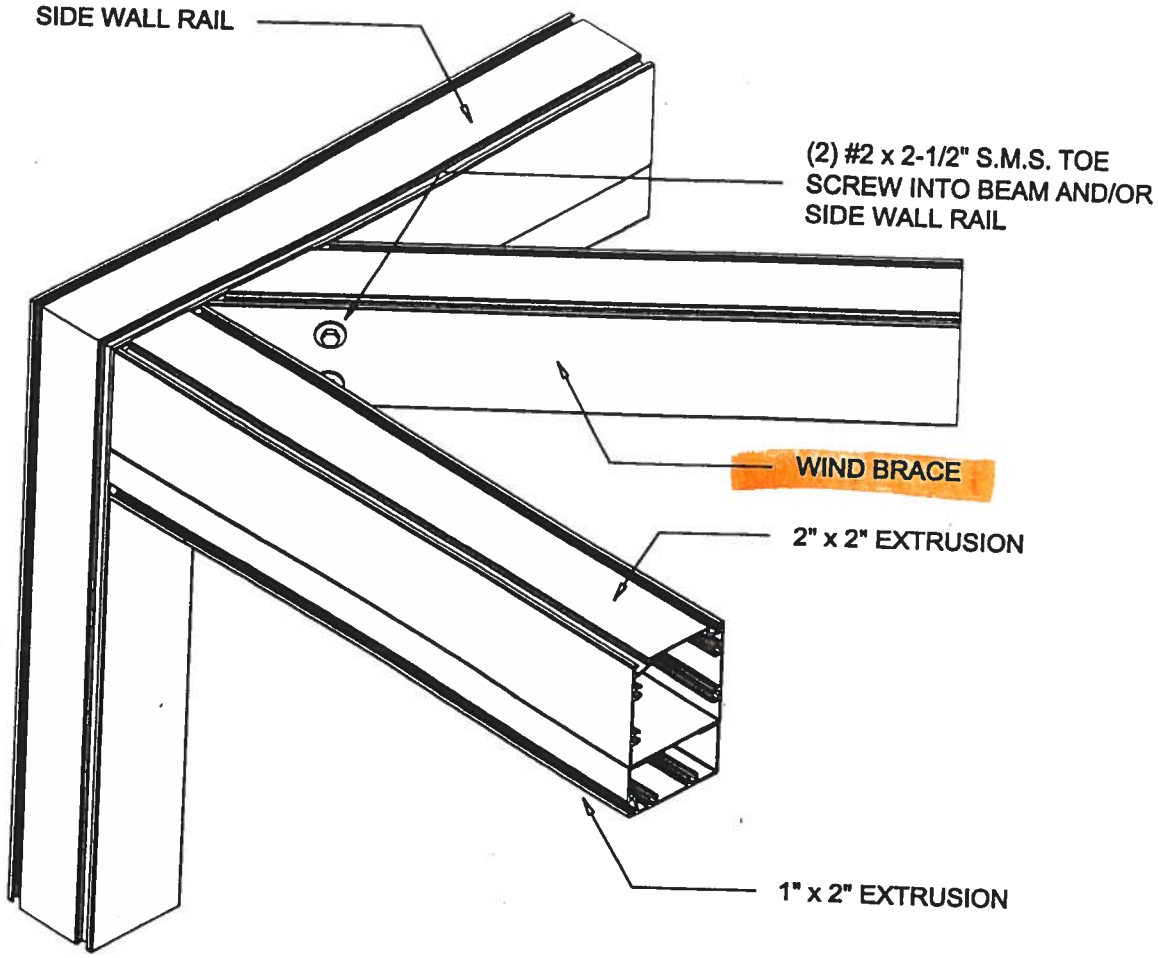

WIND BRACE CONNECTION DETAIL

SCALE: 3" = 1'-0"

NOTE:
WIND BRACING SHALL BE PROVIDED @ EACH SIDE WALL PANEL WHEN ENCLOSURE PROJECTS MORE THAN (4) PANELS FROM HOST STRUCTURE

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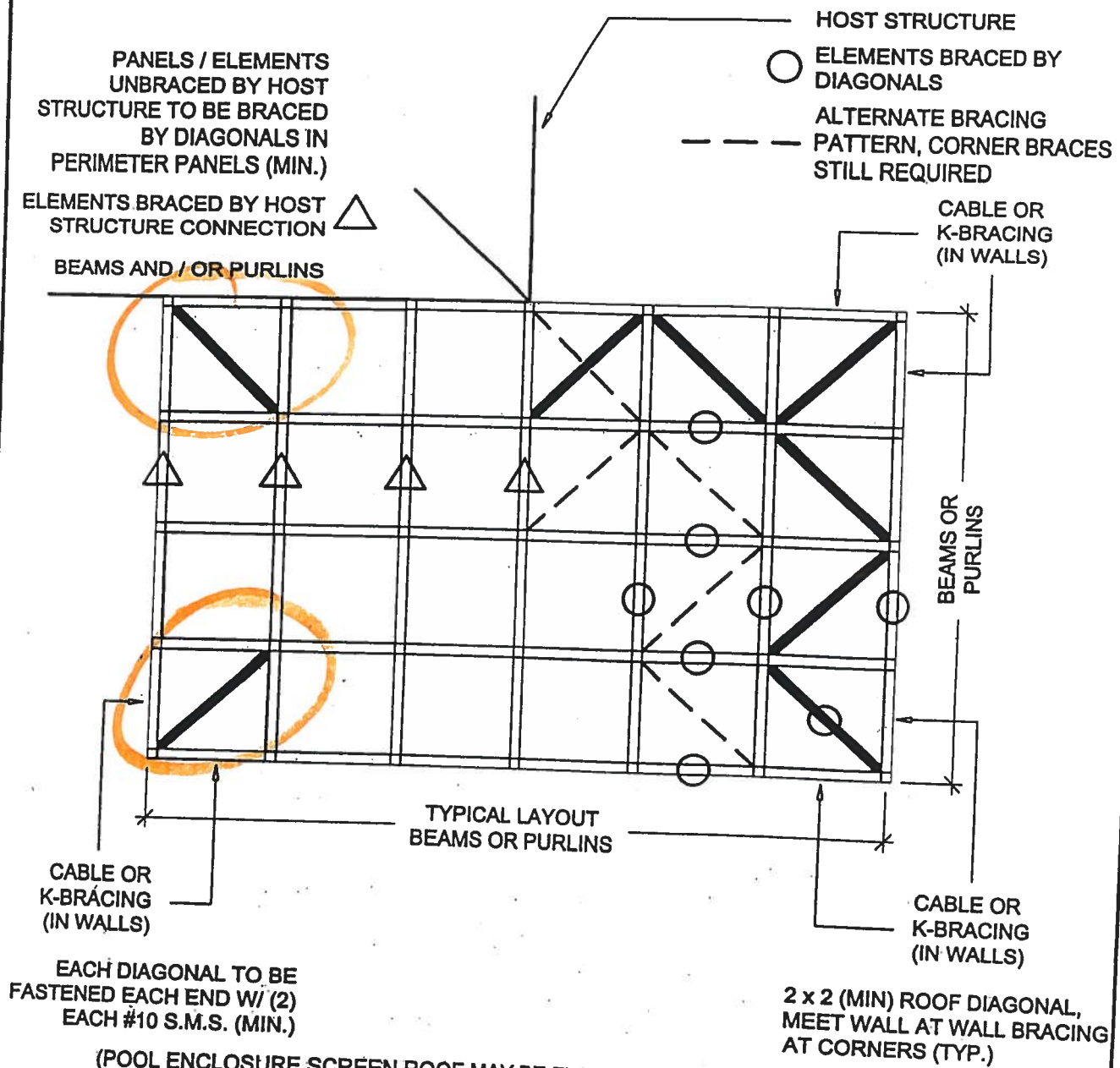

