



M.D. OF PINCHER CREEK NO. 9

UTILITY SERVICES GUIDELINES

Approved by CAO

Date: April, 2024

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REVISION HISTORY

Revision	Revision Date	Modifications
0	May, 2023	Original Release
1	July, 2023	Minor Updates
2	April, 2024	<ul style="list-style-type: none"> - Updates related to October 6th, 2023 allowed connection date and tie-in allowance - Added amending bylaw 1351-24 (12 month water meter waiver) - Referenced new land use bylaw - Minor updates regarding inspections - Clarity around water line connection fittings - Mandatory insulation of water lines above 2.4m - Clarity around external backwater valve options - Added updated Revision 1 homeowner connection form with clarity around allowed connections, backfill timing, work on adjacent private property, connections to water and sewer mains - Minor updates to example service card - Revision 1 of Standard water drawing with clarity around municipal connection - Revision 2 of Private Service Connection Checklist, with updated acceptable materials list, fittings, and final connection timing - Revision 2 flowchart showing inspection process post connection allowance

1 PURPOSE OF GUIDELINES

In accordance with Utility Bylaw 1344-22 Section (6) The Municipal District of Pincher Creek No. 9 (the “MD”) has adopted Utility Services Guidelines (“USG”) to provide clarity and guidance around procedures and requirements owners must comply with during installation of Private Water & Wastewater Lines and prior to activation.

1.1 GENERAL

The Utility Services Guidelines are intended to provide minimum acceptable procedures, requirements, specifications and standards to follow design and install of water and sewer on private properties within The MD of Pincher Creek (MD) when connecting to the municipal Utility Service Water and Wastewater Systems. Service Connections are required to follow and adhere to these guidelines as the acceptable minimum standard.



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The following are guidelines and not the complete design. The property owner and contractors are required to design and install the system to follow these minimum guidelines while meeting the needs of the site specific constraints and dwelling size.

Any work completed on private property by the owners and their contractors are the sole responsibility of the property owner. They are to apply sound design principles and industry best practices to provide an end product that is practical, economical, efficient, safe, and sustainable. Work must be carried out in accordance with the current Occupational Health and Safety requirements.

Bylaw 1344-22 (Utility Bylaw), and its successors regulate and provide for terms, conditions, rates, and charges for the supply and use of Water and Wastewater Services. Where conflicts exist between these guidelines and the Utility Bylaw, the Utility Bylaw shall prevail.

The Utility Bylaw and USG's do not relieve a Person from complying with any provision of any federal or provincial law or regulation, other bylaw or any requirement of any lawful permit, order, or license.

The Hamlet of Beaver Mines (Hamlet) is currently the only community covered by these guidelines, with the following water and sewer systems provided:

- Water – Previous to these upgrades there was no municipal water within the Hamlet. Each property had a private water supply system or utilized hauling with a cistern or other type of storage device. With these upgrades there will be full pressure water supplied to each lot with fire flow and fire hydrants throughout the community
- Sanitary Sewer – Previously there was no municipal wastewater in the community. Each property used a private sewage treatment method or a tank and haul system. With these upgrades the Hamlet will be serviced with a municipal gravity sewer system

As of October 6th, 2023, the MD has authorized connection to curbstops and stubbed sewer connections. Approved applications and initial inspections are required prior to establishment of individual connections at property edge. Note that only the MD and its representatives may turn water curbstops.

Ongoing repair and maintenance of private water and drainage lines are the responsibility of Owners per Utility Bylaw 1344-22.



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1.2 DEFINITIONS

Refer to definitions under Bylaw 1344-22 for the purpose of these guidelines. For guidelines ease of reference, the following critical definitions are repeated:

- a. "Cistern" means a waterproof holding tank or receptacle for holding potable water to meet on Property water demand;
- b. "Cross Connection" means any temporary, permanent, or potential connection of any piping, fixture, fitting, container or appliance to the Water System that may allow backflow to occur, including but not limited to: swivel or changeover devices, removable sections, jumper connections, and bypass arrangements;
- c. "Ion Exchange Water Softener" means any water treatment device that exchanges the naturally-occurring minerals in water with salt or any other chemical in the process called ion exchange;
- d. "MD" means the municipal corporation of the Municipal District of Pincher Creek No. 9 and its duly authorized employees, agents, contractors and other representatives or the geographic area contained within the boundaries thereof, as the context requires;
- e. "Meter" means the individual or compound water meter, of a make and model approved by the MD, and all other equipment and instruments, including but not limited to, radio frequency units and remote meter reading devices supplied and used by the MD to calculate and register the amount of water consumed relative to the land and buildings that the Meter is designed to monitor;
- f. "Private Drainage Line" means that portion of a Service Connection that extends from the property line to an improvement or location on a Customer's Property that receives, or is to receive Wastewater Services, comprised of the Customer-owned assembly of pipes, fittings, fixtures, traps and appurtenances for the collection and transmission of Wastewater into the Wastewater System;
- g. "Private Wastewater Disposal System" means an on-site Wastewater treatment system for the treatment and disposal of Wastewater that is not connected to the Wastewater System, as defined in the Alberta Private Sewage Systems Standard of Practice 2015 adopted by the Private Sewage Disposal Systems Regulation;



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- h. "Private Water Line" means that portion of a Service Connection that extends from the property line to an improvement or location on a Customer's Property that receives, or is to receive, Water Services, comprised of the Customer-owned assembly of pipes, fittings, fixtures, traps and appurtenances for providing water to a Customer's Property, excluding the Meter owned by the MD;
 - i. "Service Connection" means all of the Facilities required to achieve a physical connection between:
 - a. the MD's Water Main and the structure, improvement or location that receives Water Services, to allow a Customer to receive potable water, which includes a Water Service Line and a Private Water Line; or
 - b. the MD's Wastewater Main and the structure, improvement or location that receives Wastewater Services, to allow a Customer to discharge Wastewater, which includes a Wastewater Service Line and a Private Wastewater Line; as the context requires;
 - j. "Utility Services" means Water Services, Wastewater Services or Solid Waste Services or any combination of them;
 - k. "Wastewater" means the composite of water and water-carried wastes associated with the use of water for drinking, food preparation, washing, hygiene, sanitation or other domestic purposes, but does not include wastewater from industrial processes;
 - l. "Wastewater Service Line" means that portion of a Service Connection owned by the MD that extends from the Wastewater Main to the property line of a Property that receives, or is to receive, Wastewater Services;
 - m. "Wastewater System" means the Facilities used by the MD for the collection, transmission, treatment and disposal of Wastewater, which is deemed to be a municipal public utility within the meaning of the Municipal Government Act;
 - n. "Wastewater Services" includes the collection, transmission, treatment and disposal of Wastewater, as applicable, and associated services offered to the Customer under this Bylaw;
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- o. "Water Service Line" means that portion of a Service Connection owned by the MD that extends from the Water Main to the property line of a Property that receives, or is to receive, Water Service;
- p. "Water Services" means the provision of potable water by the MD to a Customer's Property and associated services offered to the Customer under this Bylaw;
- q. "Water System" means the Facilities used by the MD to supply potable water to Customers, which is deemed to be a municipal public utility within the meaning of the Municipal Government Act.



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1.3 REGULATORY, APPLICATIONS, PERMITS, AND INSPECTIONS

1.3.1 REGULATORY

The latest edition of all applicable regulations are to be followed. Owners are to reference the Alberta Government and Alberta Environment and Protected Areas websites and contact the MD for the latest regulations prior to installation.

