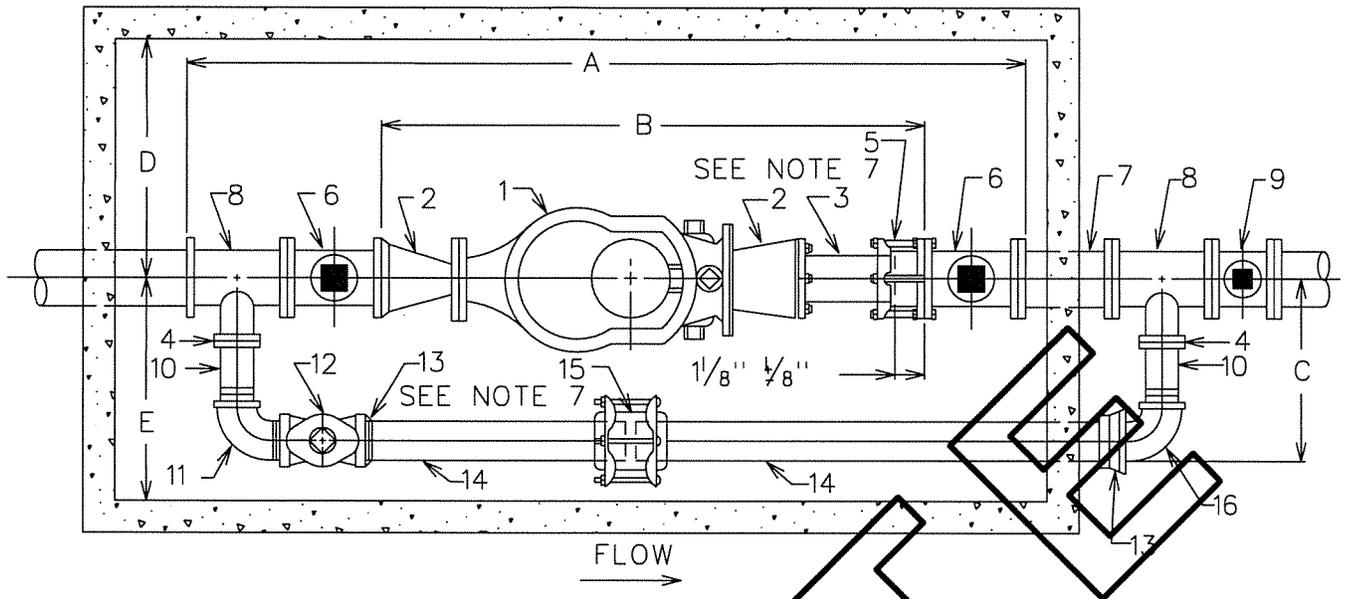


1. THIS DETAIL APPLIES ONLY TO INSTALLATIONS THAT MUST COMPLY WITH TCEQ RULE 217.53 (d) (A) (i).

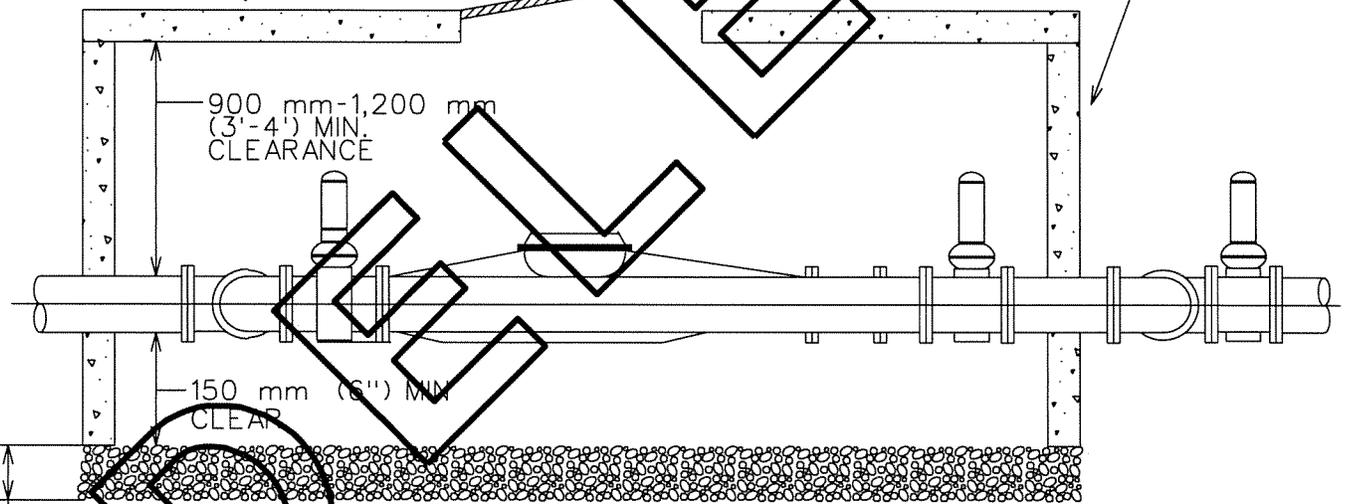
<p>CITY OF AUSTIN AUSTIN WATER UTILITY</p>	<p>WASTEWATER SERVICE CONNECTION TO PVC C900 RATED GRAVITY WASTEWATER MAIN</p>	
<p>_____</p>	<p>THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.</p>	<p>STANDARD NO. 520S-1B</p>



