

WATER METER INSTALLATION BUILDER INFORMATION PACKAGE

Water Meter Request Process – Demolition, New Build & Meter Upgrade

1. At the Building Permit (New Build or Demolition) or Plumbing Permit (Service Upgrade) stage, the Builder will complete a Water Meter Installation Request Form online at <https://www.townofws.ca/live/water-and-utilities/water-meters/> Fees associated with the supply and basic installation of a water meter are as follows (by Fees & Charges By-Law 2019-123-FI, subject to amendment) and are due upon receipt of the Building Permit or Plumbing Permit:

Residential Water Meter Size (inches)	Water Meter Fee
$\frac{3}{4}$ by $\frac{3}{4}$	\$502.00
1	\$661.00
Larger than 1 inch & Commercial Meters	Please contact watermeter@townofws.ca

2. Once the Water Meter Installation Request Form is received by the Town, a water meter account number will be assigned by the Town's Revenue & Taxation Department
3. The Town will facilitate initial contact between the Builder and the Town's water meter supplier/installer, to coordinate a time to perform the water meter installation. Please contact watermeter@townofws.ca when ready for installation.
4. Please note: often, additional work is required for water meter installation (carpentry, plumbing, etc.) If additional work is required, the Town will separately invoice the Builder.
5. The Town must verify the installation of the water meter for an Occupancy Permit to be issued. An Occupancy Permit will only be issued with an installed water meter.
6. **Please note: The Town no longer installing 5/8 by 3/4 inch meters**

Water Meter Request Form

In order to submit a Water Meter Request Form please visit <https://www.townofws.ca/live/water-and-utilities/water-meters/>.

If you are submitting a request for more than one property, please complete the Additional Property Listing - Water Meter Request Form (Excel formatted). You will upload the spreadsheet attachment in the electronic submission.

Once you have successfully submitted your on-line request, you will receive an email confirming.

Please note:

- a. Water meters of 1.0" diameter and smaller may require up to 30 days for installation following receipt of this form.
- b. Water meters of 1.5" diameter and larger may require up to 90 days for installation following receipt of this form.
- c. If additional specialized services (plumbing, carpentry, etc.) are required to complete water meter installation, the builder will be invoiced separately by the Town.

Neptune Technology Group is contracted by the Town of Stouffville to install water meters in all new homes. In an effort to organize the process and to better serve builders, we are implementing the following procedures.

Make sure plumbing is completed according to the following specifications (example is on page 2.)

- 1) There must be a building control valve in place on the pipe coming into the house.
- 2) A few inches above the valve pipe, there should be an elbow to turn the setting for the meter to a horizontal position. Meters must be installed horizontally.
- 3) There needs to be a $\frac{3}{4}$ " FIP fitting after the elbow and another FIP fitting to connect to the pipe after the meter (elbows with a $\frac{3}{4}$ " FIP side can be used.)
- 4) A connecting pipe (spacer) with MIP ends should be put in place to space the gap between FIP fittings (this 'spacer' will be cut and removed during installation). The gap in between these FIP fittings should be 12 inches wide.
- 5) The setting for the meter should be strong enough to support the weight of the meter. If all the pipe is plastic, a support platform should sit 1" below the 'spacer'.

In all cases, please ensure the area around the meter setting is clear for the installer to work.

Procedure to book an appointment for a water meter installation:

- 1) All installations will take place on Mondays and Thursdays so please allow time to schedule one of these days.
- 2) Arrange access to the home. This can be done by providing the technician with an access code, a key as required, or by having someone available on site.
- 3) Contact Neptune's call centre at 1-800-667-4387 to schedule an appointment.

Schedule all installations a minimum of 2 weeks prior to the closing date of the property.

Once the work is complete, Neptune will report all meter information to the Town of Stouffville.

Your contact information was obtained from the Town of Stouffville's records associated with this property. If there is an alternative person for us to coordinate with, please provide their contact information. If you have any questions, you may contact Neptune at 1-800-667-4387.

Regards,

Neptune Technology Group





A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

T-10 Meter

SIZES $\frac{5}{8}$ ", $\frac{3}{4}$ ", AND 1"

Every T-10® water meter meets or exceeds the latest AWWA C700 Standard. Its nutating disc, positive displacement principle has been time-proven for accuracy and dependability since 1892, ensuring maximum utility revenue.

Construction

The T-10 water meter consists of three major assemblies: a register, a lead free, high-copper alloy maincase, and a nutating disc measuring chamber.

The T-10 meter is available with a variety of register types. For reading convenience, the register can be mounted in one of four positions on the meter.

The corrosion-resistant, lead-free, high-copper alloy maincase will withstand most service conditions; internal water pressure, rough handling, and in-line piping stress.

The innovative floating chamber design of the nutating disc measuring element is unaffected by meter position or in-line piping stresses while the unique chamber seal extends the low-flow accuracy by sealing the chamber outlet port to the maincase outlet port. The nutating disc measuring element utilizes corrosion-resistant materials throughout and a thrust roller to minimize wear.

Warranty

Neptune® provides a limited warranty with respect to its T-10 water meters for performance, materials, and workmanship.

When desired, maintenance is easily accomplished either by replacement of major assemblies or individual components.

Guaranteed Systems Compatibility

All T-10 water meters are guaranteed adaptable to our ARB®V, ProRead™ (ARB VI) AutoDetect, ProCoder™, E-CODER® (ARB VII), E-CODER®R900i™, E-CODER®R450i™, E-CODER®L900i™, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.

Systems Compatibility

Adaptability to all present and future systems for flexibility is available only with Neptune's ARB® Utility Management Systems™.



KEY FEATURES

REGISTER

Magnetic-driven, low-torque registration ensures accuracy

Impact-resistant register

High-resolution, low-flow leak detection

Bayonet-style register mount allows in-line serviceability

Tamperproof seal pin deters theft

Date of manufacture, size, and model stamped on dial face

LEAD FREE MAINCASE

Made from lead free, high-copper alloy

NSF/ANSI 372, NSF/ANSI 61

Lifetime guarantee

Resists internal pressure stresses and external damage

Handles in-line piping variations and stresses

Lead free, high-copper alloy provides residual value vs. plastic or composite

Electrical grounding continuity

NUTATING DISC MEASURING CHAMBER

Positive displacement

Widest effective flow range for maximum revenue

Proprietary polymer materials maximize long-term accuracy

Floating chamber design is unaffected by meter position or in-line piping stresses

Specifications

- NSF/ANSI 372, NSF/ANSI 61
- National Type Evaluation Program (NTEP) certification

Application

- Cold water measurement of flow in one direction in residential service applications

Maximum Operating Water Pressure

- 150 psi (1034 kPa)

Maximum Operating Water Temperature

- 80°F

Measuring Chamber

- Nutating disc technology design made from proprietary synthetic polymer

Options

Sizes

- $\frac{5}{8}$ ", $\frac{5}{8}$ " x $\frac{3}{4}$ "
- $\frac{3}{4}$ ", $\frac{3}{4}$ " SL, $\frac{3}{4}$ " x 1"
- 1", 1" x 1 $\frac{1}{4}$ "

Units of Measure:

- U.S. gallons, imperial gallons, cubic feet, cubic metres

Register Types

- Direct reading: bronze box and cover (standard)

Remote Reading:

- ProRead, ProCoder, E-CODER, E-CODER)R900i, E-CODER)R450i, E-CODER)L900i, TRICON/S, TRICON/E3

- Reclaim

Bottom Caps

- Synthetic polymer ($\frac{5}{8}$ " only)
- Cast iron
- Lead free, high-copper alloy

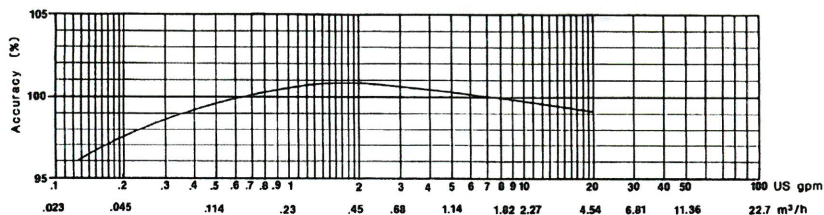
Connections

- Lead free, high-copper alloy, straight or bent

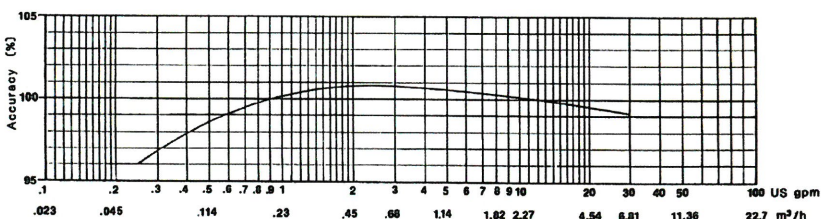
Environmental Conditions

- Operating temperature:
+33° F to +149° F (0° C to +65° C)
- Storage temperature:
+33° F to +158° F (0° C to +70° C)

