



# Service Connections and Permitting Process

Operators Workshop

23-Sep-2023

# Service Connections – Water and wastewater laterals

- Residential buildings, industrial, commercial, etc. requiring water supply and wastewater collection from AFNWA systems.
- There is a need to start documenting connections to track/measure system capacity.
- A permitting process.

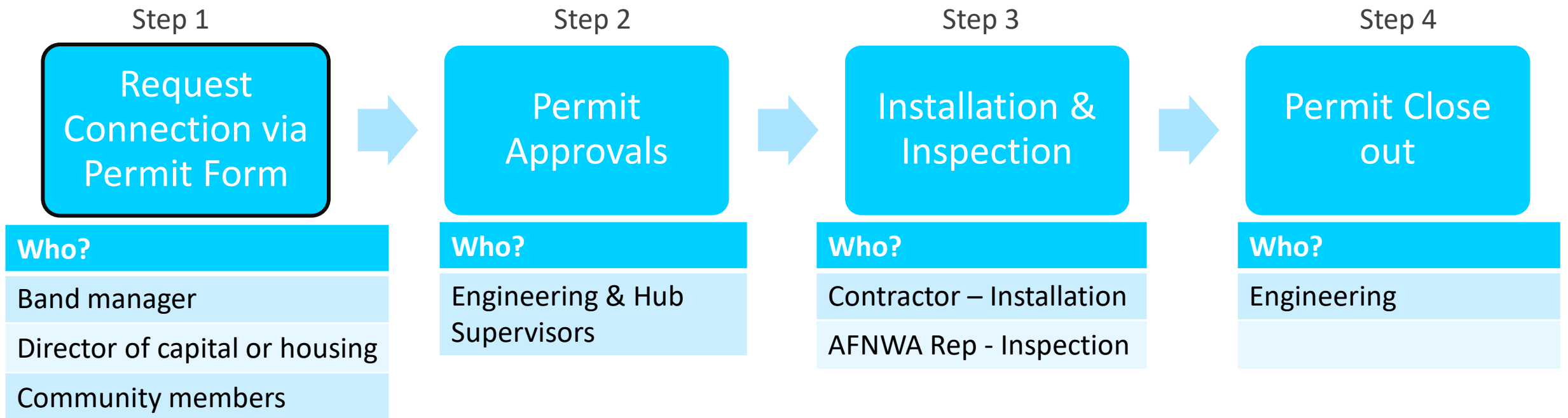
# Why do we need to track connections?

- Enables the management of the system's capacity.
  - Allows AFNWA to plan water and wastewater capacity upgrades required for future servicing, helping ensure:
    - good water pressure,
    - good sewer flows, and,
    - reduced effort to maintain systems around the year.

**“If you can't  
measure it,  
you can't  
manage it”**


# Permitting Process

- A process to document service connection.
- Folks needing a service connection would complete the Permit form.



# Request Connection - Permit Form

- Contact Information
  - Person requesting the permit
- Premise Information
  - Location requiring service and the type of connection.
  - Residential Single home units (8A) – we use fixture counts to calculate approximate peak flows.
  - Residential – Multi Unit (8B) – we use average daily consumption and apply a peaking factor for approximate peak flow.
  - Other situations (8C) we will use the calculated flow from the design. Typically for these we will have engineered drawings signed by a competent engineer.



## Permit Request

**Atlantic First Nations Water Authority Inc.**  
 13 Treaty Trail, Millbrook, NS, B6L 1W1  
 1 (902) 603 0312  
 Planning@AFNWA.CA  
 Doc# AFNWA-FRM-ENG-001/01 2023-07-24


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**How to Apply for a Permit**

Please complete this application and submit to [Planning@AFNWA.ca](mailto:Planning@AFNWA.ca) for approval.

For assistance contact AFNWA Engineering department:  
 Email: [Planning@AFNWA.ca](mailto:Planning@AFNWA.ca)  
 Phone: 1 (902) 603 0312

Atlantic First Nations Water Authority recommends completing online by scanning the QR code with your smart phone!



