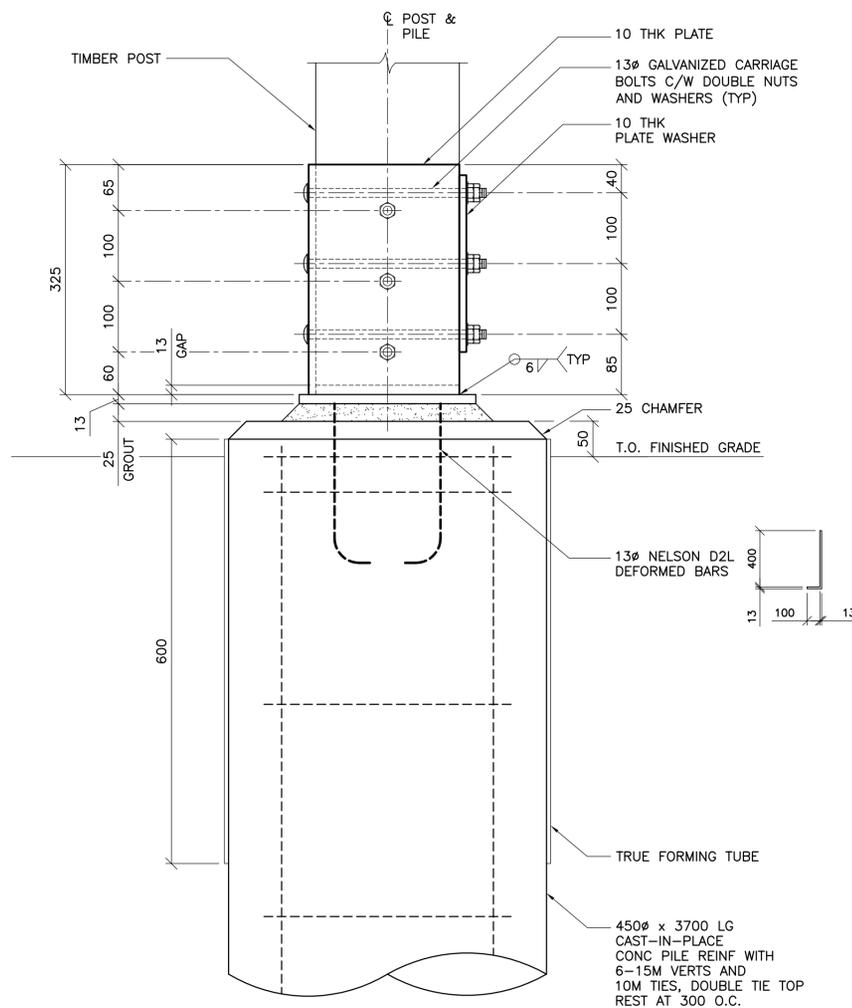
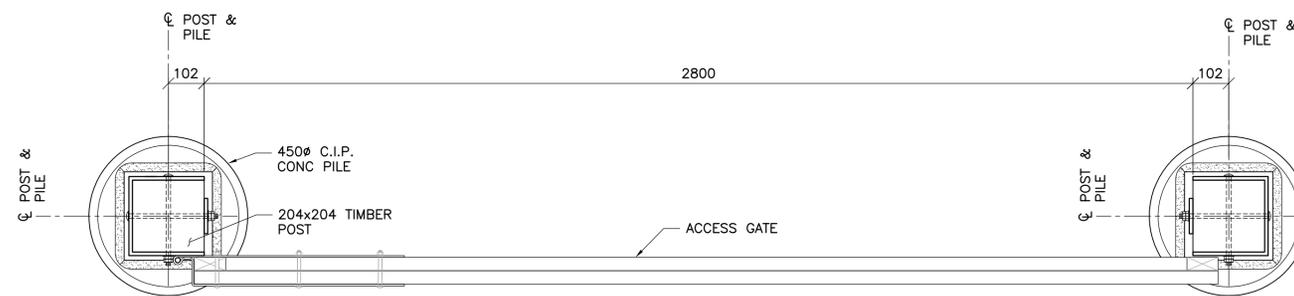


