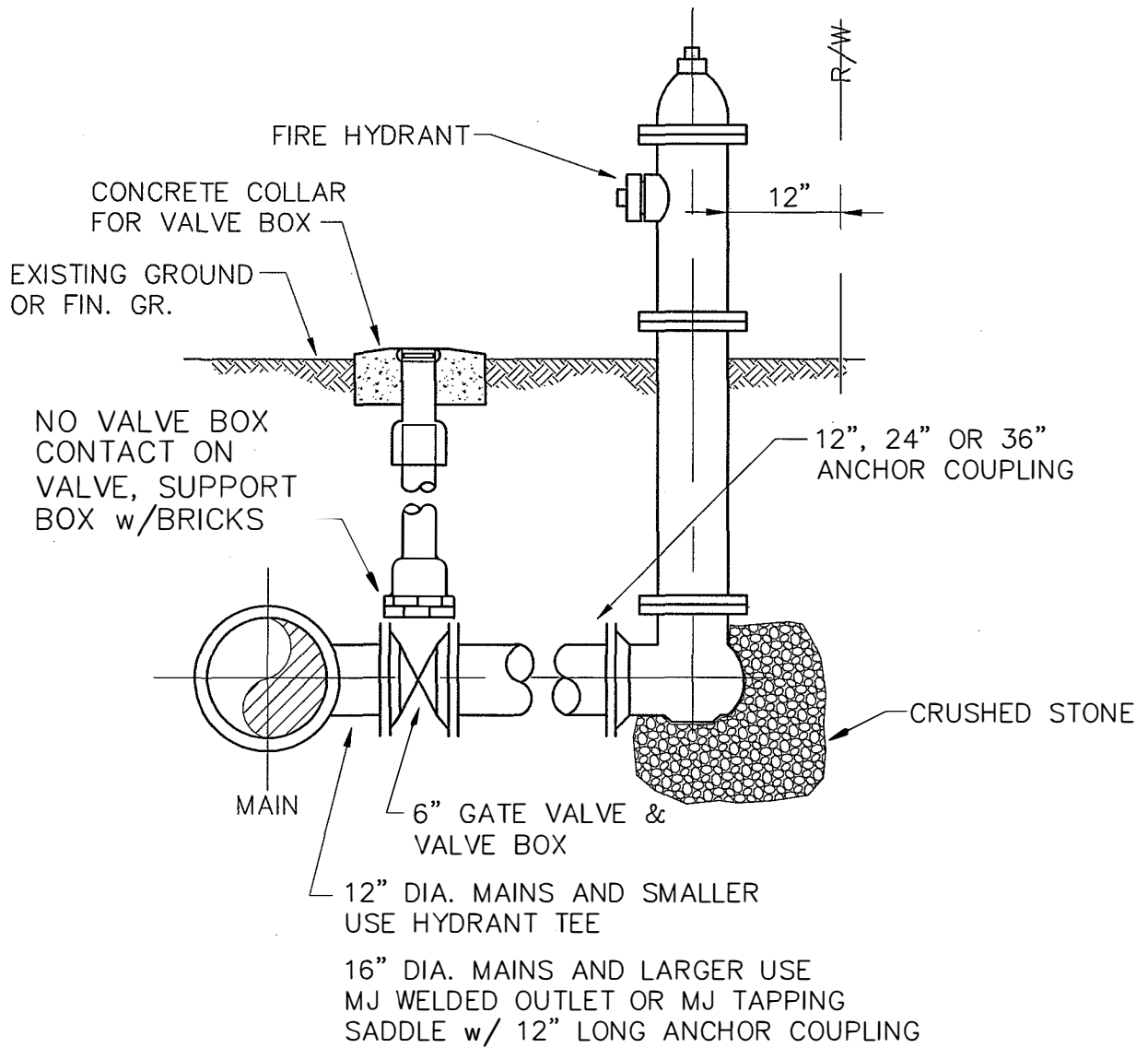

SECTION 4

STANDARD CONSTRUCTION DETAILS



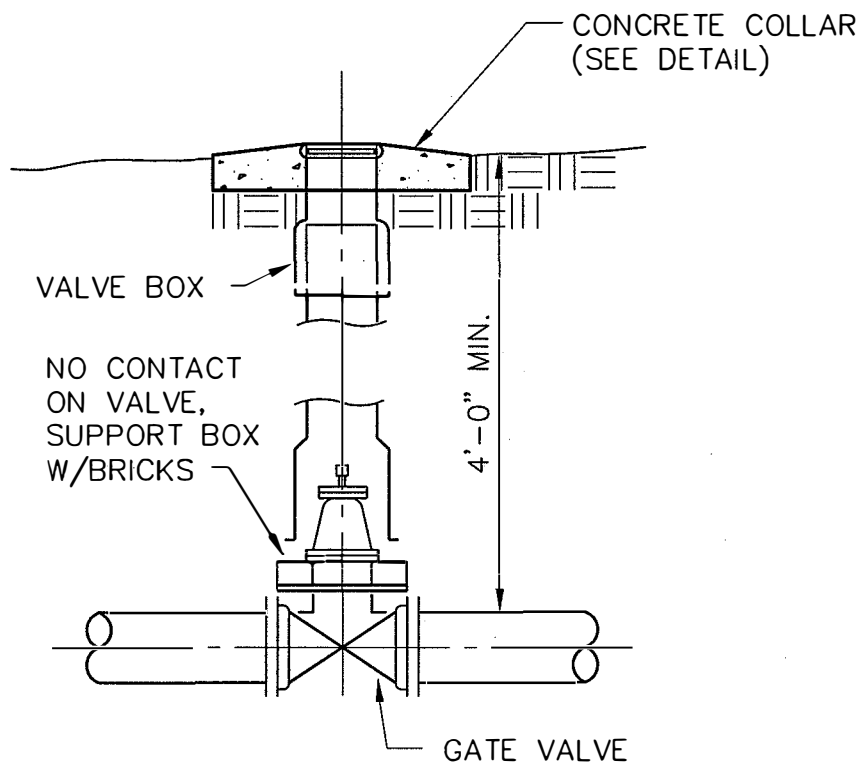
Barrow County
Water & Sewerage Authority