(POOL ENCLOSURE SCREEN ROOF MAY BE FLAT, GABLE, MANSARD, DOME, OR HIP)

POOL ENCLOSURE DIAGONAL BRACING - SCHEMATIC PLAN VIEW

SCALE: 3/8" = 1'-0"

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CABLE BRACING

General Notes and Specifications:

1) The following shall apply to the installation of cables as additional bracing to DIAGONAL bracing for pool enclosures:

a) FRONT WALL CABLES - 7 x 7 OR 7 x 19 STAINLESS STEEL

CABLE DIAMETER	TOTAL ALLOWABLE WALL AREA *
3/32"	233 Sq. Ft. / PAIR OF CABLES
1/8"	445 Sq. Ft. / PAIR OF CABLES

Front Wall 378 Sq Ft
50% Side Wall 103 Sq Ft
Total 481 Sq Ft
2 - Sets

* TOTAL WALL AREA = 100% OF FRONT WALL + 50% OF ONE SIDE WALL

EXAMPLE: FRONT WALL AREA @ 100% (8' x 32') = 256 Sq. Ft.
SIDE WALL AREA @ 50% (8' x 20') = 80 Sq. Ft.
TOTAL WALL AREA = 336 Sq. Ft.

233 Sq. Ft. x 2 sets = 466 Sq. Ft. > 336 Sq. Ft.; thus two sets of 3/32" cables is required.

b) SIDE WALL CABLES - 7 x 7 OR 7 x 19 STAINLESS STEEL

CABLE DIAMETER	SIDE WALL CABLE **
3/32"	ONE PER 233 Sq. Ft. OF WALL
1/8"	ONE PER 445 Sq. Ft. OF WALL

Total 206 SqFt
None required

** SIDE WALL CABLES ARE NOT REQUIRED FOR SIDE WALLS LESS THAN 233 Sq. Ft.

c) To calculate the required pair of cables for free standing pool enclosures use 100% of each wall area & 50% of the area of one adjacent wall.

NOTE: For wall heights greater than 9'-8", a minimum of (2) wall cables are required.

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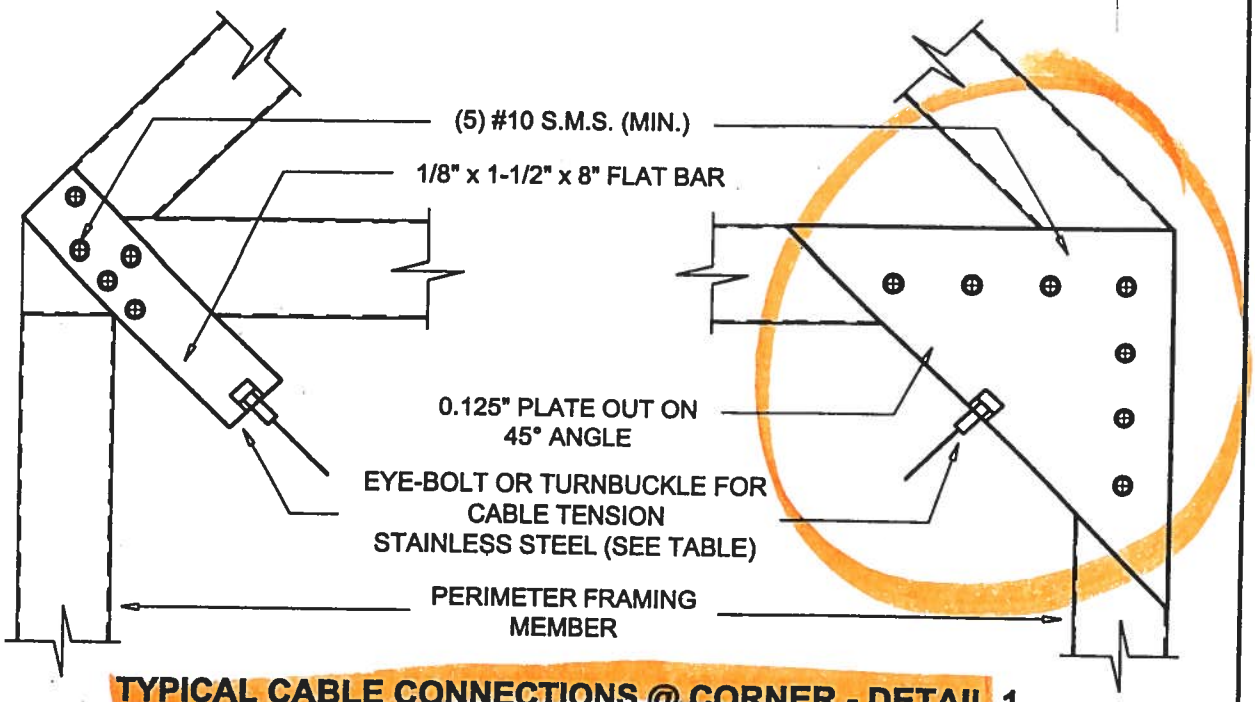
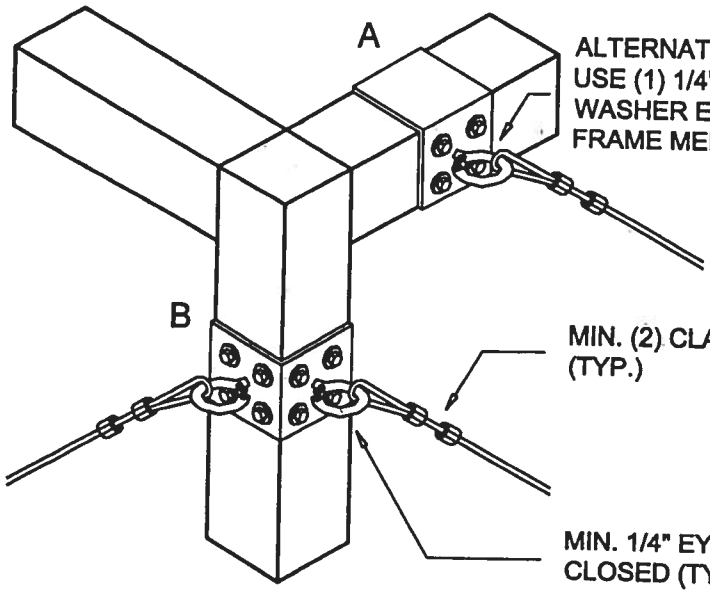


TYPICAL CABLE CONNECTIONS @ CORNER - DETAIL 1

SCALE: 3" = 1'-0"



ALTERNATE:
USE (1) 1/4" x 1-1/4" FENDER WASHER EACH SIDE OF FRAME MEMBER

EITHER A OR B

1" x 2" x 0.125" CLIP AND (4) #10 x 3/4" S.M.S. EACH SIDE FOR CABLES

MIN. (2) CLAMPS REQUIRED (TYP.)

MIN. 1/4" EYE BOLT. WELD EYE CLOSED (TYP.)