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**Your Contact Information**

1. First Nation (Select one)

<input type="checkbox"/> Bilijk	<input type="checkbox"/> Neqotkuk	<input type="checkbox"/> Glooscap	<input type="checkbox"/> Lennox Island
<input type="checkbox"/> Eskasoni	<input type="checkbox"/> Paqtnkek	<input type="checkbox"/> Potlotek	<input type="checkbox"/> Membertou
<input type="checkbox"/> Elsipogtog	<input type="checkbox"/> Pictou Landing	<input type="checkbox"/> Wagmatcook	<input type="checkbox"/> Millbrook

2. Full Name

3. Your Contact Phone Number

4. Your contact email

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**Premise Information**

5. Location/Address requiring service connection. List street No. and name or GPS coordinates.

6. Service Type (Select one) <input type="checkbox"/> New <input type="checkbox"/> Seasonal <input type="checkbox"/> Renewal <input type="checkbox"/> Construction	7. Service System (Select one) <input type="checkbox"/> Wastewater <input type="checkbox"/> Water & Wastewater <input type="checkbox"/> Water
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8. Type of premise requiring service connection (Select one)  
 Residential – Single Unit Home (Complete 8A)     Commercial/Institutions (Complete 8C)     Industrial  
 Residential – Multi Unit Complex (Complete 8B)     Recreational (Complete 8C)    (Complete 8C)

<b>8A. Residential – Single Unit Home</b> Number of bedrooms? <input style="width: 30px;" type="text"/> Number of toilets? <input style="width: 30px;" type="text"/> Total number of sinks, laundry tubs, and dishwashers? <input style="width: 30px;" type="text"/> Total number of water hose connections and outside sprinkler(s) systems? <input style="width: 30px;" type="text"/> Number of bathtubs (with/or without shower)? <input style="width: 30px;" type="text"/> Number of stand-up showers? <input style="width: 30px;" type="text"/> Number of clothes washers? <input style="width: 30px;" type="text"/>	<b>8B. Residential – Multi Unit Complex</b> Number of units in complex? <input style="width: 30px;" type="text"/> Total number of bedrooms in complex? <input style="width: 30px;" type="text"/>	<b>8C. Other</b> Daily Water Demand (m3/day) <input style="width: 30px;" type="text"/> Peak Water Demand (m3/hour) <input style="width: 30px;" type="text"/>
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# Request Connection - Permit Form Cont.

- Propose Work
  - Required by.
  - Describes potential clearance or interference issues.
  - We use the pipe information and distance to assess pressure loss.



## Permit Request

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**Propose Work**

9. When is the service connection required by?

10. Installation Sketch/Details  
Describe/draw all physical characteristics on, below, or within the property that may impact the installation of the service connection, installation, or repair. Attach drawings or notes to the permit if more space is required:

- Proposed location of service connection(s) to building.
- Location of driveways, retaining walls, and culverts.
- Future development - proposed driveway culverts, buildings, or any other structures.
- Location of existing water service connection & service box.
- Locations of underground gas, phone, and electrical utilities.
- Location of any wells, septic fields, and distance to the building.
- Any other significant features that could impact service line installation.
- Attach a drawing/note if needed.

**Water Line**  
Pipe Material:

Pipe Diameter:

**Sewer Line**  
Pipe Material:

Pipe Diameter:

Property Boundary

Civic #

Distance to Curb or Edge of Pavement

Street Name

# Request Connection - Permit Form Cont.

- Contractor information
  - The folks doing the installation.
- Administrative Section
  - Document administrative details i.e. permit#, approval date, and approver.
  - Documents inspection for the permit.



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Contractor/Installer Information	
11. Contractor Business Name <input type="text"/>	12. Contractor Contact Name <input type="text"/>
13. Contractor Phone Number <input type="text"/>	14. Contractor Email <input type="text"/>

**Done!**

Please submit the permit request to [Planning@AFNWA.ca](mailto:Planning@AFNWA.ca) for review and approval. If you do not get an email response with a permit request# (don't forget to check junk email!) please reach out to [Planning@AFNWA.ca](mailto:Planning@AFNWA.ca) for support.

**Friendly reminder:**  
 No connection to Atlantic First Nations Water Authority systems (mains) shall commence prior to permit approval. Permit submission is not an approval.

All service connections must be done in accordance with:  
 Atlantic First Nations Water Authority Inc. Service lateral installation requirements AFNWA-ENG-STD-001.