PLAN VIEW

REMOVABLE TOP
 750 mm X 750 mm (30"X30") HATCH
 SPL# 614

1.5 m X 2.1 m (5' X 7')
 PRECAST METER VAULT
 H2O LOADING
 SPL# 298



ELEVATION

No.	NAME	LENGTH
A	OVERALL LENGTH	1.9 m (76")
B	METER + SPOOL + FCA	1.1 m (44 1/2")
C	CENTER OF MAINLINE TO OUTSIDE OF BYPASS	375 mm (15")
D	CENTERLINE OF MAINLINE TO INSIDE OF VAULT	750 mm (30")
E	CENTERLINE OF MAINLINE TO INSIDE OF VAULT	750 mm (30")

CITY OF AUSTIN WATER AND WASTEWATER UTILITY		METER INSTALLATION 75 mm (3") SIZE	
RECORD COPY SIGNED BY KATHI L. FLOWERS	9/23/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-15A 1 OF 2

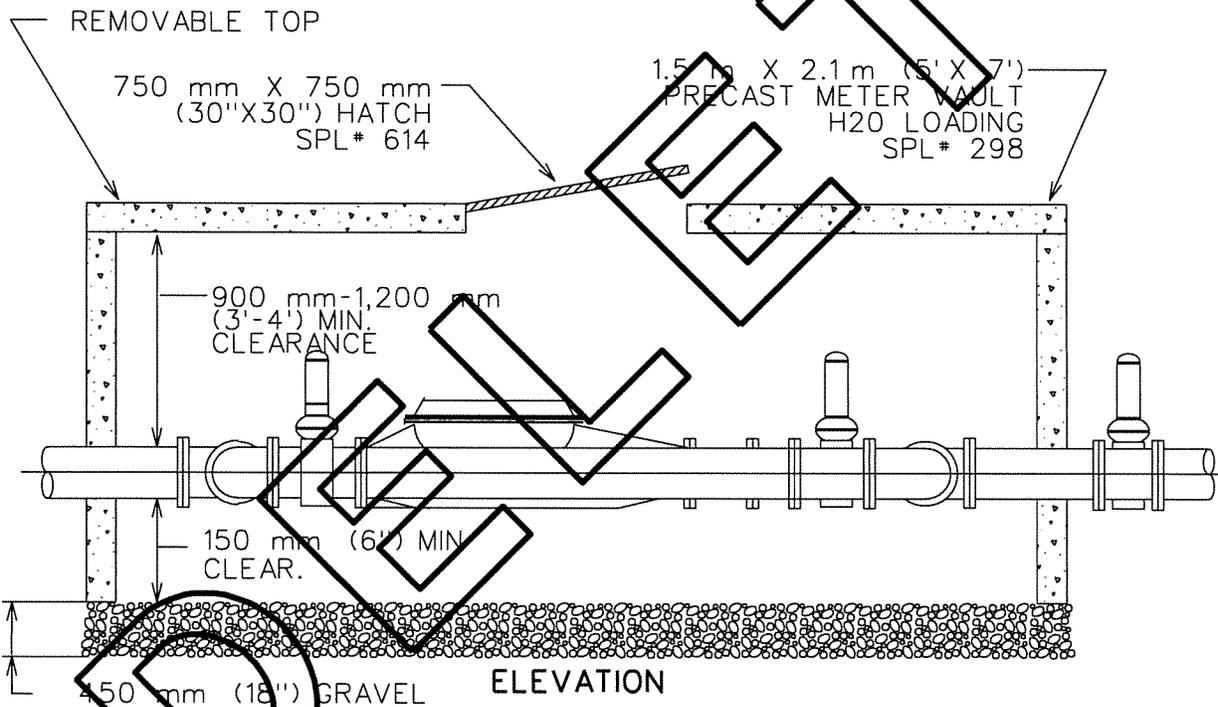
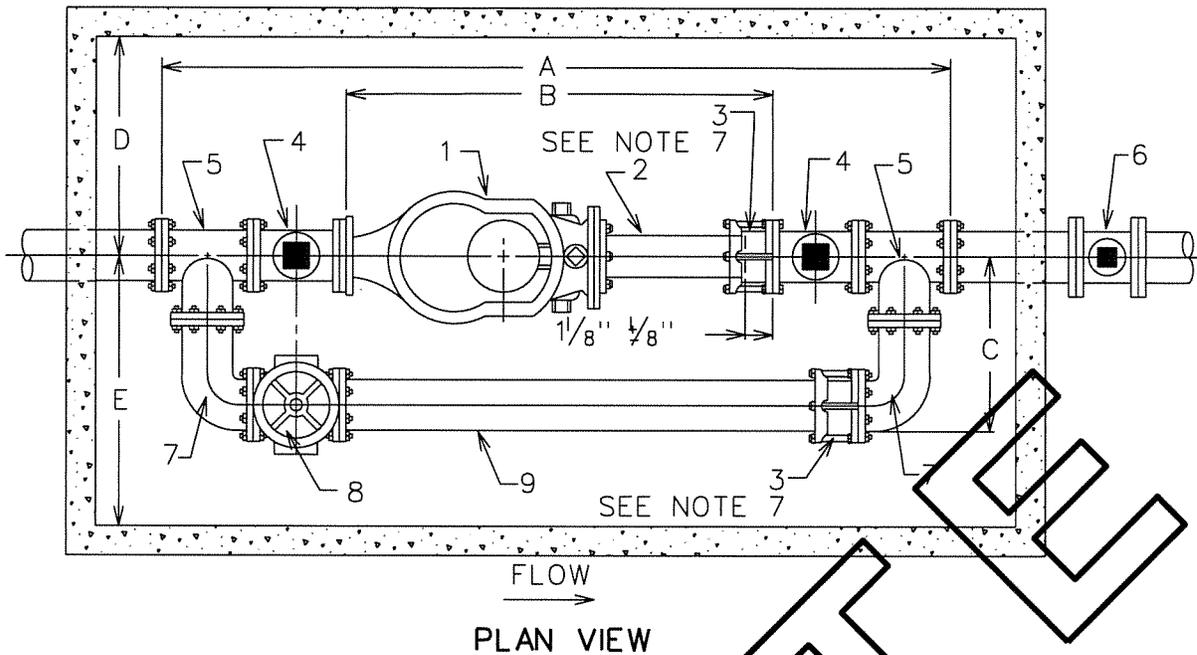
NO.	NAME	LENGTH
1	75 mm (3") METER	425 mm (17")*
2	100 mm X 75 mm (4"X3") FLANGED REDUCER	175 mm (7")
3	100 mm (4") FLANGED x PLAIN END	300 mm (12")
4	100 mm (4") COMPANION FLANGE	
5	100 mm (4") FLANGED COUPLING ADAPTER	125 mm (5")
6	COA 100 mm (4") GATE VALVE SQUARE NUT	225 mm (9")
7	100 mm (4") FLANGED SPOOL	300 mm (12") MIN.
8	100 mmX100 mmX50 mm (4"X4"X2") FLANGED TEE	325 mm (13")
9	PROPERTY OWNER'S 100 mm (4") GATE VALVE SQUARE NUT	225 mm (9")
10	50 mmX200 mm (2"X8") BRASS NIPPLE	200 (8")
11	50 mm (2") STREET ELBOW 90°	
12	50 mm (2") BRASS GATE VALVE	
13	COPPER TO IRON PIPE FITTING	
14	50 mm (2") COPPER OR BRASS PIPE	
15	50 mm (2") COUPLING	
16	50 mm (2") ELBOW 90° BRASS	

