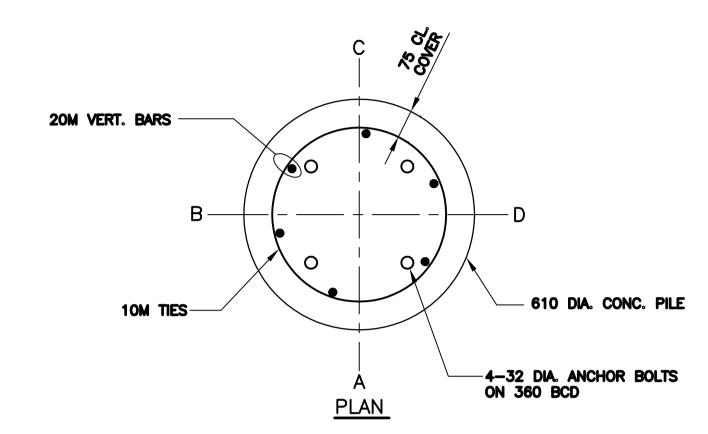
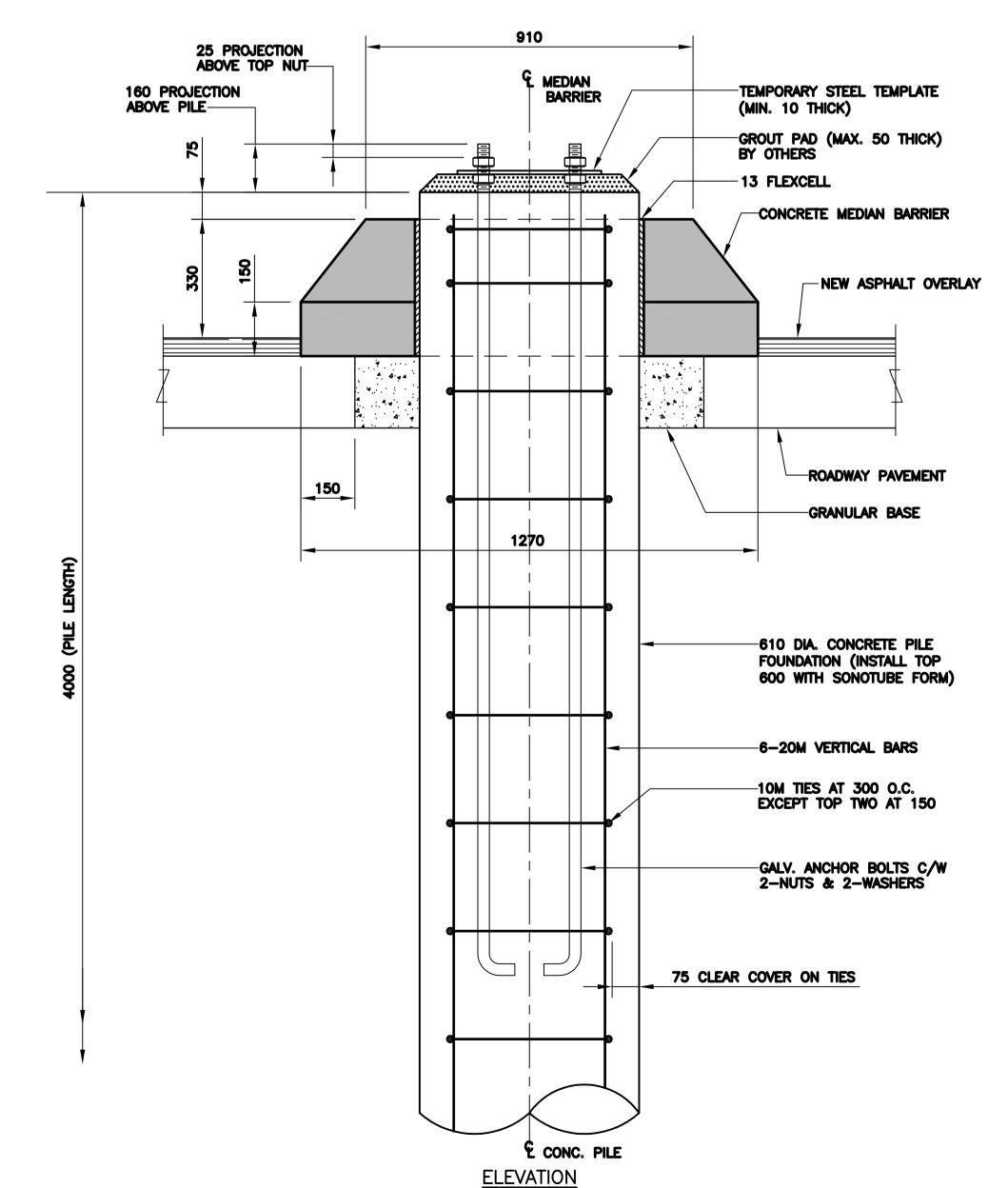