Regulatory Item	Web Link	Contact
The Utilities Bylaw - Bylaw 1344-22	https://mdpinchercreek.ab.ca/docs/files/bylaws/Bylaw%201344-22%20Utilities.pdf	MD Office 403 627 3130 mdinfo@mdpinchercreek.ab.ca
1351-24 – Amending Utility Bylaw	https://mdpinchercreek.ab.ca/docs/files/bylaws/Bylaw%201351-24%20Amending%20Utility%20Bylaw.pdf	
Alberta Safety Codes	https://www.alberta.ca/safety-codes.aspx	Municipal Affairs 1 866 421 6929 safety.services@gov.ab.ca
Alberta Building Code	https://www.alberta.ca/building-codes-and-standards.aspx	
Alberta Fire Code	https://www.alberta.ca/fire-codes-and-standards.aspx	
Alberta Plumbing Code	https://www.alberta.ca/plumbing-codes-and-standards.aspx	
National Plumbing Code of Canada	https://nrc.canada.ca/en/certifications-evaluations-standards/codes-canada/codes-canada-publications/national-plumbing-code-canada-2015	
Alberta Private Sewage Codes and Standards	https://www.alberta.ca/private-sewage-codes-and-standards.aspx	
Plumbing Standard Bulletin 20-PCB-01	https://open.alberta.ca/dataset/4e33a661-9ddd-444b-9444-4f199f8215aa/resource/c060444e-5d70-41df-a6ea-093f3207e545/download/ma-standata-bulletin-plumbing-20-pcb-001-2023-04.pdf	
Alberta Environment and Protected Areas Standards and Guidelines for Municipal Waterworks	https://open.alberta.ca/publications/5668185	Alberta Environment and Protected Areas Lethbridge Office: 403 381 5322
Alberta Wastewater and Storm Water Legislation	https://www.alberta.ca/wastewater-and-storm-water-legislation.aspx	



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Regulatory Item	Web Link	Contact
Alberta Water (Ministerial) Regulation	https://open.alberta.ca/publications/1998_205	
Alberta Water Act	https://open.alberta.ca/publications/w03	
Alberta Water wells and ground source heat exchange systems directive	https://open.alberta.ca/publications/9781460141588	Alberta Environment and Protected Areas – Regulatory Assurance Division Lethbridge Office: 403 381 5301
MD of Pincher Creek Land Use Bylaw	https://mdpinchercreek.ab.ca/docs/files/bylaws/Bylaw%201349-23%20MD%20Pincher%20Creek%20Land%20Use%20%202024%20(No%20Maps).pdf	MD Office 403 627 3130 mdinfo@mdpinchercreek.ab.ca

1.3.2 WATER AND WASTEWATER APPLICATIONS, PERMITS, AND INSPECTIONS

1.3.2.1 APPLICATIONS & PERMITS

All existing lots that have a development permit and building permits issued and that have Water Curbstops and Wastewater stubs already provided at the lots shall complete and obtain the following applications and permits.

Application/Permit Name	Who Issues and Inspects	Who Applies/Pulls Permit	Cost
Water and Wastewater Service Connection Application	MD Utilities Issues, Superior Safety Codes & MD Inspects	Any ¹ (Pre-qualified contractor recommended)	\$275 to be paid to Superior upon inspection request
Plumbing Permit	Superior Safety Codes	Licensed Plumber ¹	\$104.50 to be paid to Superior upon plumbing permit request

¹Plumbing Standard Bulletin 20-PCB-001 informs the plumbing industry for installations where sewage is discharged into a municipal collection system. Connecting existing devices/pipes/tanks to a municipal sewer is part of the plumbing system and requires a plumbing permit. Private Sewage Installers (PS) are permitted to pull plumbing permits for these portions of piping located outside of a building specifically. Alberta Private Sewage Systems Standard of Practice requirements shall apply.



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The Water and Wastewater Service Connection Application can be found on the MD Website or can be picked up in person from the MD Office. Property owners have been sent copies of blank Site Plan's for their property. Additional copies can be requested via email or can be picked up in person from the MD Office.

Superior Safety Codes website contains copies of the latest Plumbing Permits (<https://superiorsafetycodes.com/apply-for-permit.html>).

Superior's Lethbridge Office (1-877-320-0734) must be contacted to arrange inspections for both the Water and Wastewater Service Connection Application and Plumbing Permits. As of April 30th, 2024, Superior is completing all in-person inspections on Wednesdays.

New development(s) or existing development(s) that require new connections to Water and Wastewater Main lines or want to redevelop the site must obtain other permits as noted in these Guidelines and the MD of Pincher Creek Land Use Bylaw.

If any mechanical or electrical equipment is required, additional permits will apply.

Developments that do not currently have water curb stops and wastewater stubs at property edge shall contact the MD for guidance. The MD constructs Service Connections to property edge. Such connections are currently handled outside of these guidelines.

1.3.2.1.1 WATER WELLS

The MD does not regulate abandonment of water wells, nor will the MD be ensuring compliance and enforcement of provincial and federal regulations related to them. The guidance below is provided for owner's awareness based on provincial regulation.

If water wells are abandoned, this activity does not require an advanced permit, but once abandoned Alberta Environment and Protected Areas (AEP) mandates that a well log template be submitted after completion. These are to be submitted to AEP by a Licensed Water Well Driller.

1.3.2.2 COMMISSIONING AND INSPECTIONS

Final commissioning and functional testing of the systems is to be completed by a qualified contractor including pressure testing of the private water lines.



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Inspection by the MD's representatives as well as the MD is required of all buried piping, and equipment/tanks (if applicable). Approval and signoff of the system by the MD and its representative is required prior to backfill. Where connections are drilled, tie-in points shall remain unburied prior to inspection. A single copy of the *Private Service Connection Checklist* will need to be filled and signed off by the Contractor (and Owner if contractor sign-off has not been granted) prior to handover to the MD's representatives for inspection.

Connection to the MD water curbstop and wastewater stubbed connections will not be allowed until the MD's representatives (Superior) have completed their inspection, unless otherwise authorized by the MD for testing purposes.

The MD requires an MD inspection of the tie-in to the Wastewater Service Line and the Water Service Line. The MD or its representative will also inspect for cross-connection, removal of ion exchange water softeners, proper water meter installation, among other code related items. Inspections shall only be complete during MD working hours and may be subject to operational delays. Virtual inspections may be arranged at the MD and its representative's discretion. Only the MD and its representatives may turn water curbstops.

1.4 SITE PLAN

The owner is required to submit an updated site plan with the Water and Wastewater Service Connection Application. The site plan should provide information about location, size, dimensions, depth, slope, and other details of the following items:

- a) Water and Wastewater connection locations
- b) Existing building and driveways
- c) Existing septic systems/wastewater disposal systems/tanks; and
- d) Existing water service locations or water wells (if any) and cisterns

Sample site plan is shown in Appendix A. Site plans have been sent to owners with property edge locations. These shall be submitted with revised site plan information. If you have not received, please contact the MD to request.

1.5 CONTRACTORS/INSTALLERS

It is the owner's responsibility to hire a contractor to design and construct the service connections keeping in view specific requirements of the property and surface/subsurface constraints of the lot.



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The owner shall make sure that the contractor has adequate knowledge and experience to complete the work as per these guidelines, applicable codes, and regulations.

The contractor is responsible to supply and install all materials required to complete fully functional and operational service connections.

Owners may use their own contractors, but are recommended to use MD pre-qualified contractors. The MD website will maintain a list of pre-qualified contractors.

2 DISTRIBUTION SYSTEM PRIVATE WATER LINE

2.1 OVERVIEW

Owners must not connect to the MD curbstops until approved by the MD as part of the inspection process. Approved applications DO NOT constitute approval to connect to the MD curbstops or backfill excavated works. Owners shall arrange with contractors, to have private water lines installed excluding final connections to the MD infrastructure prior to initial inspection.

2.1.1 FULL PRESSURE WATER & OTHER INSTALLATION TYPES

The Hamlet of Beaver Mines is serviced by a full pressure water system. Guidance provided in this document is for full pressure private water line connections, with in-house meter installations.

Other types of connections, such as trickle fill water services, are not recommended by the MD within the Hamlet. Existing cisterns are considered private water sources by Alberta Safety Services, and therefore the National Plumbing Code requires a reduced pressure principle (RP) backflow preventer to protect the municipal supply from severe hazard. Per CSA B64.10, RP backflow preventers need to be installed aboveground (and therefore properly freeze protected) and have strict testing and inspection requirements. This is not anticipated to be feasible for most owners.

Should an owner wish to proceed with the installation of such a system under the direction of a certified contractor, additional permitting and inspection requirements will be applicable. Owners or their contractors may contact the MD during the application process if there are questions related to such cases.



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2.2 MATERIAL

2.2.1 PIPING

Refer to the National Plumbing Code for acceptable service piping materials. Recommended materials are PEX, Copper, or HDPE per AWWA C-800.

Insulation recommended to be rigid frost shield extruded polystyrene 50mm thick with a minimum 1.76 RSI (R-value of 10) as determined by ASTM C518 and a minimum comprehensive strength of 275 kPa (40 psi) as determined by ASTM D1621.

Water Service Line sizes at property edge are shown on the Site Plan's sent to Hamlet property owners. Some owners may require or have different Private Water Line sizes due to additional demands such as fire sprinklers and a higher number of fixtures. Private Water Lines should be designed according to the expected demand, maximum operating pressure of the system, and the equivalent fixture units according to the National Plumbing Code.