FIRE HYDRANT

STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCT 2021



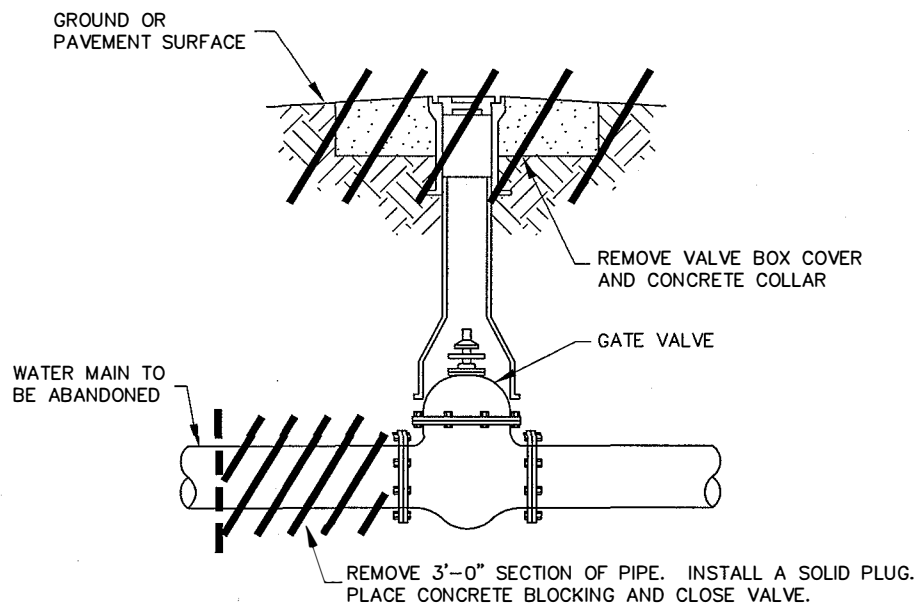
Barrow County
Water & Sewerage Authority

