

Job name TA Truck Service (signs B and C)  
Job# 3421DS  
Sign company: Dowling Signs  
Installation location: I-75 and HWY-41, Lake City, FL 32025

Section 3107 and 1609 of Florida Building Code 2020 and Chapter 30 ASCE 7-16 applies.  
Application of wind pressures using the alternative all heights method for components and cladding

Type of structure: wall mounted lighted cabinet sign

Occupancy Category:

II

Wind velocity (3 sec gust), FBC 2020, section 1609.3:

130 mph

Wind pressure (qz)

43.3 psf

Net Pressure Coefficient (Cnet) from Figure 30.7-2

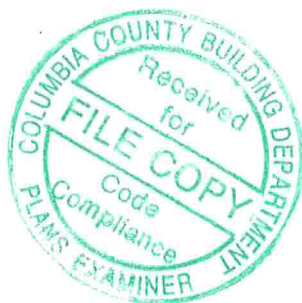
Components and cladding not in areas of discontinuity - walls and parapets -1.09  
Wind Pressure -47.2 psf

Wind load applied between wall and structure, pulling structure away from wall  
Load carried by tension in fasteners connecting structure to wall

- maximum height of structure to be attached	4.00 ft
- maximum width of structure to be attached	18.17 ft
- effective projected area factor	1.00
- projected area of each component to be attached	72.7 ft <sup>2</sup>
- wind load	-3430 lbs
- allowable tension load per fastener to	250 lbs
- even number of fasteners minimum of 2 =	-14
- number of fasteners practically required due to structure shape	14
- weight of structure is approximately	291 lbs
- allowable shear load per fastener to	125 lbs
- average shear load per fastener =	20.8 lbs

References:

ASCE 7-16  
The 7th Edition (2020) of the Florida Building Code



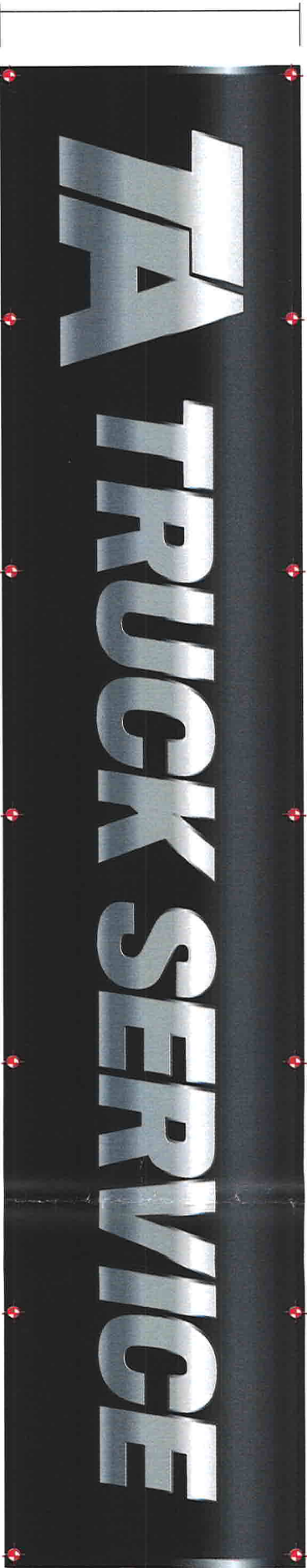
sheet: 4 of 4

John J. Orlando PE LLC 0044089  
165 Old Ridge Road  
Macon, GA 31211  
(478) 731-5394  
jjorlando@cox.net



218"

8"



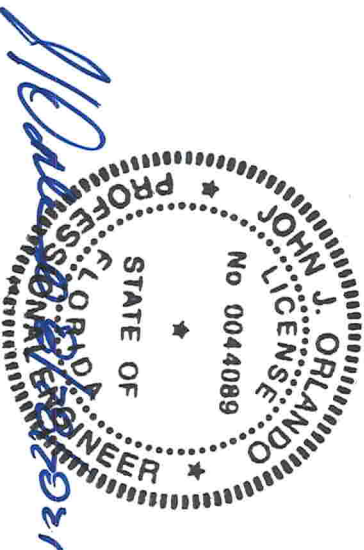
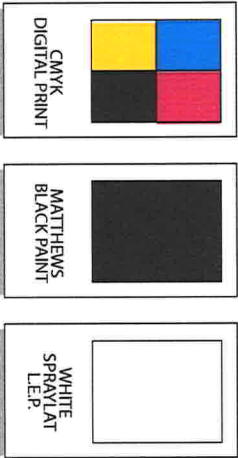
**B C** S/E ILLUMINATED CABINET  
Scale: 3/4" = 1'-0"

SCOPE OF WORK:

