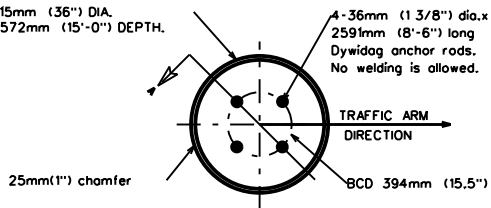
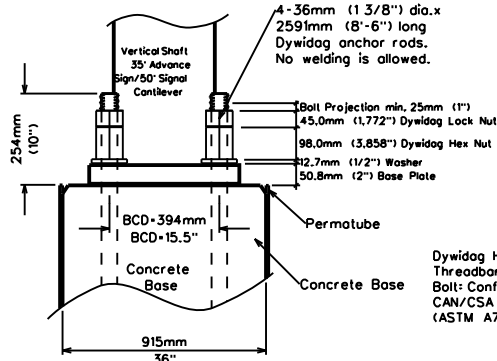


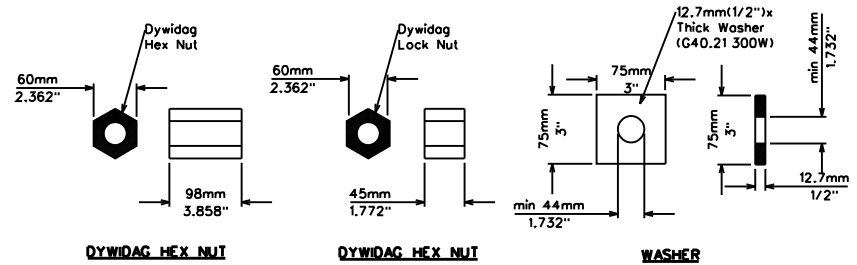
915mm (36") DIA.  
4572mm (15'-0") DEPTH.



**CONCRETE BASE-TOP VIEW**



**DETAILS 'X'**

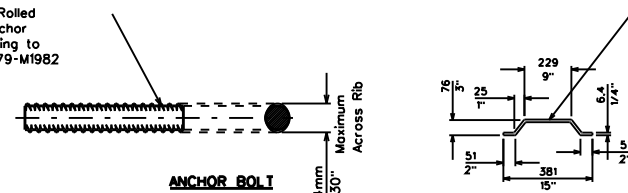


**DYWIDAG HEX NUT**

**DYWIDAG HEX NUT**

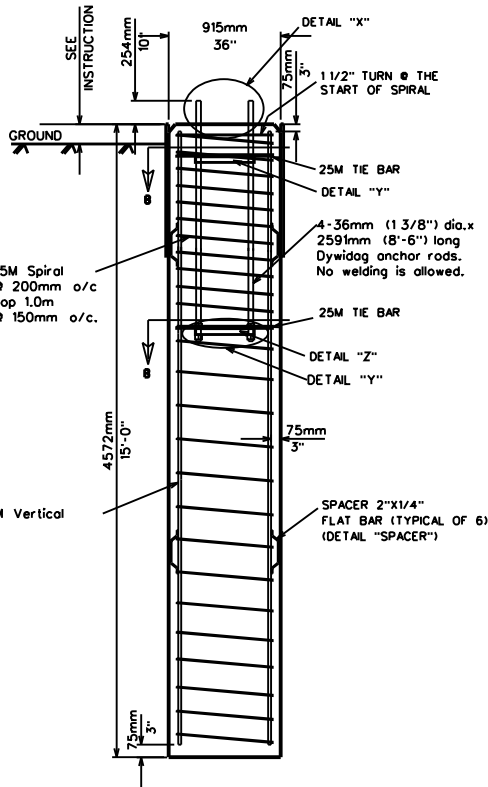
**WASHER**

Dywidag Hot Rolled Threadbar Anchor Bolt: Conforming to CAN/CSA G279-M1982 (ASTM A722)

