

WATER SYSTEM

GIS Revision Tracking Point

Pressure Tank

Unknown FCODE

Air and Vacuum Valve

Air Release Valve

Altitude Valve

Ball Valve

Butterfly Valve

Butterfly Valve Operator Side

Check Valve

Corporation Stop

Curb Stop

Drain Valve

Gate Valve

Globe Valve

Hydrant Valve

Pressure Reducing Valve

Service Valve

Surge Relief Valve

Private Air Release Valve

Private Air and Vacuum Valve

Private Altitude Valve

Private Ball Valve

Private Butterfly Valve

Private Butterfly Valve Operator Side

Private Check Valve

Private Corporation Stop

Private Curb Stop

Private Drain Valve

Private Gate Valve

Private Globe Valve

Private Hydrant Valve

Private Pressure Reducing Valve

Private Service Valve

Private Surge Relief Valve

Closed Valve

Isolation Valve

Private Isolation Valve

Backflow Preventer

Flowmeter

Water Quality Station

Water Quality Instrument

Hydrants

Hydrant

Private Hydrant

Water Fittings

Adaptor

Bend

Blind Flange

Cap

Chamber Flow Arrow

Chamber Vent

Coupling

Cross

Denso Tape

Link Seal on a Pipe Sleeve

M.J. Restraint Device

Non-shrink Fill on a Pipe Sleeve

Plug

Reducer

Sleeve

Strainer

Tapping Sleeve

Tee

Test Meter Pit

Victaulic Coupling

Wye

Wye Left

Wye Right

Structure Points

Air Release Chamber

Booster Station

Control Chamber

Meter Chamber

Production Well

PRV Chamber

Reservoir Chamber

Water Treatment Plant

Water Reservoir

Other Water Service Features

Water Service Point

Leaks and Breaks

Water Pumps

Domestic Pump

Fire Pump

Water Pipes

Unknown Pipe

Drain

Distribution Main

Transmission Main

Private Drain

Private Distribution Main

Private Transmission Main

Unknown Lateral

Service Lateral

Hydrant Lead

Private Service Lateral

Private Hydrant Lead

Pipe Mask

Water Pipe Insulation

Concrete Slab

Pipe Wrapped Insulation

Protective Piping Encasement

Styrofoam Insulation

Water Pipe Cleaning and Lining


Cleaning and Lining


Cleaned Pipe

Structure Polygons




WASTEWATER COLLECTION SYSTEM

 GIS Revision Tracking Point

 Collection System Spot Repair

Wastewater Manholes and Outfalls

 Public Manhole


 Private Manhole


Wastewater Chambers


 Diversion Chamber


 Diversion Point

 Force Main Valve Chamber

 Junction Chamber

 Pre-Treatment Unit

 Pump Chamber

 Regulating Chamber

 Tide Chamber

 Outfall

Wastewater Fittings

 Bend

 Cap

 Cleanout

 Coupling

 Eccentric Reducer

 Flexible Coupling


 Flex Joint

 Grouted Connection

 Long Radius Bend

 Mechanical Joint Restraint

 Reducer

 Saddle

 Tap

 Tee

 Wye


 Vent

 Service Point


 Legacy Service Point


 Cathodic Protection Test Station

 Control Structure

 Identified Deficiency (Pipes/Laterals)

 Tracewire Access Point

 Force Main Flow Meter

 Gravity Flow Meter


 Gravity Flow Meter - Removed


Wastewater Pumping Stations

 Public Pumping Station

 Private Pumping Station

Wastewater Holding Tanks

 Heat Recovery Tank

 Holding Tank

 Overflow Tank

Wastewater Valves


 Air Release Valve

 Altitude Valve

 Butterfly Valve

 Ball Valve


 Cone Valve

 Check Valve

 Drain Valve

 Gate Valve


 Plug Valve

 Pressure Release Valve

 Surge Relief Valve

 Valve

 Sewer Pump

 Treatment Facility

 Casing

 Lining

 Tracewire

 Vent Line

 CCTV Televised Main

Wastewater Insulation

 Concrete Slab

 Pre-Insulated Pipe

 Styrofoam Sheet

Wastewater Pipes

 Public Force Main

 Public Gravity Pressure Pipe

 Public Pressure Pipe

 Public Inverted Siphon

 Public Pipe

 Private Force Main

 Private Gravity Pressure Pipe

 Private Pressure Pipe

 Private Inverted Siphon

 Private Pipe

 Public Lateral

 Private Lateral

STORMWATER COLLECTION SYSTEM

Stormwater Manholes

- Public Manhole
- Private Manhole

Stormwater Inlets

- Public Catchbasin
- Public Double Catchbasin
- Public Triple Catchbasin
- Private Catchbasin
- Private Double Catchbasin
- Private Triple Catchbasin