MANUFACTURE AND INSTALL (1) NEWS/F ILLUMINATED CABINET

GENERAL SPECIFICATIONS:

CABINET,  
STRUCTURE: 1 1/2" x 1 1/2" x .1875" ALUM. ANGLE FRAME BUILT IN TWO PIECES TO BE JOINED IN FIELD BY WELDED CAPTURE NUTS & 3/8" Ø HARDWARE.  
OUTSIDE FRAME: FLAT BLEED RETRO FRAME WITH BLEED FRAME COVER, SUPPORTED BY FRAME BRACE WITH PLANO HINGE ON TOP OF CABINET  
SKIN : .125" ALUMINUM  
FACE : WHITE FLEXIBLE SUBSTRATE FACE WITH 1ST SURFACE DIGITAL GRAPHICS. FACE TO BE STRETCHED IN SHOP AND RELEASED FROM ONE SIDE FOR SHIPPING.  
PAINT,  
INTERIOR : TO BE PAINTED SPRAYLAT L.E.P.  
EXTERIOR : PAINT TO MATCH MATTHEWS BLACK, SEMI-GLOSS FINISH.  
ILLUMINATION :WHITE LED'S & POWER SUPPLIES AS REQUIRED FOR PROPER ILLUMINATION.  
ATTACHMENT :FLUSH MOUNT TO WALL WITH 3/8" Ø MIN. ALL THREAD. INTERIOR FRAME TO ALUM. WELDED CAPTURE NUTS FOR ATTACHMENT, 14 EVENLY SPACED PLACES, PRECISE FASTENER LOCATIONS BY INSTALLERS



FASTENER SCHEDULE		
	3/8" LAG SCREW	FOR USE WITH WOOD OR EIFS WALL SYSTEMS. 1-1/2" MIN PENETRATIONS (EXCL. TIP)
	3/8" SNAP TOGGLE	FOR USE WITH WOOD OR STUCCO WALL SYSTEMS. 1-1/2" MIN PENETRATIONS (EXCL. TIP)
	3/8" LAG & SHIELD	FOR USE WITH WOOD OR EIFS WALL SYSTEMS. 1-1/2" MIN PENETRATIONS (EXCL. TIP)
	3/8" DIA. THREADED ROD & BEARING PLATES	FOR USE WITH WOOD, CONCRETE BLOCK OR EIFS WALL SYSTEMS
	3/8" DIA. THREADED ROD	FOR USE WITH WOOD, CONCRETE BLOCK OR EIFS WALL SYSTEMS
	3/8" RED HEAD L.D.T. (LARGE DIAMETER TAPCON)	FOR USE WITH CONCRETE BLOCK, BRICK OR CONCRETE. EMBED A MIN. OF 2 1/2"
	3/8" DIA. HITLIT HIT ROD WITH HY20 ADHESIVE	FOR USE WITH CONCRETE. EMBED A MIN. OF 2"
	3/8" DIA. HITLIT HIT ROD WITH HY20 ADHESIVE	FOR USE WITH MASONRY AND BRICK EMBED A MIN. OF 3 3/8"
	3/8" DIA. HITLIT HIT ROD WITH HY20 ADHESIVE	FOR USE WITH CONCRETE BLOCK. EMBED A MIN. OF 2"
	3/8" DIA. HITLIT HIT ROD WITH HY20 ADHESIVE	FOR USE WITH CONCRETE, MASONRY AND BRICK EMBED A MIN. OF 3 3/8"

18038 NW 246th ST.  
High Springs, FL, 32643  
Phone 386-201-0819  
Fax 386-201-0820  
www.dowling-signs.com



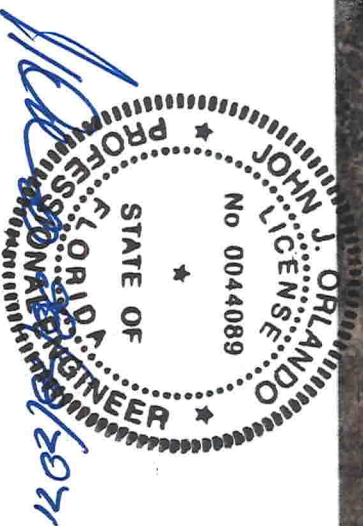


**DOWLING  
SIGNS**  
 OF NORTH CENTRAL FLORIDA, LLC

18038 NW 246th ST.  
 High Springs, FL, 32643  
 Phone 386-201-0819  
 Fax 386-201-0820  
[www.dowling signs.com](http://www.dowling signs.com)



PHOTO SURVEY OF EXISTING  
Scale: Not to Scale



Conforms to the requirements of the 7th Edition (2020) of the Florida Building Code sections 1609 and 3107, V(ult) = 130 mph, Exposure category = C, Risk category = II  
John J. Orlando PE LLC - 165 Old Ridge Road - Macon, GA 31211 - 478 731 5394 - [jjorlando@cox.net](mailto:jjorlando@cox.net) - Florida registration # 0044089 job 3421DR sheet 2 of 4



