Request for Proposal

BALFOUR WHARF ROAD WATER MAIN

ADDENDUM NO. 1

Issued: May 31, 2023

Closing Date: 2:00pm local time, June 12, 2023

This Addendum shall be read in conjunction with and considered as an integral part of the Contract Documents; revisions supersede the information contained in the original specifications or previously issued Addendum. Price submitted shall include all items of this Addendum.

No consideration will be allowed for any extra due to any Proponent not being familiar with the contents of this Addendum.

By this **Addendum No. 1**, dated May 31, 2023, the Invitation to Tender documents for the above-mentioned opportunity shall be amended as specified below.

Questions and Answers

Q1. Please advise if alternatives to bonding will be accepted.
A1. In lieu of bonding for the project the RDCK will accept the following forms of security which must be submitted with the bid documents:

a) CERTIFIED CHEQUE OR BANK DRAFT

1. The Contractor may provide, in lieu of the specified Performance and Labour and Material Bonds, security for performance of the Contract in the form of a certified cheque or bank draft for 10% of the Contract Price.

2. The certified cheque or bank draft shall be in favour of the Regional District of Central Kootenay.

3. The certified cheque or bank draft will be deposited and the monies will not be returned to the Contractor, in whole or in part, until satisfactory performance of all of the Contactor's obligations under the Contract.

4. Provided the Contractor has satisfactorily fulfilled all of its obligations under the Contract, the Owner will return to the Contractor 75% of the monies provided as contract security without interest, no later than 30 days after Substantial Performance of the Work. The remaining 25% will be returned to the Contractor one year after Substantial Performance of the Work subject to no deficiencies being identified at the One Year Warranty Inspection.

OR

b) IRREVOCABLE BANK LETTER OF CREDIT

1. The Contractor may provide, in lieu of the specified Bonds or the specified certified cheque or bank draft, security for performance of the Contract in the form of an irrevocable bank letter of credit for 10% of the Contract Price.

2. The letter of credit shall be in favour of the Regional District of Central Kootenay.

3. The letter of credit shall have an expiry date no earlier than 24 months from the date of the tender close.

4. The letter of credit will not be returned to the Contractor until satisfactory performance of all of the Contactor's obligations under the Contract.

5. Provided the Contractor has satisfactorily fulfilled all of its obligations under the Contract, the Owner will return the letter of credit to the Contractor one year after Substantial Performance of the Work subject to no deficiencies being identified at the One Year Warranty Inspection.

Q2. Are there any photos of the Wharf Road tie-in on the west side?
A2. See attachment #1 with photos of the hydrant, valve and tie-in.

Q3. Does the RDCK have any areas for laydown or staging close to the project site?
A3. The closest RDCK property to the project site is 821 Heyland Road (Balfour Transfer Station).

Q4. Please confirm if curb stops to individual services will be replaced.
A4. Yes its intended that new curbstops will be installed as part of the project scope. Majority of services already have meter pits so new curbstops can be installed in close proximity to the meter pits and property line. See service card attachment #2 for more information on locations.

Q5. Please confirm if all road cuts need to be paved prior to MOTI project.
A5. MOTI has advised that road cuts on Wharf Road do not need to be paved. However they must be brought up to finished height of existing pavement and meet compaction requirements as per the permit. See attachment #3 for additional details.

Except as modified by Addendum No. 1, the Invitation to Tender documents shall remain unchanged.

AJ Evenson
Senior Project Manager, Regional District of Central Kootenay

- END OF DOCUMENT -

ATTACHMENT NO. 1

UNION

WATER

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7824 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 2m north

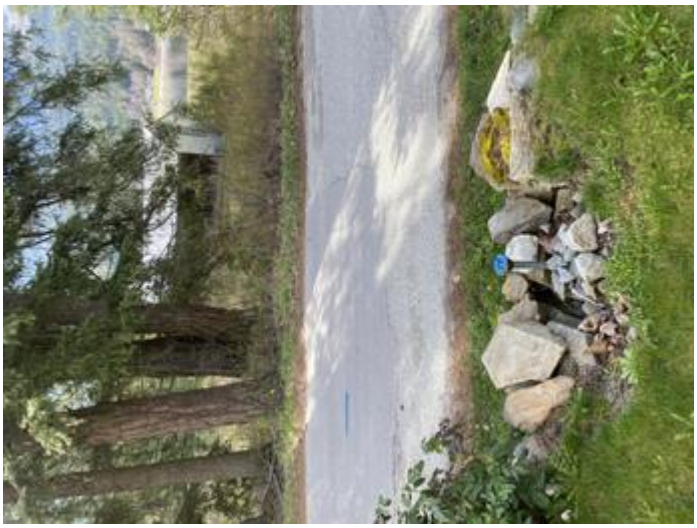
3. Driveway 30m west

Other:

Meter Pit? No

Driveway paved? Yes

Photo (facing lake):



Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: Eastern most SP/valve (SP17)

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 2.5m

Other:

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7810 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 12m south

2. Power Pole 20m east

3. Driveway 10m east

Other:

Meter Pit? No

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: V50

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge South side of road

2. Power Pole 13m

Other:

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7782/7798/7797 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 1.2m north

2. Power Pole 30m east

3. Driveway 8m east

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7778/7770 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 6m south

2. Power Pole 15m east

3. Driveway 3m

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7776 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 6m north

2. Power Pole 14m west

3. Driveway 2m west

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7771 Wharf

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4m

2. Power Pole 5m

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7767 Wharf

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4.5m North

2. Power Pole 17m East

Other:

Meter Pit? No

Driveway paved? Yes

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7764 Wharf

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4m North

2. Power Pole 18.5m West

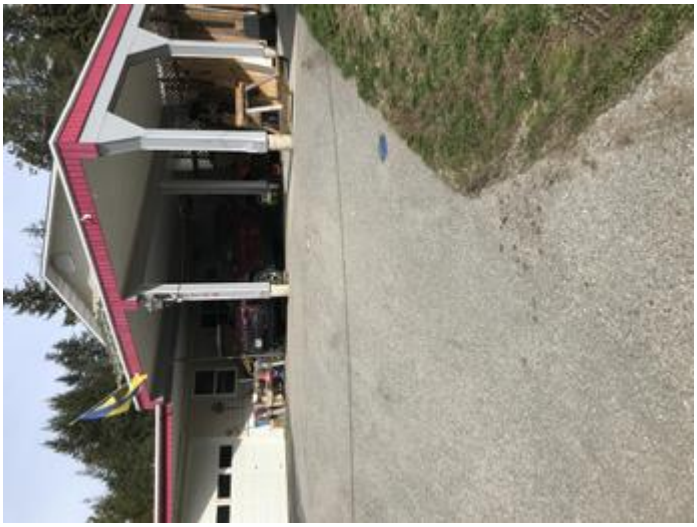
3. Driveway In Nelson box East side of driveway

Other:

Meter Pit? No

Driveway paved? Yes

Photo (facing lake):



Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7776 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 5m south

2. Power Pole 20m east and west

3. Driveway 1m west

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7762 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 8m south

2. Power Pole 10m east

3. Driveway 16m east

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? Yes

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7760 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 2m south

2. Power Pole 16m west

3. Driveway 4m west

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? Yes

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7763 Wharf

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge Service comes from 7760

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7726 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 6m north

3. Driveway 1m west

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7739 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 8m north

2. Power Pole Directly behind pole

3. Driveway 3m east

6. Culvert under highway No

Other:

Meter Pit? No

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7745 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 6m north

2. Power Pole 6m west

3. Driveway Centre

6. Culvert under highway No

Other:

Meter Pit? No

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7745 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 6m north

2. Power Pole 6m west

3. Driveway Centre

6. Culvert under highway No

Other:

Meter Pit? No

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7739 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 8m north

2. Power Pole 18m west

3. Driveway 8m west

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7746 Hwy 3a (Warf rd)

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 8m

2. Power Pole Directly behind

3. Driveway 1m east

6. Culvert under highway No

Other:

Meter Pit? No

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7733 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 8m north

2. Power Pole 26m west

3. Driveway Right side

6. Culvert under highway No

Other:

Meter Pit? No

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7722 Hwy 3a (Warf Rd)

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4m north

3. Driveway No

6. Culvert under highway No

Other:

Meter Pit? No

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7715 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4m north

2. Power Pole No

3. Driveway 1m east

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7703 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 3m north

3. Driveway 8m east

6. Culvert under highway No

Other:

Meter Pit? No

Driveway paved? Yes

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7713 Wharf

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 3m North

3. Driveway 18m West

Other:

Meter Pit? No

Driveway paved? Yes

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7691 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4m east

2. Power Pole 10m east

3. Driveway No

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7684 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4m west

2. Power Pole 4m south

3. Driveway 6m south

6. Culvert under highway No

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):

Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7680 Wharf

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 5m West

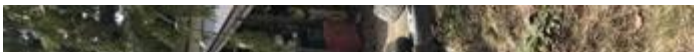
3. Driveway North side of drive

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):



Thursday, April 27, 2023

Water Service Card

2023 Balfour Paving Project

PROPERTY INFORMATION:

Residential Address: 7688 Warf Rd

MEASUREMENTS:

Measurements of Valve in meters in relation to:

1. Asphalt Edge 4m west

2. Power Pole 7m south

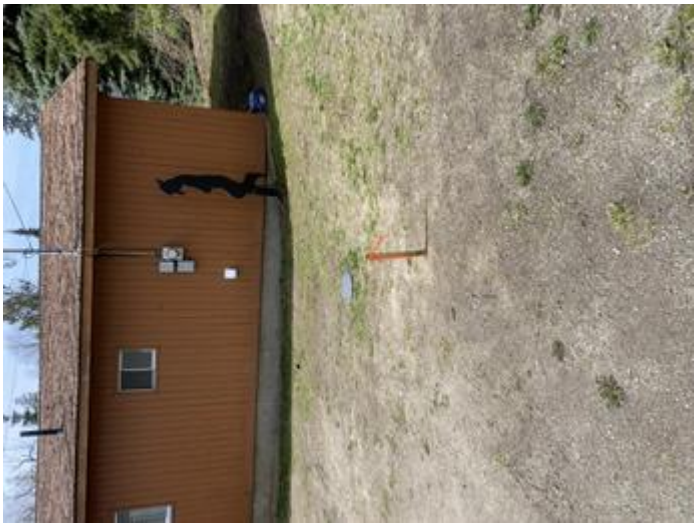
3. Driveway Right side

Other:

Meter Pit? Yes

Driveway paved? No

Photo (facing lake):



ATTACHMENT #3

BRITISH COLUMBIA | Ministry of Transportation

Permit/File Number: 2023-02383
Office: West Kootenay District

PERMIT TO CONSTRUCT, USE, AND MAINTAIN WORKS WITHIN THE RIGHT-OF-WAY OF A PROVINCIAL PUBLIC HIGHWAY

PURSUANT TO TRANSPORTATION ACT AND/OR THE INDUSTRIAL ROADS ACT AND/OR THE MOTOR VEHICLE ACT AND/OR AS DEFINED IN THE NISGA'A FINAL AGREEMENT AND THE NISGA'A FINAL AGREEMENT ACT.

BETWEEN:

The Minister of Transportation and Infrastructure
West Kootenay District
4th Floor - 310 Ward Street
Nelson, BC V1L 5S4
Email: BCMOT.WKD@gov.bc.ca

("The Minister")

AND:

Regional District of Central Kootenay
c/o Alexandra Divlakovski
202 Lakeside Drive
Nelson, BC V1L 6B9

("The Permittee")

WHEREAS:

A. The Minister has the authority to grant permits for the auxiliary use of highway right of way, which authority is pursuant to both the Transportation Act and the Industrial Roads Act, the Motor Vehicle Act, as defined in the Nisga'a Final Agreement and the Nisga'a Final Agreement Act;

B. The Permittee has requested the Minister to issue a permit pursuant to this authority for the following purpose:

The installation, operation, and maintenance of 731 metres of 150mm (6") Ø C900 PVC or HDPR DR11 water main, one Fire Hydrant, one Air Release Valve and twenty four (24) service connections within Balfour Wharf Road, as shown on attached drawing and drawings 23602-Wharf Rd Drawings Rev D.

C. The Minister is prepared to issue a permit on certain terms and conditions;

ACCORDINGLY, the Minister hereby grants to the Permittee a permit for the Use (as hereinafter defined) of highway right of way on the following terms and conditions:

1. That the construction and maintenance of the said works is carried out to the satisfaction of the Regional Executive Director.
2. That, before opening up any highway or interfering with any public work, intimation in writing of the intention to do so must be given to the District Official at least seven days before the work is begun.
3. That any person appointed by the Regional Executive Director for the purpose shall have free access to all parts of the works for the purpose of inspecting the same.
4. That the construction of the said works shall be commenced on or before the N/A and shall be prosecuted with due diligence and to the satisfaction of the Regional Executive Director and shall be completed on or before the North Shore paving project commences.
5. (a) The highway must at all times be kept open to traffic. The roadway must be completely restored for traffic as soon as possible. At all times the permittee must safeguard the traveling public.

   (b) That, unless with the consent of the Regional Executive Director no more than forty-five (45) metres of pipe-track or other excavation in any public highway is to be kept open at one time.

   (c) All excavation work must be carried out in accordance with the BC Occupational Health and Safety Regulation. Care shall be

taken to protect adjacent property.

(d) That all excavations shall be carefully back-filled with suitable material, which is to be tamped into place, and that the permittee shall restore the surface of the road and shoulders and ditches at their own expense. All surplus material is to be removed from the Provincial Crown lands, or deposited where and as required by the District Official of the Ministry of Transportation and Infrastructure. The permittee is financially responsible for any maintenance works required on said ditch for a period of one year. The Ministry will carry out the necessary remedial work and invoice the permittee monthly.

(e) The pipeline crossing installation is to be placed by drilling and (or) jacking in such a manner as to afford minimum grade settlement. No water jetting will be permitted. That where, in the opinion of the District Official, an excavation or opening for a pipeline crossing installation could be made which would not be detrimental to the highway or its users, permission will be granted for said works. On throughways, freeways, and main highways no open cuts will be allowed.

(f) That all pipelines in excess of a nominal diameter of 5 cm., whether gas, oil, water, pressure sewers, conduits, etc., shall be installed where indicated by the District Official, encased in a steel casing-pipe or conduit-pipe of sufficient strength to withstand all stresses and strains resulting from the location, such casing to extend the full width of the highway right-of-way if deemed necessary to the District Official. The ends of the casing-pipe shall be suitably sealed and, if required, properly vented above the ground with vent-pipes not less than 5 cm. in diameter, and extending not less than 1.2 metres above ground surface. Vent-pipes shall be connected 30 cm. from the ends of the casing-pipe, and the top of each vent shall be fitted with a turn-down elbow, properly screened and equipped with identification markers.

