

POLE SPECIFICATIONS	
POLE HEIGHT	108.00 FEET
TAPER	.2800 IN/FT
POLE SHAPE	18 SIDED POLYGON
ORIENTATION	FLAT-FLAT

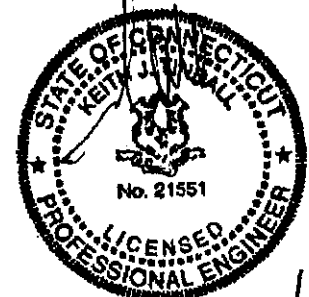
Lev	Qty	Elev	Future	DESCRIPTION
1	3	107.00	F	10' T-Arm 3' Stand-Off
6	108.00	F		P90-15-XLH-RR
6	108.00	F		TMA
2	3	98.00	F	10' T-Arm 3' Stand-Off
9	98.00	F		APX160WV-160WV-S-E-ACU
6	98.00	F		TMA
3	3	88.00	F	10' T-Arm 3' Stand-Off
6	88.00	F		LPA-80063/6CF
6	88.00	F		BXA-185063/12CF
4	3	78.00	F	10' T-Arm 3' Stand-Off
8	78.00	F		APX160WV-160WV-S-E-ACU
6	78.00	F		TMA

Load Case	DESCRIPTION	Wind (mph)	OLF	Rad. Ice	Factors	Wind (psf)
1)	Max Wind	120.0	1.00	.50	1.59	.65 62.3
2)	Max Wind Load x.75	103.9	1.00		1.69	.65 46.7
3)	Everyday Operating	50.0	1.00		1.69	.65 10.8

Load Case	DESCRIPTION	Rea. Axial (kips)	Base Shear (kips)	React. Mom (ft-k)	Disp. DEPL. (ft)	Top SWAY (deg)
1)	Max Wind	32.0	40.4	3155	4.6	4.23
2)	Max Wind Load x.75	27.4	28.1	2164	3.1	2.88
3)	Everyday Operating	27.2	6.5	501	.7	.67

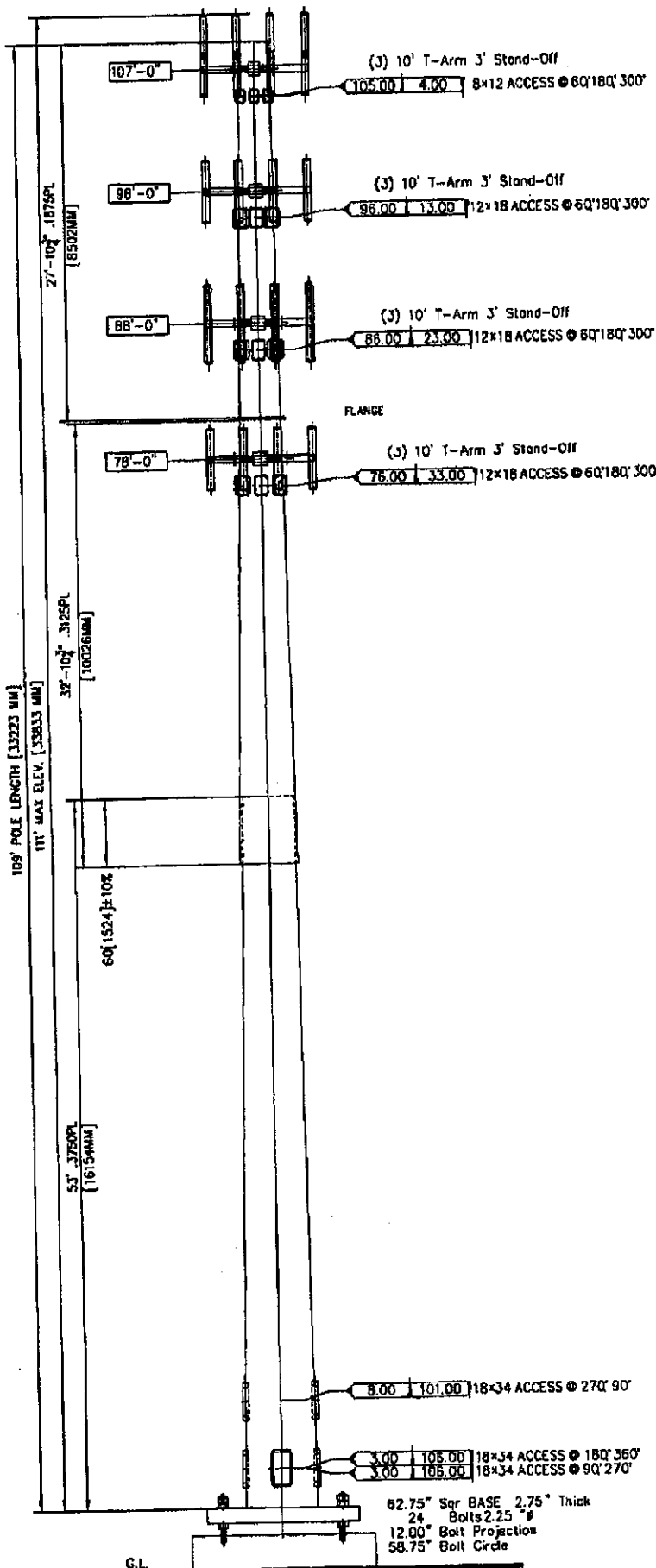
Sec	LENGTH (ft)	Flat-Flat TOP#	80T#	THICK (in)	WEIGHT (lbs)	STEEL SPEC	FINISH
1	28.00	22.25	30.09	.1875	2200	A572-65	Galv
2	33.00	30.34	39.58	.3125	4500	A572-65	Galv
3	53.00	37.58	52.40	.3750	12900	A572-65	Galv
TOTAL 19600							
ABolt Cluster	Bolt#	Hole#					
AB	57.00	2.25	2.625		3200	A615-75	Galv-18"