Stormwater Headwalls and Outfalls

- Headwall
- Outfall

Stormwater Fittings

- Bend
- Cap
- Cleanout
- Coupling
- Eccentric Reducer
- Flexible Coupling
- Flex Joint
- Grouted Connection
- Long Radius Bend
- Mechanical Joint Restraint
- Reducer
- Saddle
- Tap
- Tee
- Wye

Stormwater Chambers

- Diversion Chamber
- Diversion Point
- Force Main Valve Chamber
- Junction Chamber
- Pump Chamber
- Regulating Chamber
- Tide Chamber
- Treatment Unit

- Service Point
- Control Structure
- Identified Deficiency (Pipes/Laterals)
- Force Main Flow Meter
- Gravity Flow Meter
- Gravity Flow Meter - Removed

Stormwater Pumping Stations

- Public Pumping Station
- Private Pumping Station

Stormwater Valves

- Air Release Valve
- Altitude Valve
- Butterfly Valve
- Ball Valve
- Cone Valve
- Check Valve
- Drain Valve
- Gate Valve
- Plug Valve
- Pressure Release Valve
- Surge Relief Valve
- Valve

Stormwater Management Structures

- Other (No Remarks)
- Berm
- Constructed Wetland
- Lake
- Oversize Pipe
- Underground Storage
- Wet Pond
- Dry Pond
- Unknown
- Other (See Remarks)

- Casing
- Lining
- Ditch
- CCTV Televised Main

Stormwater Insulation





- Concrete Slab
- Pre-Insulated Pipe
- Styrofoam Sheet

Stormwater Pipes
















- Public Catchbasin Lead
- Public Culvert
- Public Drain
- Public Force Main
- Public Gravity Pressure Pipe
- Public Pressure Pipe
- Public Inverted Siphon
- Public Pipe
- Private Catchbasin Lead
- Private Culvert
- Private Drain
- Private Force Main
- Private Gravity Pressure Pipe
- Private Pressure Pipe
- Private Inverted Siphon
- Private Pipe
- Public Lateral
- Private Lateral

COMBINED COLLECTION SYSTEM




Combined Manholes and Outfalls

-  Public Manhole
-  Private Manhole
-  Outfall
-  Combined Sewer Overflow (CSO) Structure



Combined Fitting

-  Bend
-  Cap
-  Cleanout
-  Coupling
-  Eccentric Reducer
-  Flexible Coupling
-  Flex Joint
-  Grouted Connection
-  Long Radius Bend
-  Mechanical Joint Restraint
-  Reducer
-  Saddle
-  Tap
-  Tee
-  Wye

Combined Holding Tanks

-  Heat Recovery Tank
-  Holding Tank
-  Overflow Tank

Combined Pumping Stations

-  Public Pumping Station
-  Private Pumping Station



Control Structure



Identified Deficiency (Pipes/Laterals)



Force Main Flow Meter




Gravity Flow Meter















Gravity Flow Meter - Removed

Combined Chambers

-  Diversion Chamber
-  Diversion Point
-  Force Main Valve Chamber
-  Junction Chamber
-  Pump Chamber
-  Regulating Chamber
-  Tide Chamber

Combined Valves

-  Air Release Valve
-  Altitude Valve
-  Butterfly Valve
-  Ball Valve
-  Cone Valve
-  Check Valve
-  Drain Valve
-  Gate Valve
-  Plug Valve
-  Pressure Release Valve
-  Surge Relief Valve
-  Valve



Casing



Lining



CCTV Televised Main

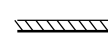
Insulation



Concrete Slab















Pre-Insulated Pipe



Styrofoam Sheet



Combined Pipes

-  Public Force Main
-  Public Gravity Pressure Pipe
-  Public Pressure Pipe
-  Public Inverted Siphon
-  Public Pipe
-  Private Force Main
-  Private Gravity Pressure Pipe
-  Private Pressure Pipe
-  Private Inverted Siphon
-  Private Pipe
-  Public Lateral
-  Private Lateral