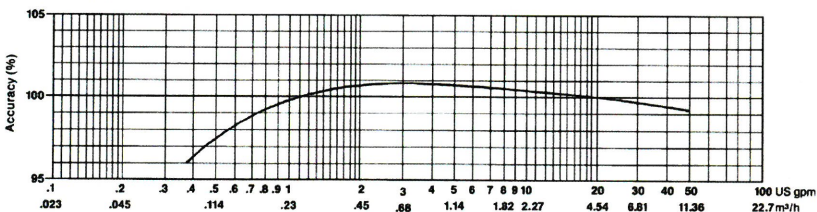
$\frac{5}{8}$ " ACCURACY



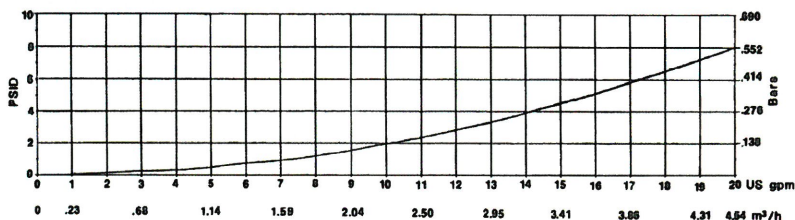
$\frac{3}{4}$ " ACCURACY



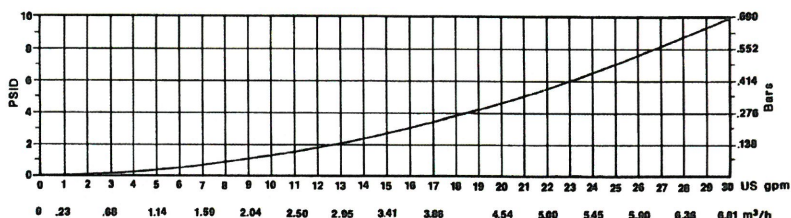
1" ACCURACY



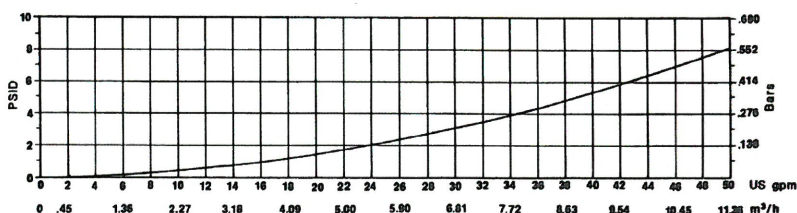
$\frac{5}{8}$ " PRESSURE LOSS



$\frac{3}{4}$ " PRESSURE LOSS

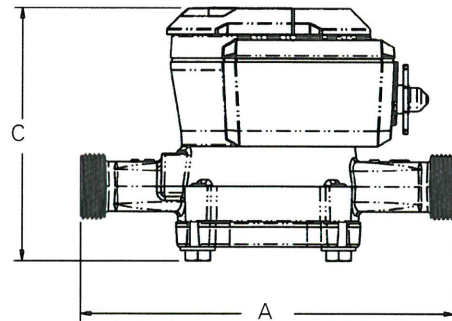
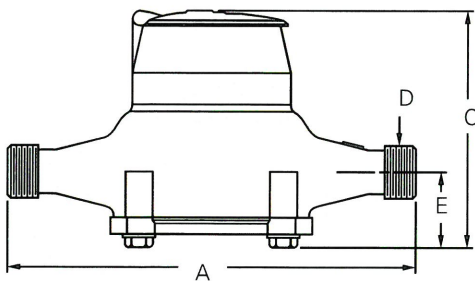
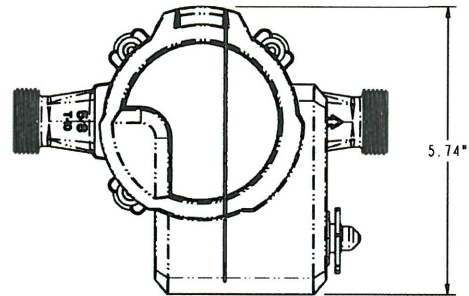
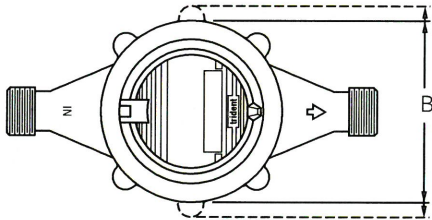


1" PRESSURE LOSS



Dimensions

Meter Size	A	B	C					D-	E-	Weight lbs/kg
	in/ mm	in/ mm	Std. in/mm	ARB in/mm	ProCoder™ or E-CODER®	ProCoder™) R900i™ or ProCoder™) R450i™	E-CODER®) R900i™ or E-CODER®) R450i™	NPSM Thread	in/ mm	
5/8	7½ 191	3¾ 92	4¾ 111	5¼ 133	5¼ 133	5¼ 133	5¼ 133	¾" - 14	1½ 38	3¼ 1.4
5/8 x ¾	7½ 191	3¾ 92	4¾ 111	5¼ 133	5¼ 133	5¼ 133	5¼ 133	1" - 11½	1½ 38	3¾ 1.5
Pre 2011 ¾	7½ 191	3¾ 92	4¾ 124	5½ 146	5½ 139	5½ 139	5½ 139	¾" - 14	1¾ 41	3¾ 1.7
Pre 2011 ¾ x ¾	7½ 191	3¾ 92	4¾ 124	5½ 146	5½ 139	5½ 139	5½ 139	1" - 11½	1¾ 41	4 1.8
¾	9 229	4¾ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1" - 11½	1¾ 48	6 2.7
¾" SL	7½ 911	4¾ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1" - 11½	1¾ 48	5½ 2.5
¾ x 1"	9 229	4¾ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1¼" - 11½	1¾ 48	6½ 2.9
1"	10¾ 273	6½ 165	6¾ 162	7 178	7 178	7 178	7 178	1¼" - 11½	2¾ 54	9¾ 4.4
1" x 1¼"	10¾ 273	6½ 165	6¾ 162	7 178	7 178	7 178	7 178	1½" - 11½	2¾ 54	10¾ 4.6



Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA Standard	Low Flow @ 95% Accuracy
5/8"	1/2 to 20 US gpm 0.11 to 4.55 m ³ /h	1 to 20 US gpm 0.23 to 4.5 m ³ /h	1/8 US gpm 0.03 m ³ /h
3/4"	3/4 to 30 US gpm 0.17 to 6.82 m ³ /h	2 to 30 US gpm 0.45 to 6.8 m ³ /h	1/4 US gpm 0.06 m ³ /h
1"	1 to 50 US gpm 0.23 to 11.36 m ³ /h	3 to 50 US gpm 0.68 to 11.4 m ³ /h	3/8 US gpm 0.09 m ³ /h

Registration

ProRead Registration (per sweep hand revolution)		5/8"	3/4" & 1"
10	US Gallons	√	√
10	Imperial Gallons	√	√
1	Cubic Foot	√	√
0.1	Cubic Metre	√	√
Register Capacity ProRead, ProCoder, and E-CODER		5/8"	3/4" & 1"
10,000,000	US Gallons	√	√
10,000,000	Imperial Gallons	√	√
1,000,000	Cubic Feet	√	√
100,000	Cubic Metres	√	√
ProCoder and E-CODER High Resolution (8-digit reading)		5/8"	3/4" & 1"
0.1	US Gallons	√	√
0.1	Imperial Gallons	√	√
0.01	Cubic Feet	√	√
0.001	Cubic Metres	√	√



A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

R900® Wall or Pit Meter Interface Unit (MIU)



Build Onto Your Existing Technology Investment

As part of Neptune's R900® System, the R900® meter interface unit (MIU) was designed for flexibility. Like its fellow system components, the R900 MIU works seamlessly with prior generations of equipment. At the same time, it allows your utility to incorporate innovations as you need. A single radio frequency unit that can transmit meter reading data using any reading method – mobile or fixed network – the R900 MIU never has to be reprogrammed. That makes migrating to new technologies simple whenever your utility is ready to implement them. When it's time to add new features or functionality, you can do it at your own pace, confident of continual system support without stranded assets.