ALTERNATE TOP CORNER OF CABLE CONNECTION - DETAIL 1A

SCALE: 3" = 1'-0"

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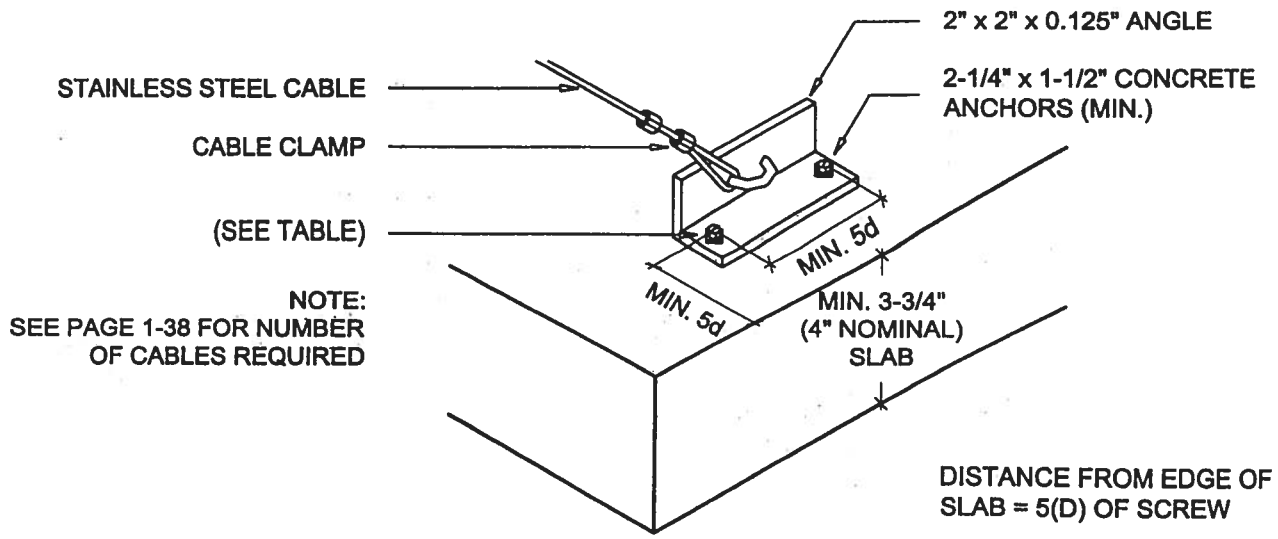
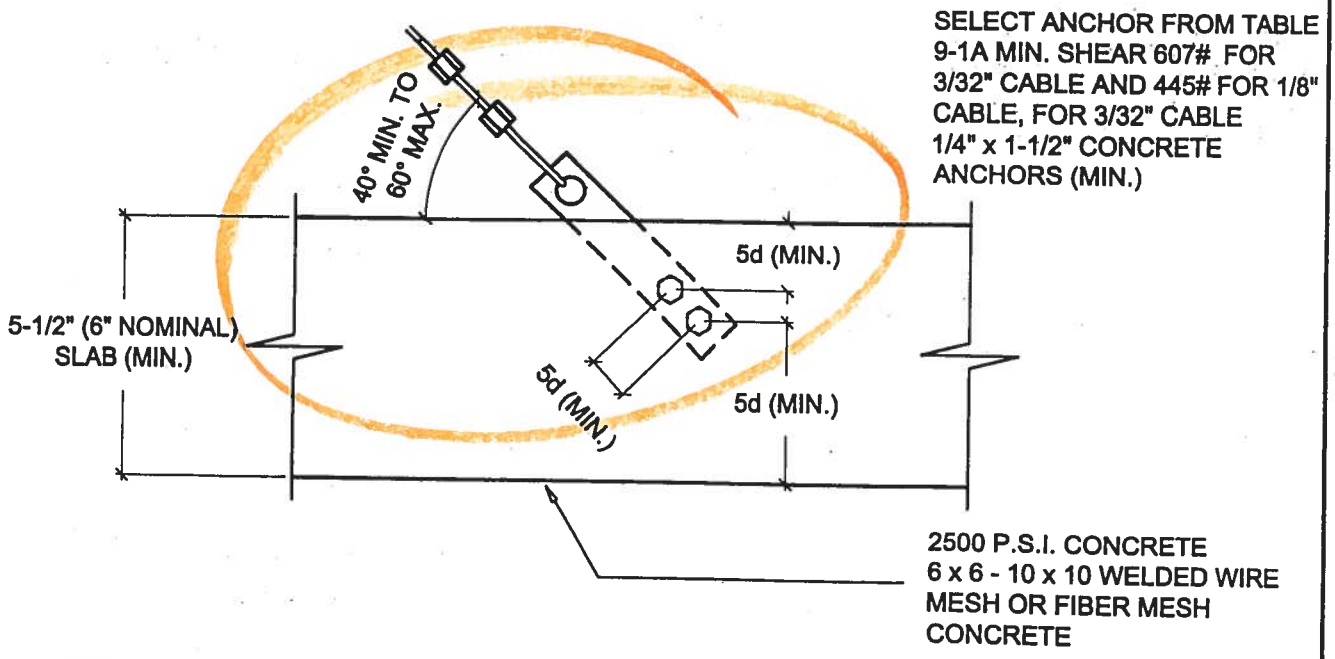


ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



ALTERNATE CABLE CONNECTIONS @ FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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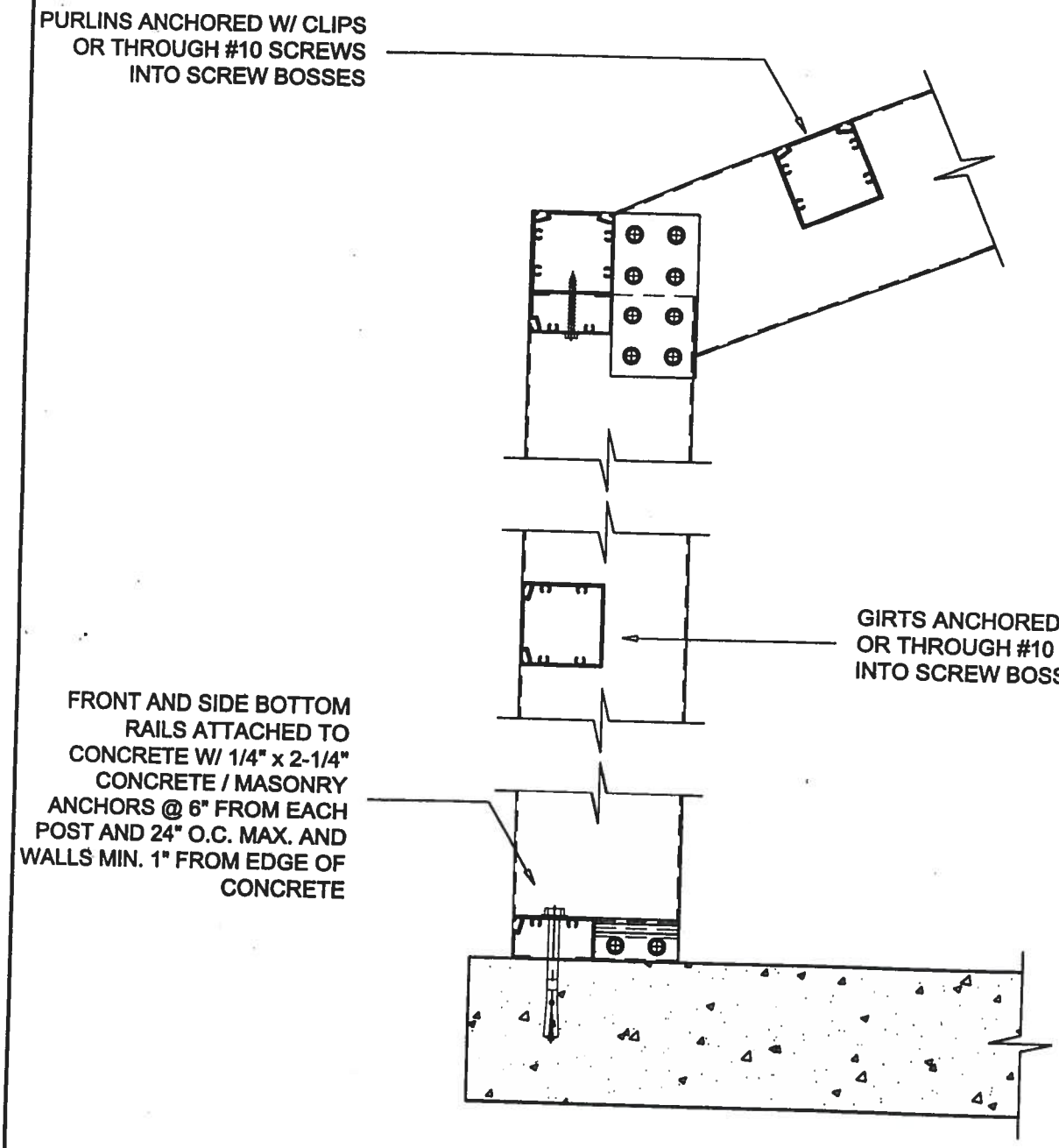