PHOTO SURVEY OF PROPOSED (ENTRANCE)  
Scale: Not to Scale





18038 NW 24th ST.  
High Springs, FL, 32643  
Phone 386-201-0819  
Fax 386-201-0820  
www.dowling signs.com



PHOTO SURVEY OF EXISTING  
Scale: Not to Scale

*John J. Orlando*  
PROFESSIONAL ENGINEER  
STATE OF FLORIDA  
No 0044089  
JOHN J. ORLANDO  
LICENSE

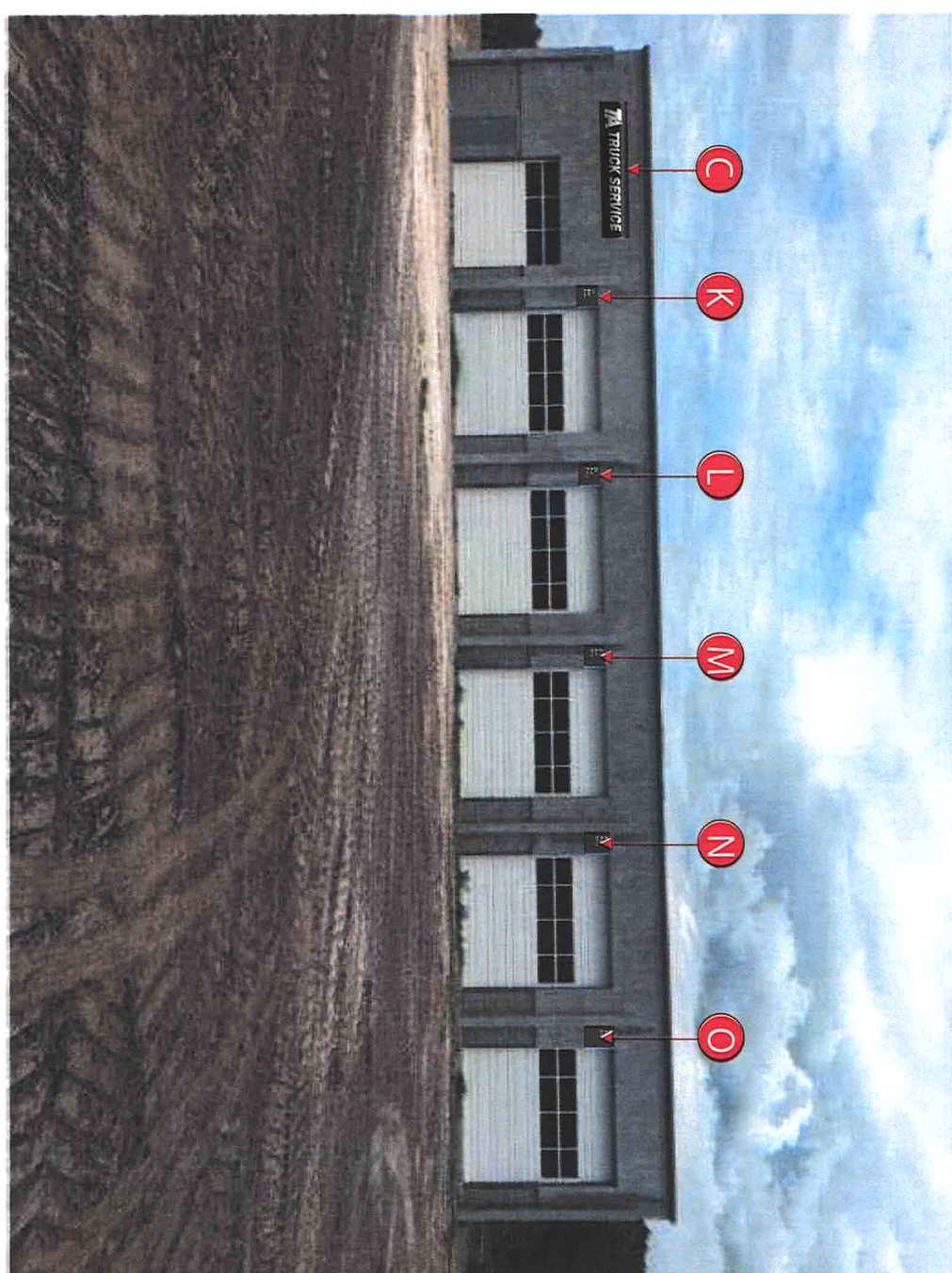


PHOTO SURVEY OF PROPOSED (EXIT)  
Scale: Not to Scale