Conserve Resources, Simplify Operations

With the pressures your utility faces, Neptune® knows you don't have time, personnel, water, or revenue to waste. That's why we designed the R900 MIU and the rest of the system for ease of use. In addition, the R900 MIU's interleaved, high-power, 1 Watt fixed network message reduces infrastructure costs while allowing reading in any mode – without separate reading systems, site visits, or any type of MIU reconfiguration. The R900 MIU provides fixed network transmission capability at all times, while it also transmits readings for walk-by or mobile methods. Making operations even easier, the user-friendly, intuitive R900 System design requires only minimal training, providing you flexibility to adapt to changes in your workforce and reallocate staff to different departments as needed.

Reduce Complaints, Delinquencies, And Write-Offs

Neptune's R900 MIU greatly improves access to meter readings, while delivering detailed consumption profile information as well as alerts for leak or backflow, helping your utility more proactively identify and resolve customers' questions. This accurate, timely data can be used to head off high bill complaints, reduce delinquent payments, and eliminate write-offs.

Because detailed data logging information from the last 96 days is always available, just waiting to be transmitted by the R900 MIU when needed, personnel can take care of a customer's issue then and there, in a single site visit. Not only can the data boost efficiency and customer service, but it will also help your utility make better-informed decisions going forward.

KEY BENEFITS

Facilitates Migration to AMI

- 1 Watt fixed network message reduces infrastructure costs
- Interleaved mobile and fixed network messages facilitate migration without changing the "modes" in the MIU

Reduces Non-Revenue Water

- Provides leak history/diagnostics
- Enables proactive leak notification
- Provides hourly consumption data
- Improves meter reading accuracy
- Eliminates estimated reads

Identifies Potential Theft

- Tamper detection
- Reverse flow detection
- Identifies significant periods of zero consumption

Simplifies Installation Process

- Easy to install/no programming required
- Reduces labor cost

Technical Specifications

Electrical Specifications

- MIU power: Lithium battery with capacitor

Transmitter Specifications

- Two-way MIU
- Transmit period (interleaved mobile and fixed network messages):
 - Standard mobile message every 14 seconds at 100 mW
 - Standard fixed network message every 7½ minutes at 1 Watt
- FCC verification: Part 15.247
 - Transmitter channels: 50; frequency-hopping, spread-spectrum
 - Channel frequency: 910 to 920 MHz
- Encoder register reading interval:
 - Every 15 minutes
- Data logging interval:
 - 96 days of hourly data

Environmental Conditions

- Operating temperature:
 - 22°F to +149°F (-30°C to +65°C)
- Storage temperature:
 - 40°F to +158°F (-40°C to +70°C)
- Operating humidity:
 - 100% condensing

Antennas

- Wall MIU: standard internal antenna
- Pit MIU: standard through-the-lid antenna
 - 18" Coax
 - 6' Coax
 - 20' Coax

Encoded Register Compatibility

- Neptune ARB® V, ProRead™, ProCoder™, and E-CODER®
- Sensus ECR II, ICE, iPerl, Electronic Register and OMNI
- Hersey/Mueller Translator
- Badger ADE and HR E|LCD
- Elster/AMCO InVision (Sensus protocol version)

Options

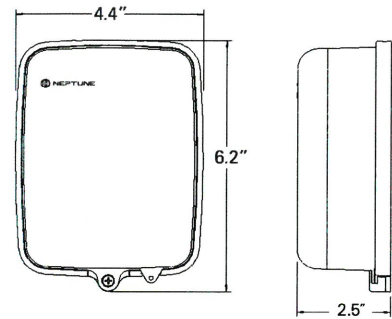
System Compatibility

- Handhelds with R900® Belt Clip Transceiver - mobile RF
- MRX920™ - mobile RF
- R900® Gateways - fixed network RF

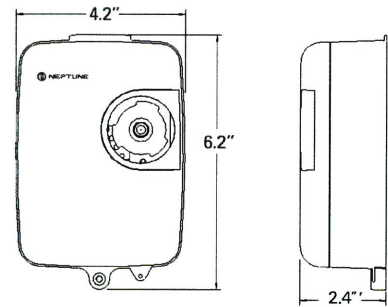
Warranty

20 years (10/10); refer to specific Warranty Statement

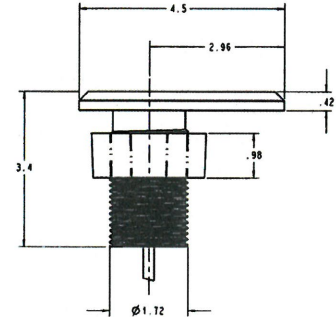
Dimensions



R900 Wall MIU



R900 Pit MIU



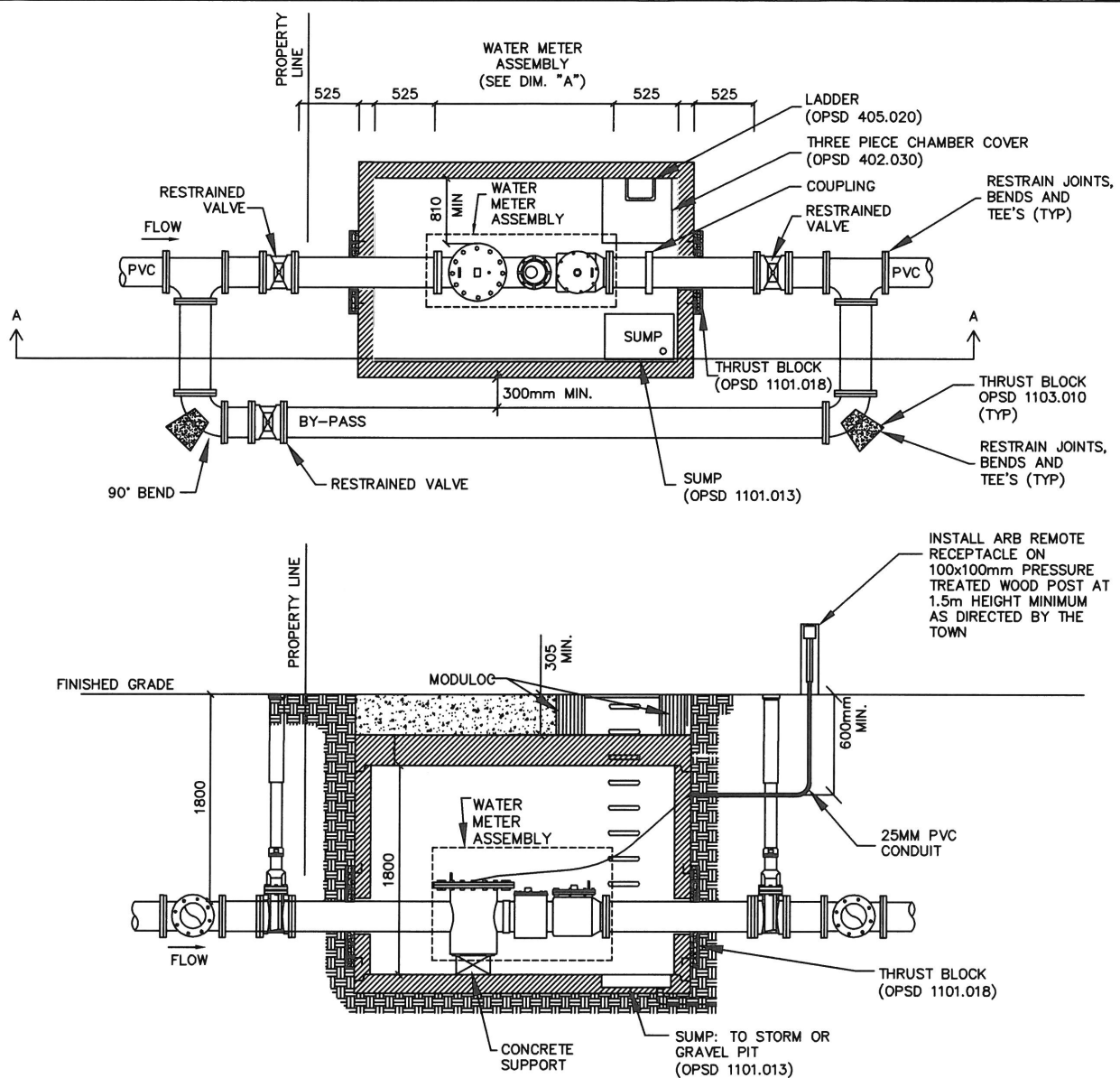
R900 Pit Antenna



#winyourday
neptunetg.com

Neptune Technology Group

1600 Alabama Highway 229
Tallahassee, AL 36078
800-633-8754 f 334-283-7293



NOTES:

1. CONCRETE TO BE 32MPa COMPRESSIVE STRENGTH.
2. 25mm PVC CONDUIT TO BE INSTALLED FROM WATER METER TO A SUITABLE LOCATION AS DIRECTED BY THE TOWN.
3. DIMENSIONS OF THE CHAMBER SHALL BE VERIFIED BEFORE INSTALLATION.
4. ALL VALVE CHAMBER CUT-OUTS TO BE FILLED WITH CONCRETE BRICKS AND MORTAR THEN PARGED INSIDE AND OUTSIDE WITH 1:3 MORTARS MIX.
5. ALL PIPE JOINTS INSIDE METER CHAMBER SHALL BE FLANGE TO FLANGE FOR SIZES 100mm and LARGER.
6. VALVES TO BE RESTRAINED TO THE CHAMBER.
7. A BACKFLOW PREVENTION DEVICE IS TO BE INSTALLED IN ACCORDANCE WITH ACCEPTABLE ENGINEERING PRACTICES; THE REQUIREMENTS OF THE ONTARIO BUILDING CODE (O. REG. 350/ 06). AS AMENDED AND THE CSA STANDARD CSA B64.10-07, "SELECTION AND INSTALLATION OF BACKFLOW PREVENTERS".
8. CONTRACTOR TO INSTALL PVC PIPE CONTINUOUS THROUGH CHAMBER.
9. CHAMBER SHALL BE INSULATED IF MINIMUM DEPTH OF BURY IS NOT MET.
10. ALL RESTRAINED VALVES SHALL BE INSTALLED WITH BOX.