PURLIN & CHAIR RAIL DETAIL

SCALE: 3" = 1'-0"

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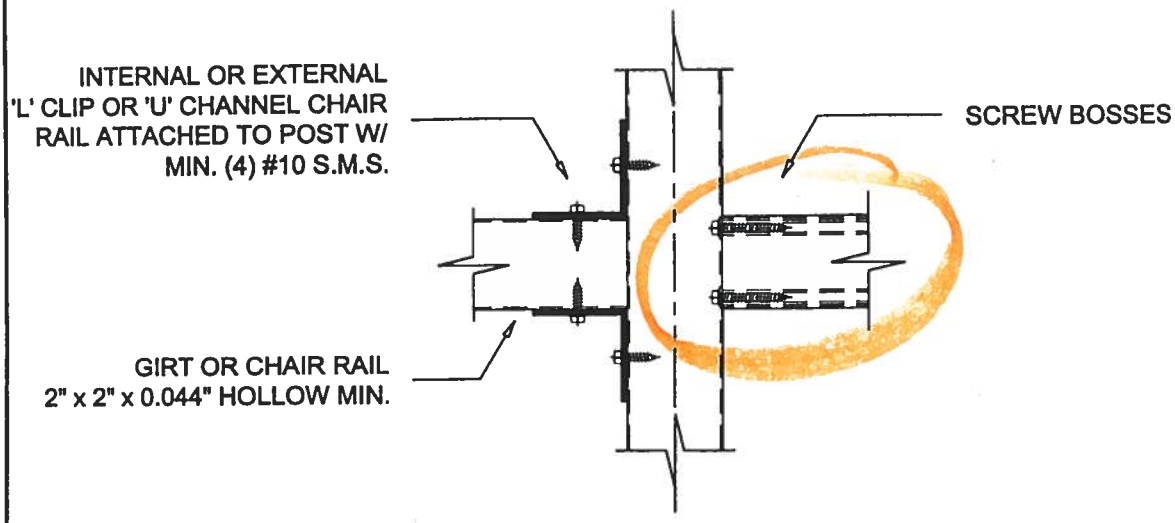

GIRT TO POST DETAIL

SCALE: 3" = 1'-0"

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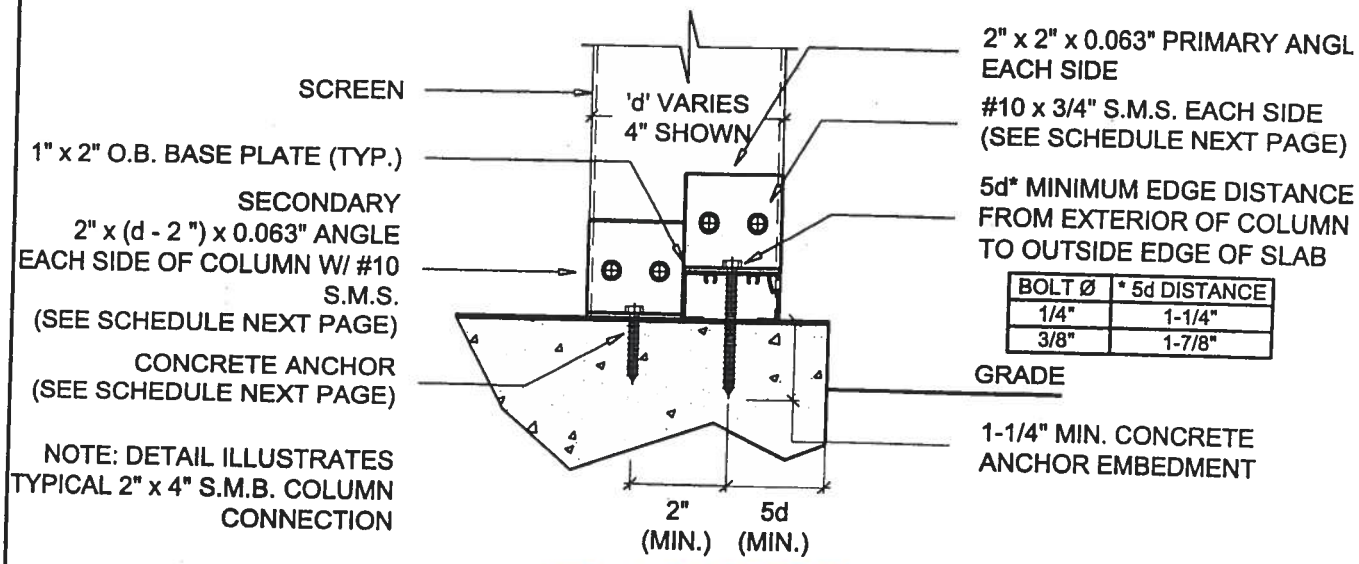
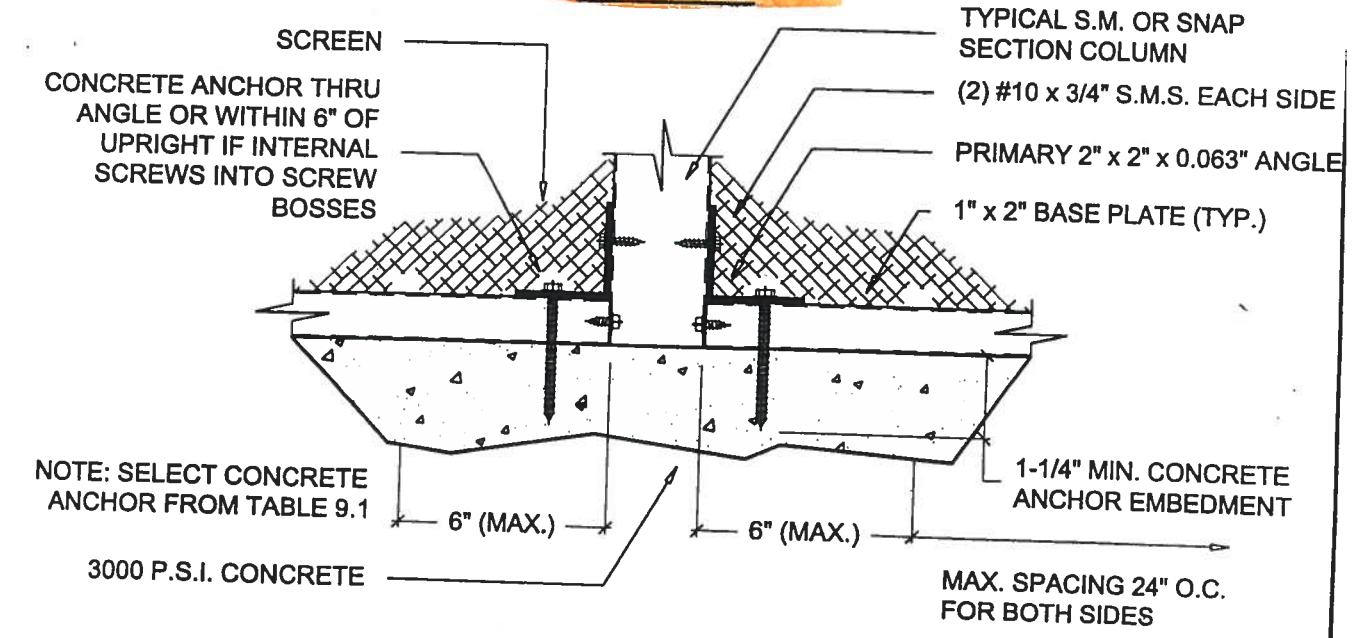


