



127 W. Fairbanks Avenue
Box 469
Winter Park, FL 32789

Brevard County Planning & Development
2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, FL 32940

Re: FL208 / Tower Design / Challenger Memorial Parkway (SR407), Cocoa, FL 32927

To whom it may concern,

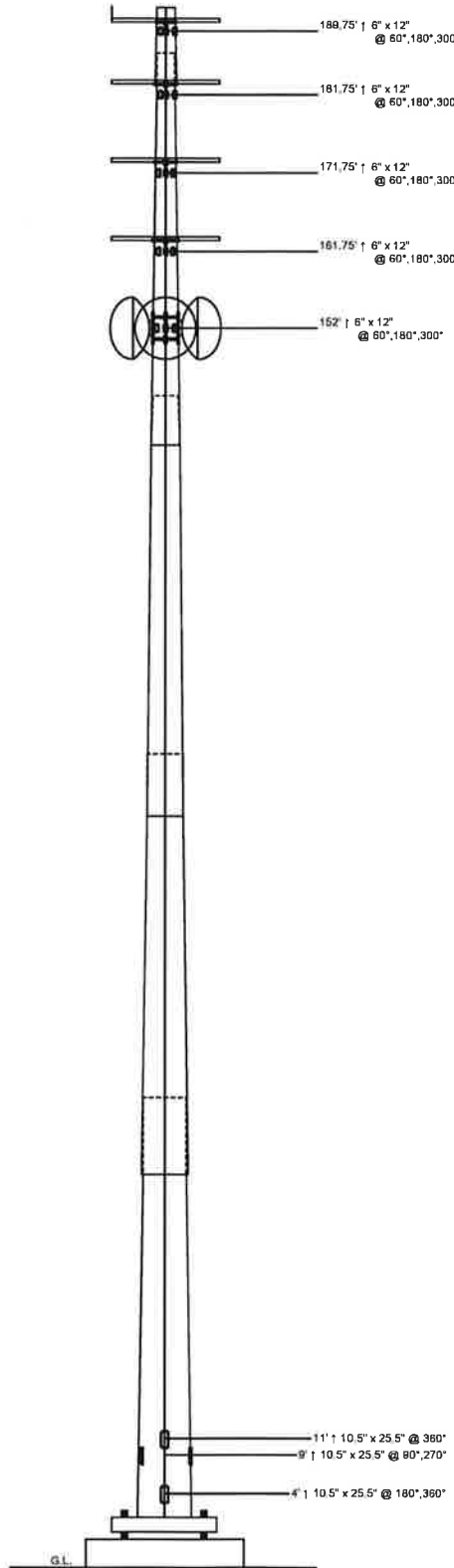
The proposed tower at Challenger Memorial Parkway (SR407), Cocoa, FL 32927 will be design for four (4) tenants. The design criteria and equipment type, size and amount are listed on the attached design drawing by the tower manufacturer, Sabre Industries.

Kind regards,

A handwritten signature in blue ink that reads "Mike Burkhead".

Mike Burkhead
(407) 617-0167

Length (ft)	53'-3"	53'-6"	50'-0"	10'-0"
Number Of Sides	18	18	18	18
Lap Splice (ft)	8' - 0"	8' - 3"	6' - 3"	A
Top Diameter (in)	54.21"	54.21"	28.22"	28"
Bottom Diameter (in)	70.24"	70.24"	44.2"	31"
Taper (in/ft)	0.2596	0.2596	0.2596	0.2596
Grade	A572-65	A572-65	A572-65	A572-65
Weight (lbs)	3124lb	21234	15031	8147
Overall Steel Height (ft)	192	192	192	192



Designed Appurtenance Loading

Elev	Description	Tx-Line
193	(1) 200 sq.ft. (no ice) 225 sq.ft. (ice)	(12) 1 5/8"
191	H.C. Platform (Monopole Only) - 14'	
183	H.C. Platform (Monopole Only) - 14'	
183	(1) 200 sq.ft. (no ice) 225 sq.ft. (ice)	(12) 1 5/8"
173	H.C. Platform (Monopole Only) - 14'	
173	(1) 200 sq.ft. (no ice) 225 sq.ft. (ice)	(12) 1 5/8"
163	H.C. Platform (Monopole Only) - 14'	
163	(1) 200 sq.ft. (no ice) 225 sq.ft. (ice)	(12) 1 5/8"
152	(3) Dish Mount (Monopole Only) - Pipe Mount (8'-10' Dish)	
152	(3) 8' Solid Dish W/ Radome	(3) 1 5/8"