- 1) FULL HEIGHT STEP BOLTS
- 2) ANTENNA FEED LINES RUN INSIDE POLE
- 3) THIS MONOPOLE DESIGN AND, IF APPLICABLE, THE FOUNDATION DESIGN SHOWN ON THE FOLLOWING PAGE(S) ALSO MEET OR EXCEED THE REQUIREMENTS OF THE 2003 INTERNATIONAL BUILDING CODE.
- 4) THE MONOPOLE WAS DESIGNED IN ACCORDANCE WITH EIA/TIA-222-F.



4/28/11

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41153		SIZE	
DATE 26Apr11		DRAWING NO. A 41153-PE A	
DRAWN BY -		REFERENCE DRAWING	
CHECKED BY REB		SCALE N.T.S. PAGE 1	



POLE SPECIFICATIONS	
POLE HEIGHT	159.00 FEET
TAPER	.2800 IN/FT
POLE SHAPE	18 SIDED POLYGON
ORIENTATION	FLAT-FLAT

Lev	Qty	Elev	Future	DESCRIPTION
1	3	146.00	F	10' T-Arm 3' Stand-Off
2	1	146.00	F	1109-1
2	1	148.00	F	DB222
1	1	148.00	F	RAD 6' MICROWAVE 6.00 Ghz
2	3	108.00	F	10' T-Arm 3' Stand-Off
6	1	108.00	F	P90-15-XLH-RR
6	1	108.00	F	TMA
3	3	98.00	F	10' T-Arm 3' Stand-Off
9	1	98.00	F	APX16DWV-16DWV-S-E-ACU
6	1	98.00	F	TMA
4	3	88.00	F	10' T-Arm 3' Stand-Off
6	1	88.00	F	BXA-185063/12CF
6	1	88.00	F	LPA-80063/6CF
5	3	78.00	F	10' T-Arm 3' Stand-Off
9	1	78.00	F	APX16DWV-16DWV-S-E-ACU
6	1	78.00	F	TMA

