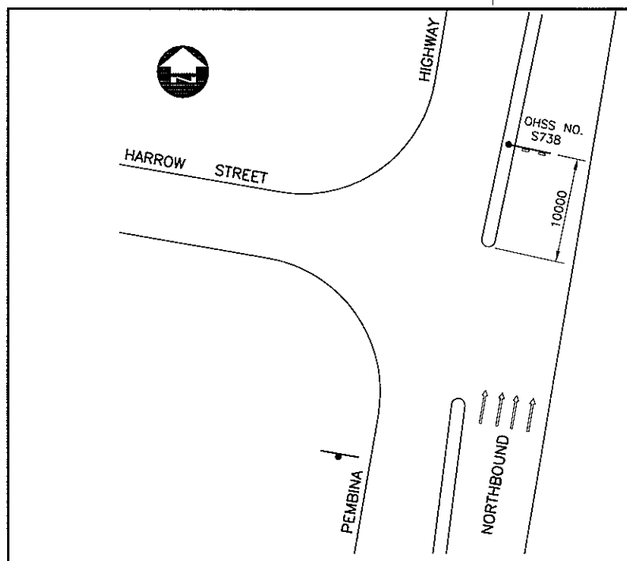
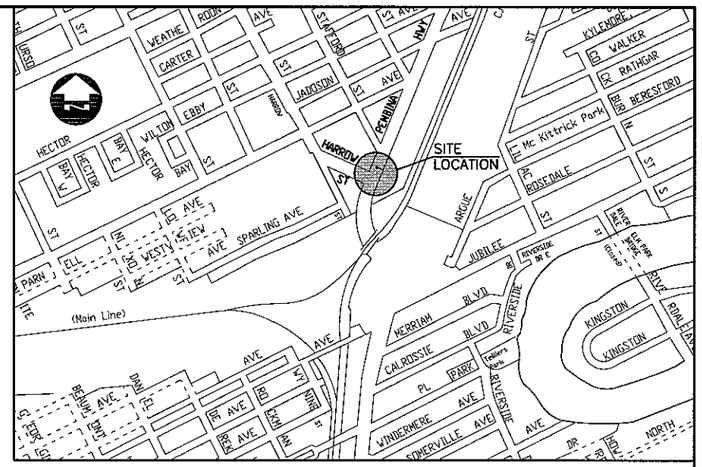
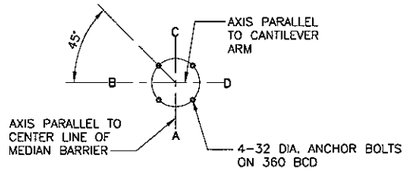
WO 101-84



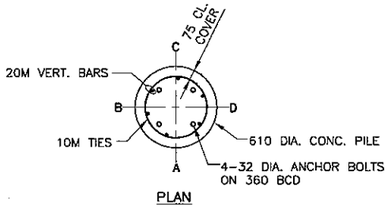
SITE PLAN



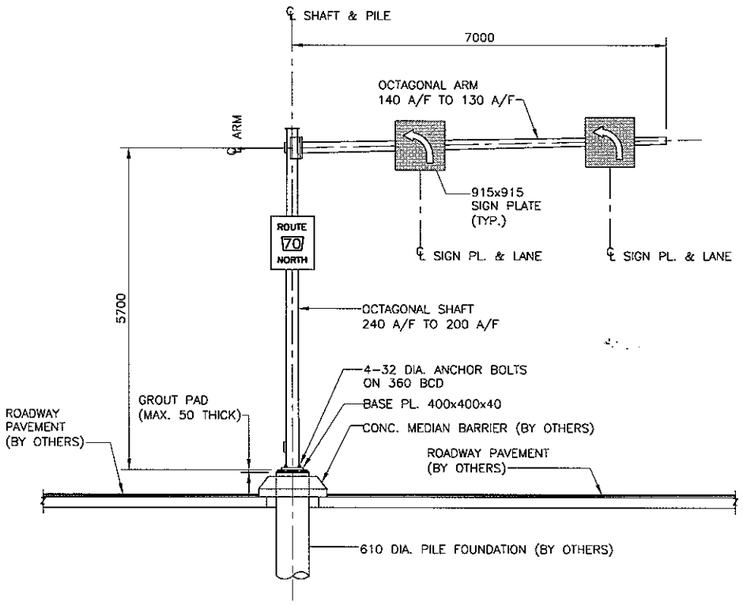
LOCATION PLAN



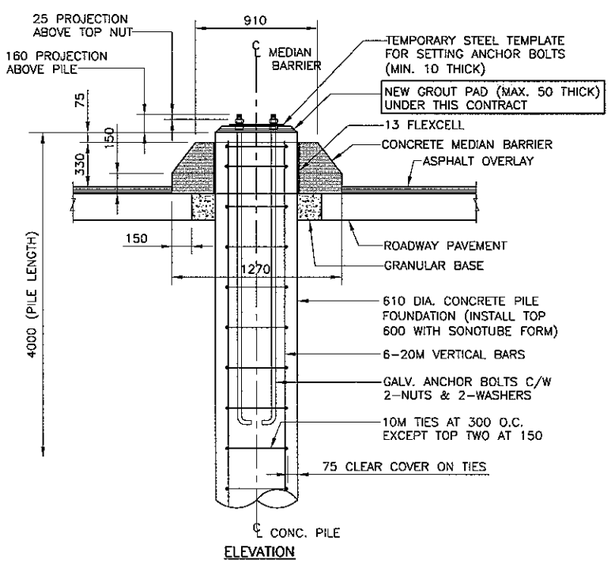
ANCHOR BOLTS LAYOUT



PLAN



SITE ELEVATION–LOOKING NORTH
1: 50 OVERHEAD SIGN STRUCTURE NO. S738



ELEVATION

CONCRETE PILE FOUNDATION FOR S738
1:20 (BY OTHERS EXCEPT AS NOTED)

PILE CONSTRUCTION NOTES (BY OTHERS EXCEPT AS NOTED)

1. REINFORCING STEEL
   - CSA G30.12 GR. 400
   - VERTICAL BARS FULL LENGTH OF PILE
   - HOT DIP GALVANIZED
2. ANCHORS BOLTS
   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:
   i) MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 35 MPa
   ii) MAXIMUM WATER/CEMENT RATIO = 0.45
   iii) MINIMUM CEMENT CONTENT = 340 kg/m
   iv) SLUMP = 80 mm ±30 mm
   v) AGGREGATE: 20 mm NOMINAL
   vi) AIR CONTENT: 5.0 TO 8.0 PERCENT
   vii) CEMENT – TYPE HS, HIGH SULFATE–RESISTANT.

B.M. ELEV.				DESIGNED BY: S.S.R.
				DRAWN BY: N.B.G.
				CHECKED BY: S.S.R.
				APPROVED BY:
				SCALE: HORZ. AS SHOWN VERT.
				DATE: MAY 2006
				AUTHORIZED BY: DATE:
1	ISSUED FOR TENDER	5/10/06	SSR	CITY BRIDGE ENGINEER
NO.	REVISIONS	DATE	BY	

DILLON CONSULTING

ENGINEER'S SEAL
PROVINCE OF MANITOBA — S.S. RIHAL — REGISTERED PROFESSIONAL ENGINEER

CONSULTANT PROJECT NO. 06-6011-1000

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

OVERHEAD SIGN SUPPORT STRUCTURE MAINTENANCE WORKS
2006 PROGRAM

CITY DRAWING NUMBER OHSS-06-04
SHEET 4 OF 7

S738 PEMBINA HIGHWAY N/B
NORTH OF HARROW ST.