ANCHOR BOLTS LAYOUT





CONCRETE PILE FOUNDATION FOR S738

PILE CONSTRUCTION NOTES

- 1. REINFORCING STEEL

 * CSA G30.12 GR. 400
- * VERTICAL BARS FULL LENGTH OF PILE * HOT DIP GALVANIZED
- 2. <u>ANCHORS BOLTS</u> CSA G40.21 GR. 300W

4-32 DIA. x 1500 LONG + 150 HOOK EACH BOLT C/W 2 NUTS & 2 WASHERS TOP 300 THREADED HOT DIP GALVANIZED FULL LENGTH

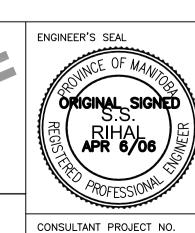
- 3. ANCHOR BOLTS SHALL BE ALIGNED WITH A TEMPORARY STEEL TEMPLATE. PLACEMENT OF ANCHOR BOLTS AND CONCRETE WITHOUT THE TEMPLATE WILL NOT BE PERMITTED.
- 4. TOP 1.0 m. OF PILE SHALL BE FORMED WITH A TABULAR FORM (SONOTUBE).
- 5. CONTRACTOR SHALL REMOVE THE BASE TEMPLATE, NUTS AND FORM, FOLLOWING A MINIMUM 24 HOUR CONCRETE CURING PERIOD.
- 6. APPLY CONCRETE CURE AND PROTECTION SYSTEM FOR TOP 600 mm OF PILE. APPROVED PRODUCT HORSEY SET WDE (WATER-DISPERSED EPOXY), MADE BY WATSON BOWMAN ACME, AS SUPPLIED BY G.D. JOHNSTON LTD.

7. CONCRETE MIX DESIGN
PROPORTIONING OF FINE AGGREGATE, COARSE AGGREGATE, CEMENT, WATER, AND AIR ENTRAINING AGENT SHALL BE SUCH AS YIELD CONCRETE HAVING THE REQUIRED STRENGTH AND WORKABILITY AS FOLLOWS:

- MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 35 MPa
- MAXIMUM WATER/CEMENT RATIO = 0.45 MINIMUM CEMENT CONTENT = 340 kg/m
- $SLUMP = 80 \text{ mm} \pm 30 \text{ mm}$
- AGGREGATE: 20 mm NOMINAL
- AIR CONTENT: 5.0 TO 8.0 PERCENT
- CEMENT TYPE HS, HIGH SULFATE-RESISTANT.

APEGM Certificate of Authorization Dillon Consulting Limited No. 1789 Expiry: April 30, 2006

B.M ELE				DESIGNED BY	S.S.R	11.
				DRAWN BY	N.B.G.	
				CHECKED BY	S.S.R.	DILLON
				APPROVED BY		CONSULTING
				HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION
0	ISSUED FOR TENDER	04/07/06	S.S.R.	VERTICAL		ORIGINAL SIGNED
NO.	REVISIONS	DATE	BY	DATE	7 APRIL 2006	DATE APR 7/06



06-6011-1000

Winnipeg

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

PEMBINA HIGHWAY (SOUTHBOUND) GRANT AVENUE TO HARROW STREÉT STREET RESURFACING

S738 PEMBINA HIGHWAY N/B

SOUTH OF HARROW ST.

CONCRETE PILE FOUNDATION DETAIL

P-3265-09

CITY DRAWING NUMBER

40DILLON ACAD FILE: G:\CAD\066011\DRAFT\OHSS\CURRENT\PEMBINA HWY_HARROW.DWG 04/05/06