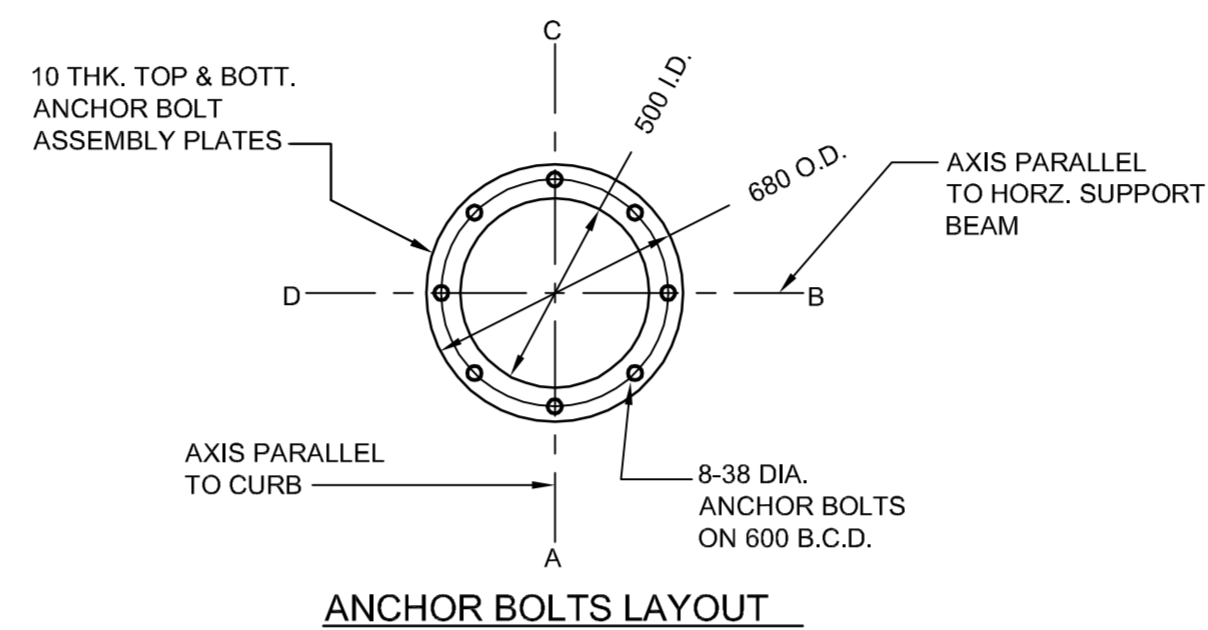
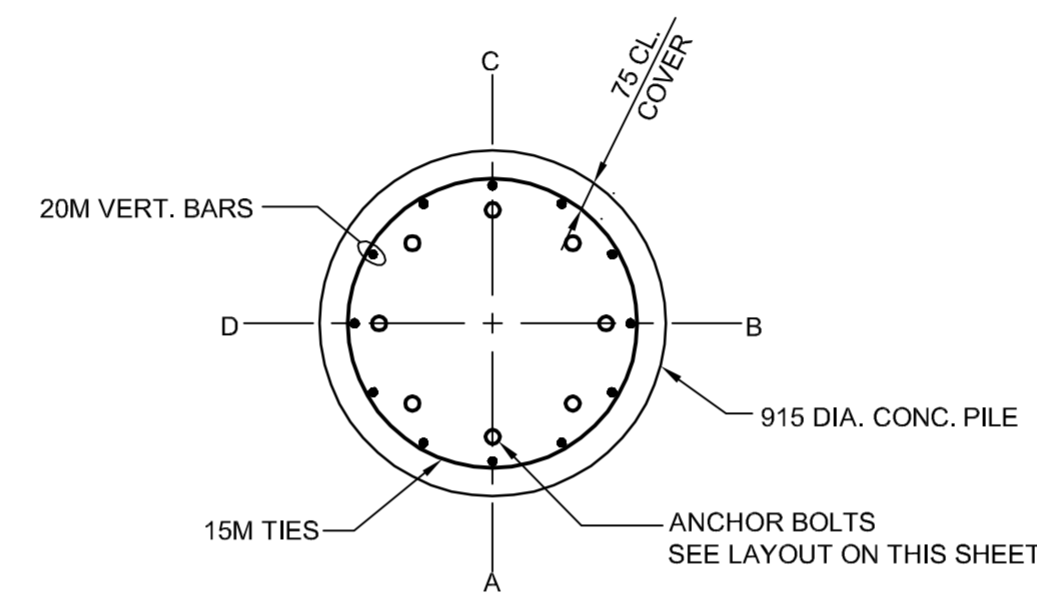