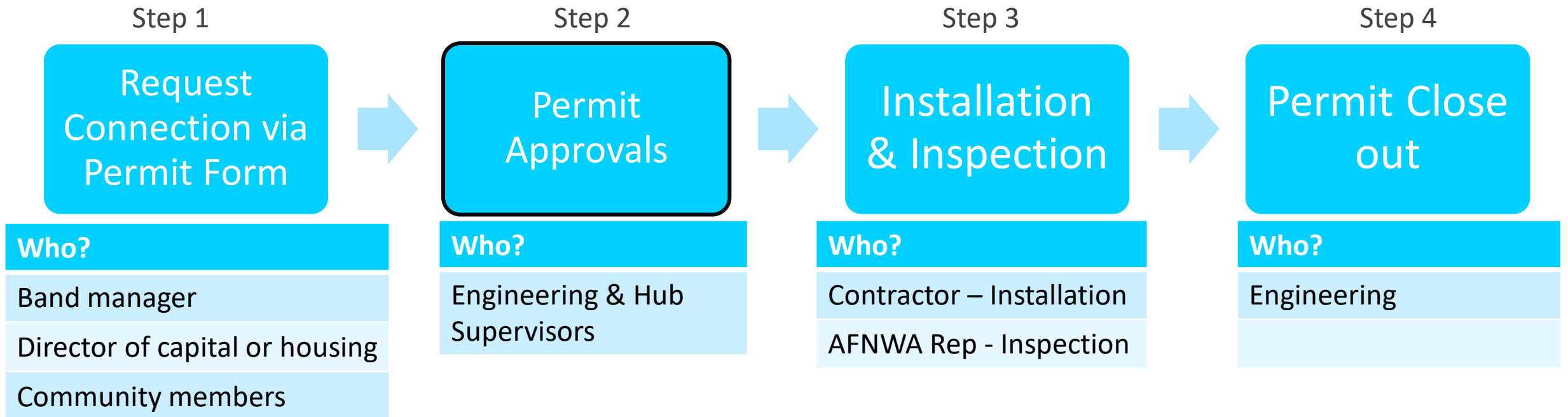
All service connections shall be inspected by AFNWA staff, 48-hour notice is required.  
 Phone: 1 (902) 603 0312 or Email: [Planning@AFNWA.ca](mailto:Planning@AFNWA.ca).

Wela'lin/Woliwon,  
 Atlantic First Nations Water Authority

Administrative Section (Internal use)		
Permit#	Permit Approval Date	Permit Approver
<input type="text"/>	<input type="text"/>	<input type="text"/>
Approval Notes/Limitations		
<input type="text"/>		
Inspection Complete?	Inspection Pass?	Inspected By
Yes No	Pass Fail	<input type="text"/>
Issues and Resolutions		
<input type="text"/>		

# Permitting Process

- Permit form information is reviewed by engineering and hub supervisors.





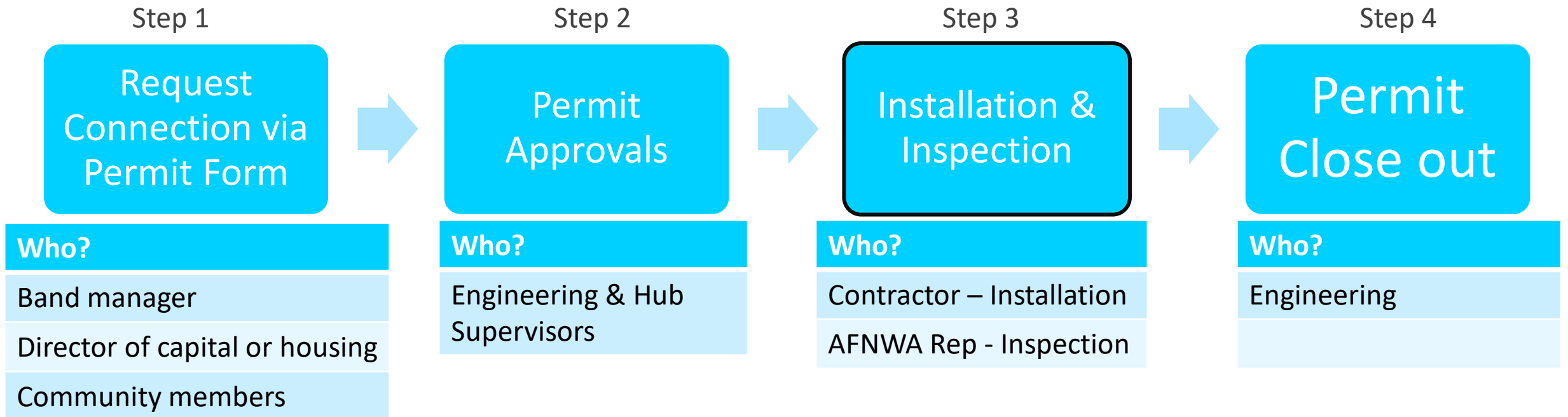
# Permit Approvals

- Engineering will assess pressure drop for supply pipe run/dimension,
- assess collection and lift station capacity working with ops, and,
- Request Hub supervisor provide feedback on the connection. i.e. slope concerns, servicing/maintenance.
- Once operations and engineering are ok to proceed, the permit requestor will be notified with a permit#.