UNKNOWN COLLECTION SYSTEM
















Unknown Manholes

-  Public Manhole
-  Private Manhole




Unknown Headwalls and Outfalls

-  Headwall
-  Outfall



Unknown Fittings








-  Bend
-  Cap
-  Cleanout
-  Coupling
-  Eccentric Reducer
-  Flexible Coupling
-  Flex Joint
-  Grouted Connection
-  Long Radius Bend
-  Mechanical Joint Restraint
-  Reducer
-  Saddle
-  Tap
-  Tee
-  Wye

Unknown Holding Tanks








-  Heat Recovery Tank
-  Holding Tank
-  Overflow Tank

Unknown Pumping Stations













-  Public Pumping Station
-  Private Pumping Station




-  Service Point
-  Cathodic Protection Test Station
-  Control Structure
-  Identified Deficiency (Pipes/Laterals)
-  Force Main Flow Meter
-  Gravity Flow Meter
-  Gravity Flow Meter - Removed

Unknown Chambers




-  Diversion Chamber
-  Diversion Point
-  Force Main Valve Chamber
-  Junction Chamber
-  Pump Chamber
-  Regulating Chamber
-  Tide Chamber

Unknown Valves













-  Air Release Valve
-  Altitude Valve
-  Butterfly Valve
-  Ball Valve
-  Cone Valve
-  Check Valve
-  Drain Valve
-  Gate Valve
-  Plug Valve
-  Pressure Release Valve
-  Surge Relief Valve
-  Valve

-  Casing
-  Lining
-  CCTV Televised Main

Unknown Insulation

-  Concrete Slab
-  Pre-Insulated Pipe
-  Styrofoam Sheet

Unknown Pipes

-  Public Force Main
-  Public Gravity Pressure Pipe
-  Public Pressure Pipe
-  Public Inverted Siphon
-  Public Pipe
-  Private Force Main
-  Private Gravity Pressure Pipe
-  Private Pressure Pipe
-  Private Inverted Siphon
-  Private Pipe
-  Public Lateral
-  Private Lateral










































































ABANDONED WATER SYSTEM

- | | | |
|-----------------------------------|---------------------------|-------------------------------------|
| Abandoned Valves | Abandoned Water Reservoir | Link Seal on a Pipe Sleeve |
| Abandoned Hydrants | Abandoned Flowmeter | M.J. Restraint Device |
| Abandoned Water Pipe | Abandoned Fittings | Non-shrink Fill on a Pipe Sleeve |
| Abandoned Water Drain | Unknown FCODE | Plug |
| Abandoned Service Point | Adaptor | Reducer |
| Abandoned Service Lateral | Bend | Sleeve |
| Abandoned Structure Points | Blind Flange | Strainer |
| Unknown Structure Subtype | Cap | Tapping Sleeve |
| ARV Air Release Chamber | Chamber Flow Arrow | Tee |
| Booster Station | Chamber Vent | Test Meter Pit |
| CTR Control Chamber | Coupling | Victaulic Coupling |
| MTR Meter Chamber | Cross | Wye |
| PW Production Well | Denso Tape | Wye Left |
| PRV PRV Chamber | | Wye Right |
| RSV Reservoir Chamber | | |
| Water Treatment Plant | | Abandoned Structure Polygons |
| | | |
| | | |




















