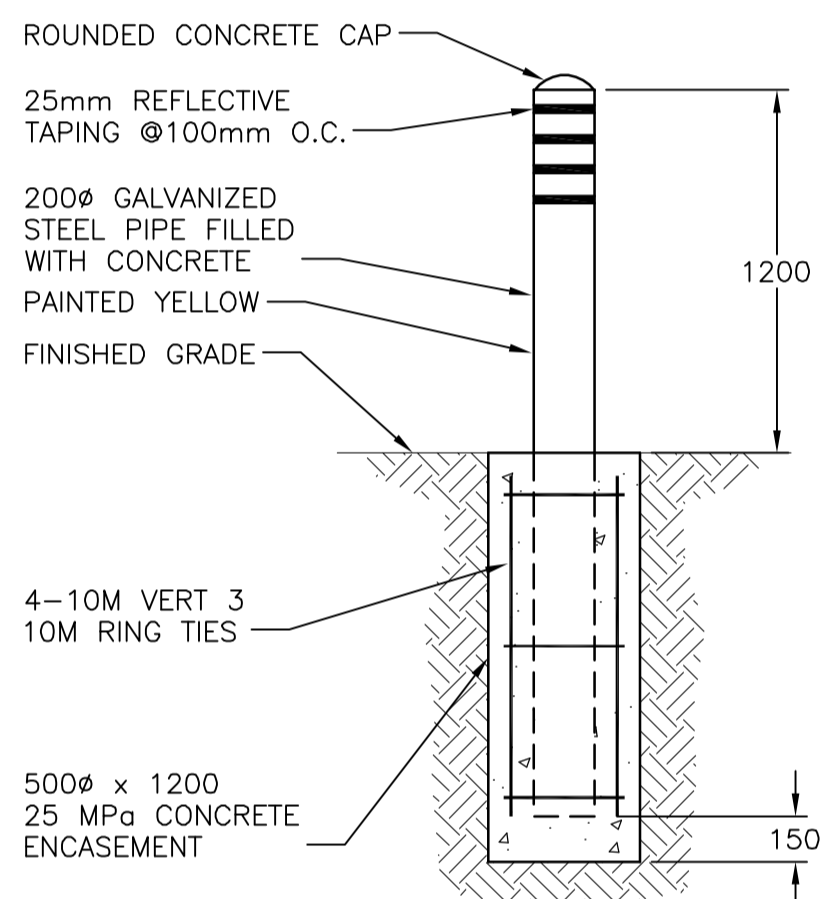
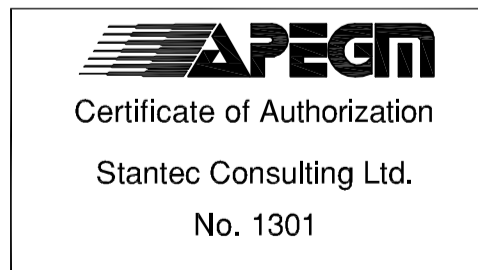


1 DROP MANHOLE DETAIL
N.T.S.



2 BOLLARD DETAIL (TYP.)
1:25

- NOTES:
- LOCATIONS OF UNDERGROUND UTILITIES SHOULD BE ASSUMED TO BE APPROXIMATE. CONTRACTOR TO VERIFY EXACT LOCATIONS AND ELEVATIONS IN THE FIELD PRIOR TO CONSTRUCTION.
 - ALL PROPOSED UNDERGROUND PIPING TO BE INSTALLED BY TRENCHLESS METHODS.
 - TRENCHES AND EXCAVATIONS WITHIN 1 METRE OF A PAVED AREA INCLUDING SIDEWALKS SHALL BE CLASS 3 BACKFILL.
 - ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST VERSION OF THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATION.
 - SEE PROCESS DRAWINGS FOR DETAILS OF NEW CONNECTIONS TO BUILDINGS.
 - SEE MECHANICAL DRAWINGS FOR HYDRONIC PIPE DETAILS. CONTRACTOR TO TAKE PRECAUTIONS TO PROTECT EXISTING HYDRONIC SYSTEM ITEMS DURING CONSTRUCTION ACTIVITIES.
 - ALL TIE-INS SHALL OCCUR DURING NON-PEAK HOURS OR IN THE EVENINGS.
 - DAMAGE TO EXISTING SITE INFRASTRUCTURE BY CONTRACTOR SHALL BE REPAIRED OR REPLACED AT NO COST TO THE CITY.
 - ANY NEW UNDERGROUND PIPING WITH LESS THAN 2.4m OF COVER SHALL BE INSULATED.