BOLT Ø	* 5d DISTANCE
1/4"	1-1/4"
3/8"	1-7/8"

SIDE VIEW



FRONT VIEW

2" x 4" OR LARGER SELF MATING OR SNAP SECTION POST TO DECK DETAILS

SCALE: 3" = 1'-0"

Note: Using 2" x 5"

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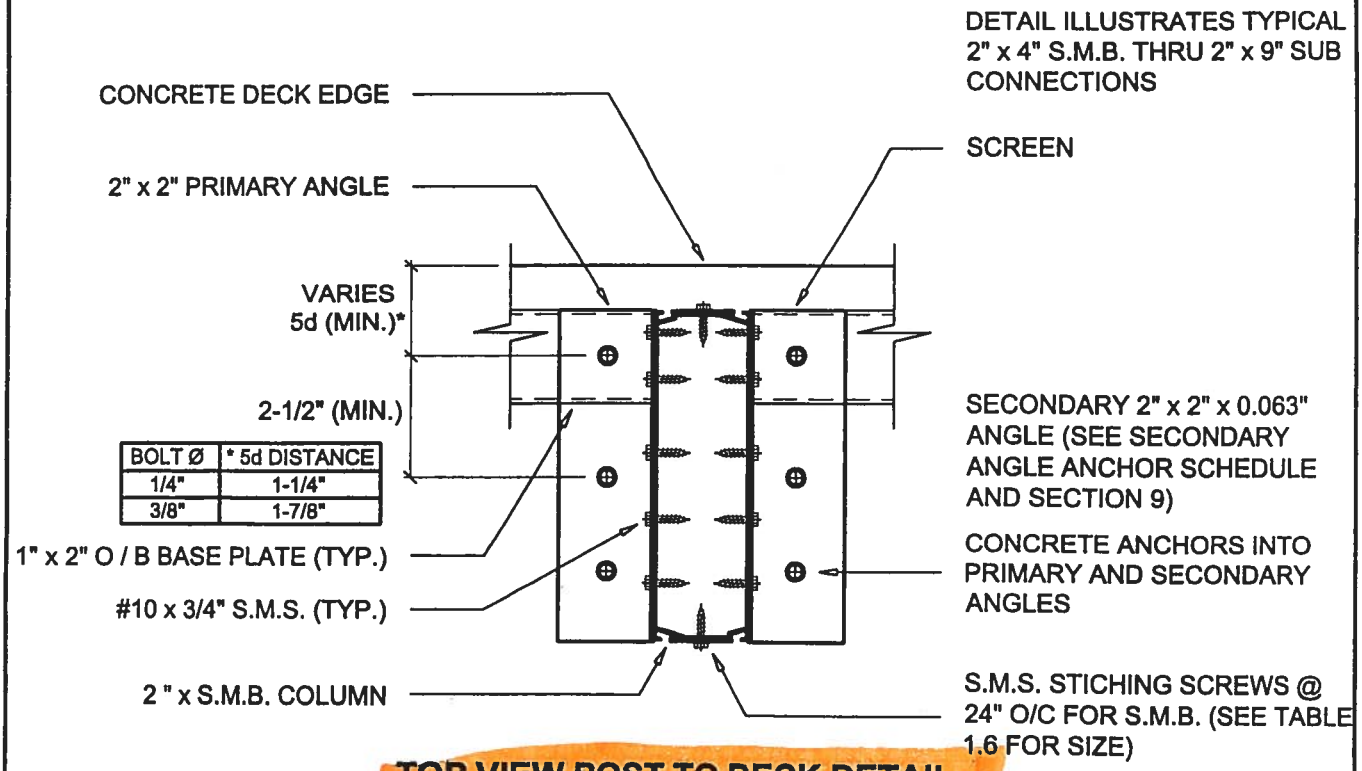

TOP VIEW POST TO DECK DETAIL

SCALE: 3" = 1'-0"

SECONDARY ANGLE ANCHOR SCHEDULE		
COLUMN SIZE S.M.B.OR SB	TOTAL CONCRETE ANCHORS	TOTAL #10 x 3/4" S.M.S.
2 x 4	(4) 1/4"	6
2 x 5	(4) 1/4"	10
2 x 6	(4) 1/4"	8
2 x 7	(4) 1/4"	12
2 x 8	(6) 1/4"	14
2 x 9	(6) 1/4"	16
2 x 10	(10) 1/4"	18