All pipelines of non-rigid material, i.e., plastic or copper, of any diameter, shall be cased, or embedded in sand.

The inside diameter of the casing-pipe shall be at least 25 percent larger than the outside diameter of the pipeline. The casing-pipe shall be installed with an even bearing throughout its length, and in such a manner so as to prevent leakage, except through the vents.

The top of the casing-pipe, or the pipeline where casing is not required, shall be located as directed by the District Official, and shall in no case be less than 1.2 metres below the surface of the highway and not less than 1.0 metres below the highway ditches. Pipelines must not obstruct drainage structures or ditches or interfere with traffic on the highway or with highway maintenance.

6. That where the work for which permission is hereby granted comes in contact with any bridge, culvert, ditch, or other existing work, such existing work must be properly maintained and supported in such manner as not to interfere with its proper function during the construction of the new work, and on the completion of the new work the bridge, culvert, ditch, or other existing work interfered with shall be completely restored to its original good condition.

7. That when necessary, all excavations, materials, or other obstructions are to be efficiently fenced, lit, and watched, and at all times every possible precaution is to be taken to ensure the safety of the public.

8. The Permittee shall indemnify and save harmless the Ministry, its agents and employees, from and against all claims, liabilities, demands, losses, damages, costs and expenses, fines, penalties, assessments and levies made against or incurred, suffered or sustained by the Ministry, its agents and employees, or any of them at any time or times, whether before or after the expiration or termination of this permit, where the same or any of them are based upon or arise out of or from anything done or omitted to be done by the Permittee, its employees, agents or Subcontractors, in connection with the permit.

9. That the permission herein granted to use and maintain the works is only granted for such times as the land or public work in, upon, or over which the said works are constructed is under the jurisdiction of the Minister of Transportation and Infrastructure. This permission is not to be construed as being granted for all time and shall not be deemed to vest in the permittee any right, title, or interest whatsoever in or to the lands upon which the works are constructed. Should the lands affected at any time be included within that of an incorporated municipality or city, this permission shall become void, unless the works are on a highway duly classified as an arterial highway pursuant to Section 45 of the Transportation Act.

10. That after receiving notice in writing of the intention on the part of the Provincial Government to construct, extend, alter, or improve any public work, the person or persons responsible for the maintenance of the works for which permission is hereby granted shall within six weeks move or alter such work at their own expense to such new positions or in such manner as may be necessitated by the construction, extension, alteration, or improvement proposed to be carried out by the Provincial Government.

11. That while reasonable care will be taken on the part of the Provincial Government to do as little damage as possible to any private work in the carrying-out of the construction, extension, alterations, improvement, repair, or maintenance of any public work adjacent thereto, the Provincial Government can accept no responsibility for any kind of such damage.

12. That the permission hereby granted to construct, use, and maintain work is granted without prejudice to the provisions of the Transportation Act, or other Acts governing Crown lands and public works or their use by the public.

13. That this permission shall be in force only during such time as the said works are operated and maintained by the applicants, to the entire satisfaction of the Regional Executive Director.

14. That the Ministry will not be responsible for grade changes on accesses caused by reconstruction of any Provincial highway.

15. This permit is valid only for the specific works stated herein. Any alterations or additions must be covered by a separate permit.

16. This permit may be canceled, at the discretion of the Minister, without recourse, should the permittee fail to comply with all the terms of the permit. Thirty days' notice will be given before cancellation.

17. When the requirements of the Ministry necessitate use of the said lands for Provincial purposes, at the discretion of the Minister, this permit may be canceled.

18. That these works shall be identified with this permit number in a manner satisfactory to the District Official of the Ministry of Transportation and Infrastructure.

19. As a condition of this permit, the permittee unconditionally agrees with the Ministry of Transportation and Infrastructure that the permittee is the prime contractor or will appoint a qualified prime contractor, as described in Section 118 of the Workers Compensation Act, for the purposes of the work described by this permit, at the work location described in this permit, and that the permittee or designated prime contractor will observe and perform all of the duties and obligations which fall to be discharged by the prime contractor pursuant to the Workers Compensation Act and the Occupational Health and Safety Regulation.

20. The permittee is advised and acknowledges that the following hazards may be present at the work location and need to be considered in coordinating site safety: overhead hazards, particularly electrical or telecommunications lines; buried utilities, particularly electrical, telecommunication, and gas lines; traffic, danger trees, falling rocks, and sharp or infectious litter.

21. Any works within the Ministry right-of-way that fall within the scope of "engineering" under the Engineers and Geoscientists Act will be performed by a Professional Engineer and shall comply with this Ministry's "Engineer of Record and Field Review Guidelines". The Guidelines can be viewed on the Ministry's website at http://www2.gov.bc.ca/assets/gov/driving-and-transportation/transportation-infrastructure/engineering-standards-and-guidelines/technical-circulars/2009/t06-09.pdf

22. The permittee is responsible for preventing the introduction and spread of noxious weeds on the highway right-of-way as defined by the British Columbia Weed Control Act and Weed Control Regulation.

