

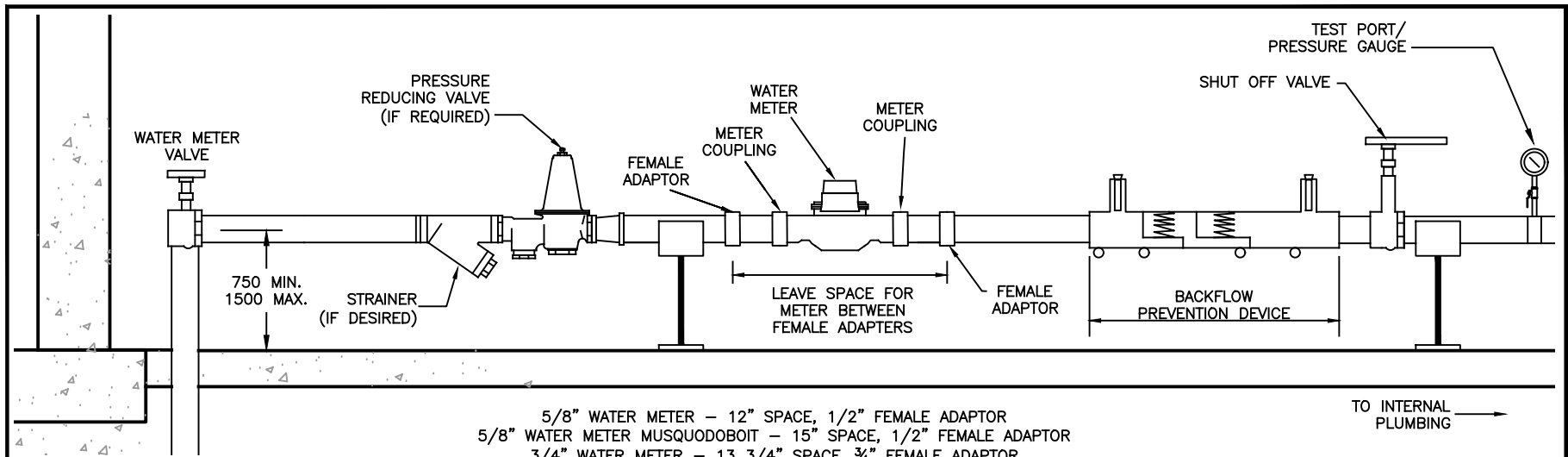
NOTES:

1. ALL PRODUCTS AND MATERIALS ARE REQUIRED TO BE NSF-61 COMPLIANT.
2. METER, METER COUPLING AND OUTSIDE REMOTE ARE SUPPLIED AND INSTALLED BY HRWC.
3. ALL PIPE MATERIAL IS REQUIRED TO BE TYPE K COPPER TUBING TO ASTM B88.
4. FOR PEX_a WATER SERVICE CONNECTIONS, USE ASTM 2080 COMPRESSION SLEEVE FITTING TO TRANSITION TO THE COPPER TUBING OF THE WATER METER ARRANGEMENT.
5. WATER METER TO BE INSTALLED WITHIN 1200 mm OF WHERE THE SERVICE CONNECTION ENTERS THE BUILDING.
6. ARRANGEMENT IS TO BE NO LESS THAN 450 mm AND NO MORE THAN 750mm FROM THE FLOOR.
7. MINIMUM OF 1200 mm STRAIGHT LENGTH OF TYPE K COPPER TUBING DOWNSTREAM OF THE WATER METER. SECURE THE COPPER TUBING TO THE WALL OR FLOOR.
8. THE ARRANGEMENT IS REQUIRED TO BE HORIZONTALLY LEVEL AND HAVE SUFFICIENT ROOM FOR ACCESS.
9. A SHUT OFF VALVE MAY BE SUBSTITUTED FOR THE WATER METER VALVE.
10. PROVIDE 1/2" CONDUIT THROUGH FOUNDATION OR EXTERIOR WALL CLOSEST TO THE WATER METER FOR PURPOSE OF INSTALLING AN OUTSIDE REMOTE. PROVIDE SOLID 22 GAUGE, 3 OR 4 STRANDED CONDUCTOR WIRE FROM THE WATER METER TO THE EXTERIOR LOCATION FOR THE OUTSIDE REMOTE.
11. INSTALL OUTSIDE REMOTE ON THE DRIVEWAY SIDE OF THE BUILDING OR WHERE DIRECTED BY HRWC.
12. ALL COMPONENTS ILLUSTRATED MUST BE INSTALLED PRIOR TO THE WATER METER INSTALLATION.
13. THE BUILDING IS REQUIRED TO BE ROOF TIGHT, WITH EXTERIOR SIDING INSTALLED, AND THE CURB STOP AND SERVICE BOX ARE TO BE PLUMB AND LEVEL WITH FINISHED LANDSCAPING PRIOR TO WATER METER INSTALLATION.

1	NEW DETAIL FOR 2017	08 05 17	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
ALL DIMENSIONS SHOWN IN MILLIMETERS, UNLESS OTHERWISE NOTED.

PROJECT		PROFILE OF 16mm, 19mm & 25mm (5/8", 3/4" & 1") WATER METER ARRANGEMENT	
DRAWN	J.W./SJT	SCALE (PLAN)	
CHECKED	J.D.	SCALE (PROFILE)	N.T.S.
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD-001			



5/8" WATER METER – 12" SPACE, 1/2" FEMALE ADAPTOR
 5/8" WATER METER MUSQUODOBOIT – 15" SPACE, 1/2" FEMALE ADAPTOR
 3/4" WATER METER – 13 3/4" SPACE, 3/4" FEMALE ADAPTOR
 1" WATER METER – 15 3/4" SPACE, 1" FEMALE ADAPTOR

NOTES:

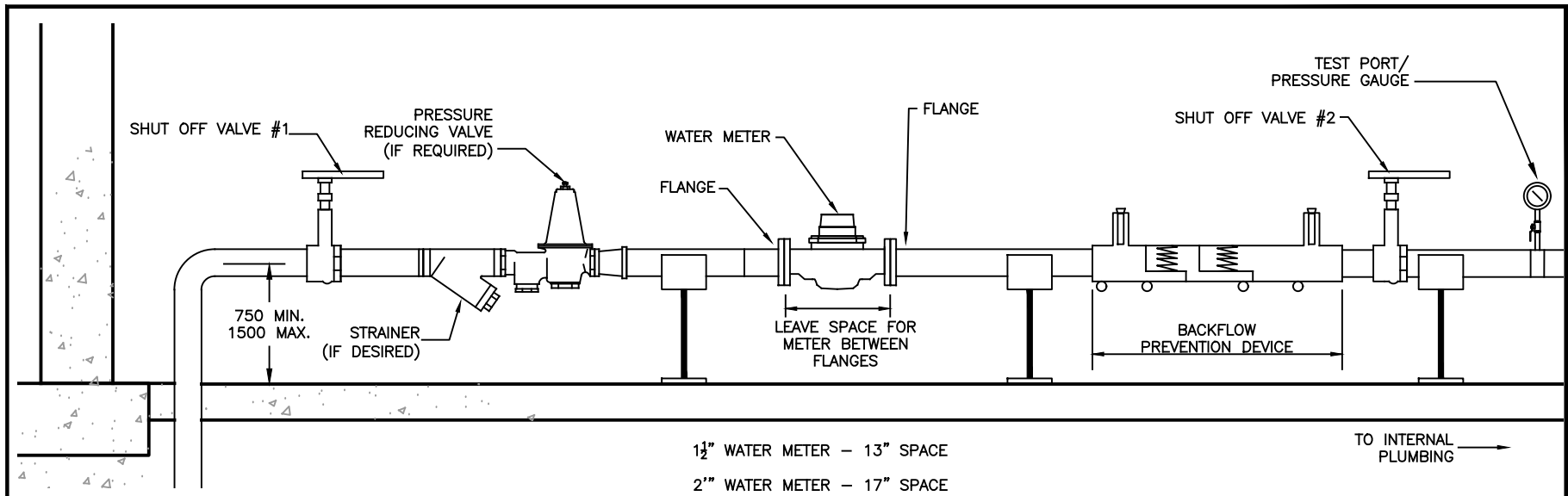
1. ALL PRODUCTS AND MATERIALS ARE REQUIRED TO BE NSF61 COMPLIANT.
2. METER, METER COUPLING AND OUTSIDE REMOTE ARE SUPPLIED BY HRWC.
3. ALL PIPE MATERIAL IS REQUIRED TO BE TYPE K COPPER TUBING TO ASTM B88,
4. FOR PEX_d WATER SERVICE CONNECTIONS, USE ASTM 2080 COMPRESSION SLEEVE FITTING TO TRANSITION TO THE COPPER TUBING OF THE WATER METER ARRANGEMENT.
5. WATER METER TO BE INSTALLED WITHIN 1200 mm OF WHERE THE SERVICE CONNECTION ENTERS THE BUILDING.
6. ARRANGEMENT IS TO BE NO LESS THAN 750 mm AND NO MORE THAN 1500 mm FROM THE FLOOR.
7. MINIMUM OF 1200 mm STRAIGHT LENGTH OF TYPE K COPPER TUBING DOWNSTREAM OF SHUT OFF VALVE #2. SECURE THE COPPER TUBING TO THE WALL OR FLOOR.
8. THE ARRANGEMENT IS REQUIRED TO BE HORIZONTALLY LEVEL AND HAVE SPECIFIED ROOM FOR ACCESS.
9. A SHUT OFF VALVE MAY BE SUBSTITUTED FOR THE WATER METER VALVE.
10. PROVIDE 1/2" CONDUIT THROUGH FOUNDATION OR EXTERIOR WALL CLOSEST TO THE WATER METER FOR PURPOSE OF INSTALLING AN OUTSIDE REMOTE PROVIDE SOLID 22 GAUGE, 3 OR 4 STRANDED CONDUCTOR WIRE FROM THE WATER METER TO THE EXTERIOR LOCATION FOR THE OUTSIDE REMOTE.
11. INSTALL OUTSIDE REMOTE ON THE DRIVEWAY SIDE OF THE BUILDING OR WHERE DIRECTED BY HRWC.
12. ALL COMPONENTS ILLUSTRATED MUST BE INSTALLED PRIOR TO THE WATER METER INSTALLATION
13. THE BUILDING IS REQUIRED TO BE ROOF TIGHT, WITH EXTERIOR SIDING INSTALLED, AND THE CURB STOP AND SERVICE BOX ARE TO BE PLUMB AND LEVEL WITH FINISHED LANDSCAPING PRIOR TO WATER METER INSTALLATION.

1	NEW DETAIL FOR 2017	08/05/17	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
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 UNLESS OTHERWISE NOTED.



PROJECT		PROFILE OF 15mm, 19mm & 25mm (5/8", 3/4" & 1") WATER METER & BACKFLOW PREVENTION DEVICE ARRANGEMENT	
DRAWN	S.T.	SCALE	(PLAN)
CHECKED	J.D.	SCALE	(PROFILE) N.T.S.
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD – 002			




NOTES:

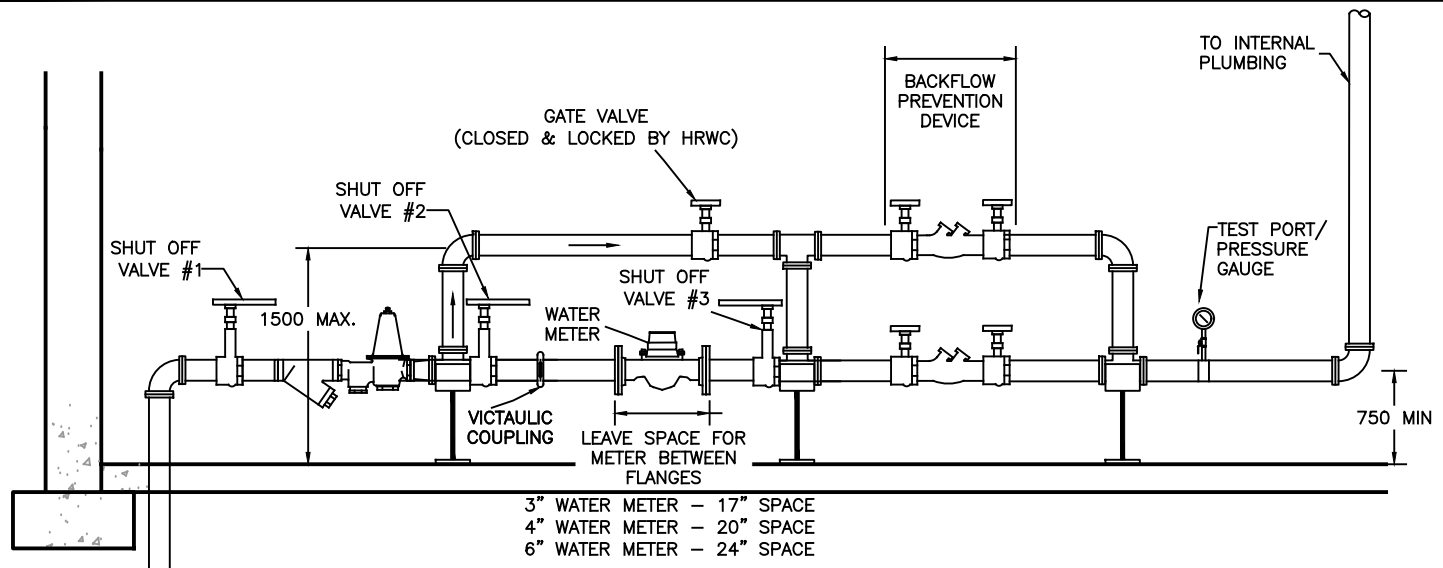
1. ALL PRODUCTS AND MATERIALS ARE REQUIRED TO BE NSF61 COMPLIANT.
2. METER AND OUTSIDE REMOTE ARE SUPPLIED BY HRWC.
3. ALL PIPE MATERIAL IS REQUIRED TO BE TYPE K COPPER TUBING TO ASTM B88, OR DUCTILE IRON, SPECIAL CLASS 52/54 TO AWWA C151.
4. FOR PEX_a WATER SERVICE CONNECTIONS, USE ASTM 2080 COMPRESSION SLEEVE FITTING TO TRANSITION TO THE COPPER TUBING OF THE WATER METER ARRANGEMENT.
5. WATER METER TO BE INSTALLED WITHIN 1200 mm OF WHERE THE SERVICE CONNECTION ENTERS THE BUILDING.
6. ARRANGEMENT IS TO BE NO LESS THAN 750 mm AND NO MORE THAN 1500mm FROM THE FLOOR.
7. MINIMUM OF 1200 mm STRAIGHT LENGTH OF TYPE K COPPER TUBING OR DUCTILE IRON DOWNSTREAM OF THE WATER METER. SECURE THE PIPING TO THE WALL OR FLOOR.
8. THE ARRANGEMENT IS REQUIRED TO BE HORIZONTALLY LEVEL AND HAVE SPECIFIED ROOM FOR ACCESS
9. PROVIDE 3/4" CONDUIT THROUGH FOUNDATION OR EXTERIOR WALL CLOSEST TO THE WATER METER FOR PURPOSE OF INSTALLING AN OUTSIDE REMOTE. PROVIDE SOLID 22 GAUGE, 3 OR 4 STRANDED CONDUCTOR WIRE FROM THE WATER METER TO THE EXTERIOR LOCATION FOR THE OUTSIDE REMOTE.
10. INSTALL OUTSIDE REMOTE ON THE DRIVEWAY SIDE OF THE BUILDING OR WHERE DIRECTED BY HRWC.
11. ALL COMPONENTS ILLUSTRATED MUST BE INSTALLED PRIOR TO THE WATER METER INSTALLATION.
12. THE BUILDING IS REQUIRED TO BE ROOF TIGHT, WITH EXTERIOR SIDING INSTALLED, AND THE CURB STOP AND SERVICE BOX ARE TO BE PLUMB AND LEVEL WITH FINISHED LANDSCAPING PRIOR TO WATER METER INSTALLATION.

1	NEW DETAIL FOR 2017	08/05/17	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
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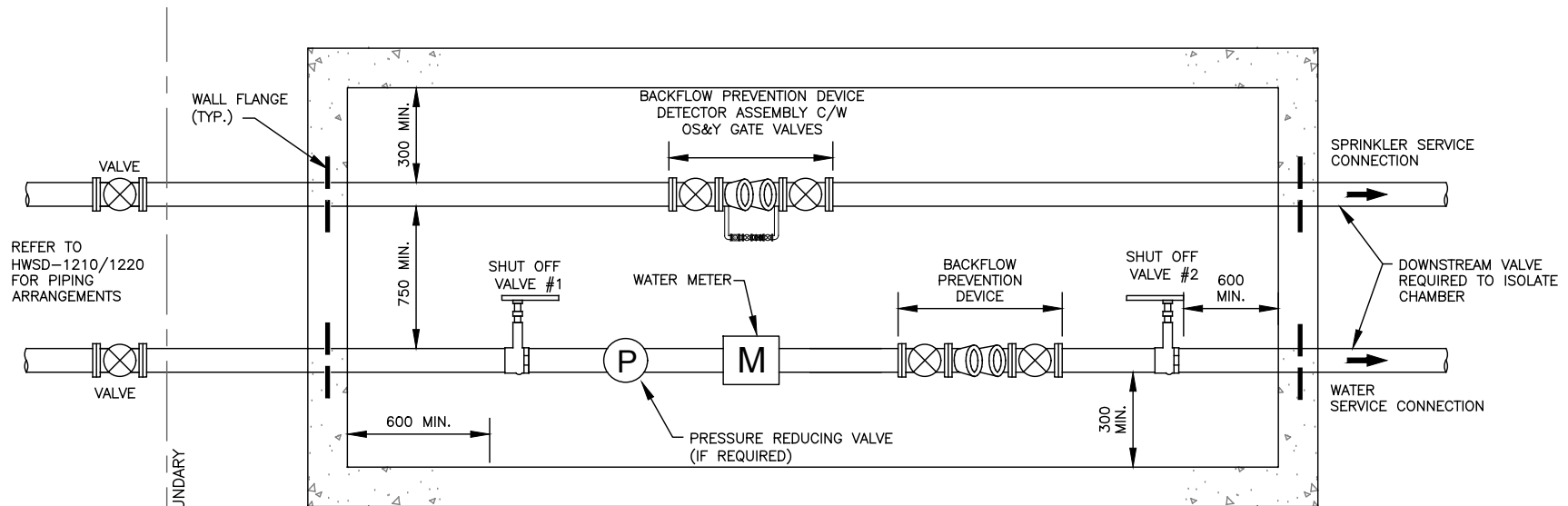
PROJECT		PROFILE OF 38 mm & 50 mm (1-1/2" & 2") WATER METER & BACKFLOW PREVENTION DEVICE	
DRAWN	S.T.	SCALE	(PLAN)
CHECKED	J.D.	SCALE	(PROFILE) N.T.S.
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD - 003			



NOTES:

1. ALL PRODUCTS AND MATERIALS ARE REQUIRED TO BE NSF61 COMPLIANT.
2. WATER METER AND OUTSIDE REMOTE ARE SUPPLIED BY HRWC.
3. ALL PIPE MATERIAL IS REQUIRED TO BE TYPE K COPPER TUBING TO ASTM B88, OR DUCTILE IRON, SPECIAL CLASS 52/54 TO AWWA C151.
4. FOR PEX_a WATER SERVICE CONNECTIONS, USE ASTM 2080 COMPRESSION SLEEVE FITTING TO TRANSITION TO THE COPPER TUBING OF THE WATER METER ARRANGEMENT.
5. WATER METER TO BE INSTALLED WITHIN 1200 mm OF WHERE THE SERVICE CONNECTION ENTERS THE BUILDING.
6. ARRANGEMENT IS TO BE NO LESS THAN 750 mm AND NO MORE THAN 1500mm FROM THE FLOOR.
7. PROVIDE STRAIGHT LENGTH OF PIPE EQUAL TO 5 TIMES THE DIAMETER OF THE PIPE UPSTREAM AND DOWNSTREAM OF THE WATER METER.
8. THE ARRANGEMENT IS REQUIRED TO BE HORIZONTALLY LEVEL AND HAVE SPECIFIED ROOM FOR ACCESS.
9. PROVIDE 1/2" CONDUIT THROUGH FOUNDATION OR EXTERIOR WALL CLOSEST TO THE WATER METER FOR PURPOSE OF INSTALLING AN OUTSIDE REMOTE. PROVIDE SOLID 22 GAUGE, 3 OR 4 STRANDED CONDUCTOR WIRE FROM THE WATER METER TO THE EXTERIOR LOCATION FOR THE OUTSIDE REMOTE.
10. INSTALL OUTSIDE REMOTE ON THE DRIVEWAY SIDE OF THE BUILDING OR WHERE DIRECTED BY HRWC.
11. ALL COMPONENTS ILLUSTRATED MUST BE INSTALLED PRIOR TO THE WATER METER INSTALLATION.
12. THE BUILDING IS REQUIRED TO BE ROOF TIGHT, WITH EXTERIOR SIDING INSTALLED, AND THE CURB STOP AND SERVICE BOX ARE TO BE PLUMB AND LEVEL WITH FINISHED LANDSCAPING PRIOR TO WATER METER INSTALLATION.
13. DETAILS OF THRUST RESTRAINT SYSTEM AND PIPE SUPPORTS TO BE DESIGNED AND STAMPED BY THE DESIGN ENGINEER.

					<p>NOTE: ALL DIMENSIONS SHOWN IN MILLIMETERS, UNLESS OTHERWISE NOTED.</p> 	<p>PROJECT PROFILE OF 75mm (3") AND GREATER WATER METER AND BACKFLOW PREVENTION DEVICE BY-PASS ARRANGEMENT</p>	
						<p>DRAWN S.T. SCALE (PLAN)</p> <p>CHECKED J.D. SCALE (PROFILE) N.T.S.</p> <p>APPROVED K.G. DATE 08/05/17</p>	<p>PROJECT No.</p> <p>DWG. No. HWSD - 004</p>
1	NEW DETAIL FOR 2017	08/05/17	ST	KG			
No.	DESCRIPTION	DATE	BY	CHKD			



NOTES:

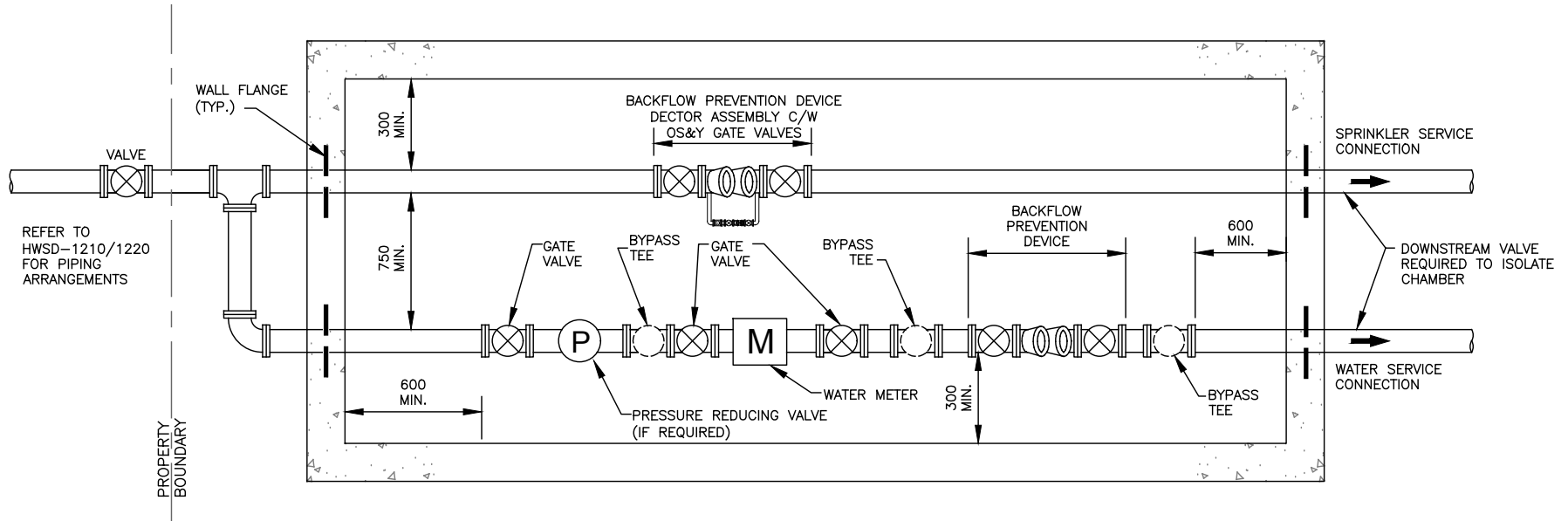
1. ALL NOTED DIMENSIONS / SPACING REQUIREMENTS WITH REGARDS TO CHAMBER WALLS.
2. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICES ARE NOT PERMITTED IN BELOW GRADE CHAMBERS.
3. REFER TO HRWC SUPPLEMENTARY STANDARD SPECIFICATION FOR ABOVE GROUND HEATED ENCLOSURE REQUIREMENTS.
4. REFER TO HWS-002 AND HWS-003 FOR THE APPLICABLE PROFILE ARRANGEMENT.