← using #14x3/4

SEE SECTION #9 FOR ADDITIONAL ANCHOR INFORMATION

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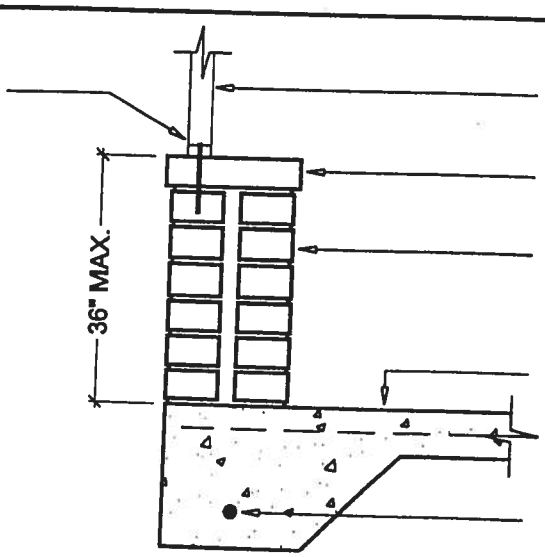
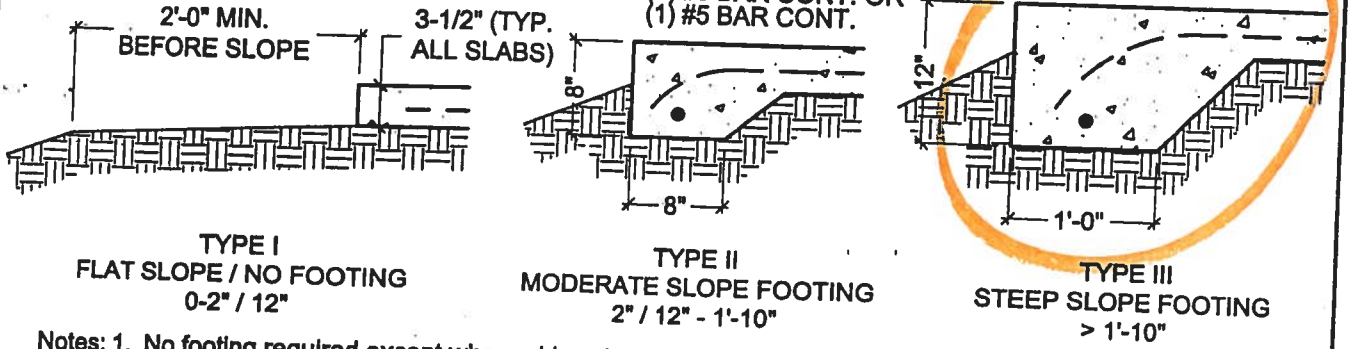


BRICK KNEEWALL AND FOUNDATION FOR SCREEN WALLS

SCALE: 3/4" = 1'-0"



TYPE I
FLAT SLOPE / NO FOOTING
0-2" / 12"

TYPE II
MODERATE SLOPE FOOTING
2" / 12" - 1'-10"

TYPE III
STEEP SLOPE FOOTING
> 1'-10"

Notes:
1. No footing required except when addressing erosion until the slab width in the direction of the primary exceeds 32 ft., then a type II footing is required under the load bearing wall only unless the side wall exceeds 16 ft. in height or the enclosure is in a "C" exposure catagory in which case a type II footing is required for all walls.
2. The foundations shown are based on a minimum soil bearing pressure of 1,500 PSF. Bearing capacity of soil shall be verified, prior to placing the slab, by field soil test or a soil testing lab.
3. The slab / foundation shall be cleared of debris and roots and compacted prior to placement of concrete.
4. Monolithic slabs and footings shall be minimum 2,500 psi concrete with 6 x 6 - 10 x 10 welded wire mesh or fiber mesh may be used in lieu of mesh.
5. If local building codes require a minimum footing, use type II footing or footing sections required by local code. Local code governs.

SLAB-FOOTING DETAILS

SCALE: 3/4" = 1'-0"

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Table 1.1 Allowable Spans For Primary Screen Roof Frame Members

Aluminum Alloy 6063 T-6

For Areas with Wind Loads up to 150 M.P.H. and Latitudes Below 30°-30'-00" North (Jacksonville, FL)

Hollow Sections	Tributary Load Width 'W' = Beam Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Span 'L' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	9'-10" b	8'-7" b	7'-8" b	6'-11" b	6'-6" b	6'-1" b	5'-8" b
2" x 2" x 0.055"	10'-9" b	9'-4" b	8'-4" b	7'-7" b	7'-1" b	6'-7" b	6'-3" b
2" x 3" x 0.045"	13'-4" b	11'-7" b	10'-4" b	9'-5" b	8'-9" b	8'-2" b	7'-8" b
2" x 4" x 0.050"	14'-8" b	12'-8" b	11'-4" b	10'-4" b	9'-7" b	8'-11" b	8'-5" b

Self Mating Sections	Tributary Load Width 'W' = Beam Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Span 'L' / bending 'b' or deflection 'd'						
2" x 4" x 0.044 x 0.100"	19'-11" b	17'-4" b	15'-6" b	14'-2" b	13'-1" b	12'-3" b	11'-6" b
2" x 5" x 0.050" x 0.100"	24'-9" b	21'-5" b	19'-2" b	17'-6" b	16'-2" b	15'-2" b	14'-3" b
2" x 6" x 0.050" x 0.120"	28'-7" b	24'-9" b	22'-2" b	20'-3" b	18'-9" b	17'-6" b	16'-6" b
2" x 7" x 0.055" x 0.120"	32'-3" b	27'-11" b	24'-11" b	22'-9" b	21'-1" b	19'-9" b	18'-7" b
2" x 7" x 0.055" w/ Insert	42'-10" b	37'-1" b	33'-2" b	30'-4" b	28'-1" b	26'-3" b	24'-9" b
2" x 8" x 0.072" x 0.224"	41'-7" b	36'-1" b	32'-3" b	29'-5" b	27'-3" b	25'-6" b	24'-0" b
2" x 9" x 0.072" x 0.224"	45'-1" b	39'-1" b	34'-11" b	31'-11" b	29'-6" b	27'-8" b	26'-1" b
2" x 9" x 0.082" x 0.310"	49'-6" b	42'-11" b	38'-4" b	35'-0" b	32'-5" b	30'-4" b	28'-7" b
2" x 10" x 0.092" x 0.369"	59'-6" b	51'-7" b	46'-1" b	42'-1" b	38'-11" b	36'-5" b	34'-4" b

Snap Sections	Tributary Load Width 'W' = Beam Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Span 'L' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	11'-9" b	10'-2" b	9'-1" b	8'-4" b	7'-8" b	7'-2" b	6'-9" b
2" x 3" x 0.045"	15'-1" b	13'-1" b	11'-8" b	10'-8" b	9'-10" b	9'-3" b	8'-8" b
2" x 4" x 0.045"	18'-5" b	15'-11" b	14'-3" b	13'-0" b	12'-1" b	11'-3" b	10'-8" b
2" x 6" x 0.062"	31'-3" b	27'-1" b	24'-2" b	22'-1" b	20'-5" b	19'-2" b	18'-0" b
2" x 7" x 0.062"	34'-9" b	30'-1" b	26'-11" b	24'-7" b	22'-9" b	21'-3" b	20'-1" b

Notes:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. The structures designed using this section shall be limited to a maximum combined span and upright height of 55' and a maximum upright height of 20'. Structures larger than these limits shall have site specific engineering.
3. Spans are based on a minimum of 10# / Sq. Ft. for up to a 150 M.P.H. wind load.
4. Span is measured from center of beam and upright connection to fascia or wall connection.
5. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
6. Purlin spacing shall not exceed 6'- 8" . For beam spans greater than 40'-0" the beam at the center purlin and one purlin for each 14'-0" on each side of the center purlin shall include lateral bracing as shown in detail (48'-0") span with purlins at 6'- 8" o.c. center purlin and (2) purlins each side of center purlin need lateral bracing.