GATE VALVE INSTALLATION

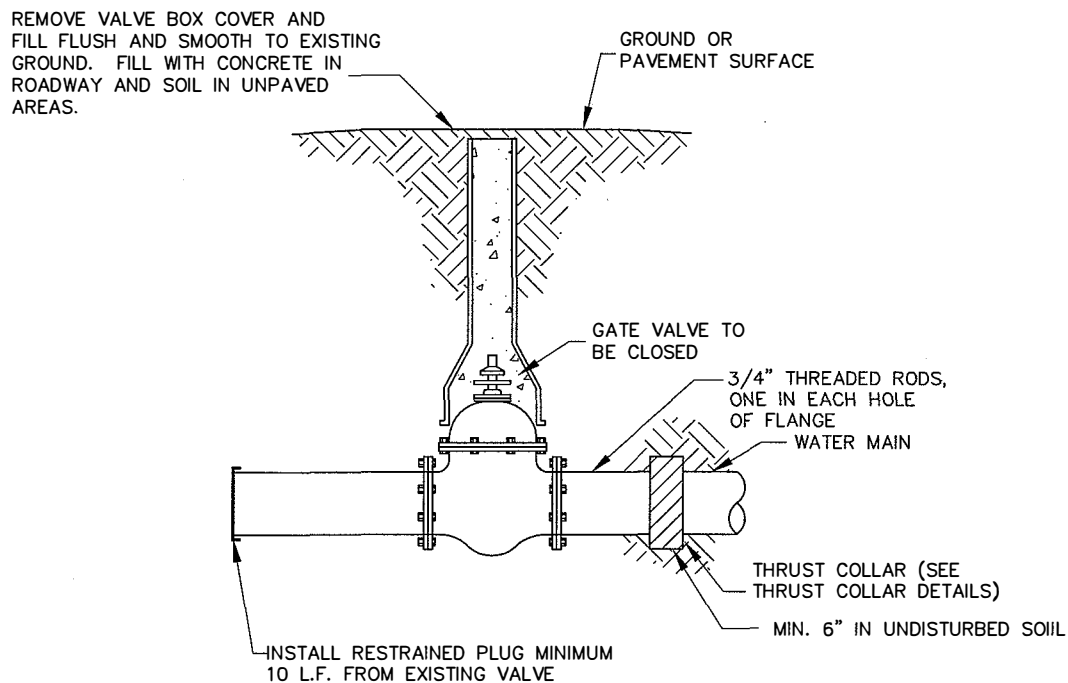
STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCT 2021



EXISTING SECTION



REVISED SECTION



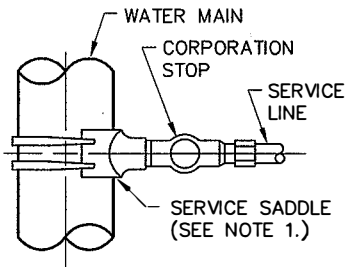
Barrow County
Water & Sewerage Authority