2.2.2 FITTINGS

Refer to the National Plumbing Code for acceptable fitting types and materials. Note that depending on chosen Private Water Line material, a specialized Philmac compression fitting with appropriate sized insert may be required to connect to the municipal stubbed HDPE DR11 IPS 1" Water Service Line. Barbed connection fittings will not be accepted.

2.2.3 WATER METER

Water meters shall be supplied by the MD and are to be installed by a qualified plumber. The MD shall stock and supply Neptune 5/8" x 3/4" Mach 10 Ultrasonic Meters with remote readers. Requests for different meter sizes will be subject to supply delays.

Meters will be supplied with two (2) 3/4" couplings and a plastic anti-tamper meter seal.

Email or call the MD upon submission of a plumbing permit to request a water meter.

2.2.4 WATER PRESSURE REDUCING VALVES & BACKFLOW PREVENTERS

Direct acting water pressure reducing valves (PRV's) for domestic water supply systems shall be installed throughout the Hamlet to protect the building plumbing from being over-pressurized. The municipal system may see pressures up to 85 psi(g) in parts of the Hamlet. PRV's shall conform to the requirements in the National Plumbing Code.



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Backflow preventers are not typically mandatory for most residential properties unless there is a risk of cross-contamination. If installed, they shall be placed in a location that eliminates any potential cross-contamination points and installed in conformance with the National Plumbing Code.

2.2.5 BEDDING

Contractors are responsible to verify ground conditions and appropriate bedding material.

Bedding materials for pipes in sound dry solids is recommended to be Zone 3 sand. For saturated soil (wet areas), crushed/washed Zone 7 granular gravel with hard, durable particles are recommended.

Bedding material shall be compacted to 95% standard proctor density with a moisture content of -1 to +2%, a nominal 300mm cover, 2x pipe OD trench width, and minimum 75mm trench depth below pipe material.

Gradation limits shall be as specified in the table below.

Granular Material Type	Sieve Size	% Passing By Weight
Zone 3 Sand – A combined coarse – fine filter material typically used as a bedding material for concrete slabs, pipe and similar structures:	40 mm	100
	20 mm	50 – 95
	5 mm	25 – 65
	0.530 mm	6 – 29
	0.315 mm	2 – 20
	0.08 mm	0 – 10
Zone 4 – A well graded gravel material typically used as a bedding material:	20 mm	100
	10 mm	20 – 60
	5 mm	5 – 30
	2 mm	2 – 10
Zone 7 – Wash Rock – typically used when specified as bedding material in extremely wet or unstable conditions:	20 mm	100
	10 mm	35 – 95
	5 mm	5 – 25
	2 mm	0 – 10
Zone 9 – Bedding and Haunching Material – A well	20 mm	100
	10 mm	20 – 60



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Granular Material Type	Sieve Size	% Passing By Weight
graded crushed angular gravel material (Percent fractures by weight will be 50% or greater):	5 mm	5 – 30
	2 mm	2 – 10

2.3 INSTALLATION

2.3.1 PRIVATE WATER SERVICE PIPING AND FITTINGS

Any piping buried less than the 2.4m is required to be insulated. If heat tracing is installed, additional permitting requirements will apply.

2.3.2 WATER METER

Water Meter must be accessible with free clearance and shall have adequate protection installed if applicable for freezing, heat, or any internal or external damage.

Water Meters shall be installed in accordance with manufacturer requirements in orientations allowable in their manual.

All Water Meters shall be issued by the MD and given to a certified contractor for installation. Copper wire must be wrapped around the meter and go through the coupling at each end prior to anti-tamper meter seal installation.

2.3.3 WATER PRESSURE REDUCING VALVES & BACKFLOW PREVENTERS

PRV's shall be located as to protect existing infrastructure in the building. Backflow preventers (if installed) shall also be located to eliminate any potential cross-contamination points (with existing or new infrastructure). Contractors are responsible to asses existing piping if they plan to forego installation of backflow preventers.

3 DISTRIBUTION SYSTEM PRIVATE DRAINAGE LINE

3.1 OVERVIEW

A Private Drainage Line generally consists of the following components:

- a) Sewer piping sloped downwards from the source towards the municipal wastewater service connection that allows for the free flow of sewage by gravity



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- b) Backwater valves may be installed on either the inside or outside of a building where the building sewer exits the building towards the municipal wastewater service connection. A backwater valve's intent is to allow flow out of the building and prevent backflow of sewage into the building. It is recommended that backwater valves are checked and maintained regularly to ensure proper operation by the owner
- c) Cleanouts are access points along the Wastewater Service Line that allow for cleaning and inspection of the service

Owners must not connect to the MD stubbed PVC sewer connection until the final inspection is complete. Approved applications DO NOT constitute approval to connect to the MD stubbed sewer connection or to backfill excavated works. Owners must arrange with contractors, to have private drainage lines installed excluding final connections to the MD infrastructure prior to inspection.

3.1.1 GRAVITY SEWER SERVICE & OTHER INSTALLATION TYPES

The Hamlet will be serviced by a gravity sewer service. Such systems are designed with sewer piping sloped downwards towards the municipal sewer main that allows for the free flow of sewage by gravity.

Backwater valves may be installed on either the inside or outside of a building where the building sewer exits the building towards the municipal sewer main. A backwater valve's intent is to allow flow out of the building and prevent backflow of sewage or stormwater surges into the building. It is recommended that backwater valves are checked and maintained regularly to ensure proper operation by the homeowner.

Cleanouts are access points along the sewer pipe that allow for cleaning and inspection of the service.

Guidance provided in this document is for standard gravity sewer service connections with connection to existing systems in the house or just outside. Connection downstream of existing septic holding tanks (prior to entering septic fields) may be feasible for some residents (depending on the existing setup), but is generally recommended against. For most cases, connection upstream of the septic tank is recommended by the MD as the septic tank must be brought up to code requirements and additional atypical requirements may apply. Applications proposing such systems will require more in-depth one-off review. This may entail modifications such as changes to outlet connection, installation of insulation, and changes to ground cover. For most cases, it would still be necessary for owners to clean their tanks over their lifetime to prevent blocking of the outlet.



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Private Sewage System Installers are qualified to make assessments and complete these installations and should be consulted regarding individual properties. Should an owner wish to proceed with the installation of such a system under the direction of a certified contractor, additional permitting and inspection requirements may be applicable.

Septic Tank Effluent Pumping (STEP) Systems retrofits are not recommended within the Hamlet of Beaver Mines due to anticipated increased installation and operational costs. Such systems would require additional in-depth review by the MD and its representatives to ensure feasibility with the gravity septic system.

3.2 MATERIAL

3.2.1 PIPING

Refer to the National Plumbing Code for acceptable service piping materials. Recommended material is PVC. On drilled locations with adequate slope to avoid ponding, HDPE could also be used. If the service piping differs from the municipal connection or building piping, the fitting used to join the dissimilar pipe materials shall be designed to accommodate the required watertight transition.

Wastewater Service Lines at property edge are shown on the Site Plan's sent to Hamlet of Beaver Mines property owners and are 100mm for all properties. Some owners may require or have different Private Drainage Line sizes. Private Drainage Lines shall be 100mm or larger and sizing shall be per National Plumbing Code requirements and shall be designed appropriate for the expected flows from the development.

3.2.2 BACKWATER VALVES

Backwater Valves must meet the requirements of the National Plumbing Code and are mandatory for most installations. Backwater valves must be of a normally open design to allow the passage of air under normal operating conditions. Adapt-A-Valve's and equivalent are acceptable backwater valves for external use.

3.2.3 CLEANOUTS

Cleanouts must meet the requirements of the National Plumbing Code. Backwater valves may be installed to act as cleanouts.

3.2.4 BEDDING

Contractors are responsible to verify ground conditions and appropriate bedding material.



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Bedding materials for pipes in sound dry solids is recommended to be Zone 3 sand. For saturated soil (wet areas), crushed/washed Zone 7 granular gravel with hard, durable particles are recommended.

Bedding material shall be compacted to 95% standard proctor density with a moisture content of -1 to +2%, a nominal 300mm cover, 2x pipe OD trench width, and minimum 75mm trench depth below pipe material.

Gradation limits shall be as specified in the table below.