Example: Max. 'L' for 2" x 4" x 0.050" hollow section with 'W' = 5'-0" = 11'-4"

Note: Roof beam span will be 16'

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Table 1.3

Allowable Post / Upright Heights For Primary Screen Wall Frame Members

Aluminum Alloy 6063 T-6

For 3 second wind gust at velocity of 120 MPH or an applied load of 14 # / sq. ft.*

Hollow Sections	Tributary Load Width 'W' = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height 'H' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	8'-4" b	7'-3" b	6'-6" b	5'-11" b	5'-6" b	5'-1" b	4'-10" b
2" x 2" x 0.055"	9'-1" b	7'-11" b	7'-1" b	6'-5" b	5'-11" b	5'-7" b	5'-3" b
2" x 3" x 0.045"	11'-3" b	9'-9" b	8'-9" b	7'-11" b	7'-5" b	6'-11" b	6'-6" b
2" x 4" x 0.050"	12'-5" b	10'-9" b	9'-7" b	8'-9" b	8'-1" b	7'-7" b	7'-2" b

Self Mating Sections	Tributary Load Width 'W' = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height 'H' / bending 'b' or deflection 'd'						
2" x 4" x 0.044 x 0.100"	16'-11" b	14'-8" b	13'-1" b	11'-11" b	11'-1" b	10'-4" b	9'-9" b
2" x 5" x 0.050" x 0.100"	20'-11" b	18'-1" b	16'-2" b	14'-9" b	13'-8" b	12'-10" b	12'-1" b
2" x 6" x 0.050" x 0.120"	24'-2" b	20'-11" b	18'-9" b	17'-1" b	15'-10" b	14'-10" b	13'-11" b
2" x 7" x 0.055" x 0.120"	27'-3" b	23'-7" b	21'-1" b	19'-3" b	17'-10" b	16'-8" b	15'-9" b
2" x 7" x 0.055" w/ insert	36'-3" b	31'-4" b	28'-1" b	25'-7" b	23'-9" b	22'-2" b	20'-11" b
2" x 8" x 0.072" x 0.224"	35'-2" b	30'-6" b	27'-3" b	24'-10" b	23'-0" b	21'-6" b	20'-4" b
2" x 9" x 0.072" x 0.224"	38'-2" b	33'-0" b	29'-6" b	26'-11" b	24'-11" b	23'-4" b	22'-0" b
2" x 9" x 0.082" x 0.310"	41'-10" b	36'-3" b	32'-5" b	29'-7" b	27'-5" b	25'-8" b	24'-2" b
2" x 10" x 0.092" x 0.369"	50'-4" b	43'-7" b	38'-11" b	35'-7" b	32'-11" b	30'-10" b	29'-1" b

Snap Sections	Tributary Load Width 'W'= Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height 'H' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	9'-11" b	8'-7" b	7'-8" b	7'-0" b	6'-6" b	6'-1" b	5'-9" b
2" x 3" x 0.045"	12'-9" b	11'-0" b	9'-10" b	9'-0" b	8'-4" b	7'-10" b	7'-4" b
2" x 4" x 0.045"	15'-7" b	13'-6" b	12'-1" b	11'-0" b	10'-2" b	9'-7" b	8'-11" b
2" x 6" x 0.062"	26'-5" b	22'-10" b	20'-5" b	18'-8" b	17'-3" b	16'-2" b	15'-3" b
2" x 7" x 0.062"	29'-5" b	25'-5" b	22'-9" b	20'-9" b	19'-3" b	17'-11" b	16'-11" b

*** For allowable heights at wind velocities other than 120 MPH, see conversion table 1A on the specification page for tables at the beginning of this section and example below.**

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Using screen panel width 'W' select upright length 'H'.
3. Above heights do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
4. Site specific engineering required for pool enclosures over 20' in mean roof height.
5. Height is to be measured from center of beam and upright connection to fascia or wall connection.
6. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height can be considered as residential guardrails provided they are attached with min. (3) #10 x 1-1/2" S.M.S. into the screw bosses and do not exceed 8'-0" in span.
7. Heights may be interpolated.

CHECK TABLE 1.6 FOR MINIMUM UPRIGHT SIZE FOR BEAMS.

IF SPANS FOR 'C' EXPOSURE CATAGORY AND/OR WINDZONES OTHER THAN 120 MPH ARE REQUIRED, SEE EXAMPLE ON SPECIFICATION PAGE FOR TABLES AT THE BEGINNING OF THIS SECTION.

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Table 1.4 **Allowable Post / Girt / Chair Rail Spans, Header Spans & Upright Heights For Secondary Screen Wall Frame Members**

Aluminum Alloy 6063 T-6

For 3 second wind gust at velocity of 120 MPH or an applied load of 14 # / sq. ft.*

A. Sections As Horizontals Fastened To Posts With Clips

Hollow Sections	Tributary Load Width 'W'						
	3'-6'	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-8"
	Allowable Heights 'H' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	6'-10" d	6'-6" b	6'-1" b	5'-9" b	5'-6" b	5'-3" b	5'-0" b
2" x 2" x 0.055"	7'-3" d	6'-11" d	6'-8" b	6'-4" b	6'-0" b	5'-9" b	5'-6" b
3" x 2" x 0.045"	7'-9" d	7'-5" d	7'-1" d	6'-10" d	6'-7" b	6'-4" b	5'-11" b
2" x 3" x 0.045"	9'-4" b	8'-9" b	8'-3" b	7'-10" b	7'-5" b	7'-2" b	6'-9" b
2" x 4" x 0.050"	10'-3" b	9'-7" b	9'-0" b	8'-7" b	8'-2" b	7'-10" b	7'-5" b

Snap Sections	Allowable Heights 'H' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	7'-6" d	7'-2" d	6'-11" d	6'-8" b	6'-4" b	6'-1" b	5'-9" b

B. Sections As Horizontals Fastened To Posts Through Side Into Screw Bosses

Hollow Sections	Tributary Load Width 'W'						
	3'-6'	4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-8"
	Allowable Heights 'H' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	7'-9" b	7'-3" b	6'-10" b	6'-6" b	6'-2" b	5'-11" b	5'-7" b
2" x 2" x 0.055"	8'-5" b	7'-11" b	7'-5" b	7'-1" b	6'-9" b	6'-5" b	6'-1" b
3" x 2" x 0.045"	9'-3" b	8'-8" b	8'-2" b	7'-9" b	7'-5" b	7'-1" b	6'-8" b
2" x 3" x 0.045"	10'-5" b	9'-9" b	9'-2" b	8'-9" b	8'-4" b	7'-11" b	7'-7" b
2" x 4" x 0.050"	11'-6" b	10'-9" b	10'-1" b	9'-7" b	9'-2" b	8'-9" b	8'-4" b
Snap Sections	Allowable Heights 'H' / bending 'b' or deflection 'd'						
2" x 2" x 0.044"	9'-2" b	8'-7" b	8'-1" b	7'-8" b	7'-4" b	7'-0" b	6'-8" b

*** For allowable heights at wind velocities other than 120 MPH, see conversion table 1A on the specifications for tables page at the beginning of this section and example below.**

Notes:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Using screen panel width 'W' select girt lengths.
3. Site specific engineering required for pool enclosures over 20' in mean roof height.
4. Span is to be measured from center of beam and upright connection to fascia or wall connection.
5. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height can be considered as residential guardrails provided they are attached with min. (3) #10 x 1-1/2" S.M.S. into the screw bosses and do not exceed 8'-0" in span.
6. Girt spacing shall not exceed 6'-8".
7. Spans may be interpolated.

IF HEIGHTS FOR 'C' EXPOSURE CATAGORY AND/OR WINDZONES OTHER THAN 120 MPH ARE REQUIRED, SEE EXAMPLE ON SPECIFICATION PAGE FOR TABLES AT THE BEGINNING OF THIS SECTION.