SECTION A-A

CHAMBER OPSD	METER SIZE	DIM. A
1101.012 (1800 X 2400mm)	4"/100mm	33"/838mm
	6"/150mm	45"/1143mm
	8"/200mm	53"/1346mm
1101.016 (2400 X 3600mm)	10"/250mm	68"/1727mm

TOWN OF WHITCHURCH-STOUFFVILLE



100mm to 250mm
WATER METER INSTALLATION
IN CHAMBER
FOR COMBINED FIRE & DOMESTIC

APPROVED:

DATE: MAR. 2019

ISSUE NO.

SCALE: N.T.S.

DWG. NO. WS-603

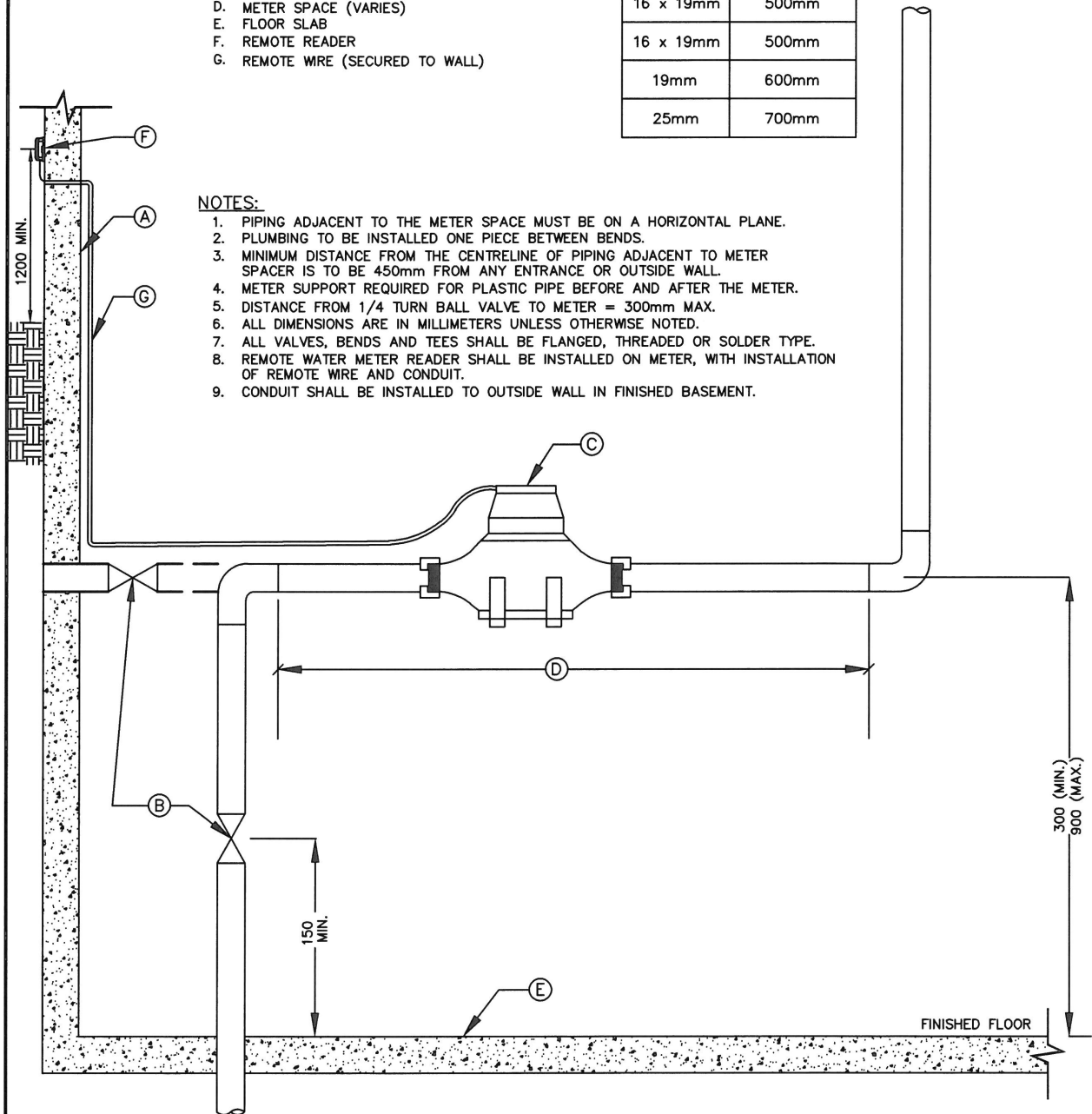
LEGEND:

- A. EXTERIOR WALL
- B. 1/4 TURN BALL VALVE (SAME SIZE AS SERVICE)
- C. WATER METER
- D. METER SPACE (VARIES)
- E. FLOOR SLAB
- F. REMOTE READER
- G. REMOTE WIRE (SECURED TO WALL)

METER SIZE	MIN. DISTANCES (D)
16 x 19mm	500mm
16 x 19mm	500mm
19mm	600mm
25mm	700mm

NOTES:

1. PIPING ADJACENT TO THE METER SPACE MUST BE ON A HORIZONTAL PLANE.
2. PLUMBING TO BE INSTALLED ONE PIECE BETWEEN BENDS.
3. MINIMUM DISTANCE FROM THE CENTRELINE OF PIPING ADJACENT TO METER SPACER IS TO BE 450mm FROM ANY ENTRANCE OR OUTSIDE WALL.
4. METER SUPPORT REQUIRED FOR PLASTIC PIPE BEFORE AND AFTER THE METER.
5. DISTANCE FROM 1/4 TURN BALL VALVE TO METER = 300mm MAX.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
7. ALL VALVES, BENDS AND TEES SHALL BE FLANGED, THREADED OR SOLDER TYPE.
8. REMOTE WATER METER READER SHALL BE INSTALLED ON METER, WITH INSTALLATION OF REMOTE WIRE AND CONDUIT.
9. CONDUIT SHALL BE INSTALLED TO OUTSIDE WALL IN FINISHED BASEMENT.



TOWN OF WHITCHURCH-STOUFFVILLE



25mm OR LESS
DOMESTIC WATER METER
INSTALLATION

APPROVED:

DATE: MAR. 2019

ISSUE NO.

SCALE: N.T.S.