ABANDONED LINE VALVE

STANDARD CONSTRUCTION DETAILS

SCALE: NONE

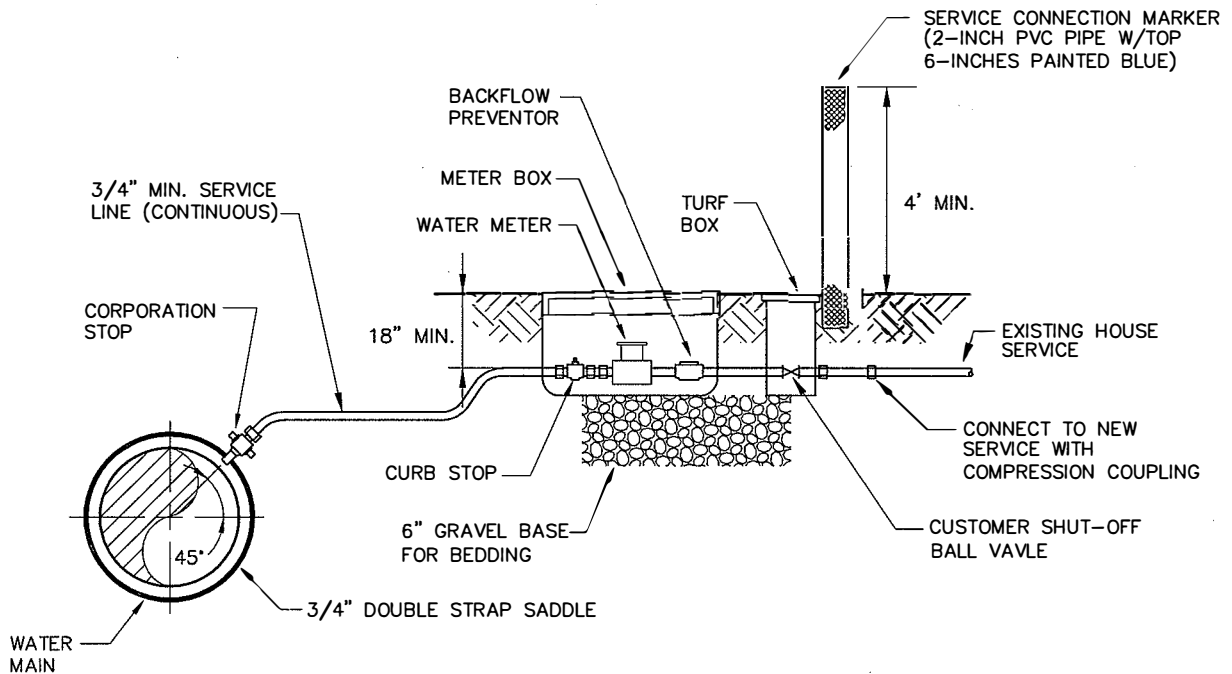
DATE: OCT 2021



PLAN

NOTES :

1. SERVICE CLAMP REQUIRED ONLY ON CONNECTIONS LARGER THAN 1" DIAM. TO DIP WATER MAIN. ALL OTHER CONNECTIONS ARE TO BE DIRECT TAP TO DIP w/CORPORATION STOP.
2. FOR 2" SERVICE LINES USE SDR 13.5 PVC PIPE WITH A #14 AWG COPPER TRACER WIRE
3. ALL WATER SERVICE LINES SHALL BE COPPER.
4. ALL WATER SERVICES SHALL REQUIRE AN INDIVIDUAL TAP ON THE MAIN. NO SPLIT SERVICES WILL BE PERMITTED.



ELEVATION

NOTE: 1. WATER METERS, METER BOXES & LIDS TO BE PROVIDED BY THE CONTRACTOR.



