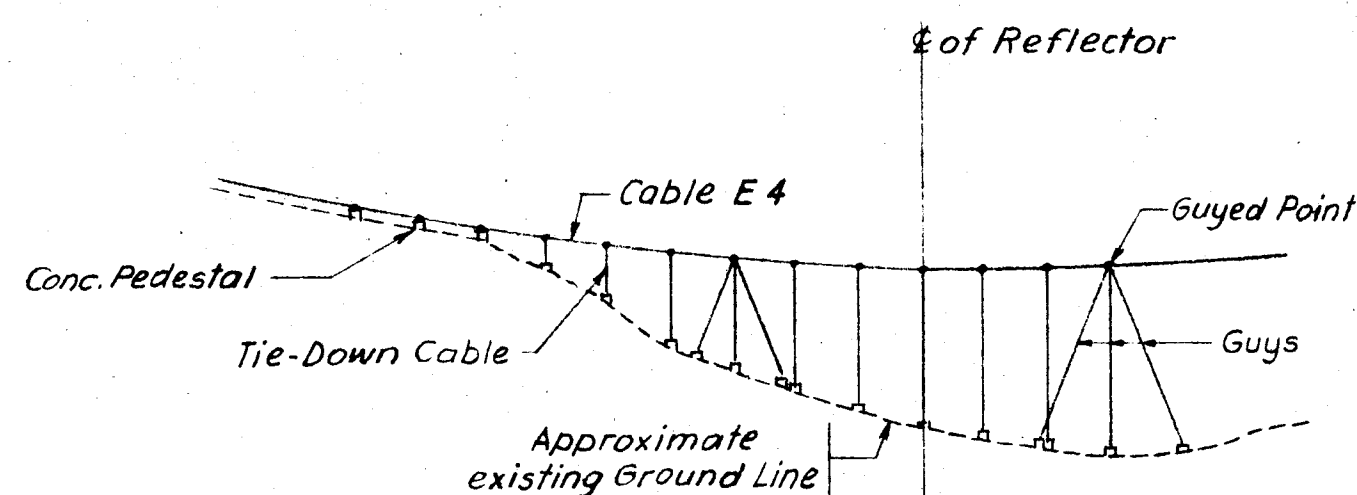
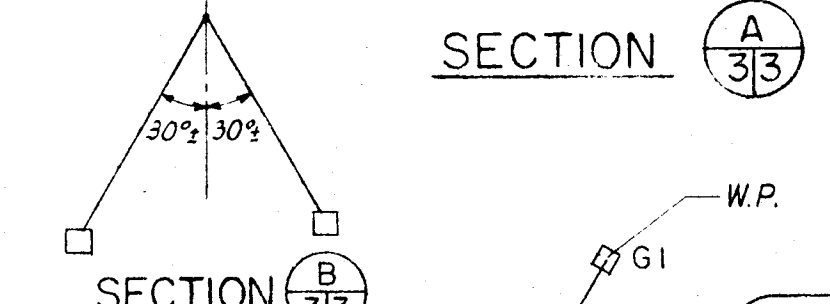


All tie-down cables and guys to be 3/8" galvanized bridge ropes or equal, to be approved by the Engineer.



Note: For detail of concrete pedestals, anchorages of tie-down cables and guys, see Dwg. No. 10-6



- LEGEND:**
- Bottom Cable Anchorages
 - ◇ Guyed Points (Three guys)
 - Concrete Pedestals
 - Tie-Down Cables
 - ⊕ Two guys

TABLE 1
BOTTOM CABLE SYSTEM

	W1,E1	W2,E2	W3,E3	W4,E4	W5,E5	
CHORD LENGTH BETWEEN W.P.'s	394.988	353.940	866.026	714.142	435.890	
THEORETICAL RADIUS	868.650	857.059	833.395	796.580	744.668	
ELEVATIONS OF THEORETICAL SURFACE	A, K	873.999	867.345			
	B, J	829.744	842.339	868.154	908.606	
	C, H	796.342	808.425	833.140	871.722	
	D, G	713.839	785.600	809.628	847.050	899.324
	E, F	762.807	774.416	798.121	835.001	887.017
HORIZONTAL D.L. REACTION (K)	53.4	52.8	51.3	49.0	45.8	