1 PLAN
1 : 5
- 2 REQUIRED



2 ELEVATION
1 : 5



3 PILE/POST LAYOUT
1 : 10

CAST-IN-PLACE CONC PILES

- .1 ALL CONCRETE MIXES, PLACING, CURING, AND TESTING WILL BE IN ACCORDANCE WITH CSA-A23.1-04/A23.2-04 CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION/METHODS OF TEST FOR CONCRETE
- .2 CONCRETE TO HAVE THE FOLLOWING PERFORMANCE REQUIREMENTS:
 NOMINAL COMPRESSIVE STRENGTH 30 MPa
 CLASS OF EXPOSURE S1
 AIR CONTENT CATEGORY 2
 CURING TYPE 2

REINFORCING STEEL

- .1 ALL REINFORCING STEEL TO MEET CAN/CSA-G30.18-M92 (R2002) - BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT GRADE 400 DEFORMED BARS EXCEPT 10M TIES MAY BE GRADE 300.
- .2 ALL STEEL TO BE DETAILED IN ACCORDANCE WITH CSA A23.1-04 CONCRETE MATERIALS AND METHODS OF THE CONCRETE CONSTRUCTION, A23.3-04 DESIGN OF CONCRETE STRUCTURES AND STANDARD THE MANUAL OF PRACTICE BY THE REINFORCING INSTITUTE OF CANADA 2004.
- .3 CLEAR COVER TO REINFORCING WILL BE:
 CONCRETE CAST AGAINST EARTH 75 mm

STRUCTURAL STEEL

- .1 ALL STRUCTURAL STEEL TO CONFORM TO CSA-G40.21-04 (R2009) GRADE 300W.
- .2 ALL EXPOSED EDGES OF THE FENCE POST BRACKET SHALL BE ROUNDED AND SMOOTH. . FREE OF BURRS OR SHARP EDGES.
- .3 HOP DIP GALVANIZE FULL BRACKET ASSEMBLY INCLUDING NELSON ANCHOR BARS AND PLATE WASHER IN ACCORDANCE TO CSA G164-M92 TO A MINIMUM RETENTION OF 600 g/m².
- .4 FIELD TOUCH UP DAMAGED HOT DIP GALVANIZING WITH GALVALLOY.
- .5 ALL WELDING TO CONFORM TO CSA W59-03 (R2008). ALL ELECTRODES SHALL CONFORM TO CSA W48.1-06 CLASSIFICATION E480XX.

OTHER

- .1 GROUT TO BE NON-SHRINK AND NON-METALLIC. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 40 MPa. APPROVED PRODUCTS ARE:
 STERNSON M-BED STANDARD, SIKA 212 OR AS ACCEPTED BY THE ENGINEER.
- .2 STRIP THE TOP PORTION OF TRUE FORMING TUBE FLUSH WITH PAVED OR CONCRETE SURFACES OR 150 BELOW SOFT LANDSCAPED SURFACES.



B.M. ELEV.			
00	ISSUED FOR TENDER	10.07.13	RHW
NO.	REVISIONS	DATE	BY

WARDROP A TETRA TECH COMPANY		PEOPLE, PASSION, PERFORMANCE. TRUSTED GLOBALLY	
DESIGNED BY	R.H.W.	CHECKED BY	
DRAWN BY	G.I.	APPROVED BY	
HOR. SCALE:	AS NOTED	RELEASED FOR CONSTRUCTION	
VERTICAL:			
DATE	10.05.15	DATE	

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION		CITY DRAWING NUMBER
2010 ACTIVE TRANSPORTATION / INFRASTRUCTURE STIMULUS PROGRAM TYPICAL FENCE POST DETAILS		SHEET OF 31 31
CONSULTANT DRAWING NO. 1000070100-DWG-S1001-00		S0001