Barrow County
Water & Sewerage Authority

WATER SERVICE CONNECTION

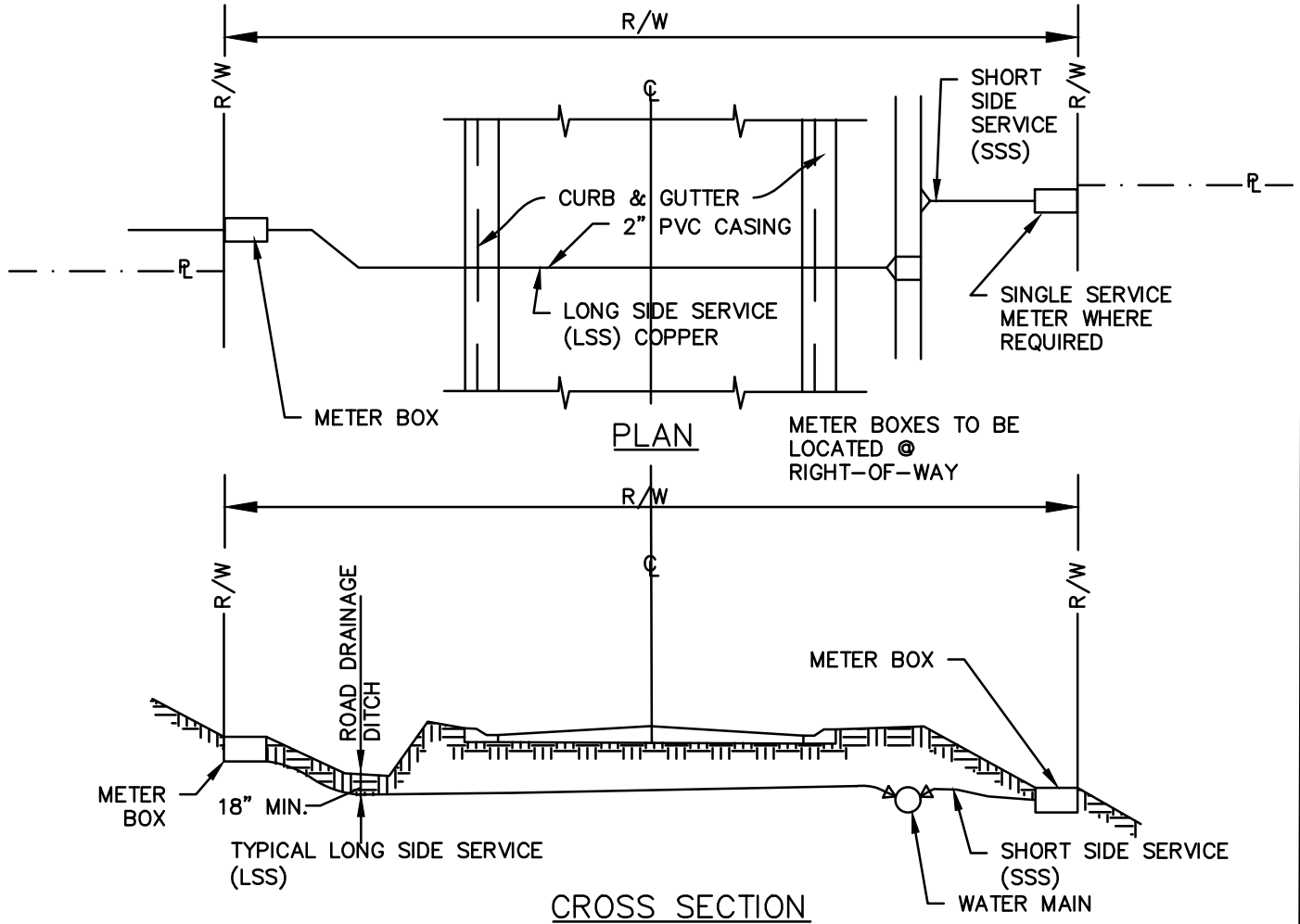
STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCT 2021

NOTES:

1. ALL WATER SERVICE LINES SHALL BE COPPER.
2. ALL WATER SERVICES SHALL REQUIRE AN INDIVIDUAL TAP ON THE MAIN. SPLIT SERVICES ARE NOT PERMITTED.



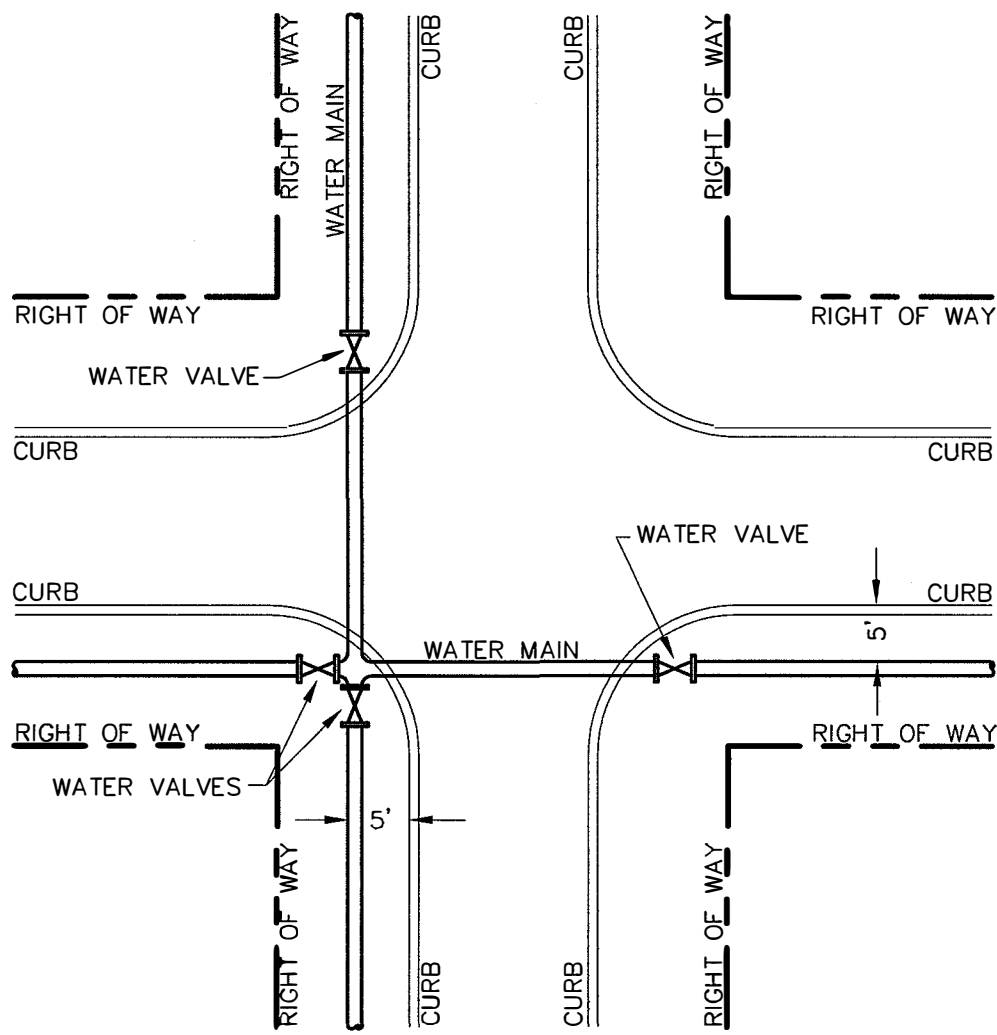
BARROW COUNTY
WATER & SEWERAGE AUTHORITY