TABLE 2
LOCATION OF GUY ANCHORAGES

POINT	G1		G5		G9		POINT	G1		G5		G9	
	ELEV.	HOR.	ELEV.	HOR.	ELEV.	HOR.		ELEV.	HOR.	ELEV.	HOR.	ELEV.	HOR.
W1A	A 838	21.0	B 863	6.5	B 858	9.0	E1A	A 838	21.0	B 863	6.5	A 854	11.5
W1B	A 763	38.0	B 795	19.5	B 788	23.5	E1B	A 756	42.0	B 796	19.0	A 753	31.0
W1C	A 765	18.5	A 759	22.0	A 761	21.0	E1C	A 744	30.5	A 751	26.5	A 752	26.0
W1D	A 749	14.0	A 757	9.0	A 753	11.5	E1D	A 738	20.0	A 741	18.5	B 745	16.0
W1E	A 737	15.0	A 737	15.0	A 739	14.0	E1E	A 735	16.0	A 735	16.0	A 735	16.0
W1F	A 740	13.5	A 739	14.0	A 740	13.5	E1F	A 737	15.0	A 736	15.5	A 737	15.0
W1G	A 748	14.5	A 745	16.0	A 748	14.5	E1G	A 744	16.5	A 740	19.0	A 743	17.5
W1H	B 767	17.5	A 758	22.5	A 763	19.5	E1H	B 773	14.0	A 762	20.0	B 769	16.0
W1J	B 825	2.5	A 786	25.0	A 795	19.5	E1J	B 806	13.5	A 789	23.0	B 804	14.5
W1K	B 864	6.0	A 851	13.5	A 858	9.0	E1K	B 866	4.5	A 851	13.5	B 858	9.0
W2A	A 866	12.0	B 874	7.5	B 873	8.0	E2A	A 866	12.0	B 875	7.0	A 866	12.0
W2B	A 791	29.5	B 814	16.0	B 812	17.5	E2B	A 788	31.0	B 820	12.5	A 795	27.0
W2C	A 761	27.0	B 773	20.0	B 776	18.5	E2C	A 751	33.0	B 762	26.5	A 749	34.0
W2D	A 749	21.0	A 752	19.0	A 753	18.5	E2D	A 740	26.0	B 745	23.0	A 740	26.0
W2E	A 757	10.0	A 753	12.0	B 763	6.5	E2E	A 739	20.0	A 739	20.0	A 737	21.5
W2F	A 750	14.0	A 757	10.0	B 761	7.5	E2F	A 739	20.0	A 739	20.0	A 737	21.5
W2G	A 755	17.5	A 751	19.5	B 759	15.0	E2G	A 745	23.0	A 743	24.0	A 743	24.0
W2H	B 778	17.5	A 764	25.5	B 781	15.5	E2H	B 759	28.5	A 749	34.0	A 751	33.0
W2J	B 822	11.5	A 798	25.5	B 821	12.0	E2J	B 822	11.5	A 790	30.0	A 797	31.5
W2K	B 876	6.5	A 866	12.0	B 875	7.0	E2K	B 878	5.0	A 866	12.0	A 869	10.5
W3B	A 844	14.0	A 855	7.5	B 858	6.0	E3B	A 839	16.5	B 854	8.0	A 833	20.0
W3C	A 798	19.5	A 811	12.0	B 818	8.0	E3C	B 799	19.0	B 805	15.5	A 774	33.5
W3D	A 763	26.5	A 775	19.5	B 783	15.0	E3D	B 775	19.5	B 781	16.0	A 758	29.5
W3E	B 772	15.0	A 766	18.5	B 771	15.5	E3E	B 761	21.5	B 764	19.5	A 746	30.0
W3F	A 779	11.0	A 780	10.5	B 783	8.5	E3F	B 756	24.0	B 758	23.0	A 746	30.0
							E3G	B 759	29.0	B 756	30.5	A 748	35.0
							E3H	B 804	16.0	A 786	26.5	A 775	33.0
							E3J	B 856	7.0	A 841	15.5	A 838	17.5
W4D	A 808	22.5	B 826	12.0	B 828	11.0							
W4E	A 794	23.5	A 794	23.5	B 806	16.5	E4E	A 807	16.0	B 816	11.0	A 791	25.5
W4F	B 826	5.0	A 815	11.5	B 826	5.0	E4F	B 803	18.5	B 799	21.0	A 771	37.0
							E4G	B 825	12.5	B 818	16.5	A 786	35.0
							E4H	B 861	6.0	A 853	11.0	A 841	18.0
W5E	A 866	12.0	A 867	11.5	B 877	6.0							
W5F	A 868	11.0	A 866	12.0	B 877	6.0	E5F	B 874	7.5	B 873	8.0	A 866	12.0
W5D	A 884	10.0	A 891	6.0	B 893	4.5	E5G	B 893	4.5	B 891	6.0	A 876	14.5

NOTES:

1. Near the rim supports and in transition areas between cut and fill, concrete pedestals may be used instead of tie-down cables or vice versa, if existing ground elevations indicate such changes advisable. Such changes shall be directed or approved by the Engineer.

CORNELL UNIVERSITY
DEPARTMENT OF DEFENSE
IONOSPHERIC RESEARCH FACILITY

PLAN OF BOTTOM CABLES

VON SEB, INC. - DEVELOPMENTAL ENGINEERING CORP.
SEVERUD - ELSTAD - KRUEGER - ASSOC. - PRAEGER - KAVANAGH

DESIGNED BY J.B. [Signature]
CHECKED BY J.R.S. [Signature]

APPROVED [Signature]
DATE March 15, 1964
SCALE As Shown
DWG. NO. 10-3

AS BUILT

D-CRS R 10-3