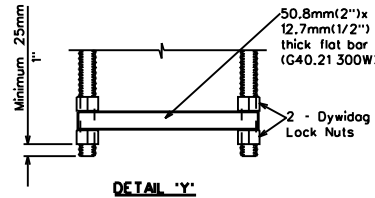


**ANCHOR BOLT**

**DETAIL 'SPACER' 6 REQUIRED**



**SEC A-A**



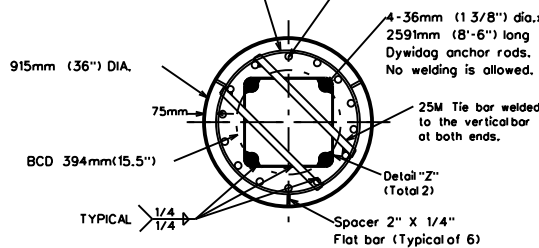
**DETAIL 'Y'**



**DETAIL 'Z'**



15M Spiral @ 200mm O/C TOP 1.0m @ 150mm O/C



**SEC B-B**

**REBAR:**

1. Reinforcing rebars to gr. 400W, CSA-G30.18M. All outer reinforcing steel shall have a minimum of 75mm (3") concrete cover. Welding shall conform to CSA W59.47.1.

**CONCRETE:**

2. Concrete: -30 MPa in 7 days  
-5% - 8% air  
-70mm - 100mm slump  
-Type 50 cement  
-Other requirements to satisfy the City of Edmonton's "Specification for Structural Footing"
3. All concrete works in/c placing, consolidation & winter protection shall be done in accordance with the latest version of CSA, CAN3-A23.1. When concrete is being placed, it shall not be placed freely from the end of the chute or elephant trunk more than 1.5m. Concrete base can not be placed if the air temperature is at or below 0 C, or when there is a probability of the temperature falling below 0 C within 24 hours of placing concrete

**ANCHOR BOLT:**

4. All anchor rods to be of Dywidag Hot Rolled Threadbar, steel grade 830/1035 MPa conforming to CSA G279-MB2 (ASTM A 722). Each Dywidag bolt c/w 1-Dywidag hex nut and 3-Dywidag locked nut, 1-12.7mm (1/2") thick washers (G 40.21 300W-Galvanized).

**SOIL:**

5. Soils assumed to be homogeneous firm clay. Top 1.0m has been neglected in the design. If unsuitable soils found to be more than 1.0m deep, the pile length must be increased to accommodate such additional depth of unsuitable soil. If site condition does not concur with the firm clay assumption, it must be notified to the Project Engineer immediately.
6. Top of pile to be placed at 0-25mm above the concrete if installed in the sidewalk, 150mm above ground if installed in level ground.
7. For pile on sloped ground steeper than 1 vertical to 4 horizontal contact designer for a deeper pile.

**DESIGN LOAD:**

8. Base Reactions as per steel structure manufacturer's drawings.  
10.67m(35') Arm Advance Sign-Nova Pole - 2-10-5031 dt. Jan 31, 2007  
15.24m(50') Arm Signal Cantilever-Valmont - 9034-08-008-01 dt. Nov 6, 2008

**UNFACTORED**

F <sub>x</sub> (kN)	F <sub>y</sub> (kN)	F <sub>z</sub> (kN)	M <sub>x</sub> (kNm)	M <sub>y</sub> (kNm)	M <sub>z</sub> (kNm)
3.3	16.5	17.9	118.7	70.9	93.8

Note:  
Dimensions are shown in metric unit with imperial. In the event of any discrepancy, the metric unit will prevail.

	TRANSPORTATION SERVICES TRAFFIC OPERATORS BRANCH
	<b>TRAFFIC SIGNALS</b>
10.67m(35') ARM ADVANCE WARNING SIGN OR	
15.24m(50') ARM CANTILEVER STRUCTURE	
CONCRETE BASE 394mm (15.5") BCD	
NOT TO SCALE	DWG. NO. 14162