Installing Secondary stair rails in walls

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Table 1.6 Minimum Upright Sizes and Number of Screws for Connection of Roof Beams To Wall Uprights or Beam Splicing

Beam Size	Upright Size	Minimum Purlin, Girt & Knee Brace Size**	Deck Anchors	Notes	Minimum Number of Screws*			Beam Stitching Screw @ 24" O.C.
					#8 x ½"	#10 x ½"	#12 x ½"	
2" x 3"	2" x 3"	2" x 2" x 0.044"	2	Full Lap	6	4	4	-
2" x 4"	2" x 3"	2" x 2" x 0.044"	2	Full Lap	8	6	4	#8
2" x 4"	2" x 4"	2" x 2" x 0.044"	2	Full Lap	8	6	4	#10
2" x 5"	2" x 3"	2" x 2" x 0.044"	2	Full Lap	8	6	4	#8
2" x 6"	2" x 3"	2" x 2" x 0.044"	4	Full Lap	10	8	6	#10
2" x 6"	2" x 4"	2" x 2" x 0.044"	4	Partial Lap	10	8	6	#10
2" x 7"	2" x 4"	2" x 2" x 0.044"	4	Partial Lap	14	12	10	#12
2" x 8"	2" x 5"	2" x 3" x 0.044"	6	Partial Lap	16	14	12	#14
2" x 9"	2" x 6"	2" x 3" x 0.045"	6	Partial Lap	18	16	14	#14
2" x 9"***	2" x 7"	2" x 4" x 0.050"	8	Partial Lap	20	18	16	#14
2" x 10"	2" x 8"	2" x 4" x 0.050"	10	Partial Lap	20	18	16	#14

Screw Size	Minimum Distance and Spacing of Screws		Gusset Plate Thickness	
	Edge To Center	Center To Center	Beam Size	Thickness
#8	5/16"	5/8"	2" x 7" x 0.055" x 0.120"	1/16" = 0.063"
#10	3/8"	3/4"	2" x 8" x 0.072" x 0.224"	1/8" = 0.125"
#12	1/2"	1"	2" x 9" x 0.072" x 0.224"	1/8" = 0.125"
#14 or 1/4"	3/4"	1-1/2"	2" x 9" x 0.082" x 0..306"	1/8" = 0.125"
5/16"	7/8"	1-3/4"	2" x 10" x 0.092" x 0.369"	1/4" = 0.25"
3/8"	1"	2"		

*** Refers to each side of the connection of the beam and upright and each side of splice connection.**
**** 0.082" wall thickness, 0.310" flange thickness**

Note:

1. Connection of 2" x 6" to 2" x 3" shall use a full lap cut or 1/16" gusset plate.
2. All gusset plates shall be a minimum of 5052 H-32 Alloy or have a minimum yield strength of 23 ksi.
3. For beam splice connections the number of screws shown is the total for each splice with 1/2 the screws on each side of the cut.
4. The number of screws is based on the maximum allowable moment of the beam.
5. The number of deck anchors is based on RAWL R Tapper allowable load data for 2,500 psi concrete and / or equal anchors may be used. The number shown is the total use 1/2 per side.
6. Hollow splice connections can be made provided the connection is approved by the engineer.
7. If a larger than minimum upright is used the number of screws is the same for each splice with 1/2 the screws on each side of the cut.
8. All beam to upright connections for 2" x 7" beams or larger shall have an internal or external gusset plates. Gusset plates are required for mansard or gable splice connections.
9. For gusset plate connections 2" x 9" beams or larger use 3/4" long screws.
10. The side wall upright shall have a minimum beam size as shown above, ie., a 2" x 4" upright shall have a 2" x 3" beam.
11. Connect beam to upright w/ H-bar, gusset plate, or angle clips for each splice with 1/2 the screws on each side of the cut.

Table 1.7 Minimum Size Screen Enclosure Knee Braces And Anchoring Required
Aluminum 6063 T-6

Brace Length	Extrusion	Anchoring System
0' - 2'-0"	2" x 2" x 0.044"	2" H-Channel With (3) #10 x 1/2" EACH SIDE
To 3'-0"	2" x 3" x 0.045"	2" H-Channel With (3) #10 x 1/2" EACH SIDE
To 4'-6"	2" x 4" x 0.044" x 0.12"	2" H-Channel With (4) 3/4" long screws (size to be determined by beam size, see table 9.6)

(See Table 1.6 For Number And Size Of Screws)

Note:

1. For required knee braces greater than 4'-6" contact engineer for specifications and details.
2. Cantilever beam detail shown on page 1-32 shall be used for host structure attachment when knee brace length exceeds 4'-6".

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NOTICE OF COMMENCEMENT

PERMIT NUMBER: _____

STATE OF: FLORIDA COUNTY OF: Columbia CITY OF: _____

THE UNDERSIGNED HEREBY gives notice that improvement(s) will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

DESCRIPTION OF PROPERTY

LOT: 29 BLOCK: _____ SECTION: 17 TOWNSHIP: 3S RANGE: 16 East

TAX PARCEL NUMBER: 17-3S-16-02168-129 HA

SUBDIVISION: Blackberry Farms PLATBOOK: _____ MAP PAGE: _____

STREET ADDRESS: 1214 N.W. Blackberry Circle

GENERAL DESCRIPTION OF IMPROVEMENTS

TO CONSTRUCT: Screen Enclosure

OWNER INFORMATION

OWNER NAME: Barry A. Groves

ADDRESS: 1214 N.W. Blackberry Circle PHONE NUMBER: 850-528-2955

CITY: Lake City STATE: Fla. ZIP CODE: 32055

INTEREST IN PROPERTY: _____

FEE SIMPLE TITLEHOLDER NAME: _____

FEE SIMPLE TITLEHOLDER ADDRESS: _____

(if other than owner)

Inst:200712023293 Date:10/17/2007 Time:9:28 AM
DC,P.DeWitt Cason,Columbia County Page 1 of 1

CONTRACTOR NAME: Vince Richardson Richardson Aluminum

ADDRESS: 692 S.W. Arlington Blvd. PHONE NUMBER: 386-755-5779

CITY: Lake City STATE: Fla. ZIP CODE: 32025

BONDING COMPANY: N/A

ADDRESS: _____ PHONE NUMBER: _____

CITY: _____ STATE: _____ ZIP CODE: _____

LENDER NAME: NA

ADDRESS: _____ PHONE NUMBER: _____

CITY: _____ STATE: _____ ZIP CODE: _____

Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a) 7., Florida Statutes:

NAME: Barry Groves ADDRESS: 1214 NW Blackberry Circle

In addition to himself, Owner designates _____

of _____ to receive a copy of Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

Expiration date is one (1) year from date of recording unless a different date is specified.

SIGNATURE OF OWNER: X Barry A Groves

SWORN to and subscribed before me this 5 day of September, A.D. 2004.

Notary Public: A Marts

My commission Expires:

NOTARY PUBLIC STATE OF FLORIDA
AMY MARTS
MY COMMISSION # DD458730
EXPIRES: Aug. 7, 2009
(407) 398-0153 Florida Notary Service.com

CERTIFICATE OF OCCUPANCY

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 17-3S-16-02168-129 **Building permit No.** 000026332

Use Classification SCREEN ENCLOSURE **Fire:** 0.00

Permit Holder RICHARDSON ALUMINUM **Waste:**

Owner of Building BARRY GROVES/DENNIS PELLETIER **Total:** 0.00

Location: 1214 NW BLACKBERRY CIRCLE

Date: 10/24/2007

Harry Dicks

Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)