## Template Version: 2024 02 01- Const Road Works

# APPENDIX 'F' MANITOBA HYDRO GAS RESPONSE LETTER



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June 6, 2024

#### MH Gas File # 2024-0230

To whom it may concern:

#### Re: Gordon Avenue and various other locations

Manitoba Hydro (Gas) has reviewed the design submitted by Dillon Consulting Ltd for the pavement rehabilitations and reconstructions. 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. Special Concerns

- Proposed road reconstruction occurs over 168.3 mm gas main, as well as small diameter steel distribution pressure gas mains.
- A safety watch may be required for activities within 1.0 m of a large diameter main.
- During construction, gas mains should not be undermined or exposed past the 3 o'clock and 9 o'clock positions on the cross section of the pipe. All excavations within 1.0 m of any natural gas main must be completed by hand or Hydro-excavation.
- If it is determined that a final minimum depth of cover of 750 mm for the 114.3 mm and 60.3 mm steel distribution mains cannot be maintained, or if 1000 mm depth of cover cannot be maintained for the 168.3 mm large diameter distribution main, then please contact David Finnbogason at <a href="mailto:dfinnbogason@hydro.mb.ca">dfinnbogason@hydro.mb.ca</a> to discuss options pertaining to relocations or lowerings as soon as possible. Under normal circumstances, the amount of time required to mobilize for small diameter distribution relocations/lowerings (114.3 mm and 60.3 mm) is approximately 3-5 months. Large diameter mains would require approximately 6-12 months to complete due to engineering, approvals, and construction.

# 2. 168.3 mm Distribution Pressure Natural Gas Main

- Proposed road reconstruction crosses over an existing 168.3 mm distribution pressure natural gas main at Molson and Snowdon Avenue. A Manitoba Hydro Safety Watch may be required if any excavations are within 1.0 m of the 168.3 mm natural gas main.
- Contact "Click before you dig" a minimum of 2 weeks prior to any work commencing within 1.0 m of the 168.3 mm distribution pressure natural gas main to arrange for the pipeline to be properly located and marked by Manitoba Hydro personnel at ClickBeforeYouDigMB.com or Call 1-800-940-3447. Upon receiving clearances, the excavator will be provided with the phone number of the appropriate District in order to coordinate a Manitoba Hydro Safety Watch, if required.

- A minimum 900 mm of cover shall be maintained in all areas where highway rated equipment will be crossing, traveling or compacting over the 168.3 mm gas main. Vibratory compaction cannot be used over or within 1.0 m of a main.
- If highway rated equipment must cross, travel, or compact over the gas main with less than the minimum depth of cover, or if equipment heavier than highway rated load cross the main then submit construction/crossing plans to David Finnbogason at dfinnbogason@hydro.mb.ca. Earth bridging or steel plates must be placed over the main and extend a minimum of 1.0 m on either side at each crossing location when crossing with less than minimum cover.
- When working with less than minimum cover, a minimum 300 mm of granular material shall be bladed into place with tracked equipment offset from the pipeline. Then static compaction equipment would be allowed and built up in layers until minimum cover is achieved.
- Once the pipeline depth and location has been confirmed by hand or hydroexcavation, the safety watcher may authorize the limited use of mechanical excavation. A smooth edged bucket must be used for excavations within 1.0 m of the main
- Subbase material shall be bladed into place as opposed to being end dumped over the 168.3 mm gas main in areas with less than the minimum cover.
- 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.

## 3. Insufficient Cover

 Absolutely no work including concrete cutting or pavement breaking may occur over the pipeline (regardless of size) until depth of cover is determined and a safety watch is on site (high pressure gas main).