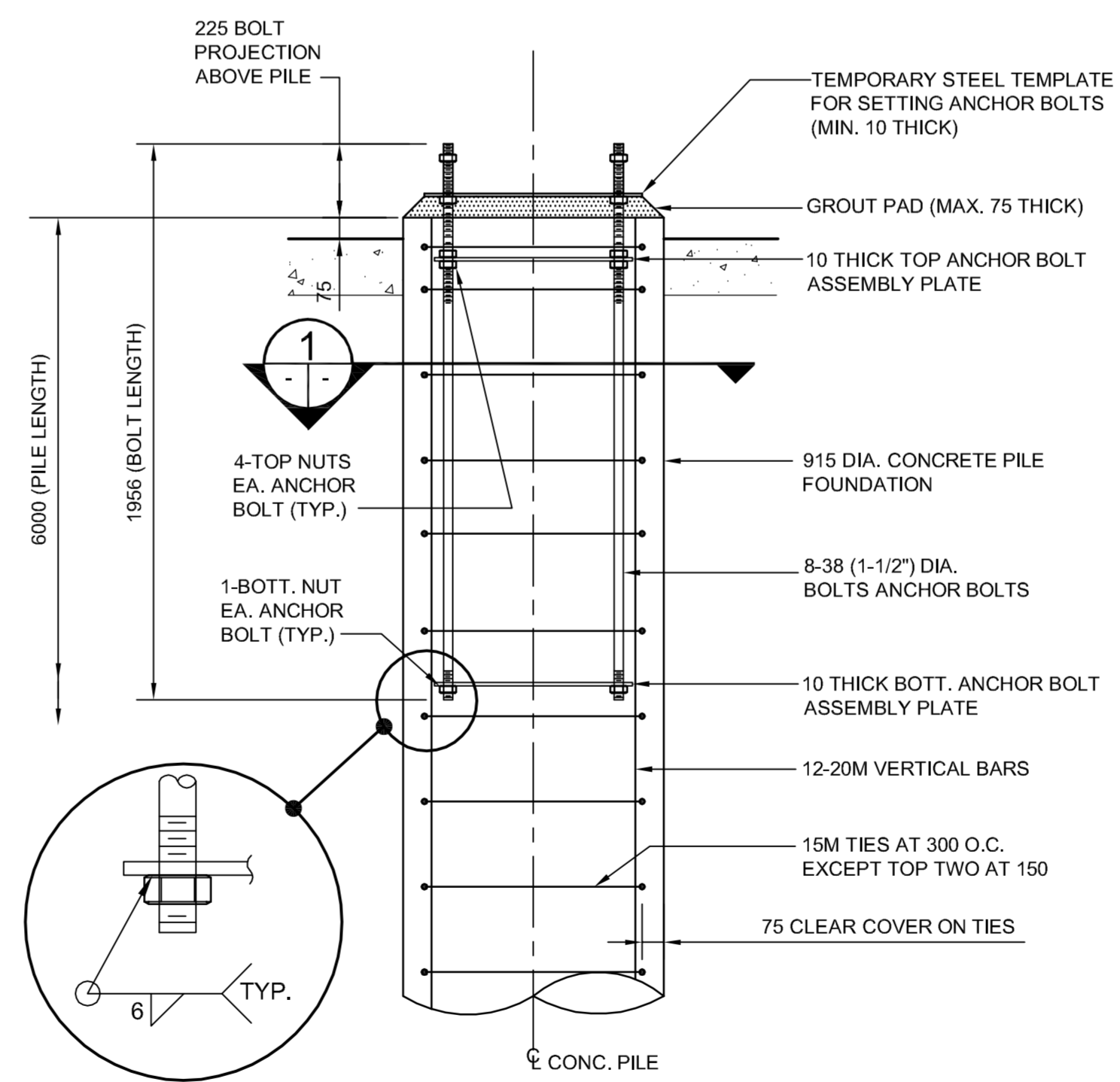
SITE PLAN
1:250



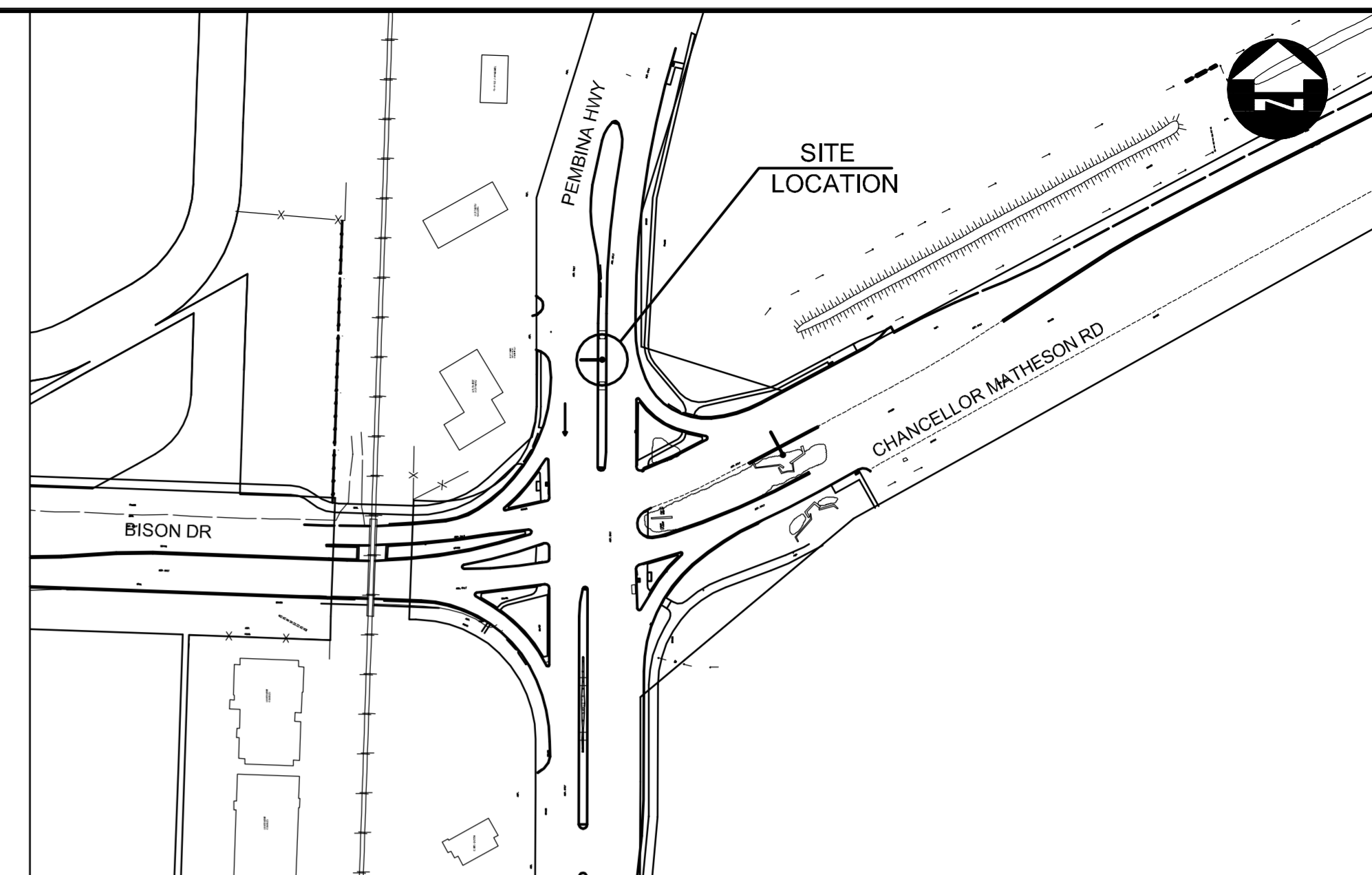
ANCHOR BOLTS LAYOUT



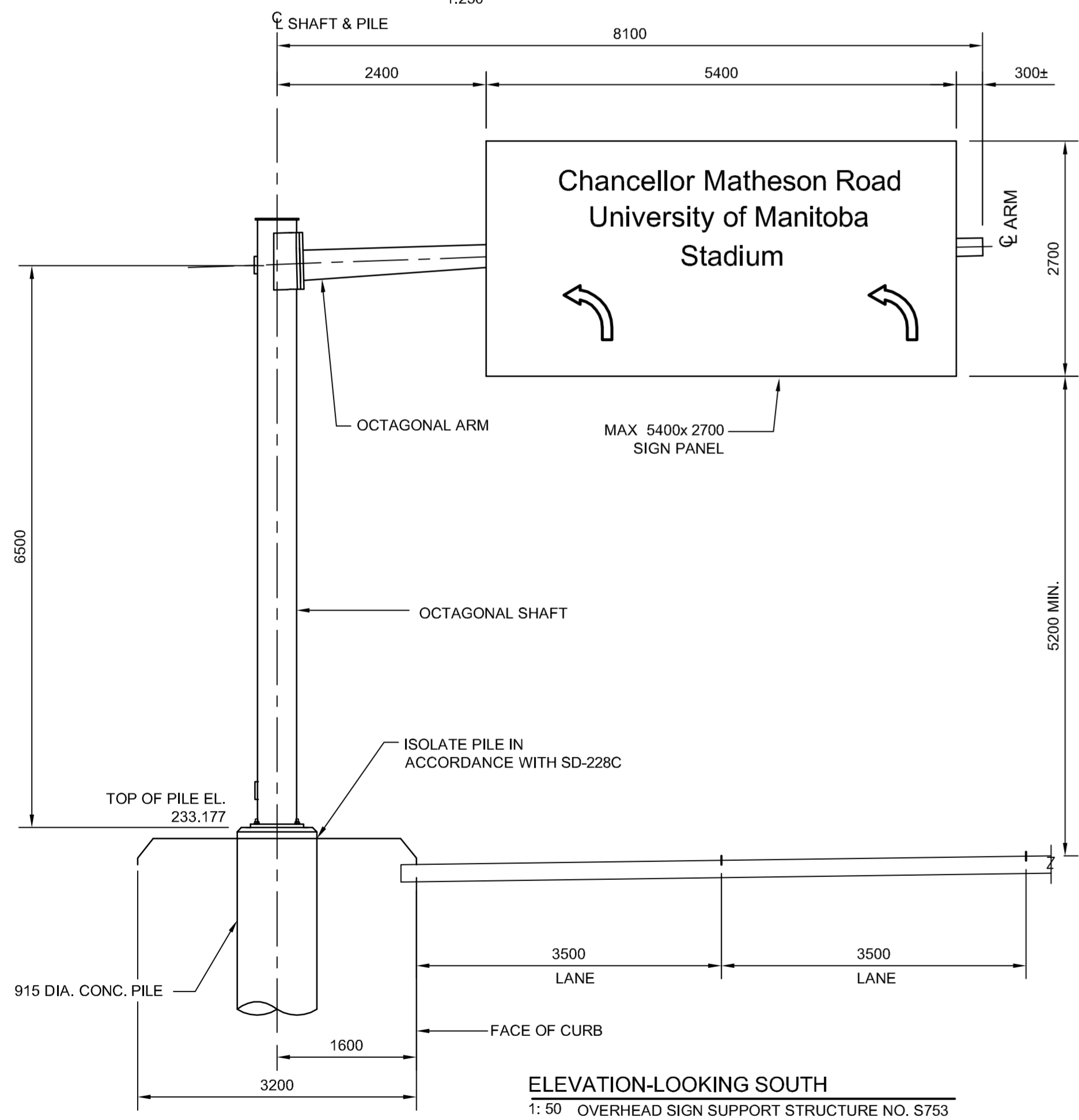
SECTION
1:20



ELEVATION
CONCRETE PILE FOUNDATION
1:20



KEY PLAN



ELEVATION-LOOKING SOUTH
1:50 OVERHEAD SIGN SUPPORT STRUCTURE NO. S753

PILE CONSTRUCTION NOTES

- EXCAVATION**
 - CONTRACTOR SHALL EXCAVATE USING HYDRO JET.
- REINFORCING STEEL**
 - CSA G30.18 GR. 400W
 - VERTICAL BARS FULL LENGTH OF PILE
 - HOT DIP GALVANIZED
- ANCHORS BOLTS**
 - CSA G40.21 GR. 300W
 - 8-38 (1-1/2") DIA. x 1956 LG. ANCHOR BOLTS
 - THREADED BOTH ENDS (569 TOP & 102 BOTT.)
 - EACH BOLT C/W 5 NUTS (1-BOTT. END 4-TOP END).
 - ANCHOR BOLTS CAGE ASSEMBLY HOT DIP GALVANIZED