ABANDONED COLLECTION SYSTEM

- | | | |
|--------------------------------------|--|----------------------------------|
| Abandoned Manholes | Abandoned Cathodic Protection Test Station | Abandoned Treatment Facility |
| Combined Manhole | Abandoned Control Structure | Abandoned Pumping Station |
| Wastewater Manhole | Abandoned Stormwater Management Structure | Abandoned Casing |
| Stormwater Manhole | Abandoned Tracewire Access Point | Abandoned Lining |
| Unknown Manhole | Abandoned Sewer Pump | Abandoned Ditch |
| Abandoned CSO Structure | | Abandoned Insulation |
| Abandoned Inlets and Outfalls | Abandoned Chambers | Abandoned Tracewire |
| Catchbasin | Diversion Chamber | Abandoned Vent Line |
| Double Catchbasin | Diversion Point | Abandoned Pipes |
| Triple Catchbasin | Force Main Valve Chamber | Combined Force Main |
| Abandoned Headwall | Junction Chamber | Combined Gravity Pressure Pipe |
| Abandoned Outfall | Pump Chamber | Combined Pressure Pipe |
| Abandoned Fittings | Regulating Chamber | Combined Inverted Siphon |
| Bend | Stormwater Treatment Unit | Combined Pipe |
| Cap | Tide Chamber | Catchbasin Lead |
| Cleanout | Wastewater Pre-Treatment Unit | Culvert |
| Coupling | Abandoned Valves | Drain |
| Eccentric Reducer | Air Release Valve | Stormwater Force Main |
| Flex Joint | Altitude Valve | Stormwater Gravity Pressure Pipe |
| Flexible Coupling | Butterfly Valve | Stormwater Pressure Pipe |
| Grouted Connection | Ball Valve | Stormwater Inverted Siphon |
| Long Radius Bend | Cone Valve | Stormwater Pipe |
| Mechanical Joint Restraint | Check Valve | Unknown Force Main |
| Reducer | Drain Valve | Unknown Gravity Pressure Pipe |
| Saddle | Gate Valve | Unknown Pressure Pipe |
| Tap | Plug Valve | Unknown Inverted Siphon |
| Tee | Pressure Relief Valve | Unknown Pipe |
| Wye | Surge Relief Valve | Wastewater Force Main |
| Vent | Valve | Wastewater Gravity Pressure Pipe |
| Abandoned Holding Tanks | | Wastewater Pressure Pipe |
| Heat Recovery Tank | | Wastewater Inverted Siphon |
| Holding Tank | | Wastewater Pipe |
| Overflow Tank | | Lateral |
| Abandoned Service Points | | |
| Unknown | | |
| Stormwater | | |
| Wastewater | | |





LAND FEATURES

| | | | | | |
|--|---|---|---|---|---|
|  | Traffic Pole |  |  |  |  |
|  | Utility Pole |  |  |  |  |
|  | Survey Monument |  |  |  |  |
|  | Natural Gas Lateral |  |  |  |  |
|  | Natural Gas Pipeline |  |  |  |  |
|  | Property Boundary |  |  |  |  |
|  | Road Feature |  |  |  |  |
|  | Halifax Water Collection System Structure |  |  |  |  |
|  | Land Owned by Halifax Water |  |  |  |  |
|  | Community Boundary |  |  |  |  |
|  | Halifax Water Sewershed Boundary |  |  | |  |
|  | Halifax Water Stormwater Service Boundary |  |  | |  |
|  | HRM Service Requirements |  | | |  |
|  | Water Service Only | | | |  |
|  | Wastewater Service Only | | | |  |
|  | Water and Wastewater Service | | | |  |
|  | Protected Water Areas | | | |  |
|  | | | | |  |
|  | Provincial Tertiary Watersheds | | | | |
|  | | | | | |

BASEMAP

| | | | |
|--|--|---|------------------------------------|
|  | Power Pole / Transmission Tower |  | Building |
|  | Municipal Boundary |  | Road |
|  | Railroad |  | Parking Area / Driveway / Sidewalk |
|  | Rivers / Stream |  | Property Boundary |
|  | Streets and Highways (1:100 - 1:8,000) |  | Lake |
|  | Streets and Highways (1:16,000: - 1:64,000) |  | Parks / Recreational Areas |
|  | Streets and Highways (1:128,000 - 1:256,000) |  | Land Owned by University |
|  | Major Highway |  | Coastline |
|  | Minor Highway | | |
|  | Primary Street | | |
|  | Street | | |










































WATER SCHEMATIC

| | |
|--|-------------------------------------|
|  | Water - Schematic System |
|  | Water - Schematic Hydrant |
|  | Water - Schematic System (Private) |
|  | Water - Schematic Hydrant (Private) |







































