23. Standards and Specifications

    The Permittee must ensure that the most current editions of the following standards and specifications, manuals and guides are utilized and complied with during the installation, operation, and maintenance of the Works:

    (a) Ministry Utility Policy Manual

    (b) Ministry Traffic Control Manual for Work on Roadways

    (c) Ministry Standard Specifications for Highway Construction

    (d) Open Cut Guidelines

    Where the Ministry and a regulator both set a standard or requirement in a particular area, the highest or most stringent of the two will apply to any installation on highway right-of- way.

24. Protection of Roads

    The Permittee shall ensure all equipment working on or hauling material on to and from the Site does not damage or deposit material onto any part of an existing roadway. Materials spilled onto the public roadways or driveways opened to public traffic shall be cleaned up immediately. The Permittee has the full responsibility to repair any damage to existing highways, local roads and driveways caused by its construction equipment and/or operations.

25. Traffic Control Plan

    The Permittee shall take all reasonable precautions to attempt to ensure the safety of the public in connection with the Use. In particular, but not so as to limit this obligation, the Permittee shall, if so required by the Designated Ministry Official on reasonable grounds, prepare and implement a traffic control plan. The contents of the plan and the manner in which it is implemented must meet the reasonable satisfaction of the Designated Ministry Official.

26. Accommodation of Traffic

    The Permittee shall, at his cost, supply, erect, and maintain standard traffic control devices in accordance with the Ministry of Transportation and Infrastructure Traffic Control Manual for Works on Roadways and Occupational Health and Safety Regulation.

27. Three Attempts to Bore Prior to Cutting

    Three reasonable attempts to bore or jack the pipeline, under paved road crossings, shall be expected prior to consideration of open cut crossings. Should open cutting be subsequently permitted, compaction, material, concrete capping and patching specifications shall be provided. If open cutting is permitted the crossing shall be perpendicular to centerline in order to minimize disturbance to the road structure, unless otherwise approved. Any open cut trench is to be saw cut to a width of one metre additional width beyond the edge of the trench excavation unless such width reaches the curb or edge of pavement. After three (3) months or when the hot patch has settled, the trench plus an additional three (3) metres on either side is to be scarified to a

50mm depth and re-paved to create a smooth seam and surface. The permittee shall be responsible for the repair of any failure and/or settlement of the excavation area for a period of three (3) years.

28. Placement of Water Line

Underground water lines must cross the highway right-of-way at an angle as close to 90° as practicable and shall be at an angle no less than 70°.

Water lines installed within and parallel to the highway right-of-way shall be aligned parallel and within 2 metres of the boundary of the highway right-of-way, unless otherwise approved by the Ministry.

The top of any buried line and/or casing must be at least 1.2 metres below the top of the pavement and shoulders and at least 1.0 metre below design ditch bottoms or elsewhere in the right-of-way and have sufficient cover to avoid freezing and/or damage. Outside the highway structure but within Ministry right-of-way, buried lines and/or their casings must be at least 1.0 metres below ground level.

29. Casing

A casing, which is at least 25% larger than the outside diameter of the water line shall be used to encase the pipeline where is crosses any travelled roadway. The casing must extend across the full width of the highway right-of-way and be designed to have a lifespan greater than or equal to that of the carrier pipe.

30. Underground Markers

Non-metallic pipe must be marked by underground markers or tracer wire which makes it possible to locate the pipe using electronic pipe location equipment.

31. Placement of Appurtenances

Any vents, valves, standpipes, or pedestals must be located and installed in such a manner that they do not interfere with right-of-way maintenance, must be consistent with Ministry "Clear Zone" standards and must not be concealed by vegetation. Valves must be located below ground and clear of the highway, intersections, and driveways. The Clear Zone is defined as the roadside border area immediately adjacent to the roadway clear of fixed object hazards which may be traversed by errant vehicles. The Clear Zone is measured from the outer edge of the traveled lane, including any paved shoulder width. Clear Zone setback requirements are specified in the BC MOT Utility Policy Manual and in the BC Supplement to TAC (Transportation Association of Canada) Geometric Design Guide.

32. Trenching Standards

Pavement must be cut by hand or approved mechanical means in straight lines parallel to the trench centerline.

Distance from a pavement cut to the edge of the trench must be at least 150 mm or sufficient to ensure the pavement will not be undermined by sloughing.

Except where trenching is well clear of the road shoulder, all excavated material must be removed from the site immediately.

Stockpiling of native material adjacent to the trench is not permitted.

Trenches must be backfilled or adequately covered at the end of the workday.

Trench shoring must conform to WorkSafe BC standards and is to be used where soil conditions warrant. Extreme care must be taken to avoid sloughing of the trench sides to minimize damage to the subgrade beyond the limits of excavation.

33. Trench Backfill

Pipe bedding must conform to industry standards.

Where sloughing of trench sides has undermined the pavement, the pavement must be marked with a painted line showing the extent of the damaged area. Pavement must be removed from this area and the voids filled and compacted in accordance with backfill requirements.