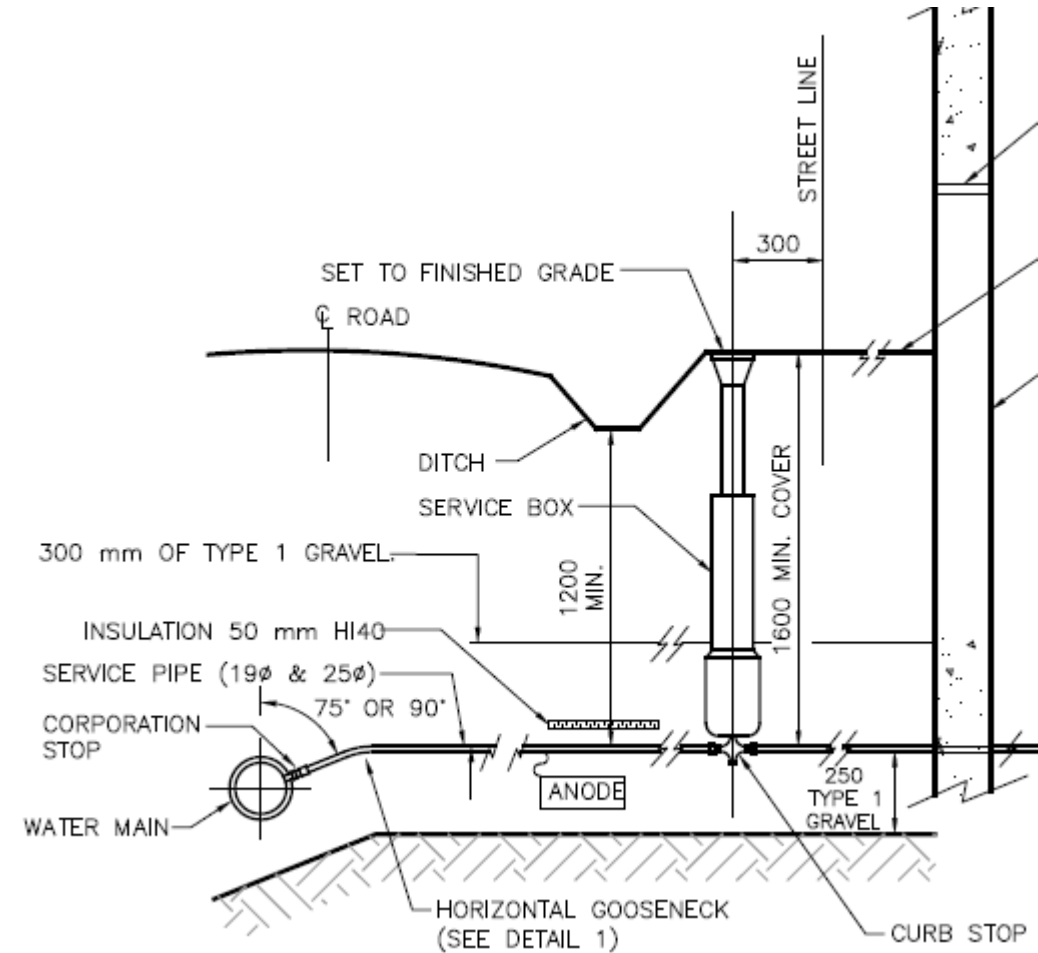
# Permitting Process

- Installation and Inspection of service connections.
  - Service Lateral Installation Requirements



# Installation & Inspection

- Contractor/Requestor notifies AFNWA 48-hours prior to burying any pipe.
- Contractor lays the pipe in the trench.
- AFNWA Operations or Engineering will inspect the pipe run and sign off on the permit.
  - When inspecting refer to the service lateral installation standards.



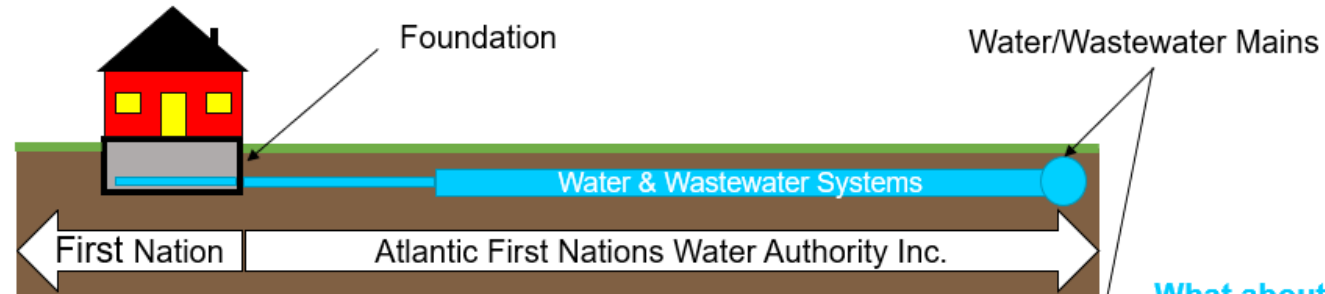
Service Lateral Connection DWG (water)  
Retrieved from Halifax Water Specification.