Design Criteria - ANSI/TIA-222-H

Wind Speed (No Ice)	142 mph
Wind Speed (Ice)	30 mph
Design Ice Thickness	0.00 in
Risk Category	II
Exposure Category	C
Topographic Factor Procedure	Method 1 (Simplified)
Topographic Category	1
Ground Elevation	16 ft
Seismic Importance Factor, I_e	1.00
0.2-sec Spectral Response, S_s	0.058 g
1-sec Spectral Response, S_1	0.033 g
Site Class	D (DEFAULT)
Seismic Design Category	A
Basic Seismic Force-Resisting System	Telecommunication Tower (Pole: Steel)

Limit State Load Combination Reactions

Load Combination	Axial (kips)	Shear (kips)	Moment (ft-k)	Deflection (ft)	Sway (deg)
1.2 D + 1.0 W _o	117.32	111.59	16957.84	14.92	8.91
0.9 D + 1.0 W _o	88.07	111.64	16783.87	14.7	8.76
1.2 D + 1.0 E _v + 1.0 E _h	119.4	2.96	485.03	0.44	0.26
0.9 D + 1.0 E _v + 1.0 E _h	87.38	2.95	478.16	0.43	0.25
1.0 D + 1.0 W _o (Service @ 60 mph)	97.87	17.92	2720.15	2.44	1.44

Base Plate Dimensions

Shape	Diameter	Thickness	Bolt Circle	Bolt Qty	Bolt Diameter
Round	95.75"	3"	90"	38	2.25"

Material List

Display	Value
A	4' - 3"

Notes

- 1) Antenna Feed Lines Run Inside Pole
- 2) All dimensions are above ground level, unless otherwise specified.
- 3) Weights shown are estimates. Final weights may vary.
- 4) Full Height Step Bolts
- 5) This tower design and, if applicable, the foundation design(s) shown on the following page(s) also meet or exceed the requirements of the 2020 Florida Building Code.



Sabre Industries
7101 Southbridge Drive
P.O. Box 658
Sioux City, IA 51102-0658
Phone: (712) 258-6690
Fax: (712) 279-0814

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Quote:

22-3666-JDS

Customer:

GULFSTREAM TOWERS

Site Name:

SR528 & SR407, FL FL208

Description:

193' Monopole

Date:

12/9/2021

By: KJL

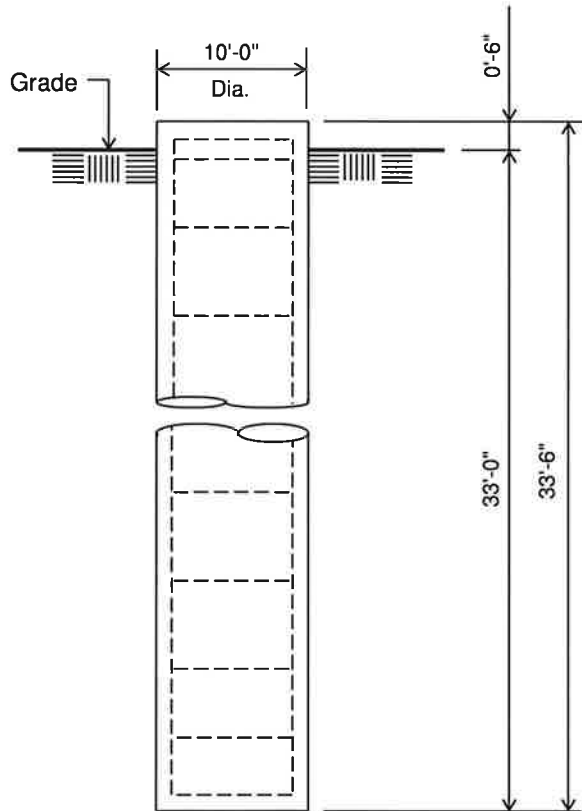
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Customer: GULFSTREAM TOWERS

Site: SR528 & SR407, FL FL208

193' Monopole

PRELIMINARY -NOT FOR CONSTRUCTION-



ELEVATION VIEW

(97.45 Cu. Yds.)

(1 REQUIRED; NOT TO SCALE)

Notes:

- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-14.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be chamfered 3/4".
- 5) The foundation design is based on presumptive sand soil as defined in ANSI/TIA-222-H-2017. It is recommended that a soil analysis of the site be performed to verify the soil parameters used in the design.
- 6) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

Rebar Schedule for Pier

Pier	(80) #11 vertical rebar w/ #5 ties, (2) within top 5" of pier, then 6" C/C
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