Trenches must be backfilled with granular material that meets Ministry standards as set out in Section 202.02 (Table 202-C), Standard Specifications for Highway Construction and all subsequent interim revisions and updates, in accordance with the following minimum requirements:

(a) Sub-base material must meet or exceed specified requirements for Select Granular Sub Base aggregates.

(b) Crushed Base Course depth is to match existing depth but must not be less than 300 mm compacted thickness and consist of "25 mm minus" WGB (or IGB) crushed aggregate.

Backfill must be placed in layers not exceeding 150 mm compacted thickness and shall be compacted with approved tamping equipment to a minimum of 95 percent Proctor density to within 300 mm of the surface and 100 percent for the final 300 mm.

34. Temporary Patching

As soon as any portion of the highway can be re-opened to traffic, a temporary asphalt patch must be applied. The Permittee shall be responsible for monitoring, maintaining, and repairing the temporary asphalt patch until a permanent patch compliant with the 2020 Standard Specifications for Highway Construction is applied.

35. Permanent Patching

Pavement edges must be cut, made true and straight, cleaned, and primed before installing a final patch.

Asphalt concrete must be restored to the same thickness as the existing surface or to a minimum of 75 mm thickness, whichever is greater. Asphaltic concrete must meet Ministry standards as set out in Section 502, Standard Specifications for Highway Construction.

Asphalt concrete is to be laid in two or more lifts or layers. Each lift is to be thoroughly compacted before successive lifts are applied.

The Permittee will ensure that the permanent pavement patch is to Ministry standards for one year from the date that the patch is installed.

36. Excavations Across Entrances

Excavations across entrances, whether private or commercial, must be backfilled and thoroughly compacted by the end of the current working day. The surface must be restored, whether paved or gravel, to its original condition within 48 hours.

Affected property owners must be notified at least 48 hours in advance before excavating a driveway.

37. Shoulder Restoration

Shoulders must be restored to a well compacted, stable and free draining surface maintaining the existing crossfall. Shoulders must be compacted using industry standard equipment. If there is not sufficient moisture present in the material, the surface will be watered before compaction. Material must meet the following standards:

a) Base course aggregate: 25mm well-graded material (Section 202.05, Table 202-C, Standard Specifications for Highway Construction)

b) Surfacing: 25mm high fines surfacing (Section 202.05, Table 202-B, Standard Specifications for Highway Construction)

c) Asphalt surfacing: as specified for permanent patching

d) All granular or other material must be removed from paved surfaces after shoulder restoration has been completed.

38. Reinstatement

Reinstatement, in a timely and professional manner, of drainage, roadway and roadside facilities shall be required within thirty (30) days of disturbing the facilities.

39. Clean Up

The highway surface, shoulders, and ditch line shall be restored and kept clear and clean of materials and equipment at the end of each day. Shoulders shall not be used to store materials and/or equipment.

The Permittee shall remove, pile, and burn or chip all slash, trees, and tree limbs from the road allowance.

All unsuitable material and inorganic debris shall be removed from the project area. All surplus or unsuitable organic waste and debris shall be removed from the site unless its complete burning is approved by the Designated Ministry Official in compliance with the B.C. Open Burning Smoke Control regulation.

40. Revegetation Seeding

Sites are to be reseeded to standards set out in Section 757, Standard Specifications for Highway Construction.

41. Location of Right-of-Way

The Permittee is responsible for ensuring that all works are contained to the highway right of way. Any works located within private property must have the owner's permission.

42. Protection of Survey Monuments

The Permittee shall be responsible for the preservation during construction of all geodetic benchmarks, survey monuments and property markers on the right-of-way. The Permittee shall use, at no expense to the Ministry, a British Columbia Land Surveyor to replace any survey monuments destroyed or damaged as a result of the Permittee's negligence. At locations where construction work will cover or destroy such markers, the Permittee shall not move or remove them until written direction is received from the Ministry Representative.

43. Removal

The Minister may order the removal or alteration of utility installations, if necessary, for the protection of the highway or highway users.

If the utility owner does not respond to an order to remove or alter a utility installation, the Minister may carry out that work and recover costs from the utility.

44. Works Around Water

It is the permittee's responsibility to obtain permission from the Ministry of Environment, pursuant to Section 11 of the Water Act, for works in or around any natural watercourse, as and if required.

45. Hours of Operation

All work on Highways' right-of-way shall be during regular hours of operation, Monday to Friday, 8:00 - 4:30, except statutory holidays.

46. As Constructed Drawings

As constructed drawings, in PDF format, shall be provided to the District office covering all works permitted within the right-of-way. Drawings submitted shall show both plan and profile views.

47. Permit on Site

A copy of the permit is to be kept by the field supervisor, in order that he is aware of all permit conditions.

48. Insurance

The Permittee shall obtain and maintain during the term of this permit and at the Permittee's own expense, liability insurance against third party claims arising as a result of the works consented to in this permit from the Permittee working within Ministry right-of-way. Such liability insurance shall have coverage limits of not less than TWO MILLION DOLLARS ($2,000,000.00) for bodily injury, including death and property damage and shall be endorsed as follows:

"It is understood and agreed that His Majesty the King in Right of the Province of British Columbia as represented by the Minister of Transportation and Infrastructure, together with the employees, agents and servants of the Minister, hereinafter referred to as the Additional Named Insured as an Additional Named Insured."