WATER METER LOCATION (SUBDIVISIONS)

STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCTOBER 2021



NOTES:

- 1. VALVES ARE TO BE LOCATED 5'-0' BEHIND THE CURB IN THE RIGHT OF WAY.
- 2. GATE VALVES ARE NOT REQUIRED ON DEAD-END LEGS LESS THAN 1000 LINEAR FEET IN LENGTH.
- 3. VALVES SHALL NOT BE LOCATED IN DITCH LINE.



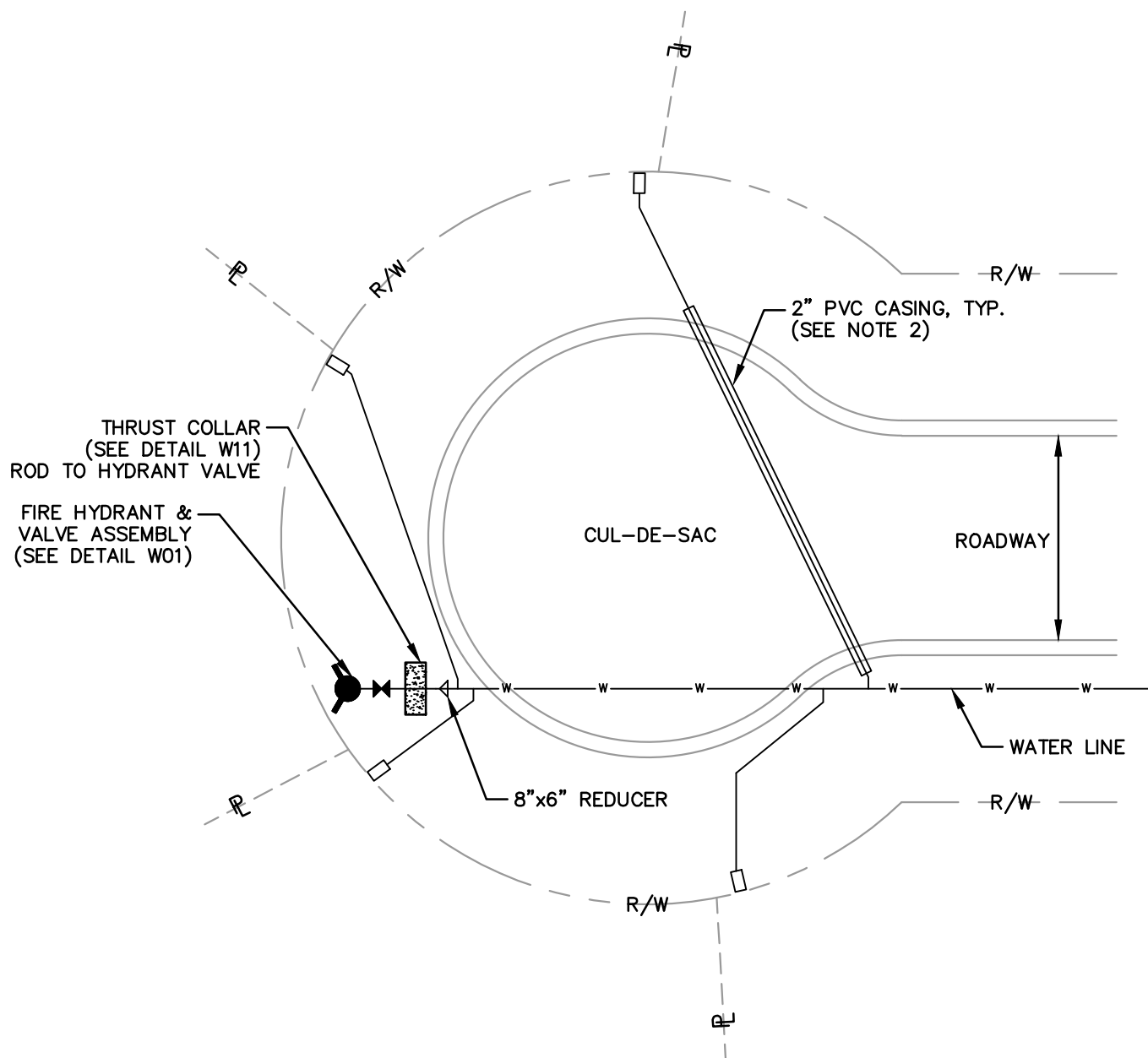
Barrow County
Water & Sewerage Authority