1	NEW DETAIL FOR 2017	08/05/28	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
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PROJECT		PLAN OF 16mm TO 50mm (5/8" TO 2") WATER METER & BACKFLOW PREVENTION DEVICE EXTERIOR CHAMBER ARRANGEMENT	
DRAWN	S.T.	SCALE	N.T.S.
CHECKED	J.D.	SCALE	(PROFILE)
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD - 005			



REFER TO
HWS-1210/1220
FOR PIPING
ARRANGEMENTS

PROPERTY
BOUNDARY

NOTES:

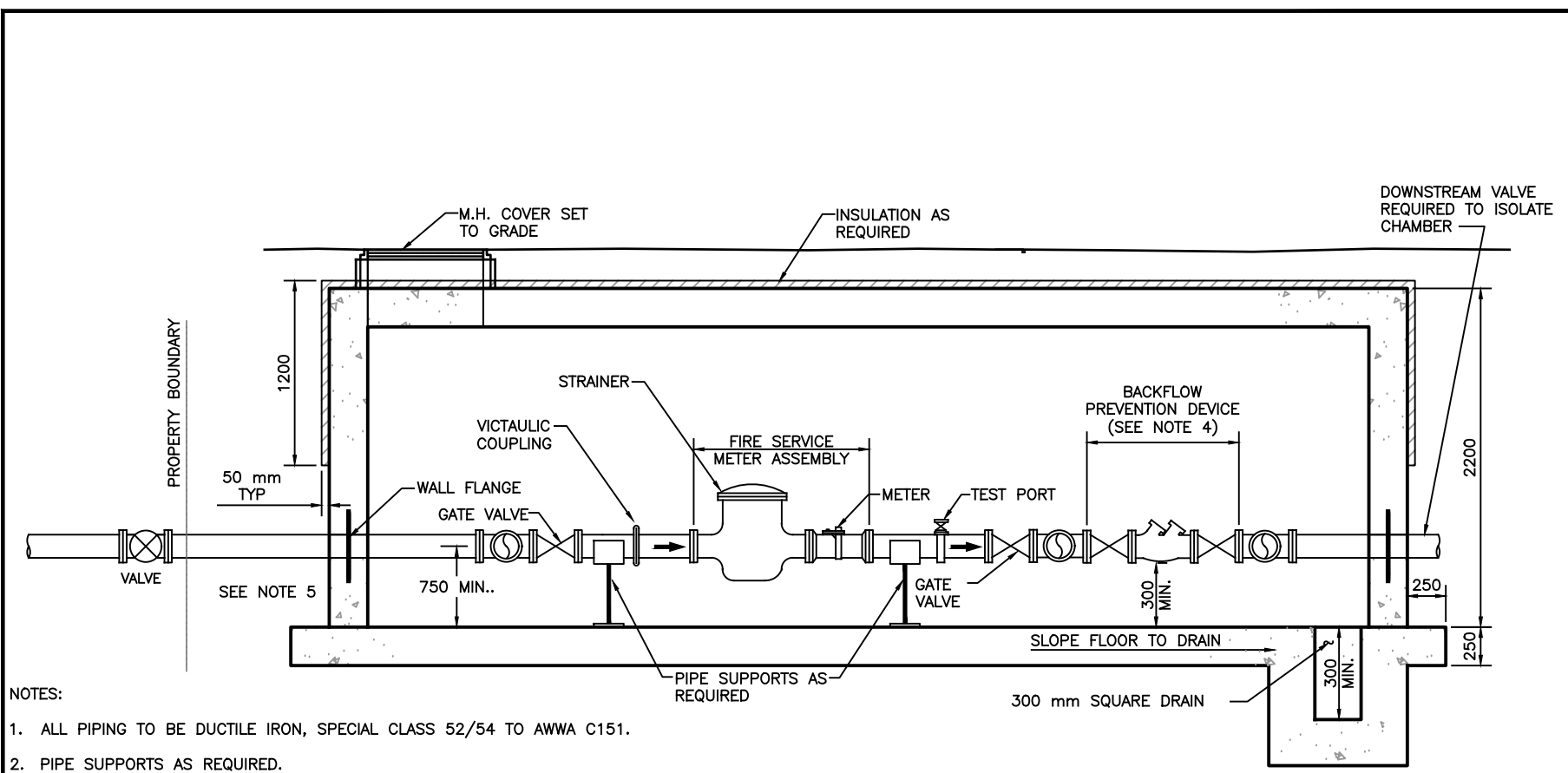
1. ALL NOTED DIMENSIONS / SPACING REQUIREMENTS WITH REGARDS TO CHAMBER WALLS.
2. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICES ARE NOT PERMITTED IN BELOW GRADE CHAMBERS.
3. REFER TO HRWC SUPPLEMENTARY STANDARD SPECIFICATION FOR ABOVE GROUND HEATED ENCLOSURE REQUIREMENTS.
4. REFER TO HWS-004 FOR THE PROFILE ARRANGEMENT.

1	NEW DETAIL FOR 2017	08/05/17	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
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PROJECT PLAN OF 75mm(3") & GREATER WATER METER AND BACKFLOW PREVENTION DEVICES WITH BYPASS EXTERIOR CHAMBER ARRANGEMENT	
DRAWN S.T.	SCALE (PLAN) N.T.S.
CHECKED J.D.	SCALE (PROFILE)
APPROVED K.G.	DATE 08/05/17
PROJECT No.	
DWG. No. HWSD - 006	




NOTES:

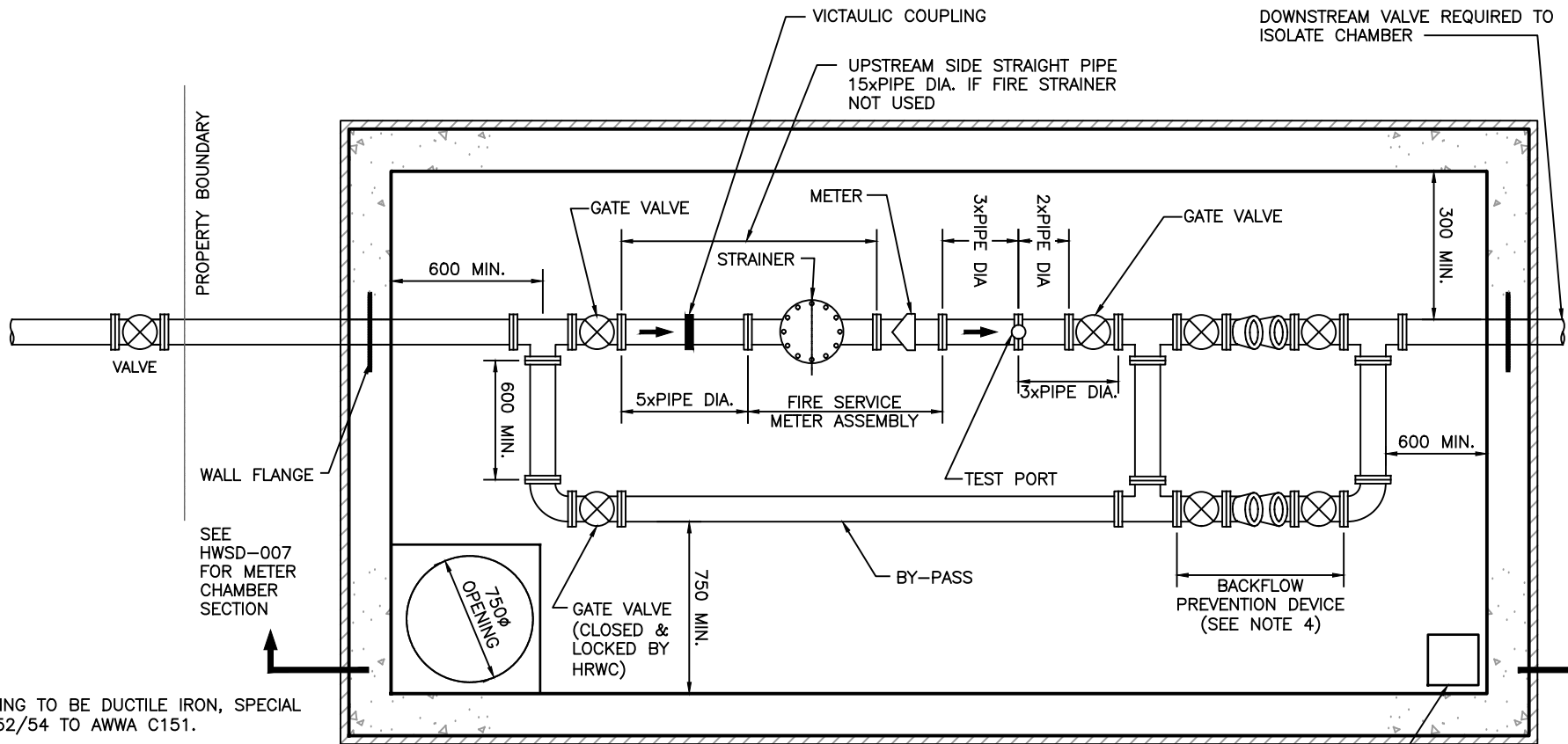
1. ALL PIPING TO BE DUCTILE IRON, SPECIAL CLASS 52/54 TO AWWA C151.
2. PIPE SUPPORTS AS REQUIRED.
3. M.H. COVER = HRWC SPEC, IMP R-90 PROVIDE 45 mm ϕ HOLE AND 100 mm ϕ -6 mm DEPTH COUNTERSINK IN COVER FOR REMOTE METER REGISTER.
4. PIPEWORK TO BE DESIGNED TO ACCOMMODATE POTENTIAL DIFFERENTIAL SETTLEMENT OF STRUCTURE.
5. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICES ARE NOT PERMITTED IN BELOW GRADE CHAMBERS. REFER TO HRWC SUPPLEMENTARY STANDARD SPECIFICATION FOR ABOVE GROUND HEATED ENCLOSURE REQUIREMENTS.

1	NEW DETAIL FOR 2017	08/05/17	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
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PROJECT		PROFILE MASTER WATER METER CHAMBER	
DRAWN	S.T.	SCALE	(PLAN)
CHECKED	J.D.	SCALE	(PROFILE) N.T.S.
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No.		HWSD - 007	



NOTES:

1. ALL PIPING TO BE DUCTILE IRON, SPECIAL
2. CLASS 52/54 TO AWWA C151.
3. PIPE SUPPORTS AS REQUIRED.
4. M.H. COVER = HRWC SPEC, IMP R-90. PROVIDE 45mm ϕ HOLE AND 100 mm ϕ -6 mm DEPTH COUNTERSINK IN COVER FOR REMOTE METER REGISTER.
5. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICES ARE NOT PERMITTED IN BELOW GRADE CHAMBERS.
6. REFER TO HRWC SUPPLEMENTARY STANDARD SPECIFICATION FOR ABOVE GROUND HEATED ENCLOSURE REQUIREMENTS.

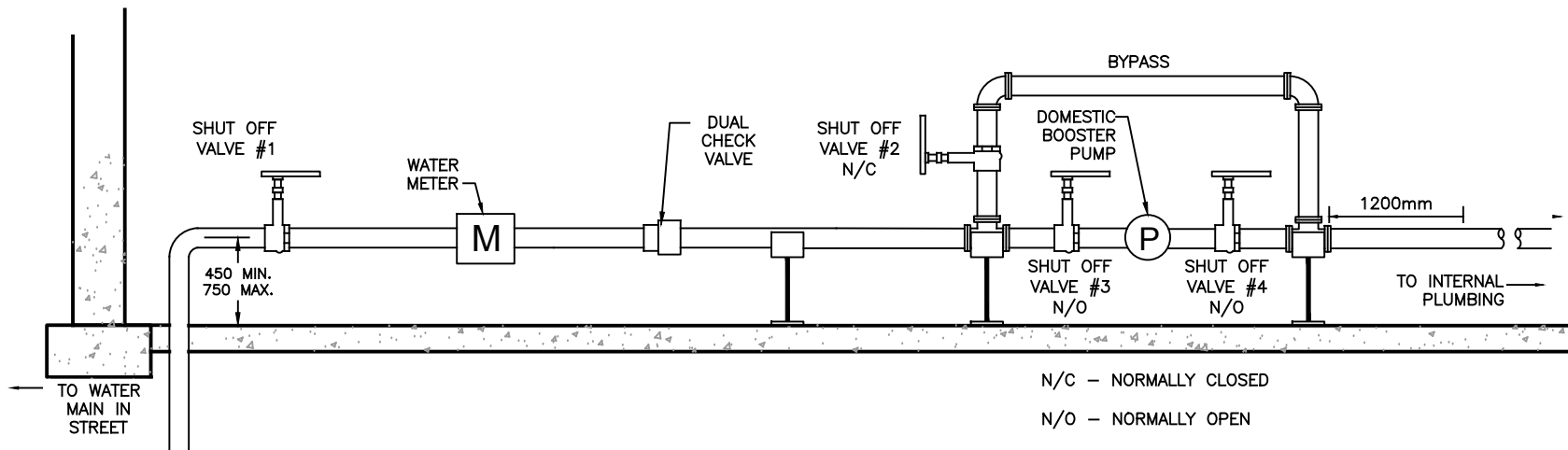
300 mm SQUARE DRAIN. MINIMUM DEPTH 300 mm BELOW FLOOR SURFACE.