The policy shall contain a cross liability clause and a clause giving notice of cancellation or material alteration to the Minister.

49. Works Notification (H1080)

The Permittee shall contact BCMOT.WKD@GOV.BC.CA a minimum of ten (10) days prior to the commencement of work to notify the start date and to submit a Works Notification / Lane Closure Request Form (H1080) and Traffic Control Plan. No work or lane closures may commence until the Ministry accepts and returns the signed Works Notification Form and Traffic Control Plan.

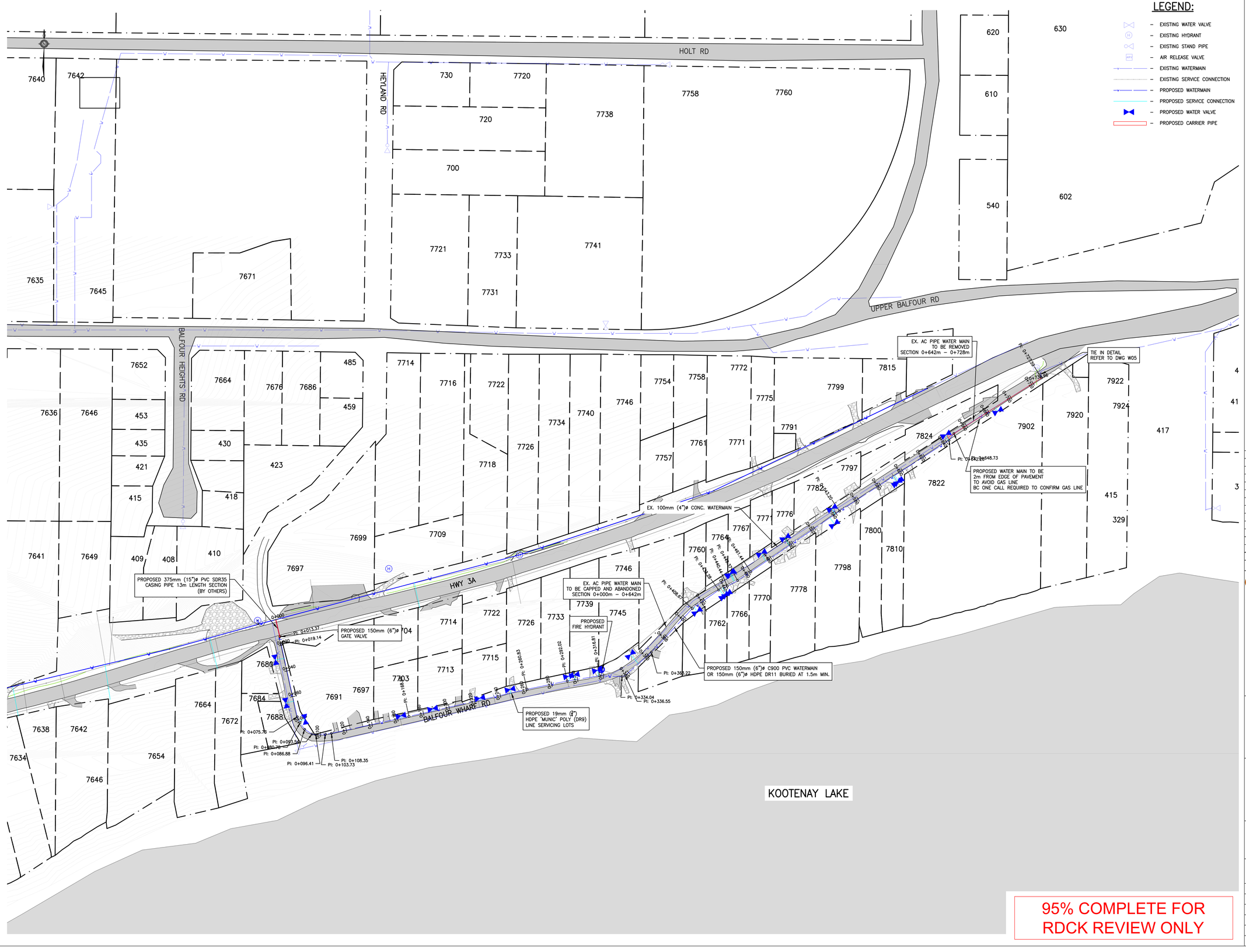
50. The Ministry contact person is Mikaela Wheaton, Development Services Officer, Mikaela.Wheaton@gov.bc.ca, 778-463-5575.

The rights granted to the Permittee in this permit are to be exercised only for the purpose as defined in Recital B on page 1.