Granular Material Type	Sieve Size	% Passing By Weight
Zone 3 Sand – A combined coarse – fine filter material typically used as a bedding material for concrete slabs, pipe and similar structures:	40 mm	100
	20 mm	50 – 95
	5 mm	25 – 65
	0.530 mm	6 – 29
	0.315 mm	2 – 20
	0.08 mm	0 – 10
Zone 4 – A well graded gravel material typically used as a bedding material:	20 mm	100
	10 mm	20 – 60
	5 mm	5 – 30
	2 mm	2 – 10
Zone 7 – Wash Rock – typically used when specified as bedding material in extremely wet or unstable conditions:	20 mm	100
	10 mm	35 – 95
	5 mm	5 – 25
	2 mm	0 – 10
Zone 9 – Bedding and Haunching Material – A well graded crushed angular gravel material (Percent fractures by weight will be 50% or greater):	20 mm	100
	10 mm	20 – 60
	5 mm	5 – 30
	2 mm	2 – 10



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UTILITY SERVICES GUIDELINES

Approved by CAO

Date: April, 2024

3.3 INSTALLATION

3.3.1 PIPE SLOPE

Private Drainage Line piping is recommended to be installed with a minimum downward slope of 2.0% in the direction of flow. Where this cannot be achieved, the minimum slope may be reduced to 1.0% provided the hydraulic load is within the limits identified in the National Plumbing Code.

The National Plumbing Code does not specify a maximum slope. However, it is Contractors responsibility to ensure the installation is completed appropriately to ensure solids do not separate from liquids and vertical drops are provided as required.

3.3.2 CLEANOUTS

Cleanouts must be installed to permit cleaning of the entire Wastewater Service Line. On service piping that is at an angle of less than 45 degrees with the horizontal, cleanout shall be installed per the spacing requirements shown in National Plumbing Code Table 2.4.7.2.

It may be necessary to use fittings to accommodate changes in direction of the Private Drainage Line. Cleanouts on 150mm diameter and smaller services are required at every cumulative change in direction more than 45°. Bends and elbow radius' shall be per National Plumbing Code requirements.

Cleanouts are recommended near property line prior to connecting with Wastewater Service Lines to assist with delineating the location of future blockages. This is not a mandatory requirements.

3.3.3 BACKWATER VALVES

Backwater Valves shall be installed in accordance with the requirements of the National Plumbing Code. It is recommended that backwater valves be installed in locations that are easily accessible for maintenance. Backwater valves installed underground are recommended to allow for ground level access to remove the seat and gate from the ground level regardless of depth.

3.3.4 OTHER

Roof leaders and building foundation drains are not permitted to be connected to the Wastewater System. There must be no potential for water/waste from cross-connection per Section 4 to enter into the Private Drainage Line.



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Date: April, 2024

4 EXISTING SYSTEM DECOMMISSIONING REQUIREMENTS

4.1 WATER SUPPLY

4.1.1 OVERVIEW

There must be no potential for cross-connection at any time with newly installed Private Water Lines flowing into the municipal system. This includes, but is not limited to: Any potential connection of piping fixture, fitting container, or appliance to piping connected to the Water Service that may allow backflow to occur, including but not limited to: swivel or changeover devices, removable sections, jumper connections, and bypass arrangements. Connections to water wells, cisterns/tanks, etc. that would provide a potential means of backflow into the Private Water Line and therefore the Water Service Line are strictly prohibited.

Refer to Bylaw *1344-22 Schedule B Section 3 and Part IV* and for further details on Alternate Water Supply and Cross Connection regulations.

4.1.2 WATER WELLS

4.1.2.1 OVERVIEW

The MD does not regulate abandonment/relicensing of water wells. The MD does not have any compliance and enforcement rights under the utility bylaw regarding abandonment/relicensing water wells. The guidance below is provided for owner's awareness based on provincial regulation.

4.1.2.2 ALBERTA ENVIRONMENT & PROTECTED AREAS GUIDANCE

Per the definition of a household user in *Water Act Section 23(2)* and *Water (Ministerial) Regulation Section 8*, any owners whom currently have a water well to which a Household Right is claimed but are entitled to receive water through a pipeline for Municipal purposes, lose this right.

Alberta Environment and Protected Areas (AEP) regulation states that well owners shall reclaim their well or relicense the well for another purpose. AEP strongly recommends reclamation of wells as opposed to relicensing. There are costs associated with gathering the data required to apply for relicense, and AEP has indicated that if the well was not drilled to current licensing requirements (as most older wells would not be), it is likely the application gets rejected.



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AEP recommends wells be reclaimed as soon as reasonably practical. At time of publication of these USG's, the MD is not aware of any legislative requirement regarding specific timeframes required for reclamation.

4.1.2.2.1 RECLAMATION

AEP strongly encourages owners to use a water well driller or a company with a licensed water well driller to seal wells to prevent potential surface water contamination from entry into the aquifer.

The Alberta Government *Water wells and ground source heat exchange systems directive Section 3.7* outlines the requirements for water well reclamation. Licensed water well drillers can provide direction regarding the process for reclamation, if desired.

4.1.3 CISTERNS, STORAGE TANKS

4.1.3.1 OVERVIEW

There is no mandatory requirement to reclaim or abandon cisterns and storage tanks.

Cisterns and storage tanks may be re-used for non-household water supply purposes such as rainwater catchment for irrigation, provided there is no possibility for cross connection with the municipal water system.

Owners must not redirect any water from re-purposed cisterns and storage tanks (including storm water or surface water) to enter the private drainage line and wastewater system. Only domestic wastewater from normal human living processes is permitted.

4.1.3.2 RECLAMATION

Owners whom choose to reclaim their cistern are recommended to either remove the cistern completely or fill it with sand or another suitable material to prevent the potential for future cave-in or groundwater induced flotation. Abandoning in place would typically involve:

- The bottom of the tank can be ruptured to allow drainage of any future potential groundwater. The tank should be fractured in a way that allows groundwater to migrate and drain into the surrounding soil and not have the ability to accumulate in the empty tank. The top of the tank should be crushed and left inside the empty tank or removed and disposed of properly. The empty tank void should be backfilled with a suitable fill material and mechanically compacted
- Mounding and grading the soil over reclaimed system to prevent surface water ponding. The immediate reclaimed area may be required to be landscaped to blend with the adjacent landscape



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It is also recommended to retain records documenting the proper reclamation of the cistern.

4.1.4 WATER TREATMENT DEVICES

The MD strictly prohibits water treatment devices that exchange naturally-occurring minerals in water with salt or any other chemical in the process called ion exchange (also known as Ion Exchange Water Softeners).

Owners must disconnect treatment devices fully prior to connection to the water and wastewater systems. This is a prerequisite to connection to the water system.

4.2 WASTEWATER (SEWAGE) SYSTEMS

4.2.1 OVERVIEW

No owner shall continue to use a Private Wastewater Disposal System once connected to the municipal system. During construction and final connection, flow from a private system must not be allowed to connect to the municipal wastewater system.

Refer to Bylaw *1344-22 Schedule C Section 3* for further details on Alternate Wastewater Systems.

For other types of wastewater systems (outside of septic/holding tanks and fields), owners and/or contractors shall reach out to Alberta Governments Municipal Affairs; Private Sewage division or a licensed Private Sewage Installer for guidance regarding reclamation.

4.2.2 SEPTIC/HOLDING TANKS AND FIELDS

4.2.2.1 OVERVIEW

Septic tanks and fields must not be connected to the municipal wastewater system. Owners shall agree to reclaim their septic tank, and indicate the timeline after connecting to the wastewater system in which they commit to do so.

Private septic tanks must not be connected to the municipal wastewater system unless authorized and permitted by a Private Sewage Installer.

An abandoned system that is not reclaimed or removed in an appropriate manner can pose a safety and environmental concern and is not permissible under the MD Utility Bylaw.



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4.2.2.2 RECLAMATION

Owners shall ensure the following guidance is met when reclaiming septic or holding tanks:

- Remove all solid and liquid contents from the tank(s) with an approved waste disposal company (sewage vacuum truck). Once the tank has been emptied, the tank and associated components should be flushed with clean water. All cleaning water should also be removed and disposed of by the waste disposal company. At this point, the owner may either:
 - Remove the empty and flushed sewage tank(s) and associated system contents from the site. The excavated tank should be disposed of at an approved landfill. The remaining excavated pit should be backfilled with a suitable fill material (preferably sandy or gravelly soil) and mechanically compacted
 - Abandon in place. The bottom of the tank can be ruptured to allow drainage of any future potential groundwater. The tank should be fractured in a way that allows groundwater to migrate and drain into the surrounding soil and not have the ability to accumulate in the empty tank. The top of the tank should be crushed and left inside the empty tank or removed and disposed of properly. The empty tank void should be backfilled with a suitable fill material and mechanically compacted
- Mound and grade the soil over reclaimed system to prevent surface water ponding. The immediate reclaimed area may be required to be landscaped to blend with the adjacent landscape
- Retain records documenting the proper disposal of the wastewater (sewage) and the septic system (tanks and equipment)

Downstream final septic field treatment components do not require removal unless that specific area is being considered for another use. If the area is planned to be reused for another purpose, the non-organic materials (piping, chambers, filter cloth, etc.) should be removed and disposed of at an approved landfill. Organic material such as gravel, sand, organic fabrics, etc. can be left in place at the site.

