

PERMIT TO CONSTRUCT

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 36

Date: **JULY 06, 2018**

File No: 842.037.2
Permit No: WS9290-2018

Permit Holder: **Town of Pasadena
18 Tenth Avenue
Pasadena NL A0L 1K0**

Attention: **Mr. Brian Hudson**

Re: **Pasadena - Lift Station Upgrades Phase 2**

Permission is hereby given for : the upgrading of four existing submersible sewage pumping stations including all mechanical and electrical components, the installation of approximately 4 metres of 300 mm PVC forcemain, 27 metres of 200 mm PVC forcemain, 8 metres of 150 mm PVC forcemain, 52 metres of 200mm HDPE forcemain, 5 metres of 450 mm PVC sewer main, 8 metres of 300 mm PVC sewer main, 9 metres of 250mm PVC sewer main, 203 metres of 200 mm PVC sewer main, 17 metres of 450mm HDPE sewer main and all associated works as described in a set of revised drawings entitled "Town of Pasadena Lift Stations Phase 2" as received from Tract Consulting Inc. on June 22, 2018.

- This Permit does not release the Permit Holder from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The Permit Holder must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This Permit is subject to the terms and conditions indicated in Appendices A and B (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this Permit must be obtained from the Department of Municipal Affairs and Environment under Section 49 of the *Water Resources Act*.
- Failure to comply with the terms and conditions will render this Permit null and void, place the Permit Holder and their agent(s) in violation of the *Water Resources Act* and make the Permit Holder responsible for taking any remedial measures as may be prescribed by this Department.



MINISTER

APPENDIX A
Terms and Conditions for Permit

Water & Sewer General

1. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations, 2003*.
2. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
3. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of this Department.
4. All waste materials resulting from this project must be disposed of at a site approved by the Department of Service NL.
5. The works proposed must satisfy the requirements of the latest applicable codes and standards, and be consistent with or otherwise address the design criteria set out in the Department of Municipal Affairs and Environment publication *Guidelines for The Design, Construction, and Operation of Water and Sewerage Systems, 2005*, and as amended from time to time.
6. The work must be undertaken in strict compliance with the submitted documents and the latest version of the *Municipal Water, Sewer and Roads Master Construction Specifications*. A copy of all documents, including the *Municipal Water, Sewer and Roads Master Construction Specifications* must be available for viewing at the construction site office at all times.
7. Liaison is to be maintained with the Environmental Scientist representing the Drinking Water and Wastewater Section of this Department, during the construction and operation of the project. They shall be notified of the pre-construction and post-construction meetings so that they may attend, if deemed necessary. They can be reached at telephone (709)637-2034 .
8. Officials of this Department may visit the project from time to time to ensure that work is carried out within the provisions of this Permit, and is not creating any environmental hazard.
9. Any changes in the approved works, or works other than those specified in the application, must be submitted, in writing, to this Department, and approved, in the form of an Amendment to this Permit, prior to any work.
10. Copies of this Permit, as well as any subsequent Amendments, must be provided to the contractor(s) who will be carrying out these works, and to the engineer's site representative.
11. The attached Completion Report (Appendix C) for Permit No. 9290 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.
12. This Permit is valid for two years from the date of issue. Work must be completed by that date or the application and approval procedure must be repeated.
13. The wastewater system shall be operated and maintained in accordance with the Permit to Operate issued by this Department.
14. The Owner must update any drawings maintained of the wastewater system to reflect the modification or replacement of the works, where applicable.

Sewer Systems

15. In the event that private or existing sewer lines are disturbed during construction, the lines are to be restored to their original *working* condition. Care shall be taken to ensure that soil or other material does not enter the lines to cause blockage.
16. The flow channel through manholes should be made to conform in shape and slope to that of the sanitary sewer.
17. The direct connection of sanitary sewer service lines to manholes is prohibited unless the service enters at the flow line of the manhole. In this instance, filleting must be provided to prevent solids deposition.

18. All sanitary sewers shall be laid or covered with sufficient depth of suitable material to prevent frost penetration and damage from traffic loading.
19. Sanitary sewers entering or crossing streams shall be constructed of ductile iron pipe with mechanical joints, or similar construction to ensure watertight joints free from change in alignment or grade. Material used to backfill the trench shall be stone, coarse aggregate, washed gravel, or other materials which will not readily erode, cause siltation, damage pipe during placement, or corrode the pipe.
20. For sanitary sewers with low percentage grade or slope, council accepts the slopes and any additional maintenance required if cleansing velocities are insufficient.

Miscellaneous

21. The Permit Holder must prevent erosion of drainage ditches, streams or other natural bodies of water by installing rip-rap and/or sodding.
22. This project involves the handling and/or dealing with asbestos cement pipe from certain portions of the work area. Any removal, handling or transport and disposal of asbestos must be carried out in accordance with the Asbestos Abatement Regulations 1998 under the Occupational Health and Safety Act. For further information, contact a Hazardous Materials Officer with Service NL, Occupational Health & safety Division at (709) 729-5536 or 729-7037.
23. The project must be wholly located within the municipal boundary over which the Owner has jurisdiction.