Dated at Nelson, British Columbia, this 29 day of May, 2023

M Wheaton

On Behalf of the Minister



LEGEND:

- EXISTING WATER VALVE
- EXISTING HYDRANT
- EXISTING STAND PIPE
- AIR RELEASE VALVE
- EXISTING WATERMAIN
- EXISTING SERVICE CONNECTION
- PROPOSED WATERMAIN
- PROPOSED SERVICE CONNECTION
- PROPOSED WATER VALVE
- PROPOSED CARRIER PIPE

GENERAL NOTES:

LOT PLAN BASED ON RDCK MAPPING AND EXISTING RECORD DRAWINGS. HIGHLAND CONSULTING IS NOT LIABLE FOR INACCURACIES IN DRAWING.
ACTUAL LOCATIONS OF INFRASTRUCTURE TO BE CONFIRMED WITH LAND SURVEY RECORD DRAWINGS.
SCALE IS BASED ON ARCH EXPANDED D (24"X36") DRAWINGS.

PRESSURE AND LEAKAGE TESTING IN ACCORDANCE WITH AWWA. DISINFECTION IN ACCORDANCE TO C651 AWWA.CHLORINE SOLUTIONS SHALL BE NEUTRALIZED IN ACCORDANCE WITH MINISTRY OF THE ENVIRONMENT AND DEPARTMENT OF FISHERIES AND OCEAN PRIOR TO DISCHARGE TO ANY DRAINAGE COURSE.

a. A minimum horizontal and vertical separation between a watermain and storm or a sanitary sewer or manhole shall be at least 3m and 0.45m respectively, the distance being measured from edge of pipe to edge of pipe. The watermain shall be above the sewer main and with a proper bedding and structure that support the water and sewer mains.
b. Where extreme conditions prevent that the 3m separation and vertical separation cannot be obtained, the sewer shall be constructed of pipe and joint materials, which are equivalent to watermain standards. Under no circumstances shall be the horizontal separation be less than 1m (edge to edge).
c. When the watermain cross below the storm and sewer mains, the watermain shall be protected:
   i. A vertical separation of at least 0.45m (Edge to edge)
   ii. all water main joints within 6m of the crossing shall be wrapped with approved heat shrink wrap ('CANUS' wrap or approved equal)'
   iii. Structural support of the sewer to prevent excessive joint deflection and setting; and centering of the length of watermain at the point of crossing so that the joints are equidistant from the sewer.

ALL WORKS CONSTRUCTED IN ACCORDANCE WITH STANDARDS AND SPECIFICATION PROVIDED IN THE LATEST VERSION OF MMCD DOCUMENTS.

CONTRACTOR IS REQUIRED TO CERTIFY WORK AND WARRANTY SYSTEM FOR MINIMUM OF TWO YEARS AFTER COMMISSIONING DATE.

WATER MAIN AND SERVICE CONNECTION MATERIALS SHALL CONFORM TO THE RDCK APPROVED PRODUCTS LIST AND MMCD SECTION 33 11 01. 100 – 300mm DIAMETER WATER MAINS TO BE DUCTILE IRON PRESSURE CLASS 350 TO AWWA C151 OR PVC CLASS 150 TO AWWA C900. 350–900mm DIAMETER WATER MAINS TO BE DUCTILE IRON PRESSURE CLASS 250 TO AWWA C151 OR PVC CLASS 150 TO AWWA C905 EXCEPT AS NOTED ABOVE. ALL FITTINGS AND VALVES TO BE DUCTILE IRON (DI) TYTON JOINT WITH CLOSED LUGS UNLESS OTHERWISE SPECIFIED.
ALL CURB STOPS TO BE FITTED WITH MUELLER TELESCOPING SERVICE BOXES OR APPROVED EQUIVALENT.

DRAWINGS SUBJECT TO CHANGE REQUIRES APPROVAL FROM IHA.

CONTRACTOR RESPONSIBLE FOR COORDINATING WITH UTILITY SERVICES/WORKS IN MOTI RIGHT OF WAY AND OBTAINING NECESSARY APPROVALS.

NO VARIATION TO THIS DRAWING SHALL BE PERMITTED UNLESS AUTHORIZED IN WRITING BY ENGINEER.

REV.	DESCRIPTION	DATE
D	ISSUED TO CLIENT	16–MAY–23
C	ISSUED TO CLIENT	10–MAY–23
B	ISSUED TO CLIENT	01–MAY–23
A	FOR REVIEW	03–APR–23

ISSUED

HIGHLAND CONSULTING LTD
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Canada pkernan@highlandconsultingltd.com

This drawing not to be used for construction purposes until noted and dated 'Issued for Construction' All measurements must be checked on site and be verified with the drawings by Contractor.

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SEAL

PROJECT TITLE
BALFOUR WATERMAIN UPGRADE
BALFOUR WHARF RD

DRAWING TITLE
GENERAL LAYOUT

CLIENT NAME
RDCK

SCALE: REFER TO DWG	JOB No. 23602
DRAWN: JH	REVISION D
CHECKED: PK	DWG. No. W01
DATE: 16–May–23	
PLOT: 16–May–23	

FILE: C:\Users\User\OneDrive\23602_RDCK–Balfour Water Main Upgrade\2_DRAWINGS\21_CMD\23602_RDCK Balfour Watermain Upgrade_Rev D_2023_05_10.dwg