

Job name Preserve Highlands
 Job# 2626DS
 Company Dowling Signs
 Installation location 950 SW Deputy J Davis Ln, Lake City, FL 32024

Section 3107 and 1609 of Florida Building Code 2023 applies
 Chapter 29 3 of ASCE 7-22 (Design Wind Loads, Solid Freestanding Walls and Freestanding Sign) applies

Type of structure	Double Faced Trellis Style Monument Sign	
Risk Category	II	
Wind velocity (3 sec gust), FBC 2023, section 1609 3	119	mph
Wind stagnation pressure (qz)	36 3	psf
Design wind pressure conversion factor	0 77	
Gust effect factor (G) ASCE 7-22 26 9 1	0 85	
Widest part of sign face (B)	8 00	
Height of sign face (s)	2 69	
Overall height of sign (H)	6 00	
Aspect ratio (B/s)	2 98	
Clearance ratio (s/H)	0 45	
Force Coefficient Cf from Figure 29 3-1, ASCE 7-22	1 4	
Wind pressure (p) multiplied by design wind pressure conversion factor and Cf	33 2	psf

1 Calculate wind load and turning moments at base by the provisions of the alternate all-heights method in Section 1609 6 Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered

Hor Dim (ft)	Vert Dim (ft)	Area Factor	Af (sf)	p	F (lbs)	H (ft)	M (base) (ft-lbs)
12 0	6 0	0 8	57 6	33 2	1913	3 0	5740
			0 0	33 2	0		0
			0 0	33 2	0		0
			0 0	33 2	0		0
Total			57 6		1913	3 0	5740

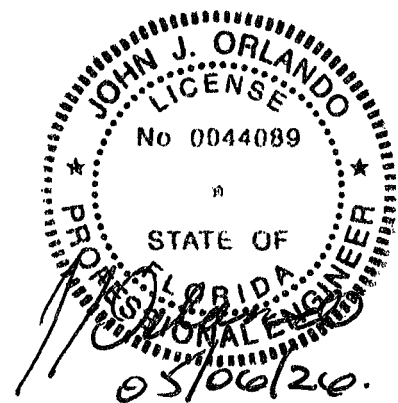
2 Size spread foundation, using method presented by Dunham, pp 229 forward

Definition of terms
 M=overturning moment (ft - #)
 P=total bearing load including weight of foundation (#)
 e=eccentricity of resultant pressure at base (ft)
 L=length of footer in wind direction (ft), b=width of footer (ft)
 D=depth of footer (ft)
 p1=maximum soil pressure at full wind load (psf)
 L1=location of max pressure (ft)
 number of foundations = 1
 number of posts 3