DWG. NO. WS-608

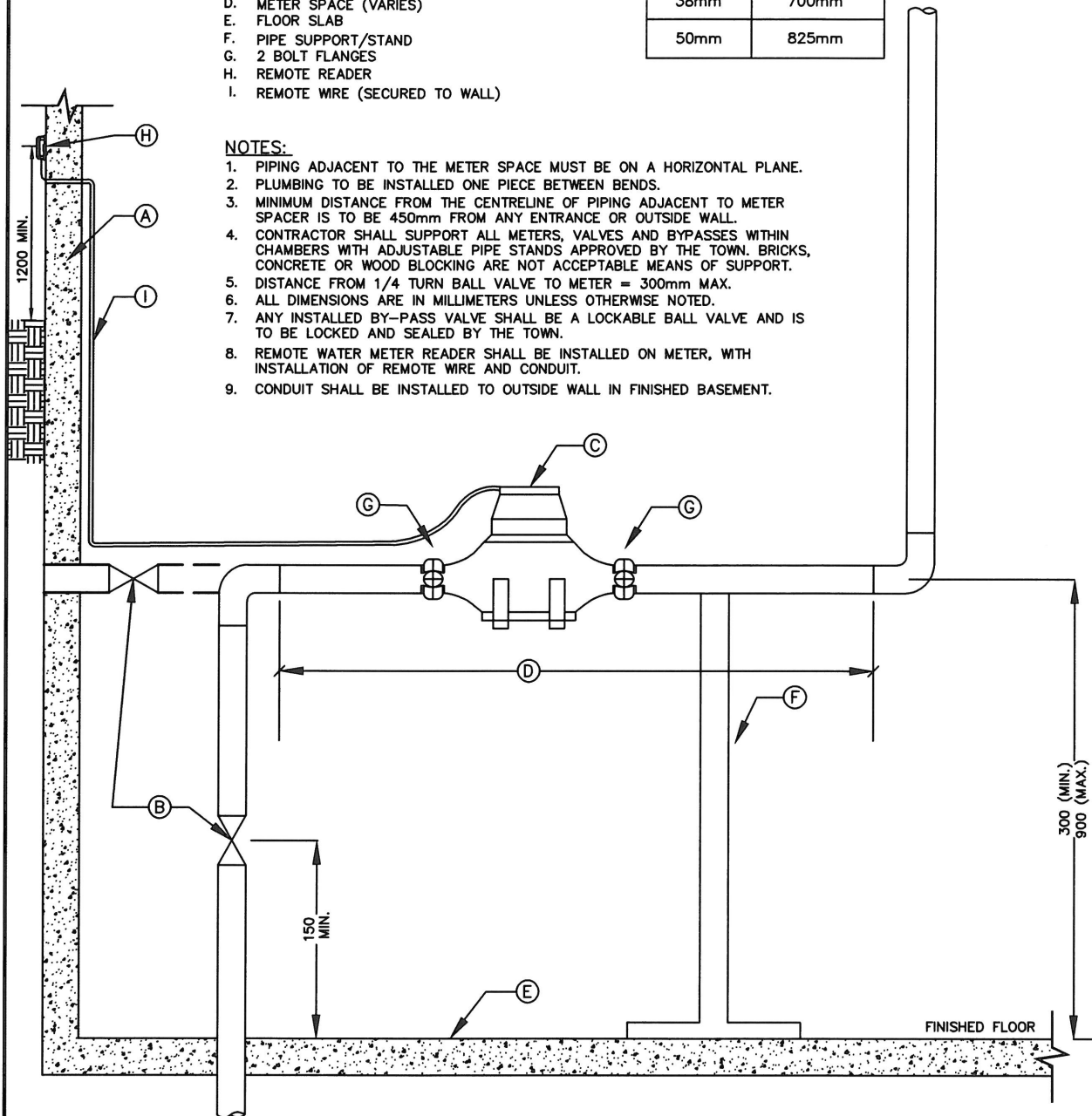
LEGEND:

- A. EXTERIOR WALL
- B. 1/4 TURN BALL VALVE (SAME SIZE AS SERVICE)
- C. WATER METER
- D. METER SPACE (VARIES)
- E. FLOOR SLAB
- F. PIPE SUPPORT/STAND
- G. 2 BOLT FLANGES
- H. REMOTE READER
- I. REMOTE WIRE (SECURED TO WALL)

METER SIZE	MIN. DISTANCES (D)
38mm	700mm
50mm	825mm

NOTES:

1. PIPING ADJACENT TO THE METER SPACE MUST BE ON A HORIZONTAL PLANE.
2. PLUMBING TO BE INSTALLED ONE PIECE BETWEEN BENDS.
3. MINIMUM DISTANCE FROM THE CENTRELINE OF PIPING ADJACENT TO METER SPACER IS TO BE 450mm FROM ANY ENTRANCE OR OUTSIDE WALL.
4. CONTRACTOR SHALL SUPPORT ALL METERS, VALVES AND BYPASSES WITHIN CHAMBERS WITH ADJUSTABLE PIPE STANDS APPROVED BY THE TOWN. BRICKS, CONCRETE OR WOOD BLOCKING ARE NOT ACCEPTABLE MEANS OF SUPPORT.
5. DISTANCE FROM 1/4 TURN BALL VALVE TO METER = 300mm MAX.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
7. ANY INSTALLED BY-PASS VALVE SHALL BE A LOCKABLE BALL VALVE AND IS TO BE LOCKED AND SEALED BY THE TOWN.
8. REMOTE WATER METER READER SHALL BE INSTALLED ON METER, WITH INSTALLATION OF REMOTE WIRE AND CONDUIT.
9. CONDUIT SHALL BE INSTALLED TO OUTSIDE WALL IN FINISHED BASEMENT.



TOWN OF WHITCHURCH-STOUFFVILLE



38mm TO 50mm
DOMESTIC WATER METER
INSTALLATION

APPROVED:

DATE: MAR. 2019

ISSUE NO.

SCALE: N.T.S.

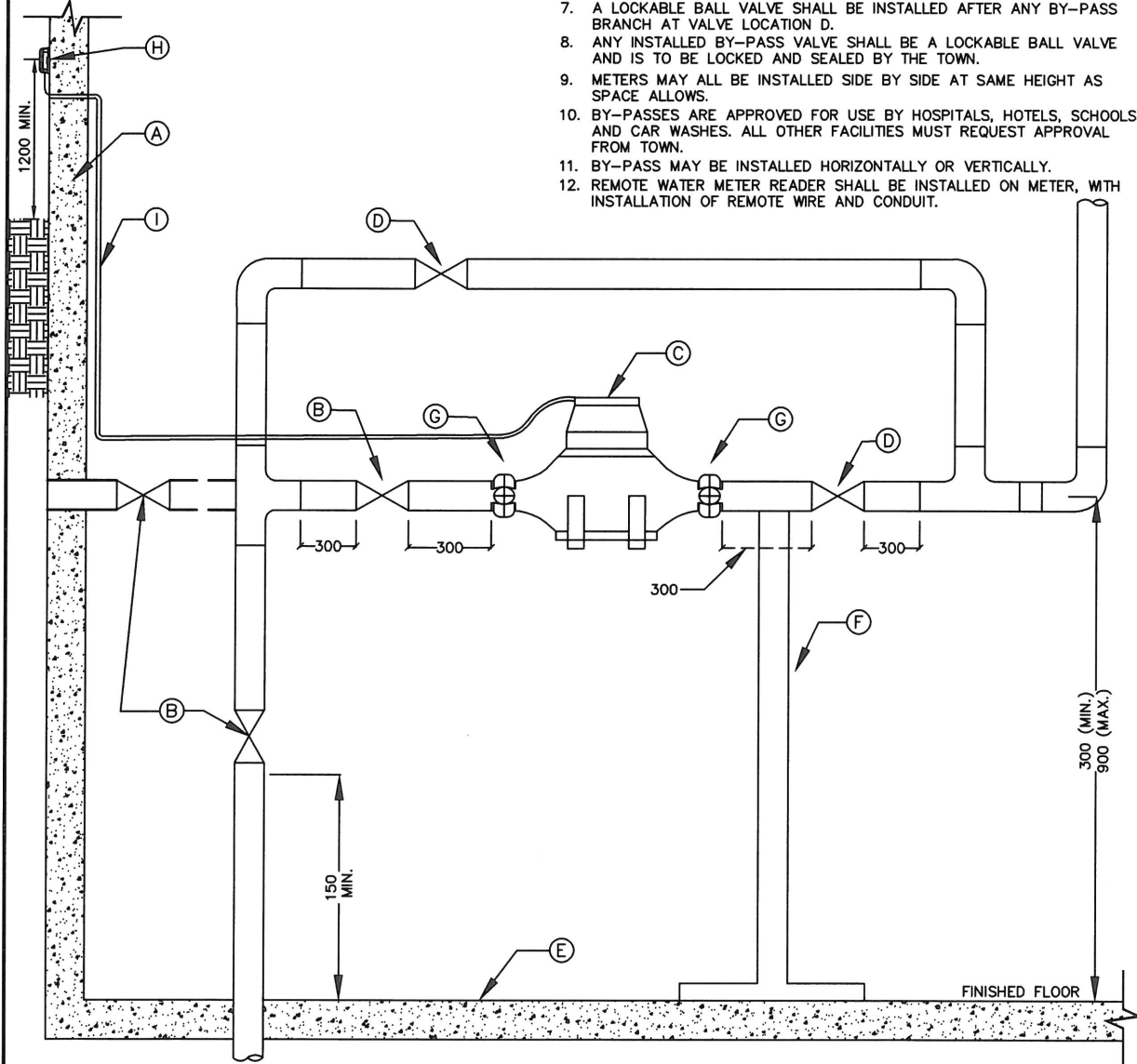
DWG. NO. WS-609

LEGEND:

- A. EXTERIOR WALL
- B. 1/4 TURN BALL VALVE (SAME SIZE AS SERVICE)
- C. WATER METER
- D. 1/4 TURN BALL VALVE (LOCKABLE AND SAME SIZE AS SERVICE)
- E. FLOOR SLAB
- F. PIPE SUPPORT/STAND
- G. 2 BOLT FLANGES
- H. REMOTE READER
- I. REMOTE WIRE (SECURED TO WALL)

NOTES:

- 1. PIPING ADJACENT TO THE METER SPACE MUST BE ON A HORIZONTAL PLANE.
- 2. METER SETTINGS ARE TO BE SET BY THE TOWN.
- 3. MINIMUM DISTANCE FROM THE CENTRELINE OF PIPING ADJACENT TO METER SPACER IS TO BE 450mm FROM ANY ENTRANCE OR OUTSIDE WALL.
- 4. CONTRACTOR SHALL SUPPORT ALL METERS, VALVES AND BY-PASSES WITHIN CHAMBERS WITH ADJUSTABLE PIPE STANDS APPROVED BY THE TOWN. BRICKS, CONCRETE OR WOOD BLOCKING ARE NOT ACCEPTABLE MEANS OF SUPPORT.
- 5. MIN. DISTANCE OF 300mm SHALL BE MAINTAINED ON EITHER SIDE OF 1/4 TURN BALL VALVES LOCATED ADJACENT TO THE WATER METER.
- 6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- 7. A LOCKABLE BALL VALVE SHALL BE INSTALLED AFTER ANY BY-PASS BRANCH AT VALVE LOCATION D.
- 8. ANY INSTALLED BY-PASS SHALL BE A LOCKABLE BALL VALVE AND IS TO BE LOCKED AND SEALED BY THE TOWN.
- 9. METERS MAY ALL BE INSTALLED SIDE BY SIDE AT SAME HEIGHT AS SPACE ALLOWS.
- 10. BY-PASSES ARE APPROVED FOR USE BY HOSPITALS, HOTELS, SCHOOLS AND CAR WASHES. ALL OTHER FACILITIES MUST REQUEST APPROVAL FROM TOWN.
- 11. BY-PASS MAY BE INSTALLED HORIZONTALLY OR VERTICALLY.
- 12. REMOTE WATER METER READER SHALL BE INSTALLED ON METER, WITH INSTALLATION OF REMOTE WIRE AND CONDUIT.



TOWN OF WHITCHURCH-STOUFFVILLE



38mm to 50mm
DOMESTIC WATER METER
INSTALLATION WITH BY-PASS

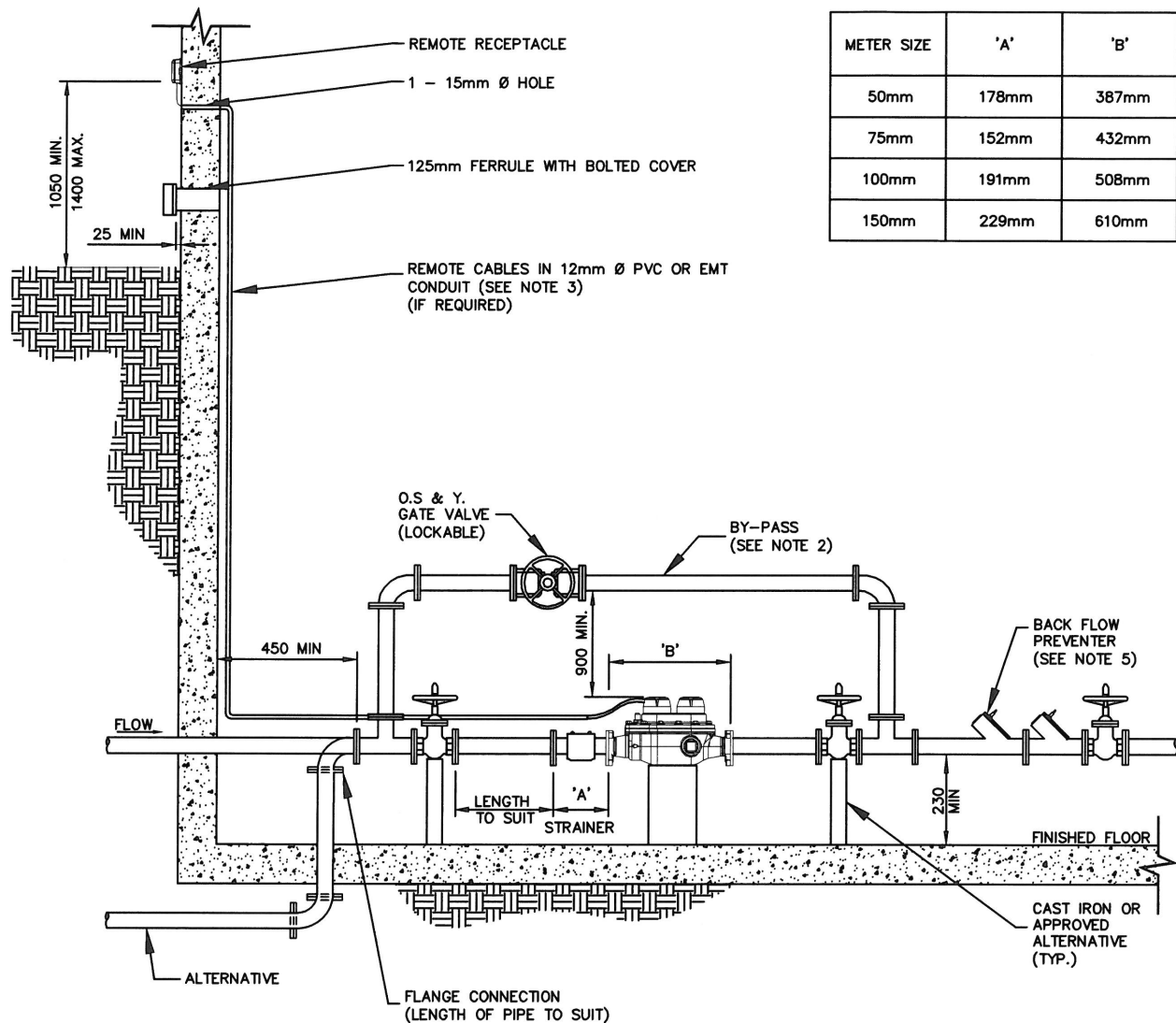
APPROVED:

DATE: MAR. 2019

ISSUE NO.


SCALE: N.T.S.