ZONES AND REGIONS

Distribution System Regions

-  Unknown
 -  East
 -  Central
 -  West
- ### Collection System Regions
-  Unknown
 -  East
 -  Central
 -  West
- ### Pressure Zones
-  Unknown Pressure Zone
 -  24 East High
 -  Atholea Low
 -  Beaver Bank Boosted
 -  Beaver Bank Intermediate
 -  Bedford Intermediate
 -  Bedford Low
 -  Bedford South Intermediate
 -  Berry Hills Boosted
 -  Bluewater Intermediate
 -  Broadholme Intermediate
 -  Brunello Boosted
 -  Burnside Boosted
 -  Burnside High
 -  Burnside Low
 -  Caldwell Road Boosted
 -  Charles Road Boosted
 -  Churchill Intermediate
 -  Cowie High
 -  Dartmouth Intermediate East
 -  Dartmouth Intermediate West
 -  Dartmouth Low
 -  Eaglewood Boosted
 -  Eastern Passage/Woodside Low
 -  Fairview Clayton High
 -  Fall River Intermediate
 -  Farnhamgate Intermediate
 -  Flamingo Intermediate
 -  Geizer 123 High
 -  Geizer 158 High
 -  Geizer Boosted
 -  Glenforest Intermediate

-  Hemlock High
-  Hemlock Intermediate
-  Hemlock Super High
-  Herring Cove Low
-  Kearney Lake Intermediate
-  Kingswood High
-  Lake Major High
-  Lakeside Intermediate
-  Leiblin Boosted
-  Lively Boosted
-  Lucasville High
-  Miller Lake High
-  Miller Lake Low
-  Monarch/Rivendale High
-  Montague High
-  Mount Edward Boosted
-  Mowatt Intermediate
-  No. 7 Highway Boosted
-  North Preston
-  Orchard High
-  Peninsula High
-  Peninsula Intermediate
-  Peninsula Low
-  Pockwock Boosted
-  Pockwock High
-  Princess Margaret Low
-  Ritcey Low
-  Robie Reservoir
-  Rockingham Low
-  Rockmanor Intermediate
-  Ross Road Low
-  Sackville High
-  Sackville Intermediate
-  SILverside Boosted
-  Spryfield Intermediate
-  Titas Evans Low
-  Upper Hammonds Plains High
-  Waverley Intermediate
-  Waverley Low
-  West Bedford Intermediate
-  Williams Lake Low

Meter Zones

-  Unknown Meter Zone
-  #7 Highway Boosted
-  24 East High
-  Atholea Low
-  Beaver Bank Boosted
-  Beaver Bank Intermediate
-  Bedford Intermediate
-  Bedford Low
-  Bedford South Intermediate
-  Berry Hills Boosted
-  Birch Cove
-  Bluewater Intermediate
-  Broadholme Intermediate
-  Brunello Boosted
-  Burnside Boosted
-  Burnside High
-  Burnside Low
-  Caldwell Rd Boosted
-  Caledonia High
-  Central Dartmouth
-  Charles Rd Boosted
-  Churchill Intermediate
-  Cobequid High
-  Cowie High
-  Dartmouth Low
-  Eastern Passage Low
-  Fairview Clayton Park
-  Fall River Intermediate
-  Farnhamgate Intermediate
-  Flamingo Intermediate
-  Geizer123 High
-  Geizer158 High
-  Geizer Boosted
-  Glenforest Intermediate
-  Hammond Kearney
-  Hemlock High
-  Hemlock Intermediate
-  Hemlock Super High
-  Herring Cove Low
-  Herring Cove Road Intermediate
-  Kearney Lake Intermediate
-  Kingswood High
-  Lake Major High
-  Lakeside High
-  Lakeside Intermediate
-  Leiblin Boosted
-  Lively Boosted
-  Lucasville High
-  Miller Lake High
-  Miller Lake Low
-  Monarch/Rivendale High
-  Montague High
-  Mount Edward Boosted
-  Mowatt Intermediate
-  North Preston
-  Orchard High
-  Penhorn Intermed
-  Peninsula High
-  Peninsula Intermediate Central
-  Peninsula Intermediate North
-  Peninsula Intermediate South
-  Peninsula Low North
-  Peninsula Low South
-  Pockwock Boosted
-  Pockwock High
-  Princess Margaret Low
-  Ritcey Low
-  Robie Reservoir
-  Rockmanor Intermediate
-  Ross Rd
-  Sackville High
-  Sackville Intermediate
-  SILverside Boosted
-  Spryfield Intermediate
-  Titus Evans Low
-  Upper Hammonds Plains High
-  Waverley Intermediate
-  Waverley Low
-  West Bedford Intermediate
-  Williams Lake Low
-  Woodlawn Inter
-  Woodside Low