

MANITOBA INDIGENOUS AND MUNICIPAL RELATIONS

WABOWDEN WASTEWATER TREATMENT LAGOON EXPANSION

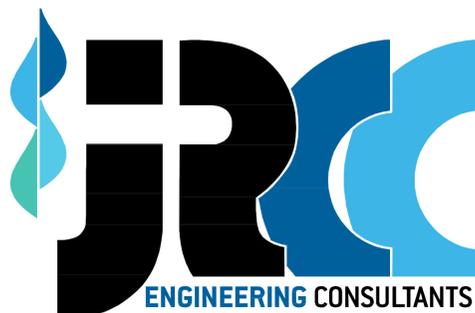
Record Drawing

Drawing compiled from visual observations of various parts of construction and/or from information by others. Accuracy not warranted. Independent verification required before application.

REDUCED DRAWING SET
DO NOT SCALE

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DRAWING LEGEND:

PIPING:

- EXISTING WATERMAIN
- - - PROPOSED WATERMAIN
- - - FUTURE WATERMAIN
- EXISTING SEWERMAIN
- - - PROPOSED SEWERMAIN
- - - FUTURE SEWERMAIN
- EXISTING FORCEMAIN
- - - PROPOSED FORCEMAIN
- - - FUTURE FORCEMAIN
- EXISTING RAW WATERMAIN
- - - PROPOSED RAW WATERMAIN
- - - FUTURE RAW WATERMAIN
- EXISTING LAND DRAINAGE SEWER
- - - PROPOSED LAND DRAINAGE SEWER
- - - FUTURE LAND DRAINAGE SEWER
- EXISTING FIRE HYDRANT
- - - PROPOSED FIRE HYDRANT
- FH EXISTING VALVE
- FH PROPOSED VALVE
- ⊙ EXISTING CLEANOUT
- ⊙ PROPOSED CLEANOUT
- CO EXISTING MANHOLE
- CO PROPOSED MANHOLE
- MH EXISTING CURBSTOP
- MH PROPOSED CURBSTOP
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- CB
- CB

ROADS AND DRAINAGE:

- EXISTING ROAD CENTERLINE
- - - PROPOSED ROAD CENTERLINE
- - - FUTURE ROAD CENTERLINE
- EXISTING ROAD SHOULDER
- - - PROPOSED ROAD SHOULDER
- EXISTING ROAD EDGE
- - - PROPOSED ROAD EDGE
- - - FUTURE ROAD EDGE
- EXISTING SIDEWALK
- - - PROPOSED SIDEWALK
- EXISTING DITCH
- - - PROPOSED DITCH
- EXISTING CULVERT
- - - PROPOSED CULVERT
- ← EXISTING DRAINAGE DIRECTION
- ← PROPOSED DRAINAGE DIRECTION
- 100 CONTOURS - MAJOR INTERVALS
- 100.5 CONTOURS - MINOR INTERVALS
- ×100.00 EXISTING GROUND ELEVATION
- (100.00) PROPOSED GROUND ELEVATION
- (100.00) EXISTING ROAD ELEVATION
- (100.00) PROPOSED ROAD ELEVATION
- TOP EXISTING SLOPE
- TOP PROPOSED SLOPE
- ASPHALT
- GRAVEL

MISCELLANEOUS:

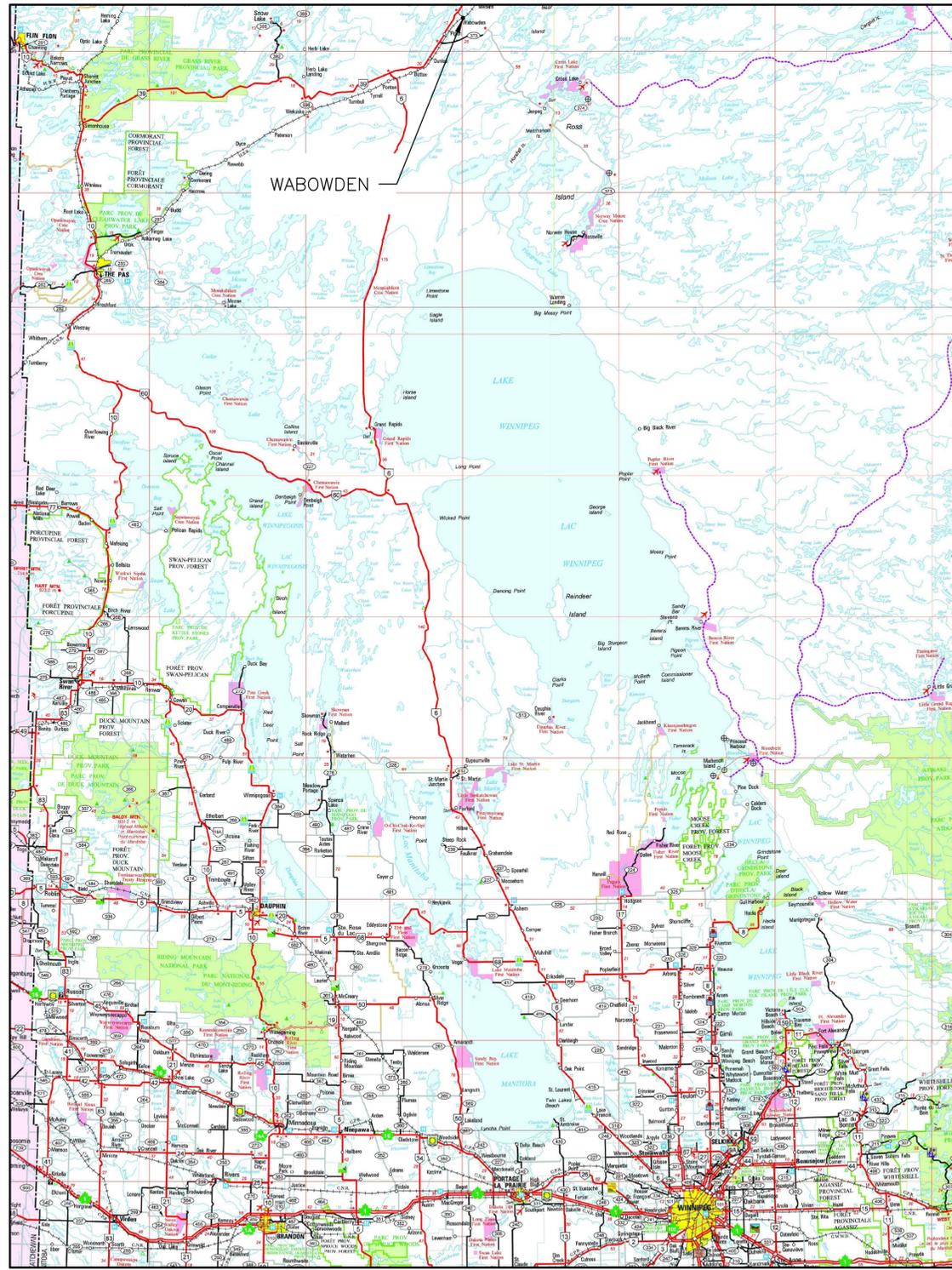
- - - EXISTING FENCE LINE
- - - PROPOSED FENCE LINE
- - - EXISTING PROPANE LINE
- - - PROPOSED PROPANE LINE
- - - EXISTING HYDRO LINE
- - - PROPOSED HYDRO LINE
- - - EXISTING GAS LINE
- - - EXISTING MTS LINE
- EXISTING BUILDING
- - - PROPOSED BUILDING
- LEGAL/LOT LINE
- ++++ RAILWAY LINE
- - - MATCH LINE
- HP EXISTING HYDRO POLE
- HP PROPOSED HYDRO POLE
- W WATER HOLDING TANK
- S SEPTIC TANK
- H SEWAGE HOLDING TANK
- ⊕ SURVEY BAR
- ⊕ SURVEY MONUMENT/BENCHMARK
- EXISTING VEGETATION
- PROPOSED VEGETATION
- ◇ DOOR CONSTRUCTION TYPE
- W WALL CONSTRUCTION TYPE
- EASEMENT
- NORTH ARROW

ABBREVIATIONS:

- | | | | |
|-------------------------------|--|----------------------------|------------------------------|
| ⊙ AT | E EAST | JCT JUNCTION | RAD RADIUS |
| A/C AIR CONDITIONING | EC END OF CURVE | JP JOCKEY PUMP | RD ROAD |
| ALUM ALUMINUM | EL ELEVATION | LAB LABORATORY | REV REVISION |
| ASPH ASPHALT | ELEC ELECTRICAL | LAM LAMINATE | ROW RIGHT OF WAY |
| AVE AVENUE | EP EDGE OF PAVEMENT | LAT LATITUDE | RM ROOM |
| AVG AVERAGE | ER EDGE OF ROAD | LDS LAND DRAINAGE SEWER | S SOUTH |
| BD BOTTOM OF DITCH | E/W EXTERIOR | LFS LEVEL FLOAT SWITCH | SCH SCHEDULE |
| BLDG BUILDING | FAX FAX MACHINE STAND | LONG LONGITUDE | SECT SECTION |
| BLVD BOULEVARD | FC FILE CABINET | LWL LOW WATER LEVEL | SHT SHEET |
| BM BENCHMARK | FD FLOOR DRAIN | M METRE | SIB STEEL IRON BAR |
| BOT BOTTOM | F/F FACE TO FACE | MAX MAXIMUM | SPEC SPECIFICATION |
| BP BACKWASH PUMP | FH FIRE HYDRANT | MCC MOTOR CONTROL CENTER | SQ SQUARE |
| B/W BOTHWAYS | FM FORCEMAIN | MECH MECHANICAL | SSL SEWER SERVICE LINE |
| CB CATCH BASIN | FP FIRE PUMP | MEMB MEMBRANE | ST STREET |
| CI CAST IRON | FT FOOT, FEET | MH MANHOLE | STD STANDARD |
| CHKD CHECKED | GA GAUGE | MIN MINIMUM | SUSP SUSPENDED |
| CNR CANADIAN NATIONAL RAILWAY | GALV GALVANIZED | MM MILLIMETRE | SW SIDEWALK |
| CO CLEANOUT | HA HECTARE | N NORTH | TEL TELEPHONE |
| COL COLUMN | HB HOSE BIBB | NAT NATURAL | TEMP TEMPORARY |
| CONC CONCRETE | HDPE HIGH DENSITY POLYETHYLENE | NBC NATIONAL BUILDING CODE | TP TRUCKFILL PUMP |
| CONST CONSTRUCTION | HI HEIGHT OF INSTRUMENT | NTS NOT TO SCALE | TYP TYPICAL |
| CONT CONTINUOUS | HPW HIGH PRESSURE WATER LINE | NWL NORMAL WATER LEVEL | VERT VERTICAL |
| COORD COORDINATE | HORIZ HORIZONTAL | O/C ON CENTRE | VOL VOLUME |
| CPR CANADIAN PACIFIC RAILWAY | HP HYDRO POLE | O/D OUTSIDE DIAMETER | US ULTRASONICS TRANSDUCER |
| C/W COMPLETE WITH | HR HOUR | O/F OUTSIDE FACE | VAR VARIES |
| DCW DOMESTIC COLD WATER | HVAC HEATING, VENTILATING AND AIR CONDITIONING | O/H OVER HEAD | VB VAPOUR BARRIER |
| DEG DEGREE | HW HOT WATER TANK | OD OUTSIDE DIAMETER | VERT VERTICAL |
| DHW DOMESTIC HOT WATER | HWL HIGH WATER LEVEL | ORIG ORIGINAL | VFD VARIABLE FREQUENCY DRIVE |
| DIA DIAMETER | ID INSIDE DIAMETER | OWSJ OPEN WEB STEEL JOIST | W WEST |
| DIM DIMENSION | IL ICE LEVEL | PLYWD PLYWOOD | W/O WITHOUT |
| DIST DISTANCE | INCL INCLUDE | POLY POLYETHYLENE | WL WATER LEVEL |
| DN DOWN | INCL INTERIOR | PROP PROPERTY | WM WATERMAIN |
| DR DRIVE | INV INVERT | PVC POLY VINYL CHLORIDE | WSL WATER SERVICE LINE |
| DWG DRAWING | | | WWS WASTEWATER SEWER |
| | | | WT WEIGHT |

NOTE: DECIMALIZED NUMBERS INDICATE METRES. WHOLE NUMBERS INDICATE MILLIMETRES.

- A - DETAIL NUMBER
- B - PLAN WHERE DETAIL EXPANDED
- C - PLAN WHERE DETAIL ORIGINATES



KEY PLAN SCALE = NTS

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			B.M. EL.
2	RECORD DRAWING	17/11/24	RH
1	ISSUED FOR TENDER	15/02/13	OT
No.	REVISIONS	DATE	INITIALS

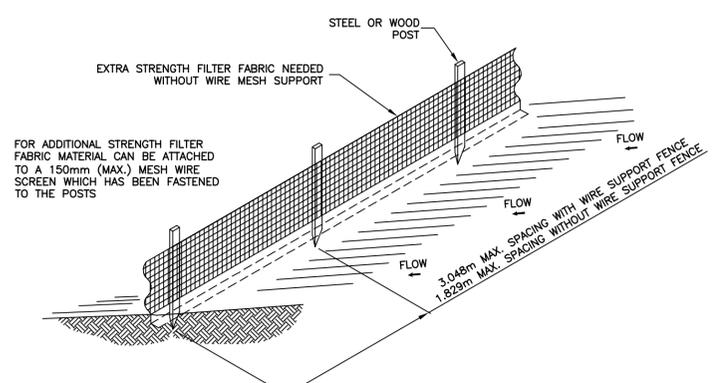
LOCATIONS OF UNDERGROUND STRUCTURES/UTILITIES AS SHOWN ARE BASED ON AVAILABLE INFORMATION BUT NO GUARANTEE IS GIVEN OR IMPLIED THAT ALL EXISTING UNDERGROUND STRUCTURES/UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL UNDERGROUND STRUCTURES/UTILITIES MUST BE OBTAINED FROM THE APPROPRIATE AUTHORITY/OWNER, BY THE CONTRACTOR, BEFORE PROCEEDING WITH CONSTRUCTION.