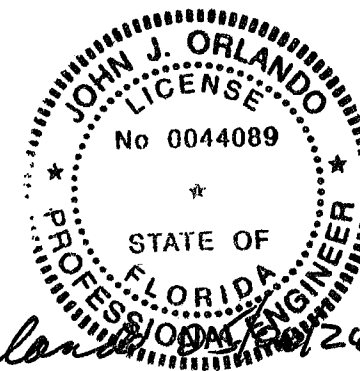
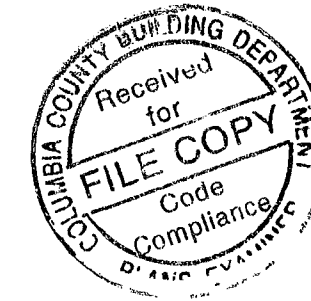
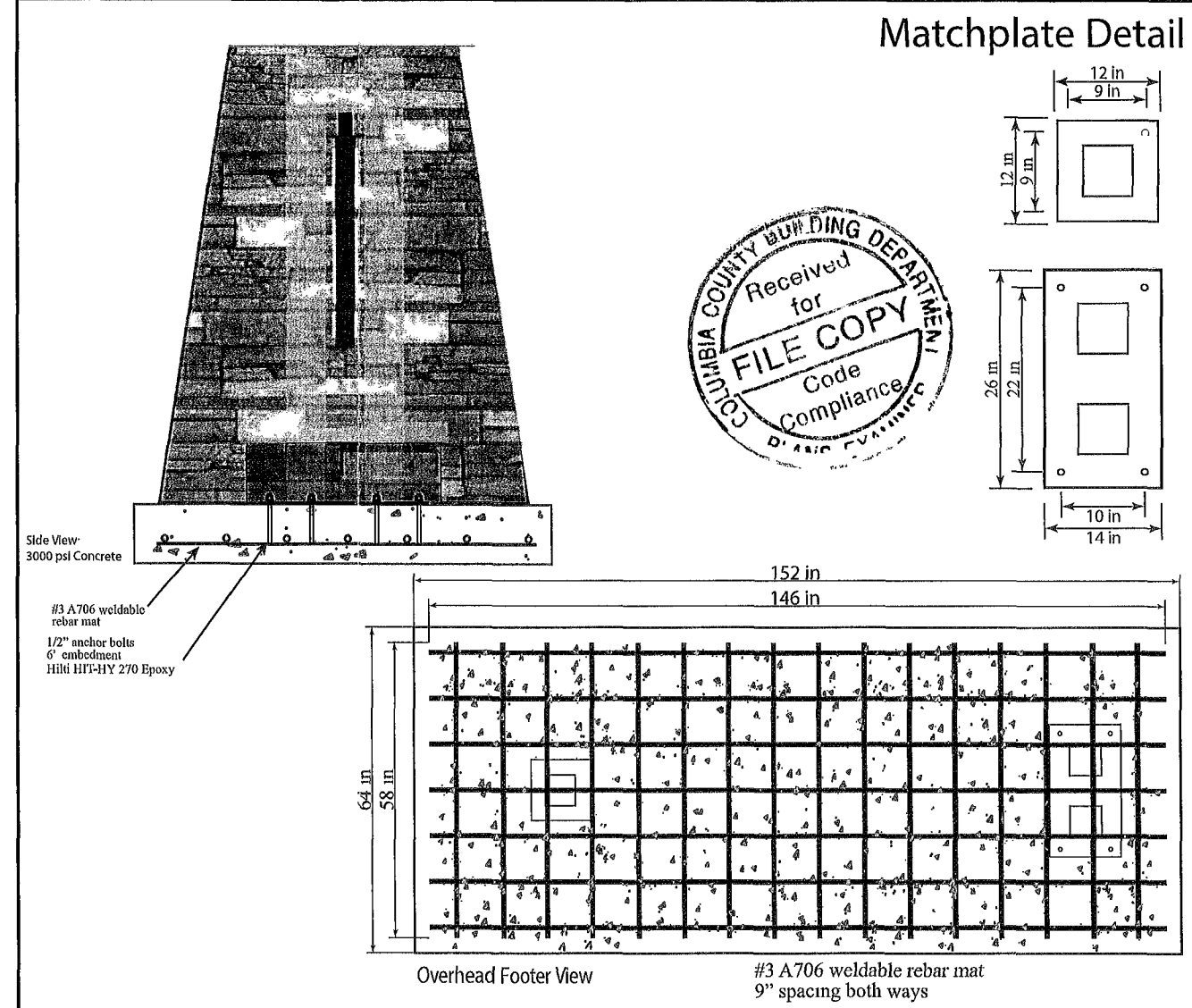
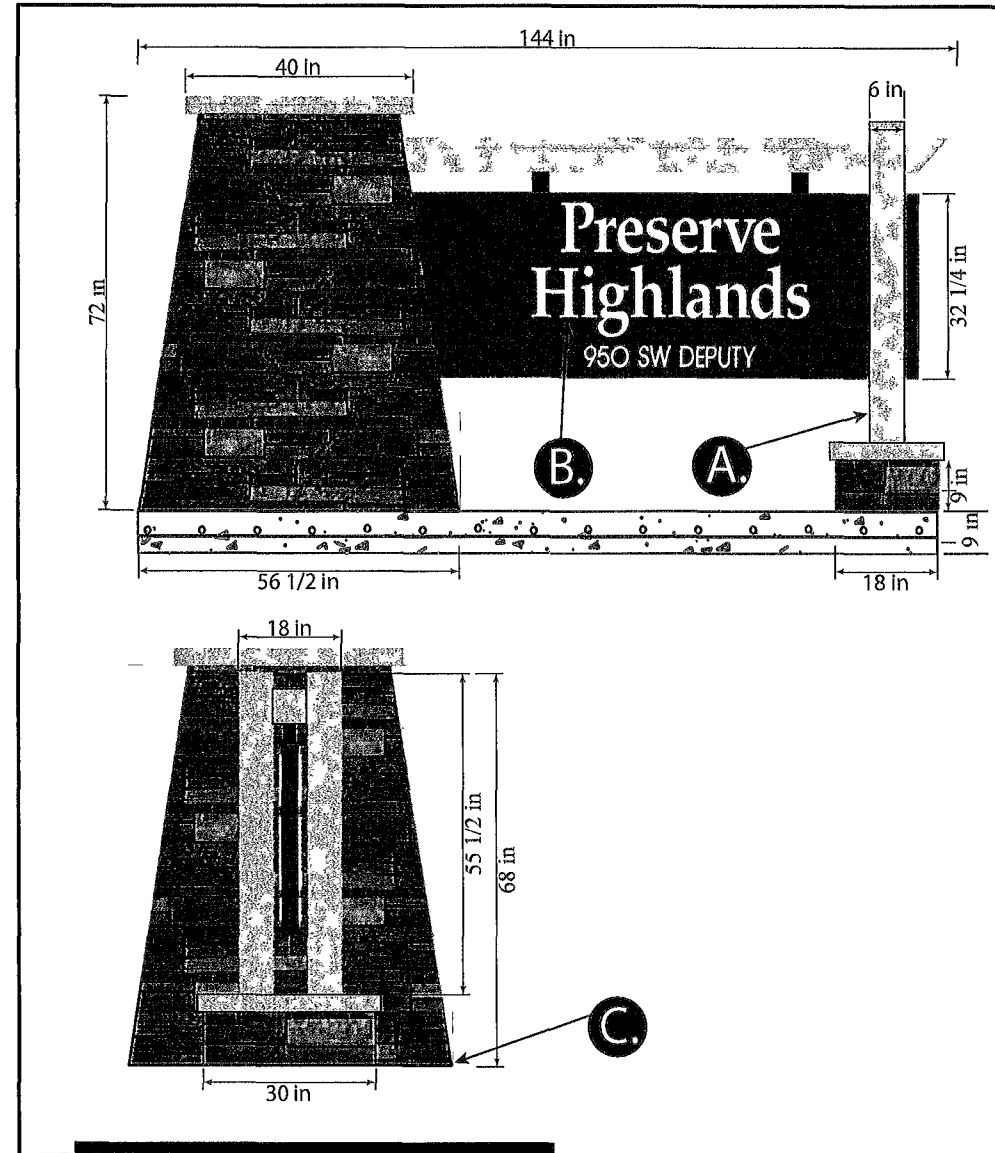
M= 5740
 L= 5.33 b= 12 67 D= 0 75
 Weight of foundation = volume 145 lbs/ft^3 = 7346 67
 Weight of sign= 8485
 wind load= 638
 P= 15832
 e=M/P 0 4
 L1=3(L/2-e) 6 9
 p1=2P/(3b(L/2-e)) 361 6

