

# TOWER QUOTE REQUEST FORM

CUSTOMER CONTACT INFORMATION													
Your Name:													
Company Name:													
Address:													
City: State: Zip Code:													
Phone: Fax:													
E-mail:													
			TOW	ER S	SITE	INFC	ORMAT	ION					
Site Name/Number:						State:							
City:								Country:					
Type of Tower:		Self-sup	oporting	Pole		Ca	amo	(	Other (	(specify):			
Soil Report & Plot Pla	n	L	ist Radius:										
recommended. List Drops & Rises or assume flat:													
Overall Height of tower (specify Meter or Feet):													
Base Elevation above surrounding terrain:													
Engineering Standard to be used: EIA-F TIA-G Use TIA Wind speed													
Other Code/Standard:													
						econd Gust Wind Speed Fastest km/Mile Wind Sp				Mile Wind Speed			
(MPH) or KPH Specify in notes:													
Radial Ice (optional) Inches:													
Load Reduced 25% per TIA/EIA Ice Considered Simultaneous (standard)													
REQUIRED INFORMATION FOR TIA-G DESIGN:													
Structure Class:		II (Defa	ult)		Class I Class III								
Exposure:		C (Defa	ult)		A						В		
Topography Category: 1 (Default) 2						3			4		5	5	
Coordinates: LATITUTDE: LONGITUDE:													
Site Address:													

ANTENNAS AND LINES (APURTENANCES)							
Height	Quantity	Model #	Mount	Line	Line		
m/ft.	_			Size	Qty		
		DISHE					
Height	Quantity	Size & Type-Solid,Grid,Radome,HP	Azimuth & Frequency	Line	Line		
m/ft.				Size	Qty		

OPTIONAL EQUIPMENT								
Lights:		Red	Medium Intensity		Dual Lights		Other (specify):	
		Beacons	Strobes					
Paint Color:				Transmission Line Bridge Length:				
List Other Options:								



# **GEOTECHNICAL INVESTIGATIONS FOR TELECOMMUNICATION TOWERS**

A soil investigation by a geotechnical engineering firm is recommended for each tower site to determine its unique soil and physical characteristics. To ensure that the report furnishes useful information to the foundation designer, the guidelines listed below should be followed.

Number Soil of Borings

<b>SS Tower</b>	Preferred	one at each tower leg or one at center of tower base if base width is less than
		4.5 meters (15 feet)
	winninum	one at center of tower base if base width less than 6 meters (20 feet)

# Monopole

## one at center of monopole base

## Depth of Boring

The depth is dependent on the magnitude of the tower reaction forces and the type of soil encountered.

# Self-Support Tower

# 6 - 8 meters (20 to 25 feet) minimum if shallow pad type foundation is anticipated

9-15 meters (30 to 50 feet) minimum if drilled pier type foundation is anticipated

## Monopole

# 8 - 12 meters (25 to 40 feet) if fill soil are not encountered

6 - 12 meters (20 to 40) feet into native soil if fill soil is encountered

If rock anchors are anticipated, the rock should be cored a minimum of 3 - 6 meters (10 to 20 feet).



## Geotechnical Data (cont.)

Soil Properties – The soil report should provide the following, including all applicable factors of safety.

### **Minimum Required Information**

- a. Allowable Bearing Pressure values vs. depth and expected settlement, mainly at tower base (all tower types)
- b. Allowable Passive Pressure values vs. depth (all tower types)
- c. Allowable Skin Friction values vs. depth (SS and guyed towers only)
- d. Angle of Internal Friction (all tower types)
- e. Unit Weight buoyant, if submerged (all tower types)
- f. Cohesion values vs. depth, if any (all tower types)
- g. Rock Quality Designation (RQD) if rock is encountered (all tower types)
- h. If rock anchors are anticipated
  - i. Ultimate Rock Shear Strength
  - ii. Unit Weight
  - iii. Rock/Grout Friction or Bond Strength
  - iv. Rock Engagement Angle

#### Optional Information (if drilled piers are anticipated for monopole

- a. Lateral Modulus of Subgrade Reaction
- b. Strain at 50% of the Maximum Principal Stress Difference (E<sub>50</sub>)

#### **Boring Logs**

- a. Date, sampling methods, and number of samples
- b. Soil strata classification per USCS, and their depth
- c. Depth of free water encountered and groundwater depth to be used for design
- d. Standard Penetration Test (SPT) blow counts (blows per foot)
- e. Maximum and average frost penetration depth
- f. Unit weight of soil, buoyant unit weight (if submerged)
- g. Type of rock encountered

#### Recommendations

- a. Foundation system best suited for existing soil conditions
- b. Alternative foundation system that can also be considered
- c. Construction problems anticipated (e.g. temporary casings, drilling slurry, rock augers or core barrels, jack hammering, etc.)
- d. Other variables that will affect the installation and design
- e. Depth of saturated soil if expected
- f. Soil resistivity if any special corrosion mitigating measures are required