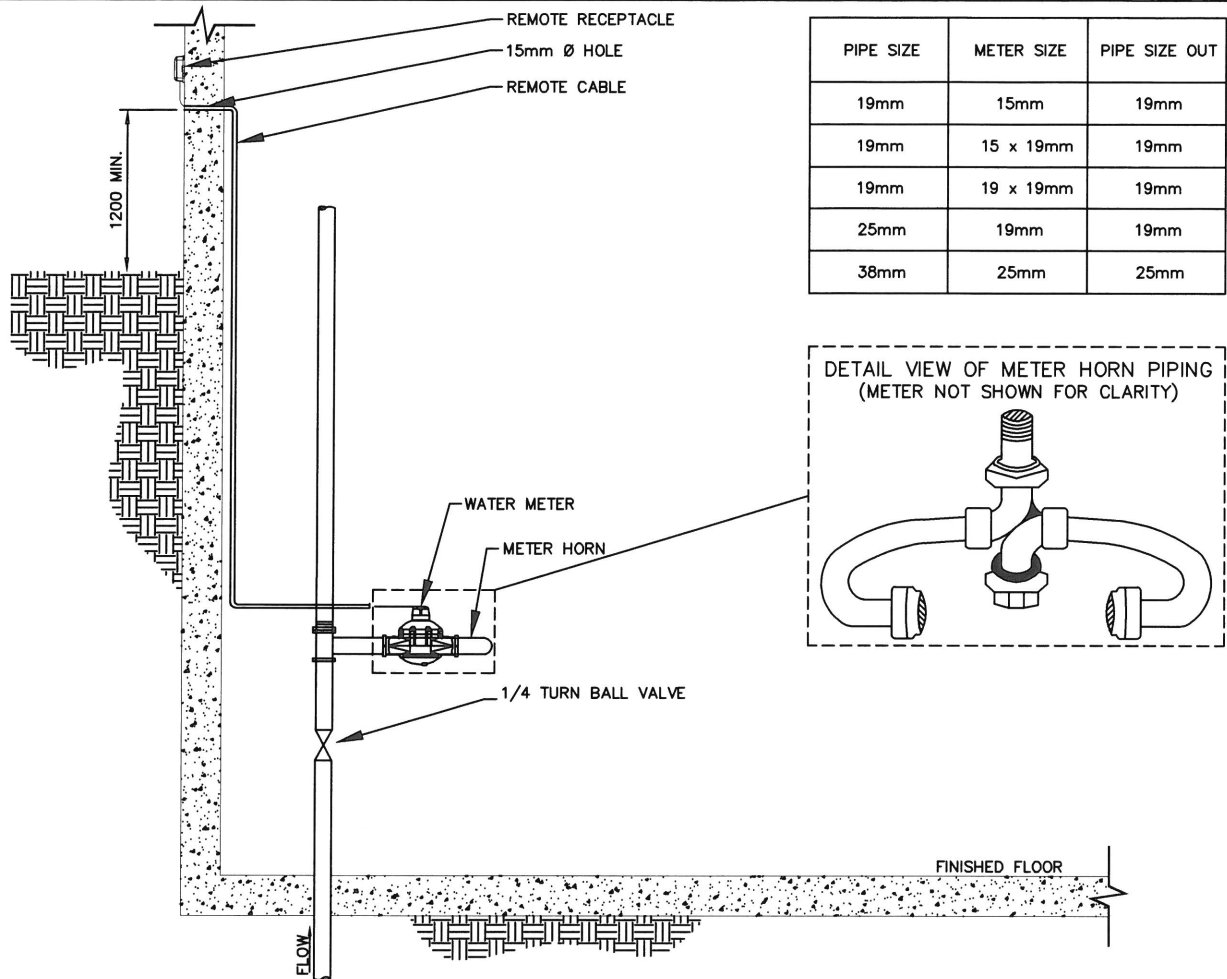
DWG. NO. WS-610



NOTES:

1. PROVISION IS TO BE MADE FOR THE DISPOSAL OF WATER USED FOR IN PLACE TESTING OF TRU-FLO COMPOUND METER EITHER THROUGH FLOOR DRAIN OR THE 125mm FERRULE.
2. BY-PASS MAY BE ONE PIPE SIZE SMALLER THAN METER SIZE AND MAY BE INSTALLED HORIZONTALLY.
3. WHERE METER ROOM IS NOT ADJACENT TO AN OUTSIDE WALL OR IS BELOW EXTERIOR FINISHED GRADE, THE APPLICANT/CONTRACTOR SHALL PROVIDE A CONTINUOUS 12mm Ø E.M.T. CONDUIT COMPLETE WITH NYLON FISH LINE FROM METER ROOM TO 1.0m ABOVE EXTERIOR FINISHED GROUND.
4. METER SHALL BE ACCESSIBLE AT ALL TIMES.
5. BACKFLOW PREVENTOR SHALL BE INSTALLED AFTER BOTH THE METER AND BY-PASS.
6. BY-PASS TO BE LOCKED AND SEALED BY THE TOWN.
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
8. REMOTE CABLE SHALL BE SECURED TO WALL.

TOWN OF WHITCHURCH-STOUFFVILLE		APPROVED:	
	50mm to 150mm COMPOUND METER ICI INSTALLATION IN BUILDING	DATE:	MAR. 2019
		ISSUE NO.	
		SCALE:	N.T.S.
		DWG. NO.	WS-611



NOTES:

1. ALL WATER METERS SHALL BE INSTALLED IN THE HORIZONTAL POSITION.
2. WATER METERS SHALL BE INSTALLED WITH A MINIMUM 1.2m UNOBSTRUCTED CLEARANCE IN FRONT OF WATER METER TO NEAREST WALL.
3. THE WORKING SPACE IN FRONT OF THE METER SHALL HAVE A MINIMUM OF 2.0m UNOBSTRUCTED HEAD CLEARANCE.
4. ALL VALVES, BENDS AND TEES SHALL BE FLANGED, THREADED OR SOLDER TYPE.
5. ALL PIPING, TEES, BENDS AND VALVES, SHALL BE THE SAME DIAMETER AS THE PRIVATE WATER SERVICE PIPE. PIPE REDUCERS REQUIRED TO ACCOMMODATE A SMALLER WATER METER THAN THE PRIVATE WATER SERVICE PIPE SHALL ONLY BE INSTALLED PAST THE INLET VALVE.
6. THE WATER METER SHALL BE SEALED BY THE TOWN.
7. ALL PIPE TYPES SHALL CONFORM TO TOWN REQUIREMENTS AND BE APPROVED BY THE TOWN.
8. ALL VALVES, DEVICES AND BRANCH FITTINGS SHALL BE LOCATED DOWNSTREAM OF THE METER.
9. ANY INSULATION PLACED AROUND ANY WATER METER SHALL BE EASILY REMOVABLE AND REPLACEABLE AND SHALL NOT CONTAIN ASBESTOS OR ANY OTHER TOXIC OR HAZARDOUS MATERIALS. SUCH INSULATION SHALL NOT COVER OR OBSTRUCT THE WATER METER REGISTER. THE TOWN OR CONTRACTOR SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO SUCH INSULATION DURING ANY REMOVAL OR REPLACEMENT OF SUCH INSULATION.
10. ALL WATER METER INSTALLATIONS SHALL CONFORM WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
11. THE PRIVATE WATER SERVICE PIPE SHALL BE FLUSHED PRIOR TO AND AFTER THE INSTALLATION OF THE WATER METER.
12. REMOTE READOUT DEVICE WIRE SHALL BE INSTALLED WITH A MINIMUM HEIGHT OF 1.0m CLEARANCE FROM THE GROUND ON THE NEAREST AVAILABLE OUTSIDE WALL.
13. ALL PIPING AFTER THE 1/4 TURN BALL VALVE SHALL BE COPPER. PIPING FOR METER TO BE RUN HORIZONTALLY & METER TO BE INSTALLED ON HORIZONTAL PIPING ONLY.
14. IF BASE PIPE IS NON-METALLIC, SUPPORT SHALL BE PROVIDED AS PER DIRECTION BY THE TOWN.
15. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

TOWN OF WHITCHURCH-STOUFFVILLE



15mm TO 25mm
RESIDENTIAL METER INSTALLATION
IN BUILDING - VERTICAL

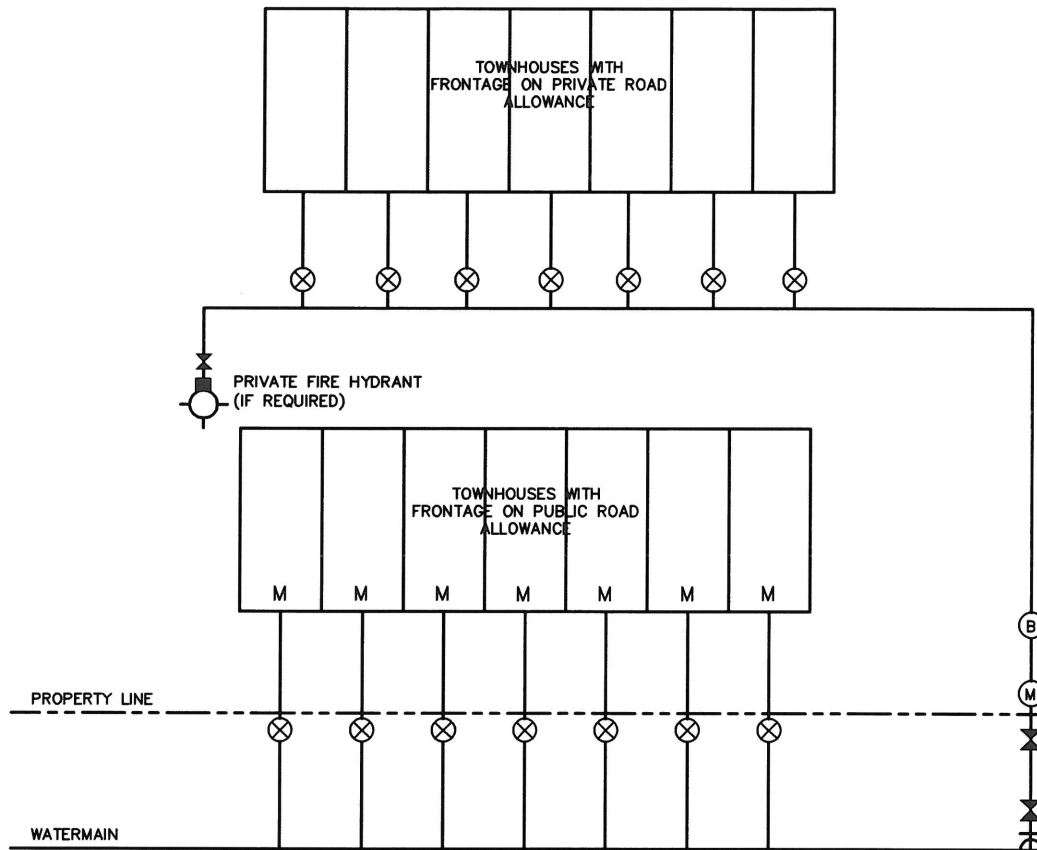
APPROVED:

DATE: MAR. 2019

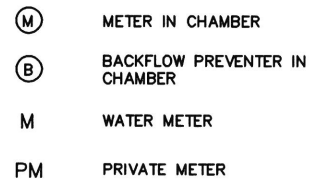
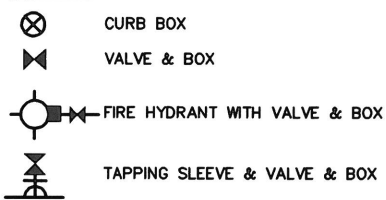
ISSUE NO.