WATER LINE VALVING AT INTERSECTIONS

STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCT 2021



NOTES:

1. LOCATE FIRE HYDRANT ON NEAREST PROPERTY LINE.
2. INSTALL 2" PVC (SCHD 40) CASING UNDER PAVEMENT AND 2' BEYOND BACK OF CURB OR EDGE OF PAVEMENT. KEEP SERVICE LINE OUT FROM UNDER PAVEMENT WHERE POSSIBLE.



BARROW COUNTY
WATER & SEWERAGE AUTHORITY

CUL-DE-SAC FIRE HYDRANT LOCATION

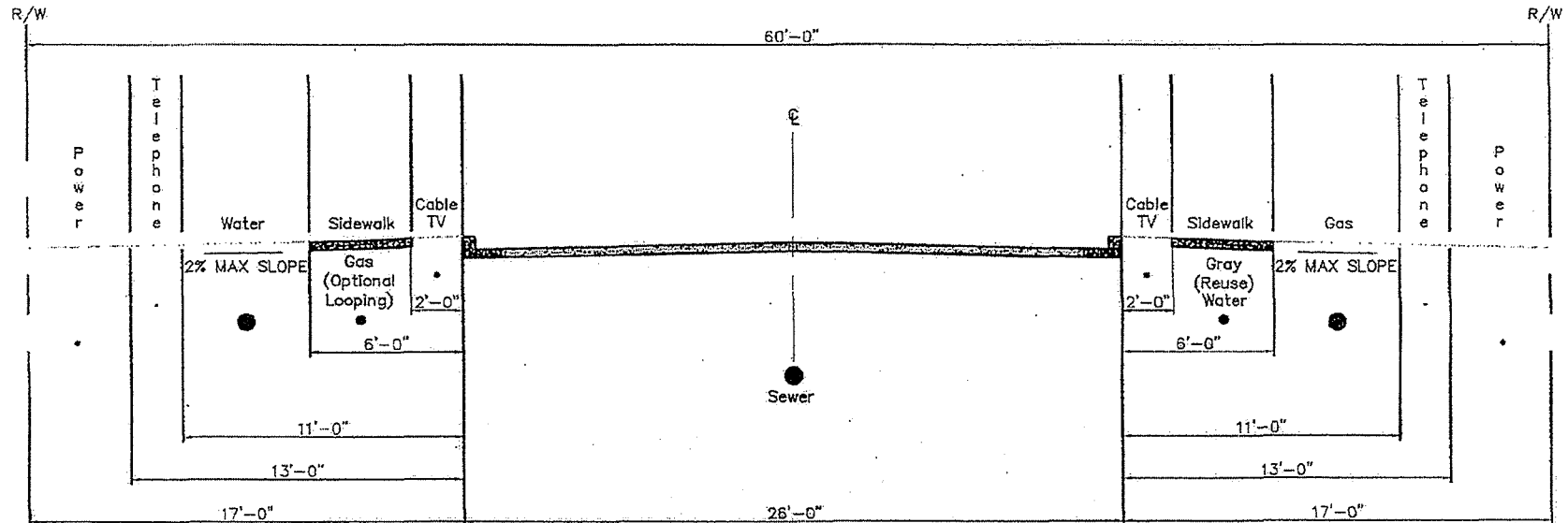
STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: MARCH 2022