 - FULL LENGTH AFTER FABRICATION.
 - B.C.D. = BOLT CIRCLE DIAMETER TO CENTER OF BOLT GROUP.
- ANCHOR BOLTS SHALL BE ALIGNED WITH A TEMPORARY STEEL TEMPLATE. PLACEMENT OF ANCHOR BOLTS AND CONCRETE WITHOUT THE TEMPLATE WILL NOT BE PERMITTED.
- TOP OF PILE SHALL BE FORMED WITH A TABULAR FORM (SONOTUBE).
- CONTRACTOR SHALL REMOVE THE BASE TEMPLATE, NUTS AND FORM, FOLLOWING A MINIMUM 24 HOUR CONCRETE CURING PERIOD.
- 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
 - 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 A23.1-04 (4-7%)
 - v) CEMENT AS SPECIFIED IN A5.28

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

WARNING

- IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:
- NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
 - TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.
 - OBTAIN EXCAVATION PERMITS PRIOR TO CONSTRUCTION.

150 WM	WATERMAIN	150 WM	HYDRO	HYDRO	HYDRO	150 mm W.M.	WATERMAIN	150 mm W.M.
⊕	HYDRANT	⊕	MTS	MTS	MTS	+	HYDRANT	+
⊗	VALVE	⊗				×	VALVE	×
300 LDS	LAND DRAINAGE SEWER	300 LDS				300 mm L.D.S.	LAND DRAINAGE SEWER	300 mm L.D.S.
250 WWS	WASTE WATER SEWER	250 WWS				250 mm W.W.S.	WASTE WATER SEWER	250 mm W.W.S.
○	MANHOLE	●				—	PROPERTY LINE	—
□	CATCH BASIN	■				—	SURVEY BAR	—
▽	CURB INLET	▼				—	CURB RAMP	—
—	JUNCTIONS	—				—		—
—	CULVERT	—				—		—
100 GAS	GAS	100 GAS				—		—
EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED

UNDERGROUND STRUCTURES

SUPPLY, U/G STRUCTURES COMMITTEE DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. 654271 N 5517192.470 E 632610.651
ELEV. 233.084

DESIGNED BY	CDW
DRAWN BY	APH
CHECKED BY	SSR
APPROVED BY	DPK
HOR. SCALE	AS NOTED
VERTICAL	
1 ISSUED FOR TENDER	11/06/23 JNC
NO. REVISIONS	DATE BY

RELEASER FOR CONSTRUCTION	ORIGINAL SIGNED BY B. KIBBINS	DATE	11/06/23
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THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

Winnipeg

BISON DRIVE & PEMBINA HIGHWAY INTERSECTION IMPROVEMENTS

SIGN STRUCTURE - S753 PEMBINA HWY S.B. NORTH OF BISON DR.

CITY DRAWING NUMBER: P-3327-21
SHEET 21 OF 24
CONSULTANT DRAWING NUMBER

CONSULTANT PROJECT NUMBER: 11-4587