



CONCRETE FOUNDATION CONSTRUCTION NOTES

- REINFORCING STEEL**
 - CSA G30 GR. 400W
 - VERTICAL BARS FULL LENGTH OF PILE SUPPLIED BY CONTRACT ADMINISTRATOR
 - HOT DIP GALVANIZED
- ANCHOR BOLTS**
 - CSA G40.21 GR. 300W "J BOLTS"
- TOP OF PILE SHALL BE FORMED WITH A TUBULAR FORM (SONOTUBE) AS FOLLOWS:**
 - BORED PILES - MIN. 1000mm BELOW FINAL GRADE
 - "HYDRO-JET EXCAVATED" PILES - MIN. 1500mm BELOW FINAL GRADE
- CONCRETE - CONCRETE MATERIAL SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES IN ACCORDANCE WITH CSA A23.1-04:**
 - CLASS OF EXPOSURE: S-1
 - COMPRESSIVE STRENGTH @ 56 DAYS - 35 MPa
 - WATER/CEMENTING MATERIALS RATIO = 0.4
 - AIR CONTENT: CATEGORY 2 PER TABLE 4 OF CSA A23.1-04 (4-7%)
 - CEMENT - TYPE HS OR HSB, HIGH SULPHATE RESISTANT

PRELIMINARY
NOT FOR CONSTRUCTION
Date: 05/26/22

ENGINEERS
GEOSCIENTISTS
MANITOBA
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: 05/26/22

A. DETAIL NUMBER
B. DRAWING WHERE DETAIL SHOWN

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

150mm W.M.	WATERMAIN	150mm W.M.	HYDRO	— — — — —	— — — — —	— — — — —	— — — — —	LOCATION APPROVED UNDERGROUND STRUCTURES	B.M. ELEV. 74M574 - Tbt. in W. wall of Conc. parking garage of No. 77 University Cres. E. of Pembina Hwy., 0.9 m N. of S.W. cor. of garage, & 2.6 m below recreation deck ELEVATION: 234.128	AECOM	ENGINEER'S SEAL	THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION 2022 REGIONAL STREET RENEWAL PROGRAM UNIVERSITY CRESCENT FROM THATCHER DRIVE TO PEMBINA HIGHWAY CONCRETE PAVEMENT RECONSTRUCTION & REHABILITATION CROSS SECTIONS AND DETAILS	CITY DRAWING NUMBER P-3559-09 SHEET 09 OF 11
300mm L.D.S.	LAND DRAINAGE SEWER	300mm L.D.S.	M.T.S.	— — — — —	— — — — —	— — — — —	— — — — —						
250mm W.W.S.	WASTEWATER SEWER	250mm W.W.S.	CONCRETE	— — — — —	— — — — —	— — — — —	— — — — —	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.	NO. REVISIONS	DATE	DATE	DATE	
300mm L.D.S.	MANHOLE	300mm L.D.S.	ASPHALT	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	CATCH BASIN	250mm W.W.S.	PROPERTY LINE	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	CATCH PIT	250mm W.W.S.	SURVEY BAR	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	JUNCTIONS	250mm W.W.S.	ELEVATION (235.750)	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	CULVERT	250mm W.W.S.	TREE	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	GAS	250mm W.W.S.	SIDEWALK RAMP	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	EXISTING	250mm W.W.S.	CONCRETE SIDEWALK	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	LEGEND - PLAN	250mm W.W.S.	FENCE	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	PROPOSED	250mm W.W.S.	LEGEND - PLAN	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	EXISTING	250mm W.W.S.	LEGEND - PROFILE	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	PROPOSED	250mm W.W.S.	PROPOSED	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	EXISTING	250mm W.W.S.	EXISTING	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	PROPOSED	250mm W.W.S.	PROPOSED	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	
250mm W.W.S.	EXISTING	250mm W.W.S.	EXISTING	— — — — —	— — — — —	— — — — —	— — — — —	DATE	DATE	DATE	DATE	DATE	