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 140/92 FOR DETAILS

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES

150 WM	WATERMAIN	150 WM	M.T.S.	CONCRETE	ASPHALT	SIDEWALK	PROPERTY LINE	SURVEY BAR	DITCH	ELEVATION	MECHANICAL PIPE COUPLING	PIPE PLUG	BOLLARD
⊕	HYDRANT	⊕	CONCRETE	▬	▬	▬	▬	+	▬	31.334	▬	▬	▬
⊙	VALVE	⊙	ASPHALT	▬	▬	▬	▬	+	▬	32.231	▬	▬	▬
⊖	LAND DRAINAGE SEWER	⊖	SIDEWALK	▬	▬	▬	▬	+	▬		▬	▬	▬
⊗	WASTE WATER SEWER	⊗	PROPERTY LINE	▬	▬	▬	▬	+	▬		▬	▬	▬
⊘	VENT PIPING	⊘	SURVEY BAR	▬	▬	▬	▬	+	▬		▬	▬	▬
○	MANHOLE	○	DITCH	▬	▬	▬	▬	+	▬		▬	▬	▬
□	CATCH BASIN	□	ELEVATION	▬	▬	▬	▬	+	▬		▬	▬	▬
⊚	GAS	⊚	MECHANICAL PIPE COUPLING	▬	▬	▬	▬	+	▬		▬	▬	▬
⊛	HYDRO	⊛	PIPE PLUG	▬	▬	▬	▬	+	▬		▬	▬	▬
⊜	REDUCER	⊜	BOLLARD	▬	▬	▬	▬	+	▬		▬	▬	▬
⊝	EXISTING	⊝	LEGEND-PLAN	▬	▬	▬	▬	+	▬		▬	▬	▬
⊞	PROPOSED	⊞	EXISTING	▬	▬	▬	▬	+	▬		▬	▬	▬
⊟	PROPOSED	⊟	LEGEND-PLAN	▬	▬	▬	▬	+	▬		▬	▬	▬
⊠	PROPOSED	⊠	PROPOSED	▬	▬	▬	▬	+	▬		▬	▬	▬

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE	DATE

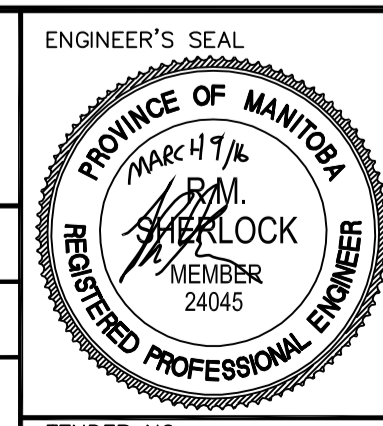
NOTE:
 LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES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

B.M. BENCHMARK #2
 ELEV. 230.670

NO.	REVISIONS	DATE	BY
3	ISSUED FOR TENDER	16.03.09	R.M.S.
2	ISSUED FOR TENDER REVIEW	16.03.07	R.M.S.
1	ISSUED FOR 95% REVIEW	16.01.29	S.K.B.



DESIGNED BY	CHECKED BY
J.K.H.	S.K.B.
DRAWN BY	APPROVED BY
J.K.H.	R.M.S.
HOR. SCALE:	RELEASED FOR CONSTRUCTION:
1:150	
VERTICAL:	DATE
	2016.01.12



THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

Winnipeg

NORTH END SEWAGE TREATMENT PLANT (NEWPC) HAULED LIQUID WASTE FACILITY PHASE II UPGRADE

PROPOSED HAULED WASTEWATER PIPING PLAN

TENDER NO. **952-2015** CITY DRAWING NUMBER **I-OIOIY-C0001-001** SHEET **2** OF **4**