Foundation is OK since L1 greater than 0 (does not overturn)

References Structural Engineering Handbook, Gaylord&Gaylord editors,
 Fourth edition, McGraw Hill, NY 1997
 ASCE 7 22
 The 8th Edition (2023) of the Florida Building Code
 Mechanics of Materials, Beer and Johnston, McGraw Hill, NY 1981
 ICBO Evaluation Report No 4016
 SBCCI Compliance Report No 9368
 Standard Handbook for Mechanical Engineers, T Baumeister and
 L S Marks, editors, Seventh edition, McGraw Hill, NY 1967



Double Faced Trellis Style Monument Sign



18038 NW 246th ST., High Springs, FL 32643
PHONE: (386) 201-0819 FAX: (201) 386-0820
www.dowling signs.com

CUSTOMER: Preserve Highlands
LOCATION: 950 SW Deputy J Davis Ln
Lake City, FL 32024
SALESMAN: Clint Lee
DESIGNER: Clint Lee
DATE: 03/19/2026

☒ ARTWORK
☒ DESIGN
☒ SURVEY
ALL BOXES CHECKED TO ENTER ORDER

COMPANION FILES

PRODUCTION PROCESSING

Job # _____
001 _____
002 _____
003 _____
004 _____

DATE: _____
REVISIONS: _____
A B C D E F G H

Drawing # **1**

NON-ILLUMINATED TRELLIS STYLE MONUMENT

- A. 6" ALUMINUM SQUARE TUBE FRAME
- B. 1/2" ACRYLIC PIN LETTERS MOUNTED TO PANEL
- C. FAUX BRICK POLE COVER W/ 1-1/2" ALUMINUM FRAMING

Versatile Gray SW 6072

Needlepoint Navy SW 0032

Preserve Alabaster SW 7008