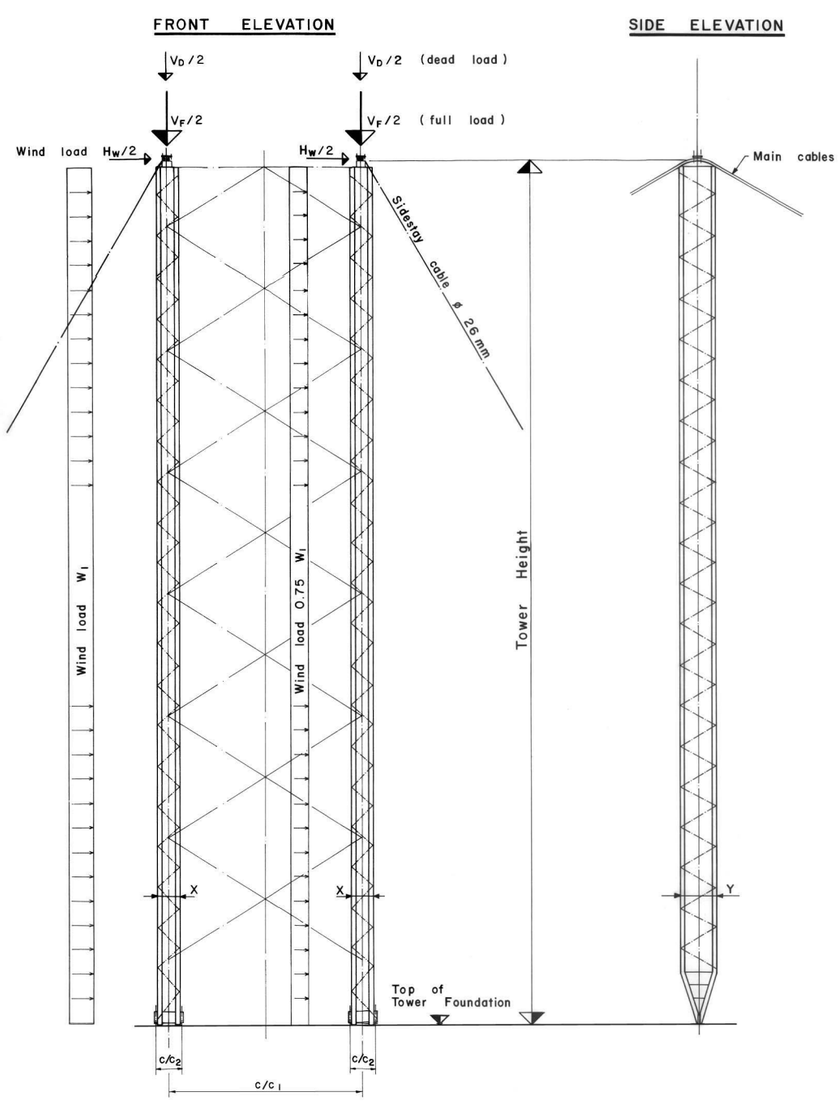
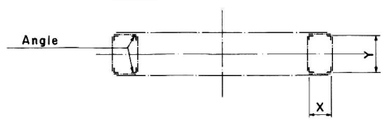
General View

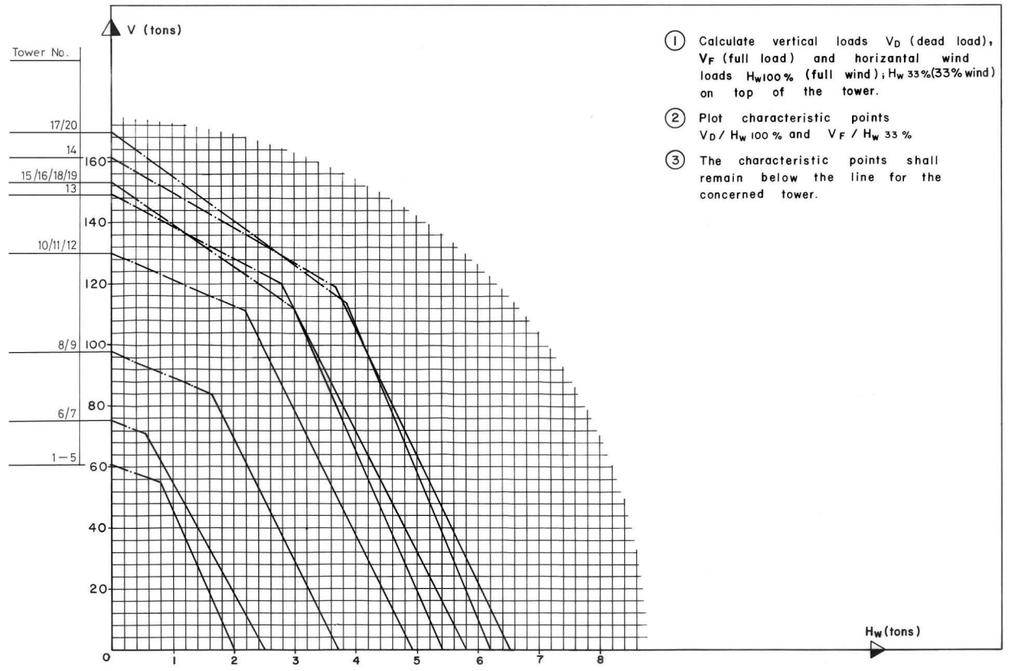


PLAN



Steel parts to be Galvanized :	Hot Dip Galvanization : IS 2629 , IS 2633
Steel parts to be Painted :	Weight of Zinc Coat : 0.61 kg / m²

Capacity Diagram :



① Calculate vertical loads V_D (dead load), V_F (full load) and horizantal wind loads H_W 100 % (full wind) ; H_W 33 % (33% wind) on top of the tower.

② Plot characteristic points V_D / H_W 100 % and V_F / H_W 33 %

③ The characteristic points shall remain below the line for the concerned tower.

Basic Data :

① **Material :**

Structural Steel according to IS 226 - 1975 (standard quality)
tensile strength σ_u = 410 - 530 N/mm²

yield stress σ_f = 250 N/mm² for { 6 ≤ t ≤ 20 mm ; 10 ≤ ø ≤ 20 mm

σ_f = 240 N/mm² for { 20 < t ≤ 40 mm ; ø > 20 mm

High tensile Friction Grip Bolts, Nuts, and Washers according to IS 3757 - 1972 ; IS 6623 - 1972 and IS 6649 - 1972

② **Safety Factor :**

The towers have been designed without considering the effect of the side stay cables ; the windload on the bridge shall be calculated without considering the effect of the windguy cables. Under this condition the safety factor has been fixed to 1.6

③ **Windload on Towers :**

Assumed uniform for all towers.

For full wind (100 %) { dynamic pressure q = 1.3 KN/m² ; windload on tower wt. = 1.02 KN / m

For partial wind (33 %) { dynamic pressure q = 50 kg/m² ; windload on tower wt. = 0.33 KN / m

MoLD / DoLIDAR / Trail Bridge Section
Long Span Trail Bridge Standard

Bridge No: Name:

Span:

Guide to L.S.T.B Standard Towers

Date: August 2004 **Drawing No.** 140

Page 1 of 2 Drawing No. 140