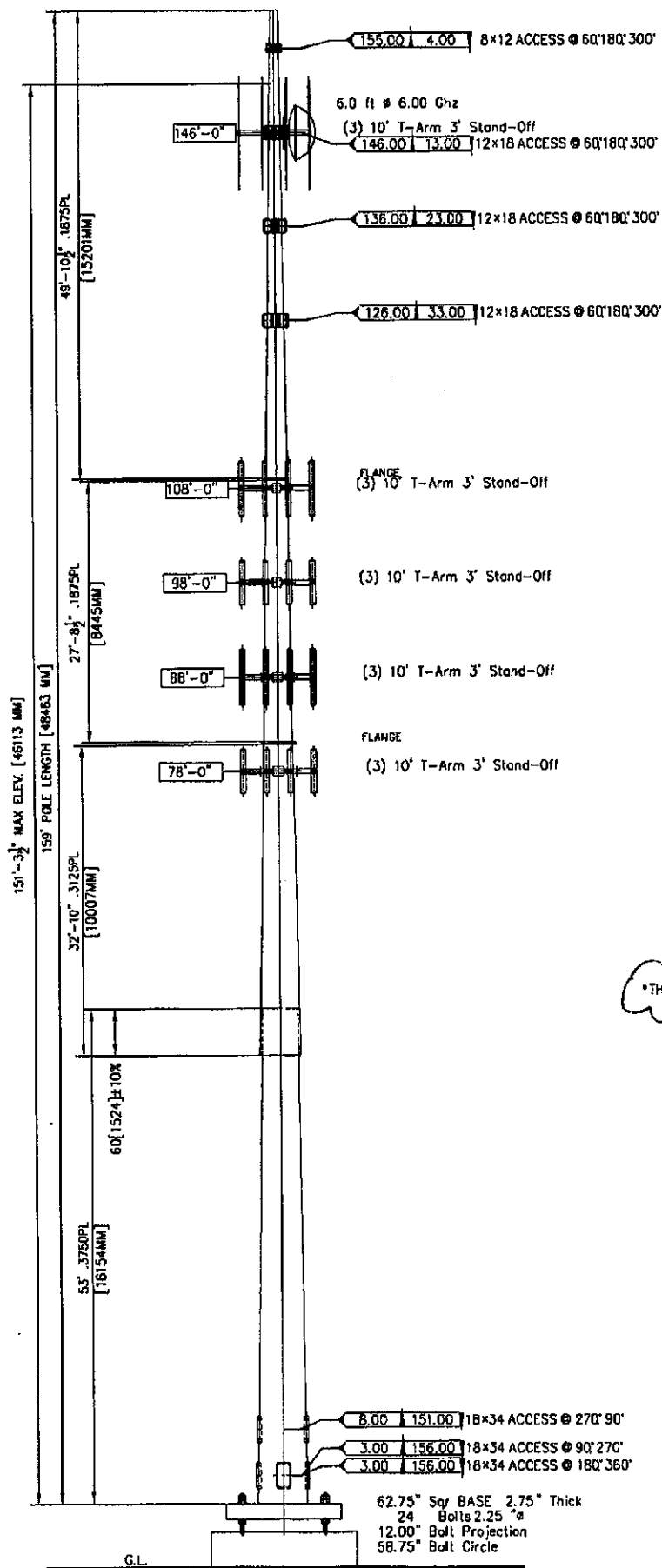
Load Case	DESCRIPTION	Wind (mph)	OLF	Rad. Ice	Factors	Wind (psf)
1)	Max Wind	120.0	1.00	.50	1.69 .65	62.3
2)	Max Wind Load x.75	103.9	1.00		1.69 .65	46.7
3)	Everyday Operating	50.0	1.00		1.69 .65	10.8

Load Case	DESCRIPTION	Res. Axial (kips)	Base Shear (kips)	React. Mom (ft-k)	Disp. @Top (ft)	SWAY (deg)
1)	Max Wind	38.1	51.0	4803	20.5	15.34
2)	Max Wind Load x.75	31.7	35.6	3297	13.9	10.35
3)	Everyday Operating	30.8	8.3	768	3.3	2.42

Sec	LENGTH (ft)	Flat-Flat TOP#	Flat-Flat BOT#	THICK (in)	WEIGHT (lbs)	STEEL SPEC	FINISH
1	50.00	8.25	22.25	.1875	2400	A572-65	Galv
2	28.00	22.25	30.09	.1875	2200	A572-65	Galv
3	33.00	30.34	39.58	.3125	4600	A572-65	Galv
4	53.00	37.56	52.40	.3750	12900	A572-65	Galv
TOTAL					22100		
ABolt Cluster	Bolt#	Hole#					
AB	57.00	2.25	2.625		3200	A615-75	Galv-18"

- 1) FULL HEIGHT STEP BOLTS
- 2) ANTENNA FEED LINES RUN INSIDE POLE
- 3) THIS MONOPOLE DESIGN AND, IF APPLICABLE, THE FOUNDATION DESIGN SHOWN ON THE FOLLOWING PAGE(S) ALSO MEET OR EXCEED THE REQUIREMENTS OF THE 2003 INTERNATIONAL BUILDING CODE.
- 4) THE MONOPOLE WAS DESIGNED IN ACCORDANCE WITH EIA/TIA-222-F.