*DIMENSIONS- SUBJECT TO CHANGE, CHECK WITH INSPECTOR

NOTES:

- PIPE AND METER SIZE SHALL BE AS DETERMINED BY OWNER; APPROVAL BY WATERSHED PROTECTION AND DEVELOPMENT REVIEW AND FIRE DEPARTMENTS. PLANS MUST BE PREPARED BY LICENSED ENGINEER IF INSTALLATION IN RIGHT-OF-WAY IS BY OTHER THAN CITY FORCES.
- METER VAULT MUST BE BEHIND CURB AND/OR WALK AND OUT OF VEHICULAR TRAFFIC.
- MAIN LINE AND BYPASS VALVES WILL BE RESILIENT SEAT TYPE WITH CORROSION RESISTANT FUSION BANDED EPOXY COATING INSIDE AND OUTSIDE, NON-RISING STEM. MAIN LINE VALVES SHALL HAVE SQUARE OPERATING NUTS. BYPASS VALVE WILL HAVE A HANDWHEEL. PROPERTY OWNER'S VALVE MUST BE LOCATED OUTSIDE OF THE CITY OF AUSTIN METER VAULT.
- APPROVAL WILL BE NEEDED IF HEIGHT OF VAULT EXCEEDS 1.8 m (72"), CALL THE PIPELINE ENGINEERING DIVISION. METER MUST BE MODIFIED TO READ FROM TOP OF VAULT.
- HATCH OPENING WILL BE 750 mm X 750 mm (30"X30"). SEE SPL #614.
- IRON PIPE TAPPING SLEEVE IN STREET RIGHT-OF-WAY SHALL BE IMBEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATIONS 510.3 (14); BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY 510.3 (25).
- DOUBLE HARNESS MJ WITH TIE RODS. ALL OTHER FITTINGS INSIDE VAULT WILL BE FLANGED.
- CONTACT THE PLUMBING REVIEW OFFICE OF THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT AT 974-2680 PRIOR TO INSTALLATION OF COMPOUND METERS FOR PROPER DOMESTIC DEMANDS.
- NOTCHES WHERE PIPING GOES THROUGH VAULT SHALL BE FILLED WITH MORTAR.
- THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY		METER INSTALLATION 75 mm (3") SIZE	
RECORD COPY SIGNED BY KATHI L. FLOWERS	9/23/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-15A 2 OF 2



No.	NAME	LENGTH
A	OVERALL LENGTH	2.0 m (79")
B	METER + NIPPLE + FCA	863 mm (34 1/2")
C	CENTER OF MAINLINE TO OUTSIDE OF BYPASS	438 mm (17 1/2")
D	CENTERLINE OF MAINLINE TO INSIDE OF VAULT	750 mm (30")
E	CENTERLINE OF MAINLINE TO INSIDE OF VAULT	750 mm (30")

CITY OF AUSTIN
WATER AND WASTEWATER UTILITY

METER INSTALLATION
100 mm (4") SIZE

RECORD COPY SIGNED
BY KATHI L. FLOWERS

9/23/02
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR APPROPRIATE USE
OF THIS STANDARD.

