

APPENDIX 'F'

MANITOBA HYDRO (GAS) REQUIREMENTS



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gblazek@hydro.mb.ca

May 1, 2014

Ron Bruce
Senior Project Manager
Morrison Hershfield
1 – 59 Scurfield Boulevard
Winnipeg, MB R3Y 1V2

Dear Ron Bruce:

Re: Emailing: 2014 Res Streets - Furby.pdf

Manitoba Hydro (Gas) has reviewed the design submitted by Morrison Hershfield for the road reconstruction along Furby St. The following parameters shall be followed when working in proximity to all natural gas mains. Please ensure that all requirements are communicated to your contractor.

1. High or Intermediate Pressure Natural Gas Main – Along Furby St.

- Proposed road reconstruction crosses over an existing 323.9 mm high pressure natural gas main. A Manitoba Hydro High Pressure Safety Watch is required for all construction activities within 3.0 m of the high pressure natural gas main.
- Contact “Call before you dig” 2 weeks prior to any work commencing within 3.0 m of the high pressure natural gas main to arrange for a Manitoba Hydro High Pressure Safety Watch at **204-480-1212**.
- Prior to construction at this location, please expose the main by hand or hydro-excavation every 25 m in order to confirm elevation of the pipe. The elevations & corresponding locations shall be forwarded back to Greg Blazek at gblazek@hydro.mb.ca.
- A minimum 900 mm of cover shall be maintained in all areas where equipment will be crossing, traveling or compacting over the 323.9mm gas mains. Vibratory compaction cannot be used over or within 3 m of a high pressure main.
- A smooth edged bucket shall be used for any excavations within 3.0m of a high pressure main.
- Subbase material shall be bladed into place as opposed to being end dumped over the 323.9mm gas main in areas with less than the minimum cover.
- The contractor and all site supervisory personnel and equipment operators shall be informed of the risks associated with working adjacent to and over this pipeline by the Resident Inspector. New site personnel during construction shall be orientated as to the significance and constraints associated with working over and around a high pressure natural gas main.

2. Catch Basin Removal and Installation – Sheet 8 of 34

- Proposed excavations for the removal and installation of catch basins and sub drains appear to be within 1.0 meters a gas main in which case will require exposure to be completed by hand or Hydro-excavation . Caution must be used when working in the vicinity of the natural gas mains at these locations.

3. Sidewalk Renewals

- Excavations shall be limited to removal of the existing concrete sidewalk. All further excavations within 1.0 meter of any natural gas main or service must be completed by hand or soft dig methods.

4. Asphalt Overlays and Road Reconstruction

- When excavations for concrete works are required within 1.0 meters of any natural gas main, the main must be exposed by hand or soft dig methods to verify the main elevation at intervals to be determined by the site inspector.
- Should a main or service be exposed to sub-base, the main requires rock wrap and may also require lowering.

5. Please add a “Caution – Gas” note at the following locations

- All catch basin installations along the west property line.

6. Service Relocations (road reconstruction)

- Services that are to be exposed in the subgrade must be replaced prior to or during construction. Manitoba Hydro will not be able to complete rock wrapping or lowering of any services unless the lowering is minimal (i.e. < 100-150mm or < 4-6”).
- A smooth edged bucket shall be used for any excavations within 600mm of a service.
- Please contact Shane Heiner at 204-360-5568 for lowering services and coordination with construction. Please discuss advanced notification requirements with Shane Heiner to allow adequate crew mobilization time.
- Morrison Hershfield may obtain locates prior to determine all service locations and expose by hydro excavation methods to determine if replacement is required. Please contact the signed at gblazek@hydro.mb.ca or at (204) 360-7707 regarding all service relocations which shall be completed prior to construction. 4 weeks notice must be allocated to coordinate paperwork and crews to mobilize for service relocations.

7. General:

- Manitoba Hydro is NOT part of the ClickBeforeYouDigMB.com service and Hydro customers must continue to phone 1-888-MBHYDRO (1-888-624-9376), or 204-480-1212 in Winnipeg, to arrange electric and natural gas line locates. Hydro is supportive of the ClickBeforeYouDigMB.com initiative but cannot participate at this time due to legislation which Hydro is lobbying to change.
- Please note that the requirements of Manitoba Hydro’s Safe Excavation and Safety Watch guidelines shall apply. All construction operations within the vicinity of natural gas pipelines are to take place in a manner so as not to damage or cause detriment to the integrity of the natural gas pipeline. All natural gas pipelines and service lines must be properly located and marked by Manitoba Hydro personnel. Construction operations are not to commence unless these conditions are adhered to. **Call before you dig 480-1212.** (1-888-624-9376 outside of Winnipeg).

- All excavations within 1.0 meter of any natural gas main must be completed by hand or Hydro-excavation.
- A minimum vertical separation of 300 mm from gas mains and 100 mm from gas service lines must be maintained between any Manitoba Hydro facility and any new installations.
- A minimum 900 mm of cover shall be maintained in all areas where equipment will be crossing, traveling or compacting over the 323.9 mm gas mains. Vibratory compaction cannot be used over or within 3 m of a high pressure main.
- A minimum 600 mm of cover shall be maintained in all areas where equipment will be crossing, traveling or compacting over the 60.3 mm gas mains. Vibratory compaction cannot be used over or within 1 m of a distribution pressure main.
- A minimum 450 mm of cover shall be maintained in all areas where equipment will be crossing, traveling or compacting over the gas service lines. Vibratory compaction cannot be used over or within 1 m of a service.
- If equipment must cross, travel, or compact over the gas main with less than the minimum depth of cover, earth bridging or steel plates shall be placed over the main and extend a minimum of 1.0 meter on either side at each crossing location.
- Caution must be used to ensure the integrity of the pipeline coating. Any damages to the coating must be reported to and repaired at no cost by Manitoba Hydro prior to backfilling.

Manitoba Hydro believes that there should be no problem with this work however; Manitoba Hydro makes no representations or warranties in that regard.

Please note that all construction drawings requiring review or approval must be sent to Gas Pipeline Engineering electronically at GasDesign@hydro.mb.ca. Physical drawings may also be mailed to Box 7950 Station Main, Manitoba, R3C 0J1.

If you have any questions or comments, please contact the undersigned at (204) 360-7707.

Regards,

Greg Blazek, P.Eng.
Senior Gas Design Engineer
Distribution Engineering - Winnipeg



GB/kt

Cc: Vern Los, Gas Supervisor - Notre Dame, Manitoba Hydro
Shane Heiner, Gas Distribution MTCE - Notre Dame, Manitoba Hydro
Larry Tole, Gas Program Advisor - Sutherland Ave, Manitoba Hydro