For sites with historical industrial or commercial use, consideration should be given to the potential pollutants of concern in relation to the operations, to rule out a history of improper disposal methods (e.g. metals, VOCs, PHCs, etc.).



David Desabrais
Utilities & Infrastructure Manager



Roland Milligan
Chief Administrative Office



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UTILITY SERVICES GUIDELINES

Approved by CAO

Date: April, 2024

HOMEOWNER/CONTRACTOR APPLICATION FORM



M.D. OF PINCHER CREEK NO. 9

BEAVER MINES PRIVATE SERVICE CONNECTION APPLICATION FORM

Form Update Date: April, 2024

I, _____ and _____

Being the registered property owner(s) of the property located at:

Municipal Address: _____

Legal Address (if known): _____

I confirm the following as part of our request to connect to the Beaver Mines Water & Wastewater System:

1. I am (one of) the legal owner(s) of the property.
2. The property is the following type as described and **as defined in the Land Use Bylaw No. 1289-18 MD of Pincher Creek Land Use Bylaw 1289-18 (mdpinchercreek.ab.ca)**
 - Hamlet Single-Detached Residential 1
 - Hamlet Residential 2
 - Hamlet Commercial
 - Hamlet General Industrial and Warehousing
 - Hamlet Highway Commercial
 - Hamlet Public and Institutional
 - Other [Click or tap here to enter text.](#)
(Describe)

**The application will be reviewed to confirm the description of dwelling and land zoning.*

3. Concurrent with this Application, I am taking responsibility to arrange construction and payment for the work required on my property to connect the private water and private drainage lines in accordance with the requirements laid out in Bylaw 1344-22 (<https://mdpinchercreek.ab.ca/docs/files/bylaws/Bylaw%201344-22%20Utilities.pdf>) and the accompanying Utility Service Guidelines.
 Check this box to confirm
4. I understand that there may be no potential for cross-connection at any time with newly installed private water lines served from the municipal system. Connections to cisterns/tanks are strictly prohibited without proper cross connection control. I understand that cisterns and tanks may be reused for other purposes provided they do not connect to both the private water and private drainage lines. I take responsibility to arrange a plan for my existing cistern/tank (if applicable) with my Contractor.
 Check this box to confirm



5. I agree that I am taking responsibility to arrange construction and payment for the work required on my property to reclaim my existing sewer infrastructure (if applicable). I understand that I shall no longer be entitled to use my private septic tank (if applicable) upon connection to the municipal water and wastewater systems and that I may be held liable for any safety and environmental concerns related to delayed reclamation.

I plan to reclaim my septic/holding tank and field within:

___ days/months (circle one) of connecting to municipal water and wastewater

N/A

6. I understand that an approved application form DOES NOT constitute approval to connect to the MD curbstops and stubbed sewer connection or to backfill excavated works. I must not connect to the curbstops and stubbed sewer connection until explicitly authorized by the MD in writing to do so (or until an initial inspection as been completed and fully passed).

Check this box to confirm

**If there is any doubt or confusion, DO NOT connect to the MD's infrastructure and DO NOT backfill until authorized in writing to do so. Failure to comply will result in multiple fines to residents under Bylaw 1344-22 and excavation of backfilled works at resident cost.*

7. I understand that all work related to my private water and private drainage lines shall be completed on private property. I understand that the MD is not the owner of adjacent Utility Right of Way's (UROW), and that direct approval from landowners is required to use any adjacent UROW's on private land. Any use of UROW, MD owned property or roadway, including, but not limited to excavation, soil storage, material storage, and equipment operation shall be completed on private property unless explicitly agreed to with the MD and/or private landowners in writing beforehand.
8. I understand that water treatment devices that exchange naturally-occurring minerals in water with salt or any other chemical in the process called ion exchanged (Ion Exchange Water Softeners) are strictly prohibited and that I take responsibility to ensure that these systems (if applicable) are fully disconnected prior to connection to the private water and drainage lines.
- Check this box to confirm**
9. I will be responsible to hire a Contractor to design and install the Service Connection to be located on my property. A list of pre-qualified contractors is available on the MD website. The MD does not require use of pre-qualified contractors. I take responsibility for the work done on my property regardless of whether a pre-qualified contractor or a contractor of my choice is used.
10. I will be responsible to sign a contract to hire a Contractor and to ensure that all fees pertaining to design, permits, construction, and warranties for the private water and drainage lines are included within the contract with the Contractor.



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BEAVER MINES PRIVATE SERVICE CONNECTION APPLICATION FORM

Form Update Date: April, 2024

11. I indemnify and hold harmless the MD, MD's employees, and its agents from any and all actions, claims, demands and costs whatsoever, arising directly or indirectly, out of any act or omission of myself, the contractors or their agents, with respect to work being carried out on private property.
12. I further confirm that the MD of Pincher Creek is not liable for the private water and drainage lines nor the work performed by the Contractor nor the future maintenance and repair costs for the private water and drainage lines. Should damage to Water or Wastewater Service Line prior to the curb stop be caused by the negligence or improper action of the Customer, the Customer shall be responsible for, and shall pay associated costs.
13. I understand that pursuant to the Bylaw 1344-22, the MD will consider my application, when complete, to assess the qualification of the owner(s) and eligibility of the property for participating in connection and may reject applications.
14. I understand that I shall not extend or permit the extension of my Private Water Line, Private Drainage Line or any other Customer-owned piping, equipment or other assets that are connected directly or indirectly to the Water System or Wastewater System, beyond the Property in respect of which they are used to supply Utility Services through a Service Connection.
15. I understand that in the event that I subdivide the parcel of land to which water is supplied hereunder, this Agreement shall apply to that portion of the subdivided land upon which the point of delivery is located. Water service shall only be available to the other subdivided parcel or parcels pursuant to new Customer Contract or Contracts.
16. **In addition to my Private Service Connections, I confirm that my property also requires new construction of Water and Wastewater Lines from my property line to the MD's Water and Wastewater Mains (i.e. curbstop connections do not exist. N/A for majority of properties in Beaver Mines):**
 Check this box if applicable

If (16) is applicable, please confirm acceptance of 17-22. Otherwise this section is not applicable (N/A for most Beaver Mines properties):

17. I understand that pursuant to Bylaw 1344-22 The MD shall provide and install all Facilities up to the property line, but the Customer shall be responsible for, and shall pay, for the provision and installation of the Water Service Line or Wastewater Service Line as set out within Schedule "E" (*Actual cost incurred by the MD in relation to the connection, plus 5%*).
18. I understand that the MD retains ownership of all Facilities necessary to provide Utility Services to a Customer, up to the property line, as well as the Curb Stop and Meter even if located on the Customer's Property, unless a written agreement between the MD and a Customer specifically provides otherwise.



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BEAVER MINES PRIVATE SERVICE CONNECTION APPLICATION FORM

Form Update Date: April, 2024

19. I require the following sized Water and Wastewater Service Lines:
____mm Water Service Line (Diameter), installed at a depth of ____m
____mm Wastewater Service Line (Diameter), installed at a depth of ____m
20. My requested installation date is:
_____mm/dd/yyyy
21. I intend to construct my private water and private drainage line before or after the Water and Wastewater Service Line installation(s):
 Private Connection to Property Edge Completed First
 Municipal Connection from Main to Property Edge Completed First
22. In accordance with Bylaw 1344-22, I have agreed that upon installation of the Water and Wastewater Service Line, I SHALL PAY AN ESTIMATED (\$_____) TO THE MD for the full cost recovery of installation + 5%, per (16). The cost (per Section 16) will be billed on my utility bill per the MD Bylaw 1344-44, Schedule E, Sec. 2.
-

Signed in the _____ in the Province of _____ this ____ day of _____,
202__ (Town/Hamlet)

Owner 1)

Owner 2)

(full name – print)

(full name – print)

Signature: _____

Signature: _____

OPTIONAL: I authorize my selected contractor _____ to act on my behalf (or represent me) during the remainder of the application and construction process.