STANDARD NO.
520S-15B
1 OF 2

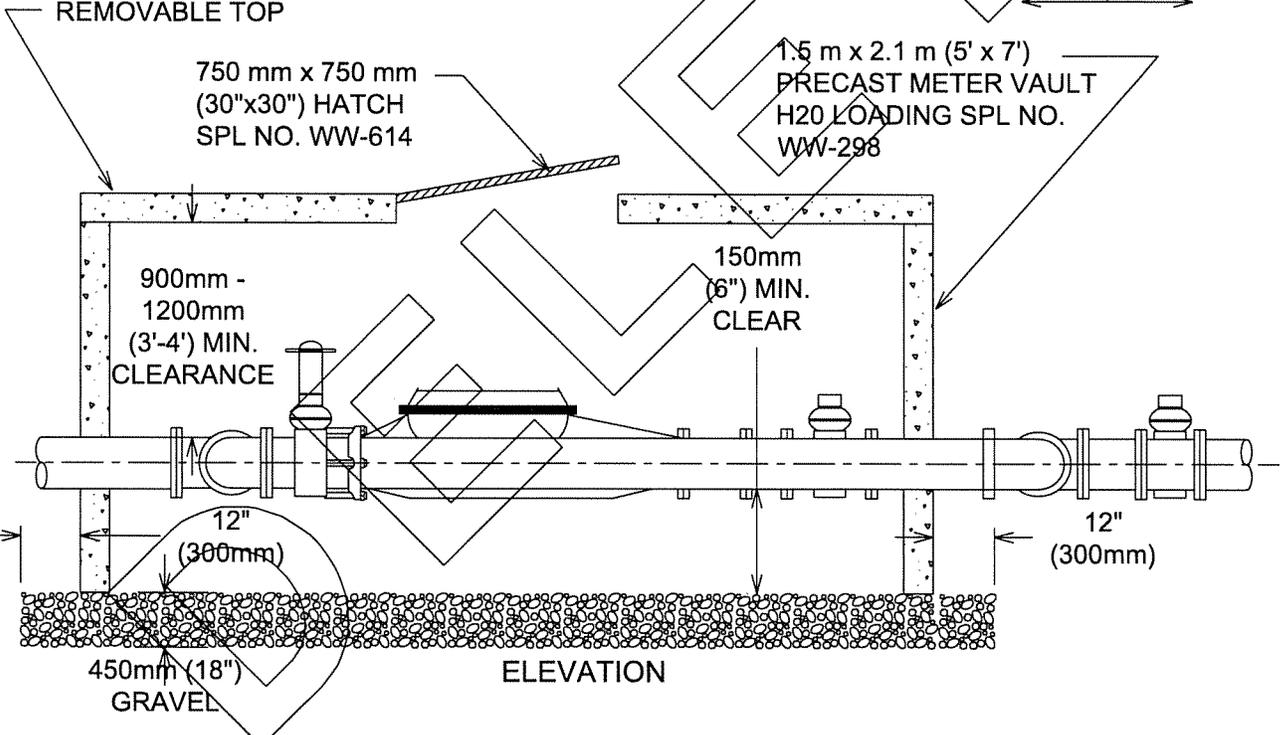
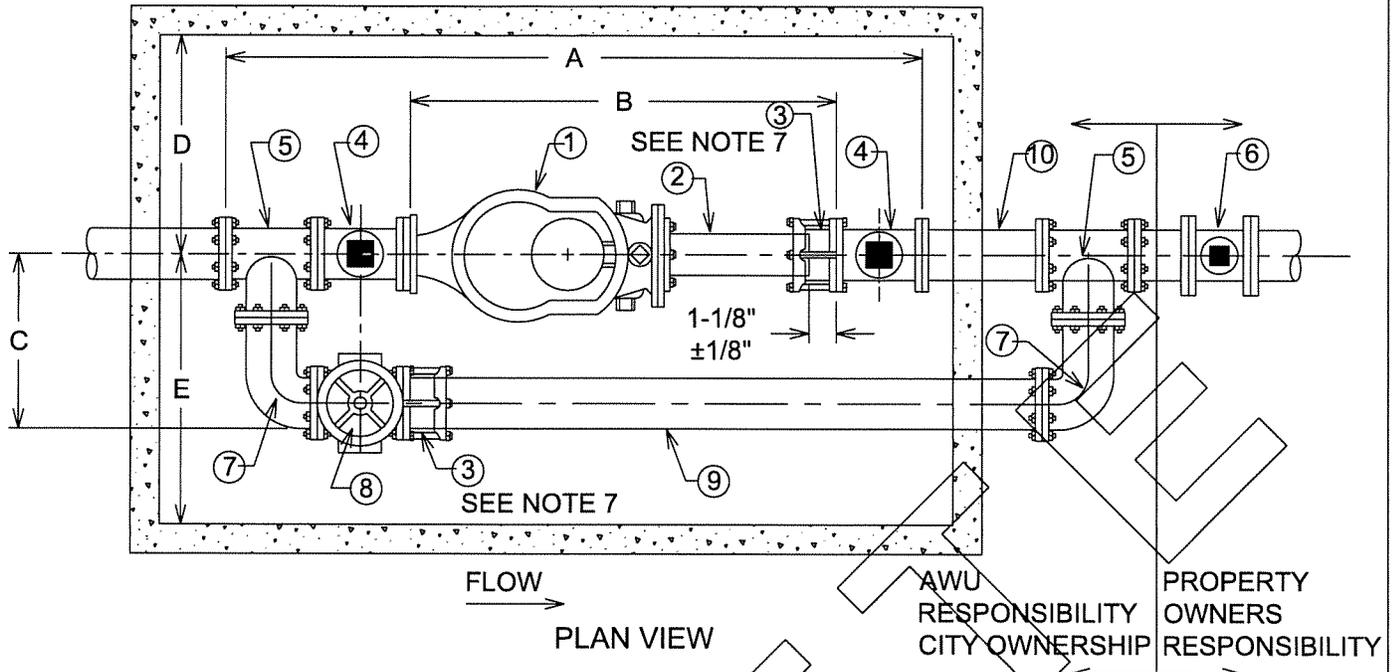
NO.	NAME	LENGTH
1	100 mm (4") METER	525 mm (21")*
2	100 mm (4") FLANGED x PLAIN END	300 mm (12")
3	100 mm (4") FLANGED COUPLING ADAPTER	125 mm (5")
4	COA 100 mm (4") GATE VALVE SQUARE NUT	225 mm (9")
5	100 mmX100 mmX100 mm (4"X4"X4") FLANGED TEE	325 mm (13")
6	PROPERTY OWNER'S 100 mm (4") GATE VALVE SQUARE NUT	225 mm (9")
7	100 mm (4") FLANGED LONG RADIUS ELBOW 90°	
8	100 mm (4") BYPASS GATE VALVE WITH HANDWHEEL	225 mm (9")
9	100 mm (4") BYPASS DUCTILE IRON PIPE	