*THEORETICAL POLE - FOR FOUNDATION DESIGN ONLY



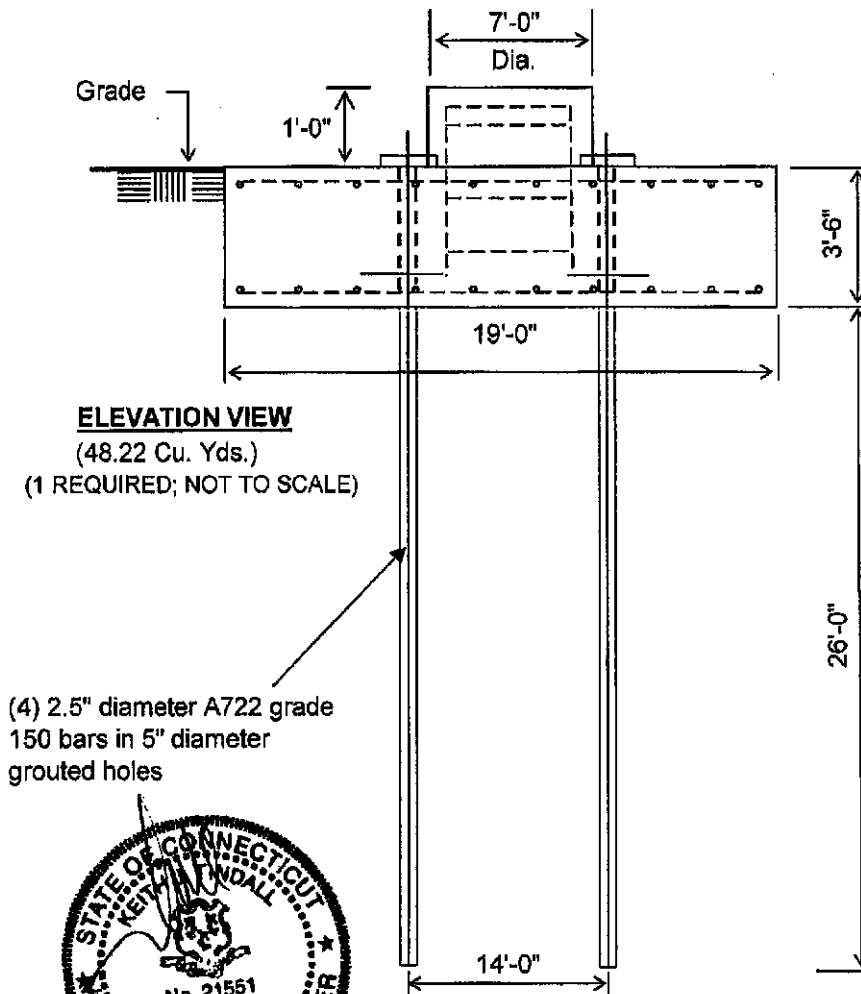
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T-MOBILE
CTNL803, CT
160.00 MONOPOLE

41153	SIZE	DRAWING NO.	REV
DATE 26Apr11	A	41153-PE	A
DRAWN BY	REFERENCE DRAWING	SCALE N.T.S.	PAGE 2
CHECKED BY REB			

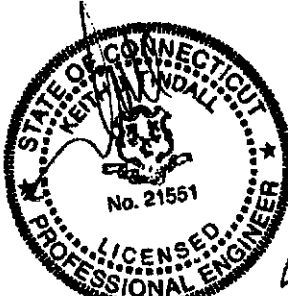
Customer: T-MOBILE
Site: CTNL803, CT

110' Monpole at
 120 mph Wind + 0.5 in. Ice (concurrent) per ANSI/TIA/EIA-222-F-1996
 Antenna Loading per Page 1



Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 5000 psi, in accordance with ACI 318-05.
- 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 the geotechnical report by Terracon; Project # J2105224, dated: 11/10/10.
- 6). Bar centralizers shall be used at 5' spacing along the length of each rock anchor.
- 7). Grout shall have a minimum 28-day compressive strength of 5000 psi.
- 8). Proof load two anchors per foundation to 300 kips and lock off all anchors (post-tensioned clamping force) at 50 kips.
- 9). Anchors may be proof-loaded before or after concrete is installed, but must be post-tensioned after concrete is installed.



Rebar Schedule per Pad and Pier

Pier	(32) #10 vertical rebar w/hooks at bottom w/#4 ties, two within top 5" of top of pier then 6" C/C
Pad	(34) #11 horizontal rebar evenly spaced each way top and bottom (136 Total)

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