APECM
Certificate of Authorization
J.R. Cousin Consultants Ltd.
No. 234 Date: 15/02/13

ENGINEER'S SEAL
ORIGINAL DRAWING
SIGNED AND SEALED
BY
J.G. DYCK
15/02/13

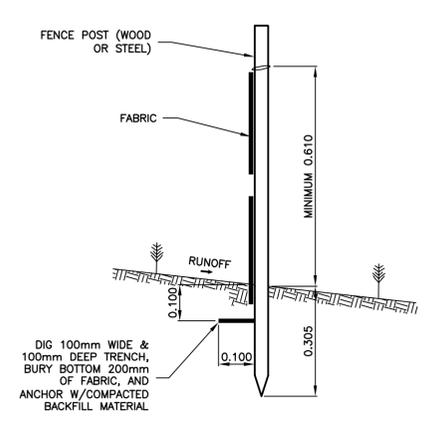
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CODE: W-449.01	PROJECT: MANITOBA INDIGENOUS AND MUNICIPAL RELATIONS WABOWDEN WASTEWATER TREATMENT LAGOON EXPANSION
DESIGNED BY: OW	TITLE: DRAWING LEGEND, ABBREVIATION INDEX AND KEY PLAN
DRAWN BY: DN	
REVIEWED BY: JD	
SCALE: AS NOTED	DATE: 14/06/16
PLAN: G1	SHEET: 1 of 7

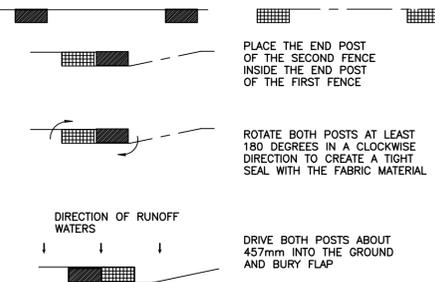


- NOTES:
1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 914mm.
 2. HE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS.
 3. POSTS SHALL BE SPACED A MAXIMUM OF 3.048m APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 300mm. WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 1.829m.
 4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 100mm WIDE AND 100mm DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
 5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 25mm LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 50mm AND SHALL NOT EXTEND MORE THAN 914mm ABOVE THE ORIGINAL GROUND SURFACE.
 6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 200mm OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 914mm ABOVE THE ORIGINAL GROUND SURFACE.
 7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
 8. SILT FENCING TO BE POLYPROPYLENE SYNTHETIC FIBRE WITH ULTRAVIOLET STABILIZERS. AMOCO 1198 OR APPROVED EQUAL.
 9. WOOD POSTS TO BE 38mm X 89mm (2" X 4"), POINTED AT ONE END AND FABRICATED.
 10. INSTALL ALL SUPPORTING POSTS ON THE DOWN SLOPE SIDE OF THE FENCING
 11. MAINTAIN SILT FENCE THROUGHOUT CONSTRUCTION AND UNTIL REVEGETATION OCCURS.

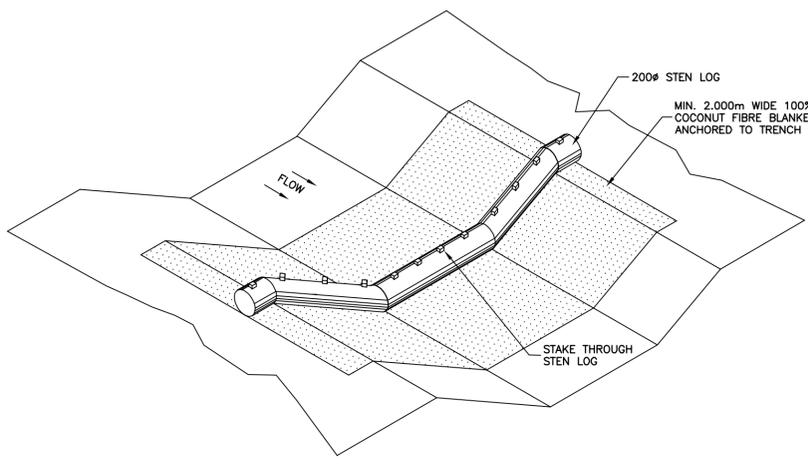
1 SILT FENCE DETAIL
SCALE = 1:40



2 SILT FENCE SECTION
SCALE = 1:10



3 ATTACHING TWO SILT FENCES
SCALE = 1:10



4 STEN LOG DETAIL
SCALE = 1:30

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SCALE: AS NOTED	DATE: 14/06/16	PLAN: L6	SHEET: 7 of 7