*DIMENSIONS- SUBJECT TO CHANGE, CHECK WITH INSPECTOR

NOTES:

- PIPE AND METER SIZE SHALL BE AS DETERMINED BY OWNER; APPROVAL BY WATERSHED PROTECTION AND DEVELOPMENT REVIEW AND FIRE DEPARTMENTS. PLANS MUST BE PREPARED BY LICENSED ENGINEER IF INSTALLATION IN RIGHT-OF-WAY IS BY OTHER THAN CITY FORCES.
- METER VAULT MUST BE BEHIND CURB AND/OR WALK AND OUT OF VEHICULAR TRAFFIC.
- MAIN LINE AND BYPASS VALVES WILL BE RESILIENT SEAT TYPE WITH CORROSION RESISTANT FUSION BONDED ZINCOXY COATING INSIDE AND OUTSIDE, NON-RISING STEM. MAIN LINE VALVES SHALL HAVE SQUARE OPERATING NUTS. BYPASS VALVE WILL HAVE A HANDWHEEL. PROPERTY OWNER'S VALVE MUST BE LOCATED OUTSIDE OF THE CITY OF AUSTIN METER VAULT.
- APPROVAL WILL BE NEEDED IF HEIGHT OF VAULT EXCEEDS 1.8 m (72"), CALL THE PIPELINE ENGINEERING DIVISION. METER MUST BE MODIFIED TO READ FROM TOP OF VAULT.
- HATCH OPENING WILL BE 750 mm X 750 mm (30"X30"). SEE SPL #614.
- IRON PIPE TAPPING SLEEVE IN STREET RIGHT-OF-WAY SHALL BE IMBEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATIONS 510.3 (14); BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY 510.3 (25).
- DOUBLE HARNESS MJ WITH TIE RODS. ALL OTHER FITTINGS INSIDE VAULT WILL BE FLANGED.
- CONTACT THE PLUMBING REVIEW OFFICE OF THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT AT 974-2680 PRIOR TO INSTALLATION OF COMPOUND METERS FOR PROPER DOMESTIC DEMANDS.
- NOTCHES WHERE PIPING GOES THROUGH VAULT SHALL BE FILLED WITH MORTAR.
- THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY		METER INSTALLATION 100 mm (4") SIZE	
RECORD COPY SIGNED BY KATHI L. FLOWERS	9/23/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-15B 2 OF 2



No.	NAME	LENGTH
A	OVERALL LENGTH	1.8 m (74-3/4")
B	METER + NIPPLE + FCA	938 mm (37-1/2")
C	CENTER OF MAINLINE TO OUTSIDE OF BYPASS	438 mm (17-1/2")
D	CENTERLINE OF MAINLINE TO INSIDE OF VAULT	750 mm (30")
E	CENTERLINE OF MAINLINE TO INSIDE OF VAULT	750 mm (30")

