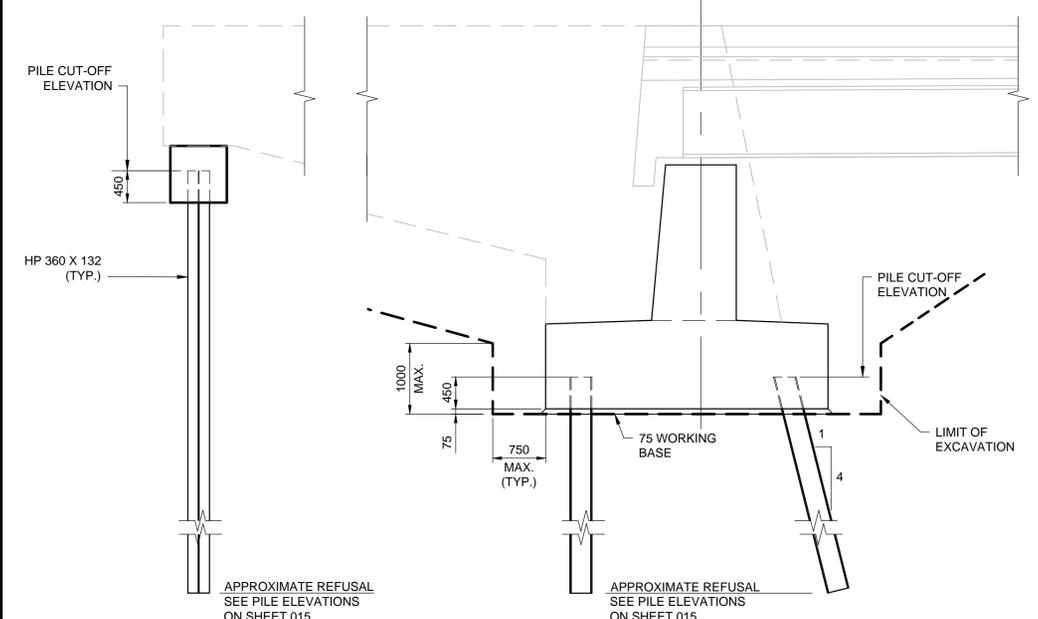


PLAN  
SCALE 1:50



A SECTION  
SCALE: 1:50  
PILES AT WINGWALL

B SECTION  
SCALE: 1:50  
PILES AT ABUTMENT

NOTES:

- FOR GENERAL NOTES SEE SHEET C2-CS-001.
- FOR FOUNDATION NOTES SEE SHEET C2-CS-001.
- FOR CAISSON NOTES SEE SHEET C2-CS-016.
- PILE SPACING SHALL BE MEASURED AT THE UNDERSIDE OF THE ABUTMENT SEAT AND PIER PILE CAP.
- ALL PILES SHALL BE PROVIDED WITH STEEL PILE TIPS PRIOR TO INSTALLATION.
- AFTER DRIVING, THE STEEL PILES SHALL BE LOCATED WITHIN 50 mm OF THE LOCATIONS SHOWN ON THE DRAWINGS.
- ALL NEW PILES ARE STEEL HP360 x 132.
- DESIGN CAPACITY OF HP360 x 132 PILE IS 1460 kN (SERVICE) WHEN DRIVEN TO REFUSAL WITH A HAMMER WITH A RATED ENERGY OF AT LEAST 50 kJ PER BLOW.
- ABUTMENT PILE LOADS (SERVICE):
  - PRIMARY LOADS = 842 kN
  - PRIMARY & SECONDARY LOADS = 1014 kN
- STEEL PILES SHALL BE DRIVEN TO THE APPROXIMATE TIP ELEVATIONS AS SHOWN ON THE DRAWING. EXCEPT THAT WHEN REQUIRED BY THE CONTRACT ADMINISTRATOR THE PILES SHALL BE DRIVEN TO AN ALLOWABLE LOAD CAPACITY OF 1500 kN BASED ON PILE DYNAMIC ANALYZER (PDA) TEST.
- PRIOR TO PILE CONSTRUCTION THE ACCEPTABILITY OF THE PILE DRIVING SYSTEM AND THE REQUIRED SET CRITERIA SHALL BE DETERMINED BY WAVE EQUATION ANALYSIS. THE SET CRITERIA SHALL BE CONFIRMED DURING CONSTRUCTION BY PDA TESTING.
- THE PILE DESIGN IS BASED ON THE ASSUMPTION THAT THERE WILL BE NO DISTURBANCES DUE TO THE EXCAVATIONS OR ANY OTHER REASONS TO THE GROUND WITHIN 1.0 m OF ANY PILE. IF SUCH DISTURBANCES ARE REQUIRED THE DESIGN ENGINEER SHALL BE NOTIFIED PRIOR TO THE DISTURBANCES SO THAT ANY POTENTIAL IMPACT TO THE PILE DESIGN CAN BE EVALUATED AND MODIFICATIONS CAN BE MADE TO THE PILE DESIGN AS REQUIRED.
- SUPPLY MAXIMUM LENGTHS OF PILES TO MINIMIZE FIELD SPLICING DURING INSTALLATION.
- IF FIELD SPLICES ARE REQUIRED THEY SHALL BE MOMENT SPLICES AS SHOWN ON THE DRAWINGS.
- FIELD SPLICES SHALL BE LOCATED SUCH THAT NO MORE THAN 50% OF THE PILES ARE SPLICED AT THE SAME ELEVATION.

**APEGM**  
Certificate of Authorization  
Dillon Consulting Limited (MB)  
No. 1789 Date: 2017/01/09

NO.	REVISIONS	DATE	BY	DATE
1	ADDENDUM #1	17/01/25	RE	
0	ISSUED FOR TENDER	17/01/09	RE	

DESIGNED BY	RE	CHECKED BY	SSR
DRAWN BY	CGC	APPROVED BY	DBW
HOR. SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERTICAL	AS SHOWN		

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
R.B. ERIC  
Member 22665  
REGISTERED PROFESSIONAL ENGINEER  
CONSULTANT PROJECT NUMBER  
16-3353

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
Waverley Street Underpass at CN Mile 3.89 Rivers Sub  
Contract 2: Underpass Structure, Railworks,  
Roadworks, Land Drainage Sewer, Pumping Station  
and Landscaping Works  
FOUNDATION LAYOUT  
CITY DRAWING NUMBER  
U-239-2016-C2-CS-014  
SHEET 014 OF 085  
CONSULTANT DRAWING NUMBER  
C2-CS-014

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