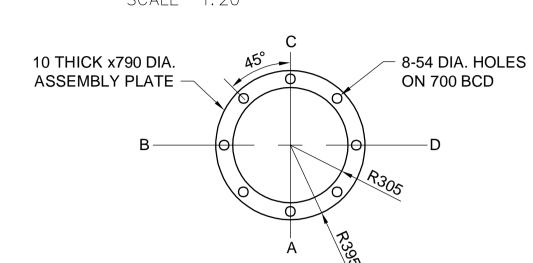
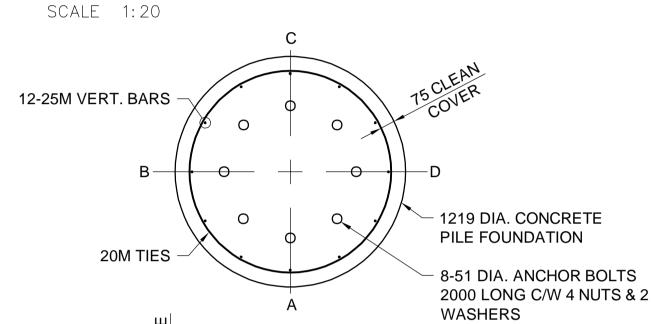
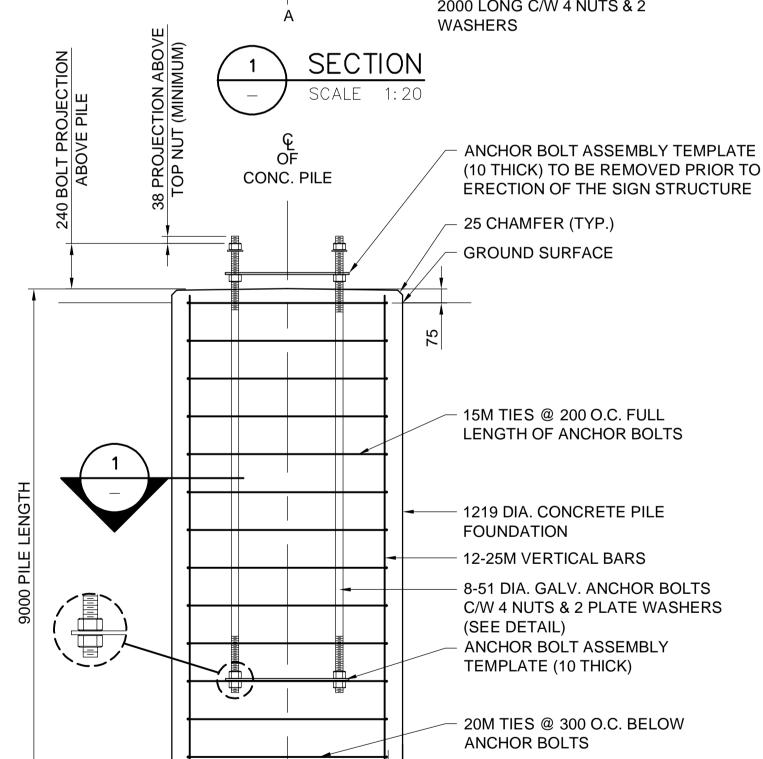


ANCHOR BOLTS LAYOUT



ANCHOR BOLT ASSEMBLY TEMPLATE





CONCRETE PILE FOUNDATION DETAIL FOR S797

NO. REVISIONS

ELEV. CHECKED CC

DRAWN APPROVED RELEASED FOR HOR. SCALE: 1 ISSUED FOR ADDENDUM 2 22/06/10 FT **CONSTRUCTION BY:** NOTED VERTICAL: 0 ISSUED FOR TENDER 22/05/26 FT

75 CLEAR COVER ON TIES

ORIGINALY SIGNED BY F. TABET Member 33659 (%) 2022.05.26 PROFESSIONAL

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

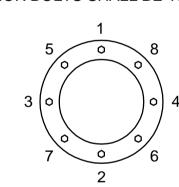
Winnipeg ENGINEERING DIVISION CITY DRAWING NUMBER 2022 REGIONAL STREET RENEWAL PROGRAM S-797-22-01 UNIVERSITY CRESCENT FROM THATCHER DRIVE TO PEMBINA HIGHWAY

SITE LOCATION

SCALE N.T.S.

PILE CONSTRUCTION NOTES:

- 1. REINFORCING STEEL
- -CSA G30.18 GR. 400W
- -VERTICAL BARS FULL LENGTH OF PILE
- -HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A767
- 2. ANCHOR BOLT
- -ASTM F1554 GR.55 (380 MPa)
- -8-51 DIA. ANCHOR BOLTS 2.0m LONG
- EACH BOLT C/W 4 NUTS AND 2 PLATE WASHERS (SEE PLATE WASHER DETAIL FOR MK. 14) - TOP 300 THREADED UNC CLASS 2A
- BOTTOM 100 THREADED UNC CLASS 2A
- HOT DIP GALVANIZED FULL LENGTH, IN ACCORDANCE WITH ASTM A153 CLASS C
- B.C.D. = BOLT CIRCLE DIAMETER TO CENTRE OF BOLT GROUP
- ANCHOR BOLTS SHALL BE ALIGNED WITH TEMPORARY STEEL TEMPLATES. PLACEMENT OF ANCHOR BOLTS AND CONCRETE WITHOUT THE TEMPLATES WILL NOT BE PERMITTED.
- CONTRACTOR SHALL REMOVE THE TOP ANCHOR BOLT SETTING TEMPLATE, NUTS AND FORM, FOLLOWING A MINIMUM 24 HOUR CONCRETE CURING PERIOD. - FOLLOWING INSTALLATION OF THE STEEL STRUCTURE, TIGHTEN THE LOWER LEVELING
- NUTS AND UPPER ANCHOR NUTS TO A SNUG-TIGHT CONDITION, FOLLOWED BY 1/2 NUT
- ROTATION (+20°/-0°) OF THE UPPER ANCHOR NUTS. - ANCHOR BOLTS SHALL BE TIGHTENED USING A STAR PATTERN TIGHTENING SEQUENCE.



- 3. FORM TOP OF PILE WITH A TUBULAR FORM (SONOTUBE):
- -1m FOR DRILLED SHAFTS
- -1.5m FOR HYDRO-EXCAVATED SHAFTS
- 4. 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) CLASS OF EXPOSURE: S-1, C-1
- ii) MINIMUM COMPRESSIVE STRENGTH AT 56 DAYS = 35 MPa
- iii) MAXIMUM WATER/CEMENT RATIO = 0.40
- iv) AIR CONTENT: CATEGORY 2 PER TABLE 4 OF CSA A23.1-14 (4-7%) v) CEMENT IN ACCORDANCE WITH CSA A23.1-14

WARNING:

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

- 1. NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
- 2. TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS
- SEE PROVINCIAL REGULATION 210/72 FOR DETAILS
- 3. OBTAIN EXCAVATION PERMITS PRIOR TO CONSTRUCTION.

METRIC WHOLE NUMBERS INDICATE MILLIMETRES DECIMALIZED NUMBERS INDICATE METRES



AECOM S797 NB UNIVERSITY CR NORTH OF WEDGEWOOD DR CONSULTANT DRAWING NO. OVERHEAD SIGN SUPPORT STRUCTURE CS-01 PLAN, SECTION AND DETAILS DATE BY DATE 2022-05-26 DATE