CITY OF AUSTIN AUSTIN WATER UTILITY		METER INSTALLATION 150mm (6") SIZE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-15C 1 OF 2

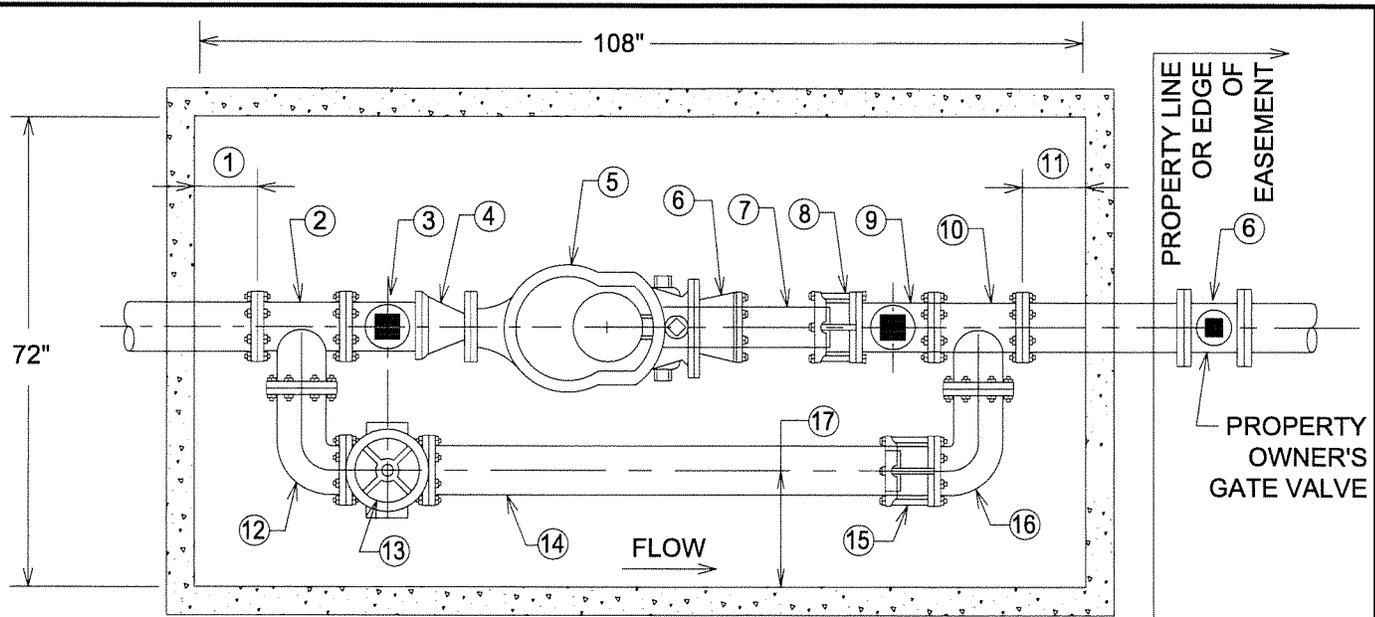
NO.	NAME	LENGTH
①	150 mm (6") METER	600 mm (24")*
②	150 mm (6") FLANGED x PLAIN END	300 mm (12")
③	150 mm (6") FLANGED COUPLING ADAPTER	125 mm (5")
④	COA 150 mm (6") GATE VALVE SQUARE NUT	263 mm (10-1/2")
⑤	150 mm x 150 mm x 150 mm (6"x6"x6") FLANGED TEE	125 mm (5")
⑥	PROPERTY OWNER'S 150 mm (6") GATE VALVE SQUARE NUT	263 mm (10-1/2")
⑦	150 mm (6") FLANGED ELBOW 90°	
⑧	150 mm (6") BYPASS GATE VALVE WITH HANDWHEEL	263 mm (10-1/2")
⑨	150 mm (6") BYPASS DUCTILE IRON PIPE	
⑩	150 mm (6") FLANGED SPOOL	

*DIMENSIONS- SUBJECT TO CHANGE, CHECK WITH INSPECTOR

NOTES:

- PIPE AND METER SIZE SHALL BE DETERMINED BY OWNER: APPROVAL BY WATERSHED PROTECTION AND DEVELOPMENT REVIEW AND FIRE DEPARTMENTS. PLANS MUST BE PREPARED BY AN ENGINEER LICENSED BY THE STATE OF TEXAS.
- METER VAULT MUST BE BEHIND CURB AND/OR WALK AND OUT OF VEHICULAR TRAFFIC.
- MAIN LINE AND BYPASS VALVES WILL BE RESILIENT SEAT TYPE WITH CORROSION RESISTANT FUSION BANDED EPOXY COATING INSIDE AND OUTSIDE, NON-RISING STEM. MAIN LINE VALVES SHALL HAVE SQUARE OPERATING NUTS. BYPASS VALVE WILL HAVE A HAND-WHEEL. PROPERTY OWNER'S VALVE MUST BE LOCATED OUTSIDE OF THE CITY OF AUSTIN METER VAULT.
- APPROVAL WILL BE NEEDED IF HEIGHT OF VAULT EXCEEDS 1.8m (72"), CALL THE CITY OF AUSTIN PIPELINE ENGINEERING DIVISION. METER MUST BE MODIFIED TO READ FROM TOP OF VAULT.
- HATCH OPENING WILL BE 750mm x 750mm (30"x30"). SEE SPL NO. WW-614.
- IRON PIPE TAPPING SLEEVE IN STREET RIGHT-OF-WAY SHALL BE IMBEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATIONS 510.3 (14); BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY 510.3 (25).
- DOUBLE HARNESS MJ WITH TIE RODS. ALL OTHER FITTINGS INSIDE VAULT WILL BE FLANGED.
- CONTACT THE PLUMBING REVIEW OFFICE OF THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT PRIOR TO INSTALLATION OF COMPOUND METERS FOR PROPER DOMESTIC DEMANDS.
- NOTCHES WHERE PIPING GOES THROUGH VAULT SHALL BE FILLED WITH NON-SHRINK GROUT.
- THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT.

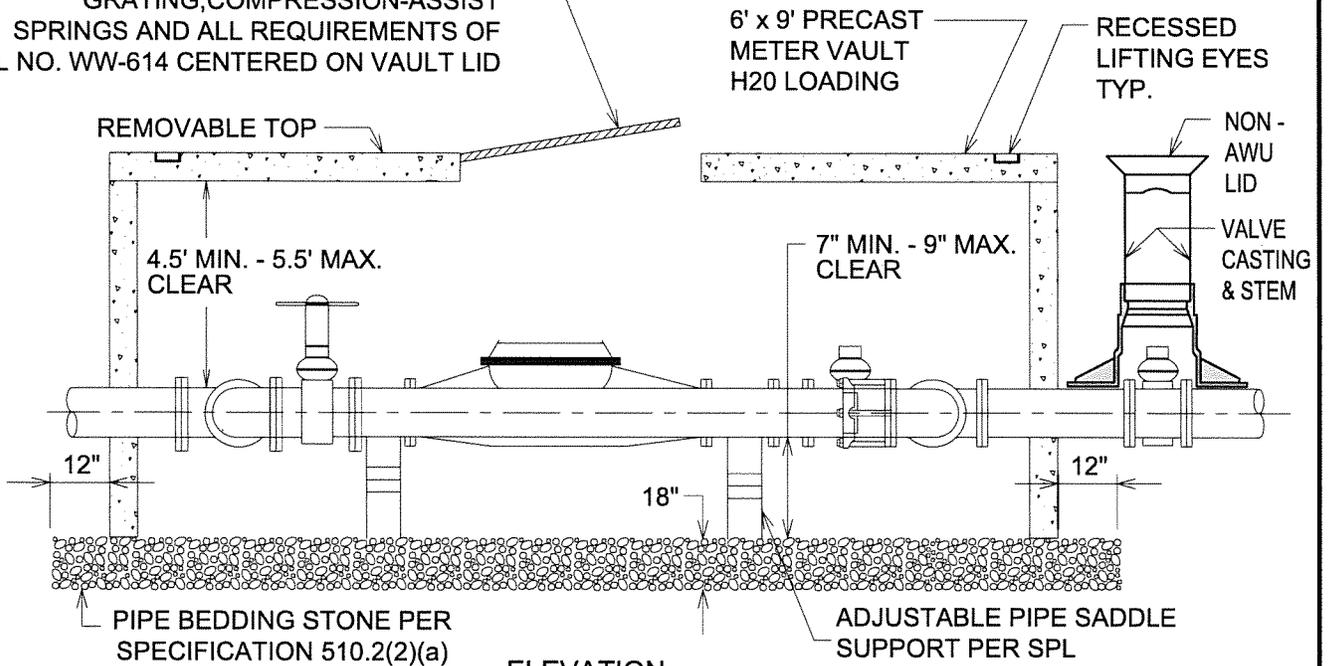
CITY OF AUSTIN AUSTIN WATER UTILITY		METER INSTALLATION 150mm (6") SIZE	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2011		THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-15C 2 OF 2



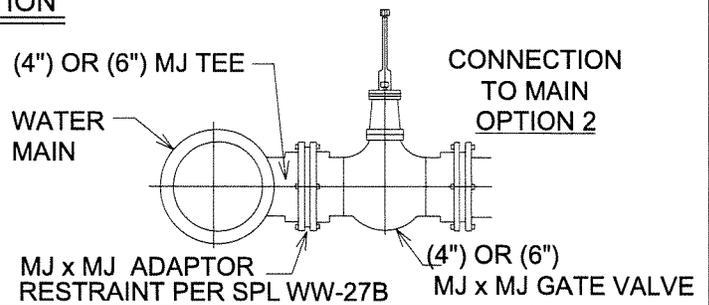
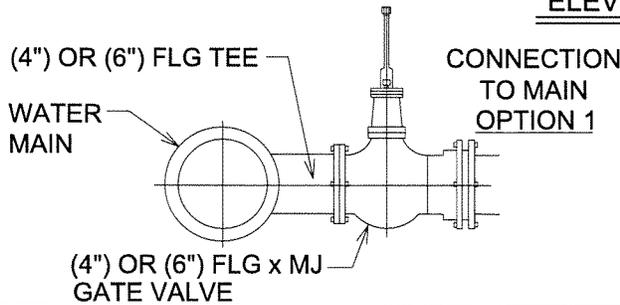
PLAN VIEW