Signature: _____

Please be aware of any risks involved with sharing personal/private information.



M.D. OF PINCHER CREEK NO. 9

BEAVER MINES PRIVATE SERVICE CONNECTION APPLICATION FORM

Form Update Date: April, 2024

ATTACH FILLED SITE PLAN



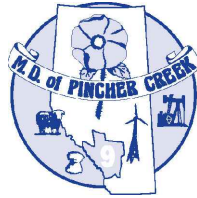
M.D. OF PINCHER CREEK NO. 9
UTILITY SERVICES GUIDELINES

Approved by CAO

Date: April, 2024

APPENDIX A: SAMPLE SITE PLAN

ADDRESS XXX - 1st AVENUE
 LOT # XX THROUGH XX
 BLOCK # XX
 PLAN # XXXX AL



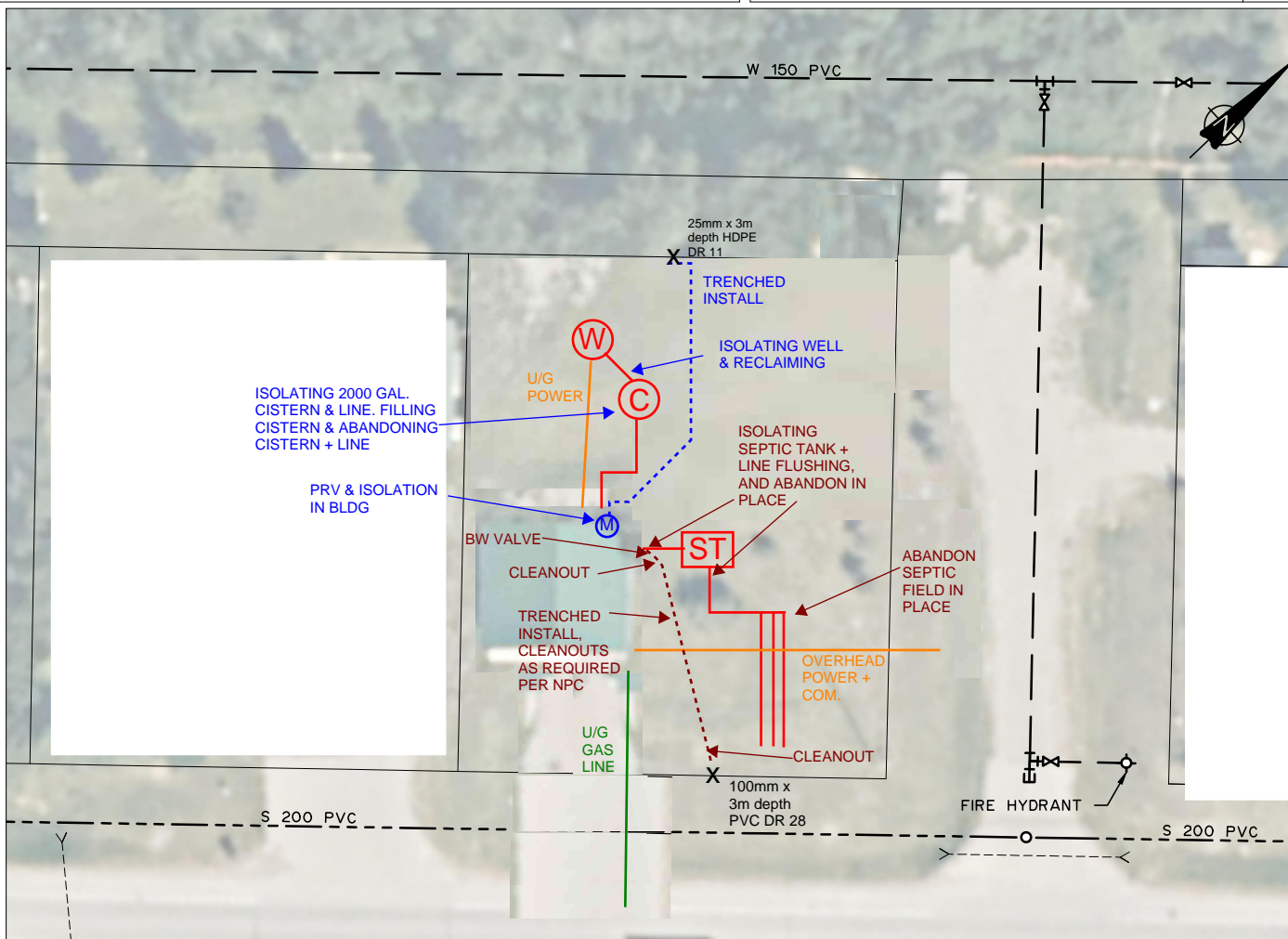
**BEAVER MINES
 DISTRIBUTION AND COLLECTION SYSTEM
 SERVICE CONNECTION SITE PLAN**

OWNER JANE DOE
 PHONE # XXX XXX XXXX
 CELL # XXX XXX XXXX
 EMAIL janed@xx.com

INDICATE LOCATION, SIZE, DIMENSIONS, DEPTH, SLOPE, AND OTHER DETAILS OF THE FOLLOWING ITEMS ON THE SITE PLAN PROVIDED:
 A) EXISTING SEPTIC SYSTEM
 B) EXISTING WATER SERVICE LOCATIONS OR WATER WELLS (IF ANY)
 C) EXISTING WASTEWATER DISPOSAL SYSTEMS/TANKS

EXISTING SEPTIC TANK ON PROPERTY (Y/N)	Y
EXISTING SEPTIC FIELD ON PROPERTY (Y/N)	Y
EXISTING CISTERN ON PROPERTY (Y/N) 2,000 gallon U/G	Y
EXISTING WATER WELL ON PROPERTY (Y/N)	Y

CONTRACTOR:	CONTRACTOR LTD
CONTRACTOR REPRESENTATIVE:	JOHN DOE
CONTRACTOR PHONE #:	XXX XXX XXXX
CONTRACTOR EMAIL:	johnd@xx.com



NOTE: THIS IS AN EXAMPLE SITE LAYOUT AND NOT INTENDED TO BE REPRESENTATIVE OF ACTUAL POWER/GAS LOCATIONS OR EXISTING INFRASTRUCTURE. NOT TO BE USED AS A GUIDE FOR SPACING/LOCATING EQUIPMENT, CLEANOUTS, ETC. USG AND NPC GUIDELINES APPLY