1	NEW DETAIL FOR 2017	98 01 22	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
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UNLESS OTHERWISE NOTED.



PROJECT			
PLAN MASTER WATER METER CHAMBER			
DRAWN	S.T.	SCALE (PLAN)	N.T.S.
CHECKED	J.D.	SCALE (PROFILE)	
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD - 008			



NOTES:

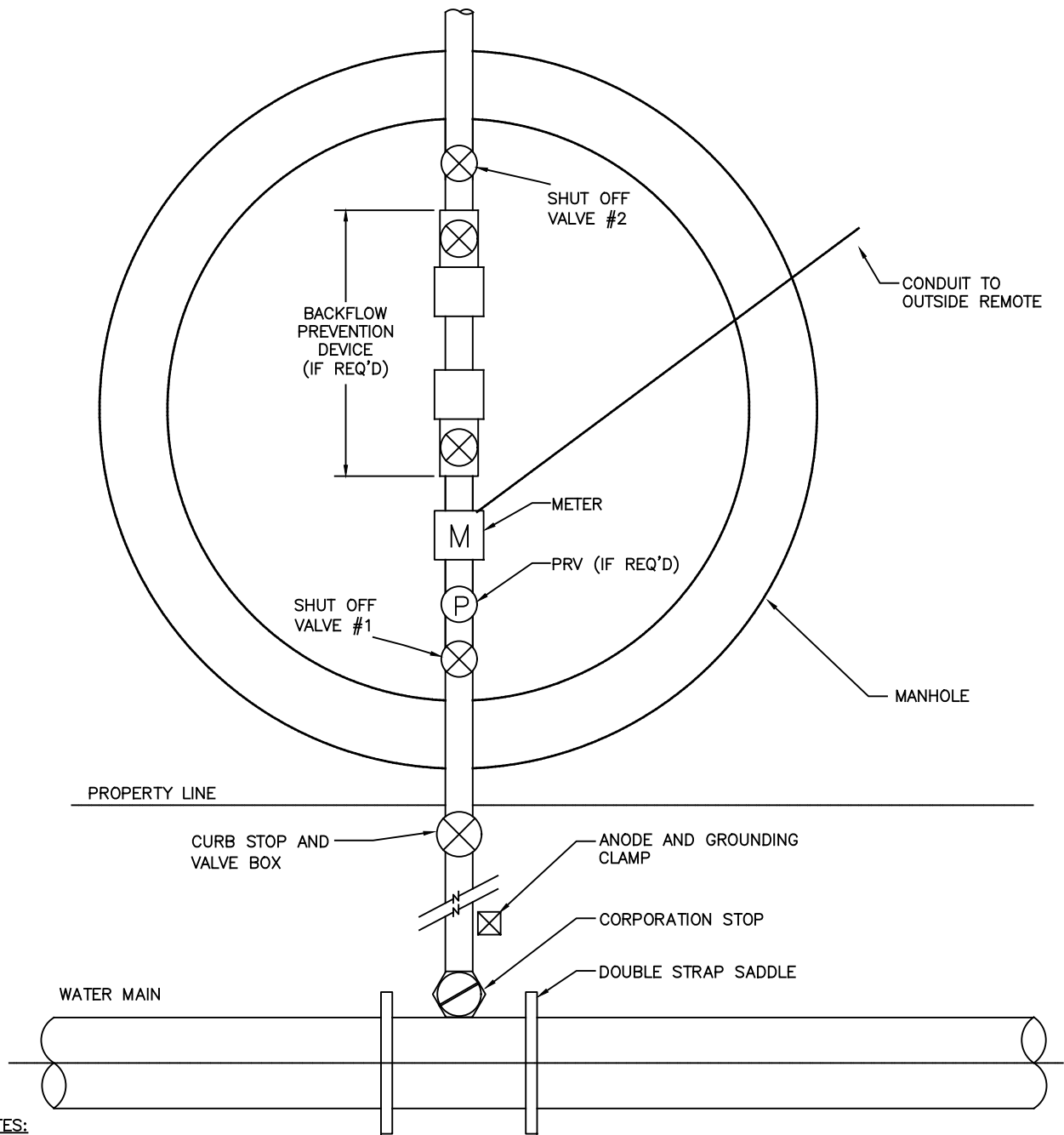
1. ALL PRODUCTS AND MATERIALS ARE REQUIRED TO BE NSF-61 COMPLIANT.
2. DOMESTIC BOOSTER PUMP SIZING AND PRODUCT SPECIFICATION AS PER BUILDING PLUMBING DESIGNER.
3. MINIMUM WATER SERVICE CONNECTION DIAMETER IS 25 mm.
4. REFER TO HWSD-001, HWSD-002 OR HWSD-003 FOR THE APPLICABLE PROFILE ARRANGEMENT.
5. ALL PIPE MATERIAL IS REQUIRED TO BE TYPE K COPPER TUBING TO ASTM B88.
6. FOR PEX_a WATER SERVICE CONNECTIONS, USE ASTM 2080 COMPRESSION SLEEVE FITTING TO TRANSITION TO THE COPPER TUBING OF THE WATER METER ARRANGEMENT.
7. ARRANGEMENT IS TO BE NO LESS THAN 450 mm AND NO MORE THAN 750mm FROM THE FLOOR.
8. MINIMUM OF 1200 mm STRAIGHT LENGTH OF TYPE K COPPER TUBING DOWNSTREAM OF BY PASS ARRANGEMENT SECURE THE COPPER TUBING TO THE WALL OR FLOOR.
9. THE ARRANGEMENT IS REQUIRED TO BE HORIZONTALLY LEVEL AND HAVE SUFFICIENT ROOM FOR ACCESS.
10. PROVIDE 3/4" CONDUIT THROUGH FOUNDATION OR EXTERIOR WALL CLOSEST TO THE WATER METER FOR PURPOSE OF INSTALLING AN OUTSIDE REMOTE. PROVIDE SOLID 22 GAUGE, 3 OR 4 STRANDED CONDUCTOR WIRE FROM THE WATER METER TO THE EXTERIOR LOCATION FOR THE OUTSIDE REMOTE.
11. INSTALL OUTSIDE REMOTE ON THE DRIVEWAY SIDE OF THE BUILDING OR WHERE DIRECTED BY HRWC.
12. ALL COMPONENTS ILLUSTRATED MUST BE INSTALLED PRIOR TO THE WATER METER INSTALLATION.
13. THE BUILDING IS REQUIRED TO BE ROOF TIGHT, WITH EXTERIOR SIDING INSTALLED, AND THE CURB STOP AND SERVICE BOX ARE TO BE PLUMB AND LEVEL WITH FINISHED LANDSCAPING PRIOR TO WATER METER INSTALLATION.