#### 4. Catch Basin and CB Lead Removal and Installation

- Proposed excavations for the removal and installation of catch basins and leads within 1.0 m of a gas main will require exposure to be completed by hand or Hydroexcavation. Caution must be used when working in the vicinity of the natural gas mains at these locations.
- Deep utilities shall maintain a minimum horizontal clearance from natural gas mains of 1.25 m when running in parallel.
- A minimum horizontal separation of 300 mm from gas mains and 100 mm from service lines must be maintained for any new underground structure installations (such as catch basins) excluding directionally drilled, punched, and bored crossings. If an underground structure must be installed with less than the minimum horizontal separation, an underground rigid foam barrier shall be placed over the main for protection. Submit plans for barrier installation to David Finnbogason at <a href="mailto:dfinnbogason@hydro.mb.ca">dfinnbogason@hydro.mb.ca</a>.
- Underground structure installations above natural gas infrastructure should be avoided. Contact David Finnbogason at <a href="mailto:dfinnbogason@hydro.mb.ca">dfinnbogason@hydro.mb.ca</a> if installations above facilities are required.

## 5. Sidewalk Renewals

Excavations shall be limited to removal of the existing concrete sidewalk. All further
excavations within 3.0 m of any high pressure natural gas main or 1.0 m within small
diameter distribution pressure or service lines must be completed by hand or soft dig
methods.

## 6. Asphalt Overlays and Road Reconstruction

- When excavations for concrete works are required within 3.0 m of any high pressure natural gas main (1.0 m within small diameter distribution pressure mains), 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 be exposed to sub-base, the main requires rock wrap and may also require lowering.

# 7. Service Relocations (road reconstruction)

- This project may impact services. Services that are to be exposed in the subgrade must be rock wrapped and lowered during construction or replaced prior to construction.
   Manitoba Hydro will not be able to complete rock wrapping or lowering of any services unless the lowering is minimal (i.e. < 100-150 mm or < 4-6").</li>
- Manitoba Hydro is currently performing lowerings and rock wrapping free of charge to City Of Winnipeg works during normal working hours.
- Under normal circumstances, the amount of time required to mobilize for this work is approximately 2-3 weeks.
- Please contact Larry Tole at 204-360-5220 or <a href="ltole@hydro.mb.ca">ltole@hydro.mb.ca</a> for any work required on site.

## 8. General:

- Please note that the requirements of Manitoba Hydro's Safe Excavation and Safety
  Watch guidelines shall apply. All natural gas pipelines and service lines must be
  properly located and marked by Manitoba Hydro personnel. This can be arranged by
  visiting ClickBeforeYouDigMB.com or call 1-800-940-3447. Construction operations
  are not to commence unless these conditions are adhered to.
- All excavations within 1.0 m of any natural gas main must be completed by hand or Hydro-excavation.
- A minimum separation of 300 mm from gas mains and 100 mm from service lines must be maintained for any new underground structure installations excluding directionally drilled, punched, and bored crossings. If an underground structure must be installed with less than the minimum separation, an underground rigid foam barrier shall be placed over the main for protection. Submit plans for barrier installation to David Finnbogason at <a href="mailto:dfinnbogason@hydro.mb.ca">dfinnbogason@hydro.mb.ca</a>.
- A minimum 600 mm of cover shall be maintained in all areas where highway rated equipment will be crossing, traveling or compacting over the 114.3 mm and 60.3 mm gas mains. Vibratory compaction cannot be used over or within 1.0 m of a main.
- A minimum 450 mm of cover shall be maintained in all areas where highway rated equipment will be crossing, traveling or compacting over the gas service lines. Vibratory compaction cannot be used over or within 1.0 m of a service.

- If highway rated equipment must cross, travel, or compact over the gas main with less than the minimum depth of cover, or if equipment heavier than highway rated load cross the main then submit construction/crossing plans to David Finnbogason at <u>dfinnbogason@hydro.mb.ca</u>. Earth bridging or steel plates must be placed over the main and extend a minimum of 1.0 m on either side at each crossing location when crossing with less than minimum cover.
- 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. 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.

If you have any questions or comments, please contact the undersigned.

Regards,

David Finnbogason, P.Eng

Manitoba Hydro - Gas Design

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Cc: Larry Tole, Gas Operations MTCE – Sutherland Ave, Manitoba Hydro Robert Morrison, Damage Prevention – Sutherland Ave, Manitoba Hydro Aaron Dueck, District Service Worker – Henlow Bay, Manitoba Hydro Curtis Menzul, Gas Operations MTCE – Sutherland Ave, Manitoba Hydro Aldo Garofalo, Gas Operations MTCE – Sutherland Ave, Manitoba Hydro