SCALE: N.T.S.

DWG. NO. WS-612



LEGEND



TOWN OF WHITCHURCH-STOUFFVILLE



WATER SERVICING FOR TOWNHOUSE
COMPLEX

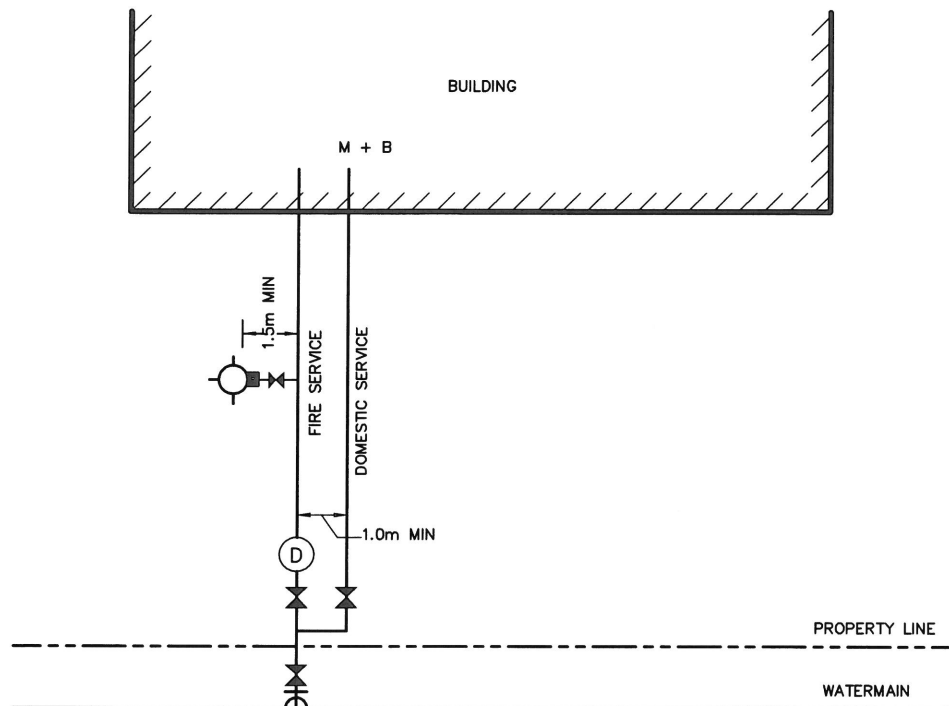
APPROVED:

DATE: MAR. 2019

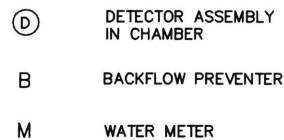
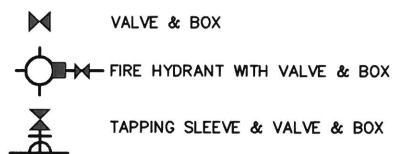
ISSUE NO.

SCALE: N.T.S.

DWG. NO. WS-613




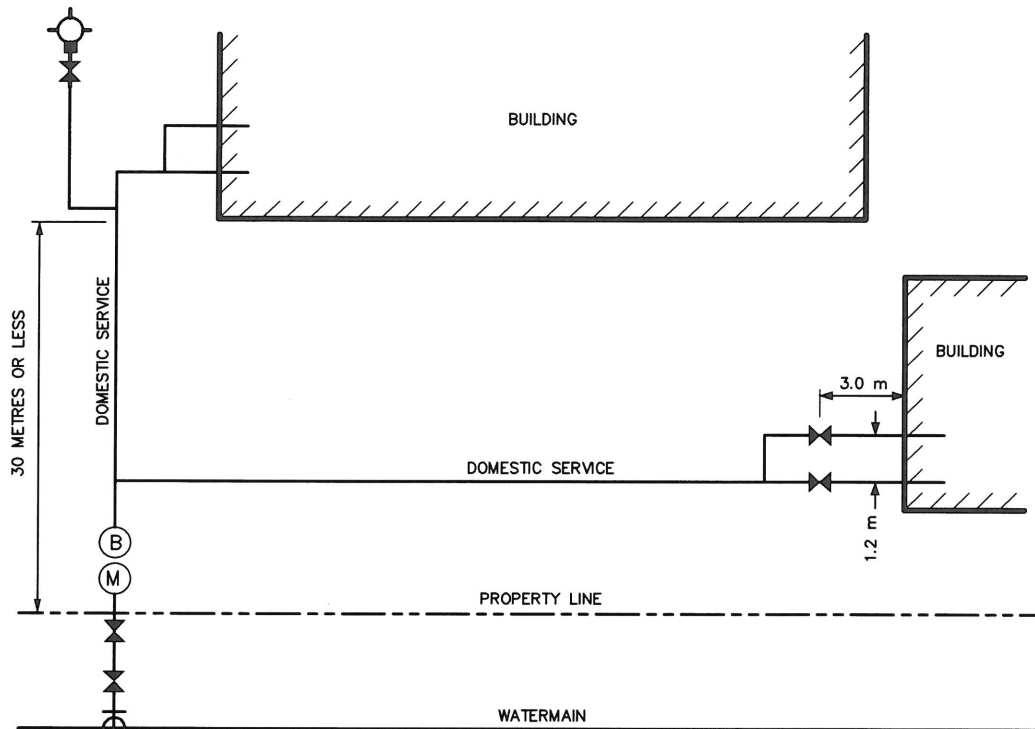
LEGEND



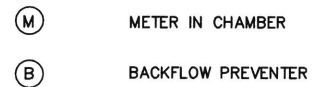
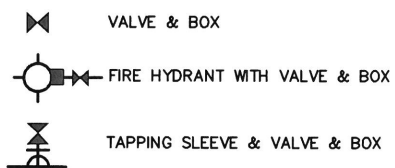
NOTES:

1. THE REQUIRED DETECTOR ASSEMBLY ON THE FIRE SERVICE IS DETERMINED BASED ON THE FIRE SPRINKLER OR STANDPIPE CLASSIFICATION AS FOUND IN SECTION 7.6.2.4, BACKFLOW FROM FIRE PROTECTION SYSTEMS, OF THE 2006 ONTARIO BUILDING CODE AND SECTION 5.5 OF THE CSA B64.10 SERIES STANDARD. IF THE BUILDING CODE AND CSA B64.10 REQUIRES A DOUBLE CHECK VALVE ASSEMBLY FOR THE FIRE SERVICE THEN THE WATER SUPPLY BYLAW REQUIRES IT TO BE DOUBLE CHECK DETECTOR ASSEMBLY. CONVERSELY, IF THE BUILDING CODE OR CSA B64.10 REQUIRES A REDUCED PRESSURE PRINCIPAL ASSEMBLY, THEN IT SHOULD BE A REDUCED PRESSURE DETECTOR ASSEMBLY. IT SHOULD BE NOTED THAT A REDUCED PRESSURE DETECTOR ASSEMBLY CANNOT BE INSTALLED BELOW GRADE IN A VAULT OR CHAMBER.
2. WHEN A BUILDING REQUIRES A HYDRANT FOR FIRE PROTECTION MAKE ALL ATTEMPTS TO LOCATE PROPOSED HYDRANT ON PRIVATE PROPERTY.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

TOWN OF WHITCHURCH-STOUFFVILLE		APPROVED:
	WATER SERVICING FOR SINGLE BUILDING WITH FRONTAGE ON MUNICIPAL ROAD ALLOWANCE ONE LOT	DATE: MAR. 2019
		ISSUE NO.
		SCALE: N.T.S.
		DWG. NO. WS-614




LEGEND



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

TOWN OF WHITCHURCH-STOUFFVILLE		APPROVED:	
	WATER SERVICING FOR MULTIPLE BUILDINGS WITH FRONTAGE ON MUNICIPAL ROAD ALLOWANCE ONE LOT	DATE:	MAR. 2019
		ISSUE NO.	
		SCALE:	N.T.S.
		DWG. NO.	WS-615