# Installation & Inspection Cont.

## Water and Wastewater Maintenance Responsibilities

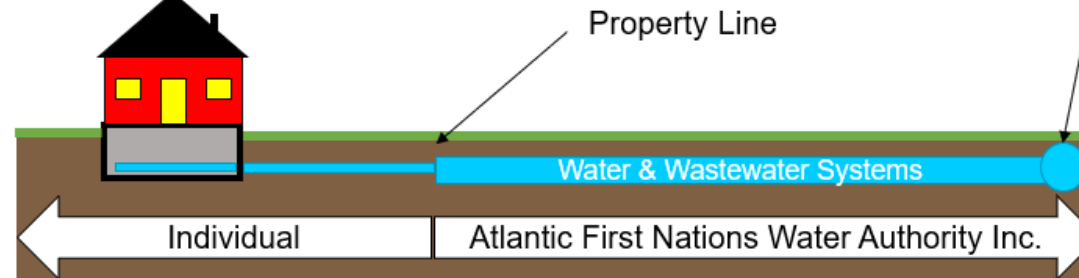


**First Nation administered housing**



**Individual owned housing (Certificate of Possession)**

AFNWA would take responsibility for the lateral up to the foundation if we get an easement/access permit from the certificate owner.

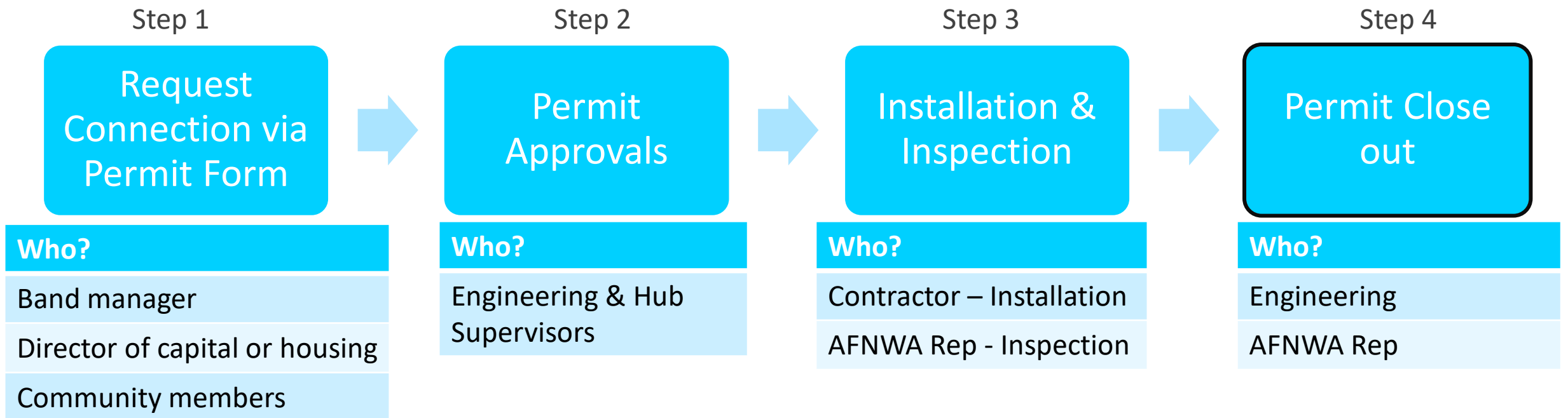


**What about wells and septic systems?**

Atlantic First Nations Water Authority does not maintain residential wells and on-site septic systems. This responsibility remains under Indigenous Services Canada.

# Permitting Process

- Permit Close out



# Permit Close Out

- AFNWA Rep completes the lateral inspection:
  - They will forward results to engineering for permit records.
  - Line taps, valves, and pipe meeting the foundation to be captured with GIS.
  - Permit request will be updated and closed out in the tracker.





# Next steps...

- Communicate the process.
- Work with community members, contractors, and operations to implement the process, forms, and standards.
- Collect feedback from operators and community members requesting connections.
- Work with community, contractors, operators and supervisors to implement feedback and continuously improve the process.

**Questions?**