M.D. OF PINCHER CREEK NO. 9
UTILITY SERVICES GUIDELINES

Approved by CAO

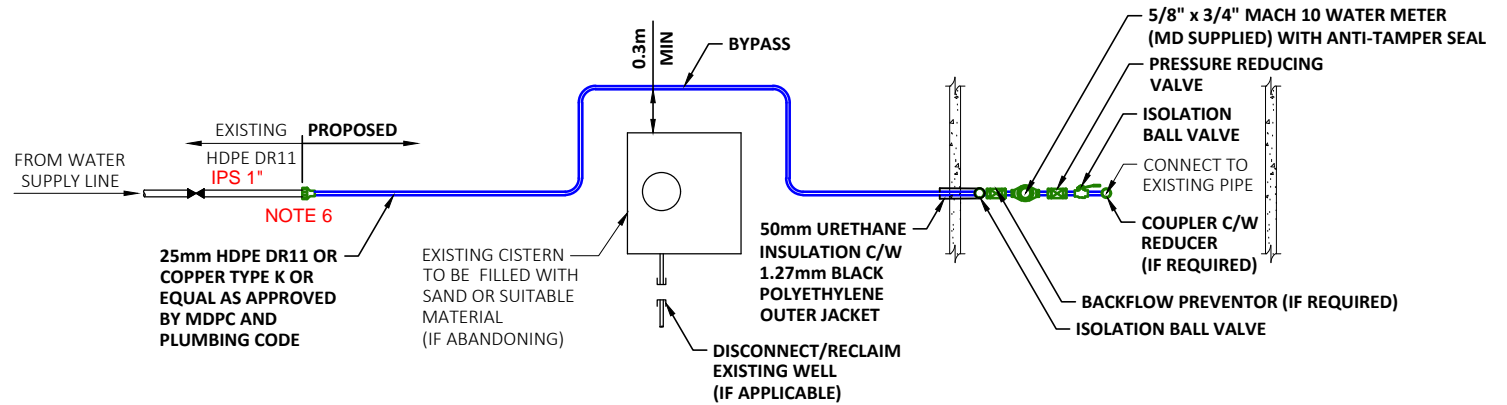
Date: April, 2024

APPENDIX B: STANDARD DRAWINGS

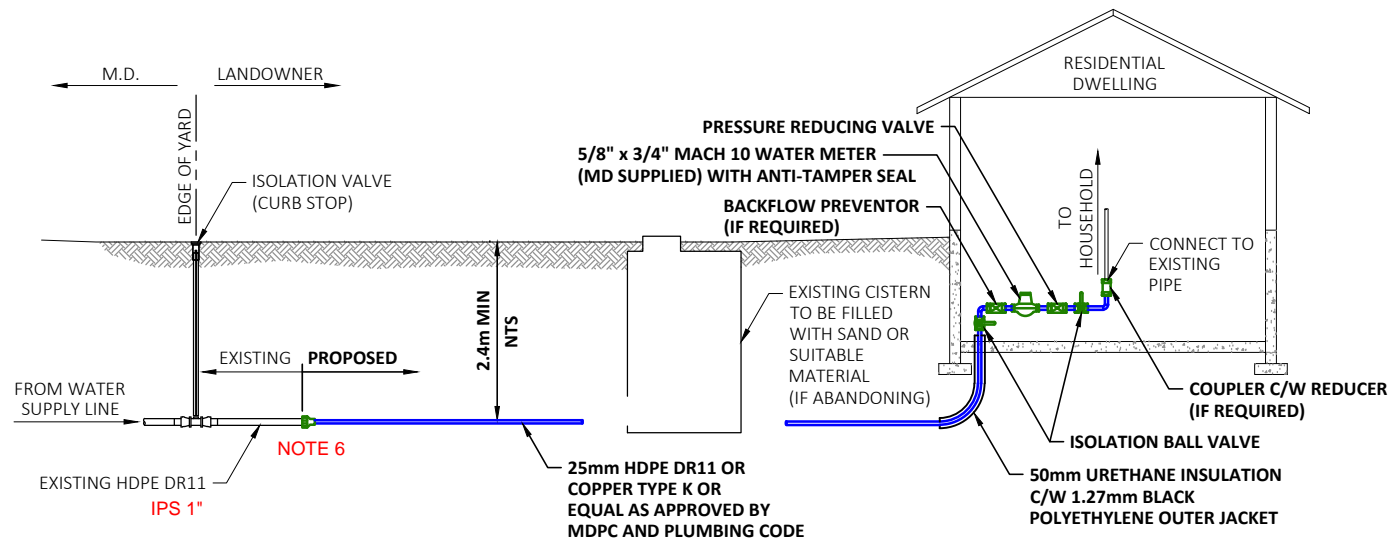
GENERAL NOTES:

1. DIAMETER OF SERVICE PIPE TO BE UNIFORM FROM CURB STOP TO WATER METER.
2. MINIMUM COVER OVER SERVICE PIPES TO BE 2.4m AS SHOWN.
3. SERVICE CARDS TO SHOW ELEVATION AND LOCATION OF SERVICE FITTINGS.
4. UTILITY LOCATES AND WORKING WITH SUBSURFACE CONDITION AS THEY ARE FOR EACH LOT ARE THE RESPONSIBILITY OF THE CONTRACTOR.
5. WATER AND SANITARY SERVICE LINES ARE SHOWN IN SEPARATE TRENCH FOR ILLUSTRATION PURPOSE ONLY. SOME OWNERS MAY BE ABLE TO LOCATE IN THE SAME TRENCH PROVIDED SPACING REQUIREMENTS ARE MET.

6. DEPENDING ON CHOSEN PRIVATE WATER LINE & MATERIAL, A SPECIALIZED "PHILMAC" STYLE COMPRESSION FITTING WITH APPROPRIATE SIZED INSERT MAY BE REQUIRED TO CONNECT TO MUNICIPAL STUBBED HDPE DR11 IPS 1" WATER SERVICE LINE. BARBED FITTINGS NOT ACCEPTABLE



PLAN VIEW



ELEVATION VIEW

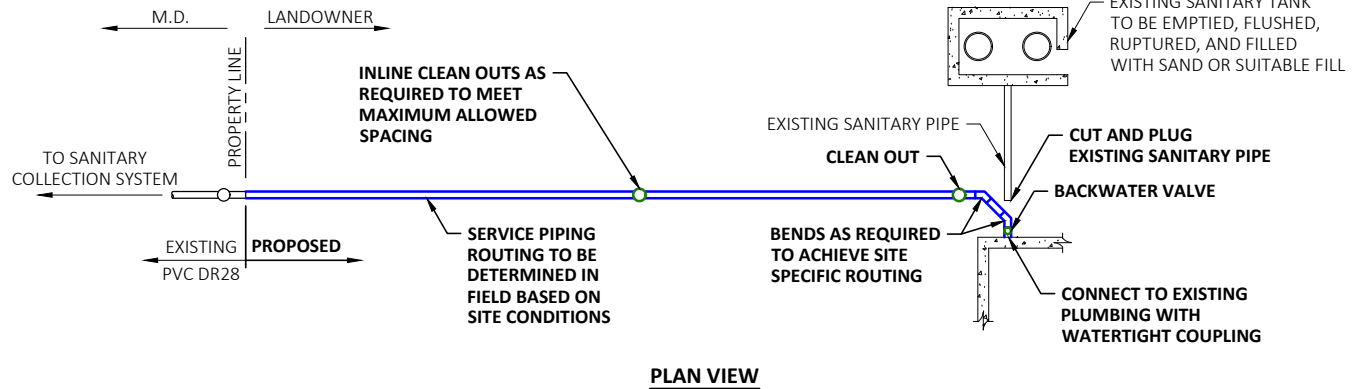


MUNICIPAL DISTRICT OF PINCHER CREEK
BEAVER MINES
DISTRIBUTION AND COLLECTION SYSTEM
FULL PRESSURE SERVICE
TYPICAL CONNECTION

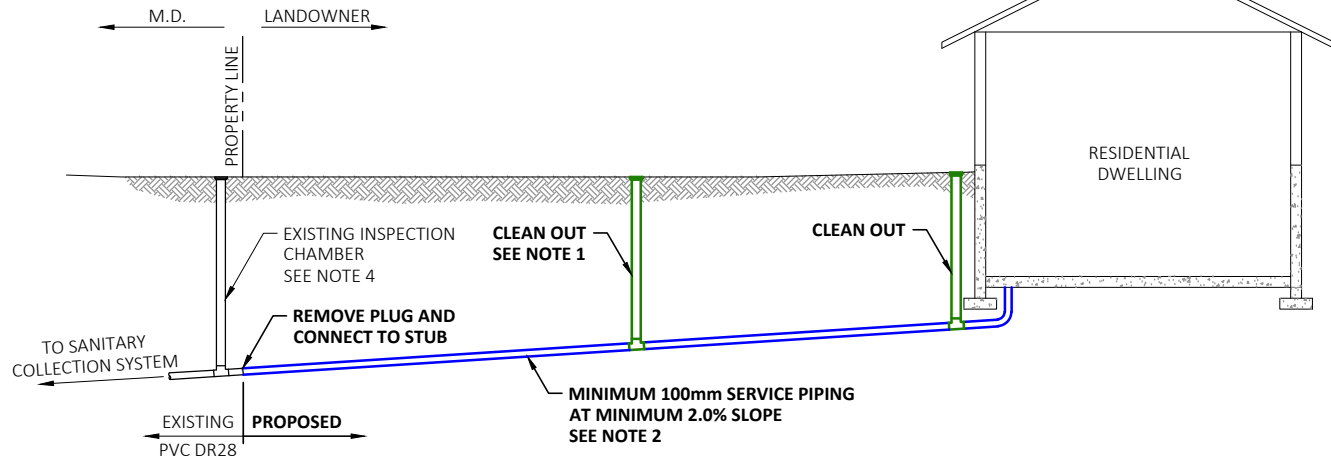
SCALE:	NTS	DATE:	APRIL 2023	JOB:	1770-018-02	FIGURE:	1
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GENERAL NOTES:

1. CLEAN OUTS AS REQUIRED BASED ON SITE SPECIFIC ROUTING. SEE CONNECTION GUIDELINES AND NATIONAL PLUMBING CODE FOR CLEANOUT SPACING REQUIREMENTS.
2. WHERE 2.0% SLOPE CANNOT BE ACHIEVED, THE MINIMUM SLOPE MAY BE REDUCED TO 1.0% PROVIDED THE HYDRAULIC LOAD IS WITHIN THE LIMITS IDENTIFIED IN THE PLUMBING CODE.
3. MINIMUM COVER OVER SERVICE PIPES TO BE 2.4m. INSULATION REQUIRED WHERE THIS CANNOT BE ACHIEVED.
4. INSPECTION CHAMBERS MAY NOT EXIST ON ALL EXISTING SERVICE STUBS.
5. UTILITY LOCATES AND WORKING WITH SUBSURFACE CONDITIONS AS THEY ARE FOR EACH LOT ARE THE RESPONSIBILITY OF THE CONTRACTOR.
6. WATER AND SANITARY SERVICE LINES ARE SHOWN IN SEPARATE TRENCH FOR ILLUSTRATION PURPOSE ONLY. SOME OWNERS MAY BE ABLE TO LOCATE IN THE SAME TRENCH PROVIDED SPACING REQUIREMENTS ARE MET.