36" x 36" HATCH INCLUDING SAFETY GRATING, COMPRESSION-ASSIST SPRINGS AND ALL REQUIREMENTS OF SPL NO. WW-614 CENTERED ON VAULT LID

AWU RESPONSIBILITY CITY OWNERSHIP
PROPERTY OWNER'S RESPONSIBILITY



ELEVATION



CITY OF AUSTIN
AUSTIN WATER UTILITY

3", 4" AND 6" COMPOUND & TURBINE METER INSTALLATIONS

ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

STANDARD NO.
520-15
1 OF 2

LARGE METER INSTALLATIONS

DIMENSIONS IN INCHES		3" TURBINE	3" COMPOUND	4" TURBINE	4" COMPOUND	6" TURBINE	6" COMPOUND
No.	METER LINE	4" BYPASS	4" BYPASS	4" BYPASS	4" BYPASS	6" BYPASS	6" BYPASS
1	CLEARANCE FROM VALVE WALL TO TEE	8"	8"	12"	12"	6"	6"
2	FLANGED TEE	13"	13"	13"	13"	16"	16"
3	COA GATE VALVE SQUARE NUT	9"	9"	9"	9"	10 1/2"	10 1/2"
4	3" X 4" FLANGED REDUCER (3" METER ONLY)	7"	7"	—	—	—	—
5	METER	17"	19"	20"	23"	24"	27"
6	3" X 4" FLANGED REDUCER (3" METER ONLY)	7"	7"	—	—	—	—
7+8	⑦ FLANGED X PLAIN END DI PIPE + ⑧ RESTRAINED FLANGE COUPLING ADAPTER (RFCA) OR ⑦ FLANGE X DI PIPE + ⑧ DISMANTLING JOINT (DJ)	17"	15"	20"	17"	19"	16"
9	COA GATE VALVE SQUARE NUT	9"	9"	9"	9"	10 1/2"	10 1/2"
10	FLANGED TEE	13"	13"	13"	13"	16"	16"
11	CLEARANCE FROM INSIDE WALL TO TEE	8"	8"	12"	12"	6"	6"
	TOTAL (INCHES)	108.0"	108.0"	108.0"	108.0"	108.0"	108.0"
	BYPASS LINE						
1	CLEARANCE FROM INSIDE WALL TO TEE	8"	8"	12"	12"	6"	6"
	1/2 TEE	6 1/2"	6 1/2"	6 1/2"	6 1/2"	8"	8"
12	FLANGED 90° ELBOW	6 1/2"	6 1/2"	6 1/2"	6 1/2"	8"	8"
13	BYPASS GATE VALVE WITH HAND WHEEL	9"	9"	9"	9"	10 1/2"	10 1/2"
14+15	⑭ FLANGED X PLAIN END DI PIPE + ⑮ RESTRAINED FLANGE COUPLING ADAPTOR (RFCA) OR ⑭ FLANGE X FLANGE DI PIPE + ⑮ DISMANTLING JOINT (DJ)	57"	57"	49"	49"	53 1/2"	53 1/2"
16	FLANGED 90° ELBOW	6 1/2"	6 1/2"	6 1/2"	6 1/2"	8"	8"
	1/2 TEE	6 1/2"	6 1/2"	6 1/2"	6 1/2"	8"	8"
11	CLEARANCE FROM VALVE WALL TO TEE	8"	8"	12"	12"	6"	6"
	TOTAL (INCHES)	108.0"	108.0"	108.0"	108.0"	108.0"	108.0"
17	CLEARANCE FROM INSIDE WALL TO CENTER OF BYPASS LINE	23"	23"	23"	23"	20"	20"

NOTES:

- METER VAULT MUST BE PLACED AT THE PROPERTY LINE WITHIN PUBLIC RIGHT-OF-WAY OR WITHIN A DEDICATED WATER METER EASEMENT. METER SHALL NOT BE PLACED IN THE PATH OF VEHICULAR TRAFFIC INCLUDING ROADWAYS, DRIVEWAYS AND PARKING LOTS. METERS MAY NOT BE PLACED IN SIDEWALKS UNLESS SPECIFICALLY APPROVED BY AUSTIN WATER. METERS MUST BE ACCESSIBLE TO SERVICE VEHICLES AND SHALL NOT BE ENCLOSED WITHIN PROPERTY FENCES.
- ALL PIPE AND FITTINGS FROM MAIN TO CUSTOMER VALVE SHALL BE RESTRAINED.
- FACTORY NOTCHES WHERE PIPING GOES THROUGH VAULT WALL SHALL BE FILLED WITH NON-SHRINK GROUT PER SPL NO. WW-704A.

CITY OF AUSTIN AUSTIN WATER UTILITY	3", 4" AND 6" COMPOUND & TURBINE METER INSTALLATIONS
ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 520-15 2 OF 2