Water & Sewer Installation

24. Where the horizontal separation between watermains (including hydrant leads and drains) and gravity sanitary sewers is less than 3.0 metres, the watermain shall be laid in a separate trench, or on an undisturbed earth shelf located on one side of the sanitary sewer and at such an elevation that the invert of the watermain shall be a minimum of 450 mm above the crown of the sanitary sewer and 300 mm horizontally from the sanitary sewer measured edge to edge.
25. Watermains (including hydrant leads) crossing gravity sanitary sewers should be laid to provide a minimum vertical distance of 450 mm between the outside of the watermain and the outside of the sanitary sewer. This should be the case where the watermain is either above or below the sanitary sewer with preference to the watermain located above the sanitary sewer. At crossings, above or below, one full length of water pipe shall be located so both joints will be as far from the sanitary sewer as possible. Special structural support for the water and/or sewer pipes may be required.
26. There shall be at least 3.0 m horizontal separation between water mains and sanitary sewer forcemains. Watermains crossing forcemains shall be laid to provide a minimum vertical separation of 450 mm between the crown of the forcemain and the invert of the watermain. Also in this regard, one full length of watermain should be centered over the forcemain so that both joints will be as far from the forcemain as possible.

Lift Stations and Forcemains

27. The sewage lift station must be equipped with a manual line transfer switch to accommodate an auxiliary power source during power outages.
28. Forcemains shall enter the gravity sanitary sewer at a point not more than 600 mm above the flow line of the receiving manhole.
29. The direct connection of sanitary sewer services to sewage lift stations is not permitted. Connection may be made to a sanitary sewer main leading to the sewage lift station, or to a manhole immediately prior to the sewage lift station provided the sanitary sewer service lateral enters the manhole at the flow line.
30. Automatic air relief valves shall be placed at all high points in the forcemain to prevent air locking
31. Contingency plans must be established for mechanical and extended electrical failure for all sewage pumping stations. Alarm systems shall be activated in cases of power failure, pump failure, unauthorized entry, or any cause of pump station malfunction.
32. Provision must be provided for the temporary pumping of sewage to the existing receiving manhole while the sewage pumping station and forcemain is being upgraded. Pumping to any other location will not be considered for this project.
33. All septic sludge and grit removed from the lift station chamber must be disposed of by a licensed hauler to an approved waste disposal site.

APPENDIX B
Special Terms and Conditions for Permit

1. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall keep all systems and works in good condition and repair and in accordance with all laws, by-laws, directions, rules and regulations of any governmental authority. The Permit Holder or its agent(s), subcontractor(s), or consultant(s) shall immediately notify the Minister if any problem arises which may threaten the structural stability of the systems and works, endanger public safety and/or the environment or adversely affect others and/or any body of water either in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for all damages suffered by the Minister and Government resulting from any defect in the systems and works, operational deficiencies/inadequacies, or structural failure.
2. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall operate the said Project and its systems and works in a manner which does not cause any water related and/or environmental problems, including but not limited to problems of erosion, deposition, flooding, and deterioration of water quality and groundwater depletion, in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for any and all damages associated with these problems caused as a result of changes, deficiencies, and inadequacies in the operational procedures by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
3. If the Permit Holder or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions, or provisions of this Permit and/or Ministerial orders and guidelines, as determined by this Department, the Minister may, after providing ten (10) day notice to the Permit Holder, amend, modify, suspend or cancel this Permit in accordance with the *Water Resources Act*.
4. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, systems and works in or outside the said Project areas, or any act or omission of the Permit Holder or its agent(s), subcontractor(s), or consultant(s) in or outside the said Project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
5. This Permit is subject to all provisions of the *Water Resources Act* and any regulations in effect either at the date of this Permit or hereafter made pursuant thereto or any other relevant legislation enacted by the Province of Newfoundland and Labrador in the future.
6. This Permit shall be construed and interpreted in accordance with the laws of the Province of Newfoundland and Labrador.

- cc: Mr. Chris Dohaney
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3 Cromer Avenue
Grand Falls-Windsor NL A2A 1W9
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- cc: Ms. Deneen Spracklin, P.Eng.
Environmental Engineer, Drinking Water and Wastewater Section
Water Resources Management Division
Department of Municipal Affairs and Environment
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- cc: Mr. Chris Power, P. Eng.
Regional Engineer, Western Regional Office
Department of Municipal Affairs and Environment
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- cc: Ms. Susan Hoddinott (Western/Labrador)
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mgorman@tractconsulting.com
- cc: Mr. Chris Blanchard, B.Tech.(Env), AScT
Environmental Scientist
Water Resources Management Division
Department of Municipal Affairs and Environment
P.O. Box 2006
Corner Brook, NL A2H 6J8
cblancha@gov.nl.ca

Appendix C - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 36

Date: **JULY 06, 2018**

File No: **842.037.2**
Permit No: **WS9290-2018**

Permit Holder: **Town of Pasadena
18 Tenth Avenue
Pasadena NL A0L 1K0**

Attention: **Mr. Brian Hudson**

Re: **Pasadena - Lift Station Upgrades Phase 2**

Permission was given for : the upgrading of four existing submersible sewage pumping stations including all mechanical and electrical components, the installation of approximately 4 metres of 300 mm PVC forcemain, 27 metres of 200 mm PVC forcemain, 8 metres of 150 mm PVC forcemain, 52 metres of 200mm HDPE forcemain, 5 metres of 450 mm PVC sewer main, 8 metres of 300 mm PVC sewer main, 9 metres of 250mm PVC sewer main, 203 metres of 200 mm PVC sewer main, 17 metres of 450mm HDPE sewer main and all associated works as described in a set of revised drawings entitled "Town of Pasadena Lift Stations Phase 2" as received from Tract Consulting Inc. on June 22, 2018.

I (the Permit Holder named above or agent authorized to represent the Permit Holder) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Municipal Affairs and Environment and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.

Date: _____

Signature: _____

This completion report must be completed and forwarded to the following address upon completion of the approved work.

Department of Municipal Affairs and Environment
Water Resources Management Division
PO Box 8700
St. John's NL A1B 4J6