1	NEW DETAIL FOR 2017	08/05/17	ST	KG	
No.	DESCRIPTION	DATE	BY	CHKD	

NOTE:
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PROJECT		PROFILE RESIDENTIAL BOOSTER PUMP ARRANGEMENT	
DRAWN	S.T.	SCALE	(PLAN)
CHECKED	J.D.	SCALE	(PROFILE) N.T.S.
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD - 009			




NOTES:

1. ALL PIPE, MANHOLE, FRAME AND COVER, VALVES AND FITTINGS TO BE SUPPLIED BY CONTRACTOR.
2. MANHOLE 2400 mm WITH B.F.P., 1800 mm WITHOUT B.F.P.
3. CONTRACTOR TO INSTALL CONDUIT AND SUPPORT/PROTECTION FOR REMOTE REGISTER, SUBJECT TO HRWC APPROVAL.
4. MINIMUM DEPTH OF METER FROM FINISHED GRADE 1600 mm.
5. INSULATION IS REQUIRED. SEE HWS-1310 FOR DETAILS.
6. SEE HWS-1180 FOR INSTALLATION OF SERVICES 38 mm AND OVER.
7. SEE HWS-1310 FOR PRECAST CONCRETE CHAMBER DETAILS
8. SEE HWS-1460 FOR MANHOLE FRAME AND COVER DETAILS
9. SEE HWS-001, HWS-002 OR HWS-003 FOR WATER METER ARRANGEMENT REQUIREMENTS.

1	NEW DETAIL FOR 2017 SPEC.	08/05/17	ST	KG
No.	DESCRIPTION	DATE	BY	CHKD

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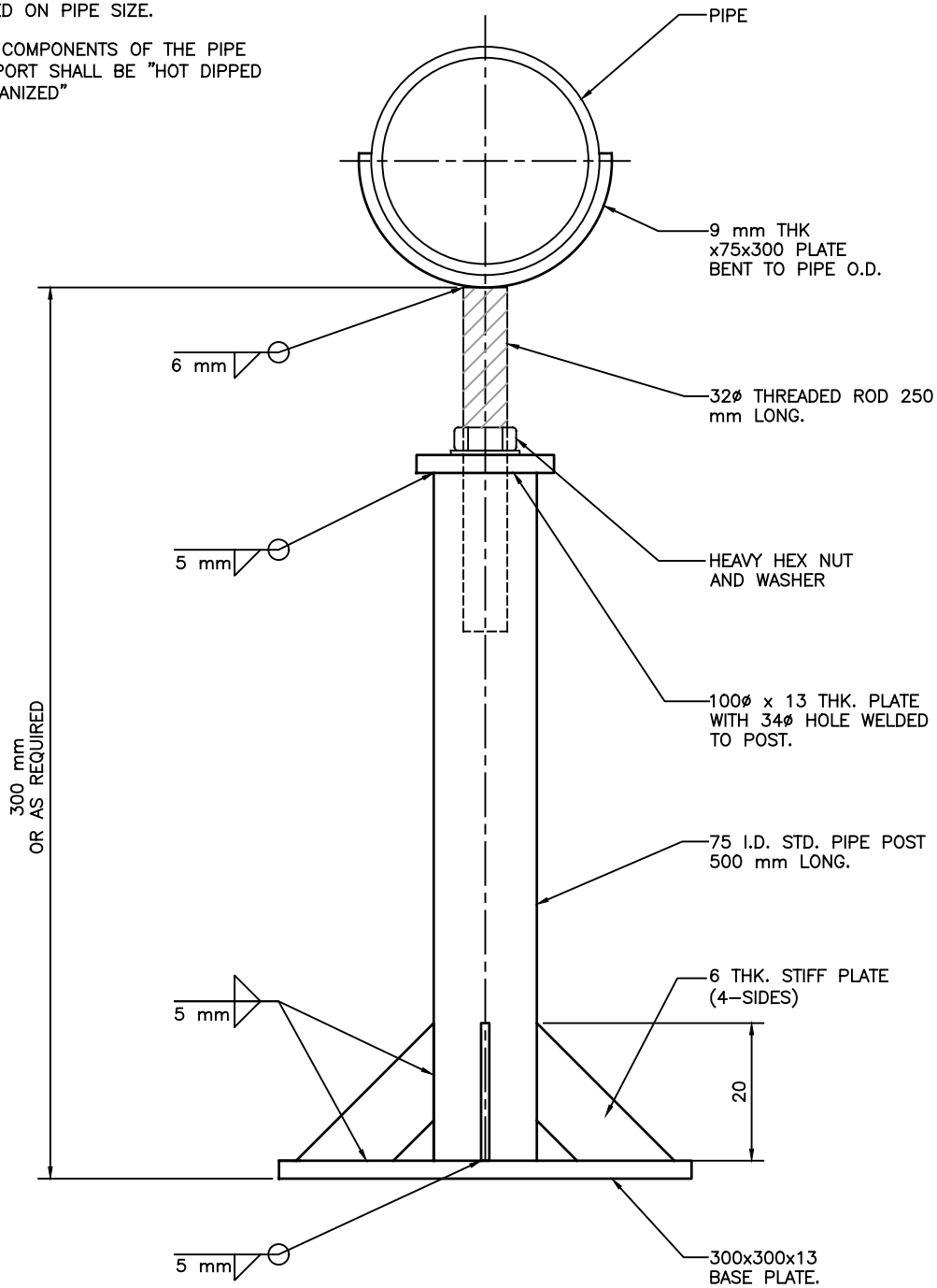


PROJECT
PLAN OF 16mm TO 50mm
(5/8" TO 2")
WATER METER PIT

DRAWN	J.W.	SCALE (PLAN)	N.T.S.
CHECKED	J.D.	SCALE (PROFILE)	
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD - 010			

NOTES:

1. NUMBER OF SUPPORTS NEEDED BASED ON PIPE SIZE.
2. ALL COMPONENTS OF THE PIPE SUPPORT SHALL BE "HOT DIPPED GALVANIZED"



1	NEW DETAIL FOR 2017 SPEC	08/05/17	ST	KG
No.	DESCRIPTION	DATE	BY	CHKD

NOTE:
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UNLESS OTHERWISE NOTED.



PROJECT		PIPE SUPPORT DETAIL	
DRAWN	S.T.	SCALE (PLAN)	
CHECKED	J.D.	SCALE (PROFILE)	N.T.S.
APPROVED	K.G.	DATE	08/05/17
PROJECT No.			
DWG. No. HWSD - 011			