PLAN VIEW



ELEVATION VIEW



MUNICIPAL DISTRICT OF PINCHER CREEK
BEAVER MINES
DISTRIBUTION AND COLLECTION SYSTEM
GRAVITY SANITARY SERVICE
TYPICAL CONNECTION

SCALE: NTS

DATE: APRIL 2023

JOB: 1770-018-02

FIGURE: 2



M.D. OF PINCHER CREEK NO. 9
UTILITY SERVICES GUIDELINES

Approved by CAO

Date: April, 2024

APPENDIX C: PRIVATE SERVICE CONNECTION CHECKLIST



BEAVER MINES PRIVATE SERVICE CONNECTION CHECKLIST

Approved by CAO

Date: April, 2024

1 FULL PRESSURE PRIVATE WATER LINE CHECKLIST

1.1 PRIVATE WATER LINE PIPE SIZE

Contractor | Inspector

| For single house, Service Connection is equal to or greater than 25 mm. If other development type, Service Connection was designed by a qualified plumber or consultant according to the water consumption and was found to be _____ mm

1.2 PRIVATE WATER LINE CONNECTION TRENCH

- | Pipe cover is at least 2.4m
- | All pipe installed with less than 2.4m cover has insulation installed per NPC guidelines
- | Separation between water and other services in the same trench is minimum 0.3 m
- | Bedding material for open cut pipes is Zone 3 sand or Zone 7 granular material (if wet)

1.3 PRIVATE WATER LINE PIPE MATERIAL

- | Copper pipe type K, annealed with standard brass coupling
- | High Density Polyethylene DR 11 (HDPE) marked with continuous blue stripe (AWWA C-900-81)
- | Polyvinyl Chloride DR 18 (PVC) (AWWA C-900-81)
- | Muncipex rated to 1,105 kPa @ 23°C (AWWA C800)
- | Approved equal as noted (please specify _____)

1.4 PRIVATE WATER LINE CONNECTION FITTINGS

- | (If installed) Back flow preventer type _____
- | Valves (AWWA C509 or AWWA C515)
- | PVC fittings – CSA B137 (Class 137), AWWA C900
- | Municipal Connection Adapter from HDPE DR 11 1” IPS (Barbed adapter not allowed)
- | Valves are installed according to the standard detail
- | PRV installed to protect house plumbing

2 GRAVITY PRIVATE DRAINAGE LINE CHECKLIST

2.1 PRIVATE DRAINAGE LINE SIZE

- | For single house, Service Connection is equal to or greater than 100mm
- | For duplex, triplex, or fourplexes was designed by a qualified plumber or consultant according to the water consumption and was found to be _____ mm

2.2 PRIVATE DRAINAGE LINE CONNECTION TRENCH

- | Pipe cover is at least 2.4m
- | All pipe installed with less than 2.4m cover will require insulation per NPC guidelines
- | Private Drainage Line is installed with a positive slope of minimum 2% or 1% where this cannot be achieved



BEAVER MINES PRIVATE SERVICE CONNECTION CHECKLIST

Approved by CAO

Date: April, 2024

- | Separation between wastewater and other services in the same trench is minimum 0.3m
- | Bedding material for open cut pipes is Zone 3 sand or Zone 7 granular material (if wet)

2.3 PRIVATE DRAINAGE LINE PIPE MATERIAL

- | High Density Polyethylene DR 11 (HDPE) (AWWA C-901) with light colour interior
- | PVC SDR 35 (minimum) (CSA-B182.2) integral locked-in gasket bell and spigot joints
- | ABS SCH. 40 DWV. NPC 2020. Division B sec.2.2.5.9.,2.2.5.10 and 2.2.5.11
- | Approved equal as noted (please specify _____)

2.4 PRIVATE DRAINAGE LINE CONNECTION FITTINGS

- | Backwater flow valve is installed and normally open design to allow the passage of air under normal operating conditions (Type: _____)
- | Cleanouts are installed and meet the requirements of the National Plumbing Code
- | Cleanout at property edge (not mandatory)

3 FINAL CONNECTION CHECKLIST

Contractor | Inspector

- | MD Application submitted and approved
- | Plumbing permit(s) submitted and approved
- | Drawings and specifications on site
- | Superior plumbing approval received, on-site¹
- | Ion Exchange Softeners non-existent or confirmed disconnected
- | Private Water and Drainage Lines flushed and free of sediment or rocks
- | Building heated
- | No cross-connection on Private Water Line to existing setups
- | No connection on Private Drainage Line to existing pressurised setups, septic fields, or any other non-household water supply such as building foundation drains and roof leaders
- | MD supplied Water Meter installed, in proper direction, in heated area and/or insulated, with plastic anti-tamper seal

Once this section has been completed by the Contractor, an inspection may be arranged with Superior Safety Codes. **Contractors shall not complete connection to the MD water curb stop and wastewater stubbed connection until this section and the associated inspection has been completed.**

¹NOTE: Depending on timing of installations, water allowance in the Hamlet, and deficiencies, there may be cases, which require multiple inspection visits to closeout this mandatory checklist. The MD reserves the right to allow connection and turning on water temporarily for testing/inspection purposes as required prior to final inspection completion.



M.D. OF PINCHER CREEK NO. 9

BEAVER MINES PRIVATE SERVICE CONNECTION CHECKLIST

Approved by CAO

Date: April, 2024

3.1 EXISTING SYSTEMS & FINAL APPROVAL

Contractor | MD

- | Existing septic tank (if applicable) decommissioned, or plan in place to decommission
(Details: _____)
- | Water Pressure Testing information on-site¹
- | Private Drainage Lines flow test complete
- | Tie-in to MD Service Connections inspected prior to backfill

ADDITIONAL NOTES:

Owner 1)

(full name – print)

Signature: _____

(Date)

Owner 2)

(full name – print)

Signature: _____

(Date)

Contractor (if authorized to act on behalf)

(full name – print)

Signature: _____

(Date)

Inspector

(full name – print)

Signature: _____

(Date)

MD Approval

(full name – print)

Signature: _____

(Date)

Water on-date:



M.D. OF PINCHER CREEK NO. 9
UTILITY SERVICES GUIDELINES

Approved by CAO

Date: April, 2024

APPENDIX D: FLOW CHART FOR CONNECTION

OWNER

CONTRACTOR

INSPECTOR

MDPC

START

OBTAIN QUOTE(S) FOR DESIGN & CONSTRUCTION

OPTIONAL: COMPLETE PRE-QUALIFICATION

SUBMIT QUOTATION

FILL APPLICATION FORM

APPROVE / DENY

APPROVE / DENY

A

D

ENTER AGREEMENT WITH CONTRACTOR

OPTIONAL: OBTAIN FINANCING

PREPARE & SUBMIT PLUMBING PERMIT APPLICATION
SUBMIT REQUEST FOR WATER METER

APPROVE / DENY

D

A

SUPPLY WATER METER

START CONSTRUCTION (EXCLUDING TIE-IN TO MD CURBSTOP)

SUBMIT CHECKLIST & BOOK INSPECTION WITH SUPERIOR & MD
COMPLETE INTERNAL CONNECTION TO WATER/SEWER (NO DISCHARGE ALLOWED)

APPROVE / DENY

D

A

COMPLETE WATER & SEWER TIE IN AT PROPERTY EDGE
RE-SUBMIT CHECKLIST TO MD

APPROVE / DENY

D

A

COMPLETE BACKFILL
BOOK VALVE TURNING

TURN ON WATER
COMPLETE CHECKLIST

ACKNOWLEDGE COMPLETION & PAY CONTRACTOR

NOTES: OBTAIN QUOTES & HIRE CONTRACTOR TO RECLAIM EXISTING SYSTEMS. NOT SHOWN ON FLOWCHART.