Barrow County
Water & Sewerage Authority



NOTES:

- (1) ALL DIMENSIONS ARE MEASURED FROM BACK OF CURB, REGARDLESS OF R/W WIDTH.
- (2) BEFORE ANY UTILITY IS INSTALLED, THE ENTIRE WIDTH OF THE R/W SHALL BE AT FINISHED GRADE, AND ALL CONCRETE CURBING SET AT FINAL GRADES.
- (3) THE FINISHED GRADE WITHIN THE R/W SHALL NOT EXCEED A 2% SLOPE.
- (4) IN GENERAL, THE DEEPEST UTILITIES SHOULD BE INSTALLED FIRST TO MINIMIZE ANY POSSIBLE INTERFERENCE WITH LATERALS OR SERVICE LINES.
- (5) STREET OPENING PERMITS ARE REQUIRED BEFORE ANY COMPLETED PAVEMENT CAN BE CUT FOR ANY PURPOSE.
- (6) IN CUL-DE-SAC STREETS, ALL DIMENSIONS SHALL REMAIN IDENTICAL TO STANDARD STREET SPACING.
- (7) EACH UTILITY SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE THEY CREATE TO OTHER UTILITY LINES, OR TO THE STREET IMPROVEMENTS WITHIN THE R/W.
- (8) ALL STREET LIGHTS SHALL REMAIN WITHIN THE POWER UTILITY CORRIDOR.

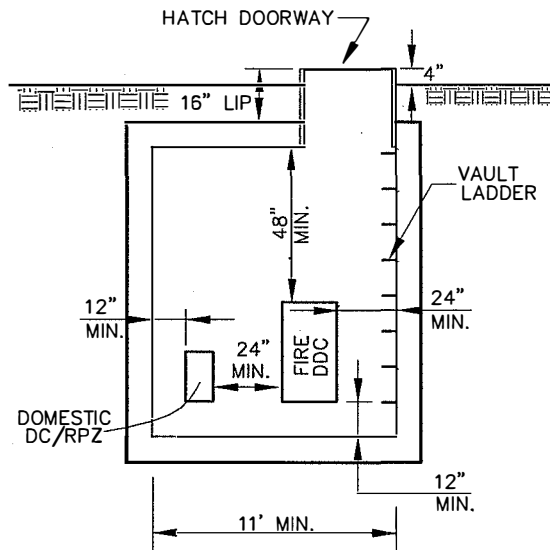
TYPICAL UTILITY CORRIDOR DETAIL

STANDARD CONSTRUCTION DETAILS

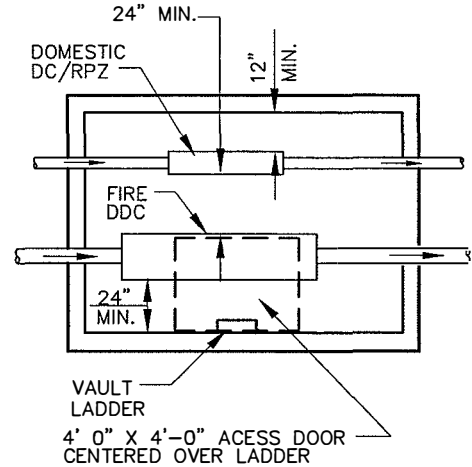
SCALE: NONE

DATE: OCT 2021

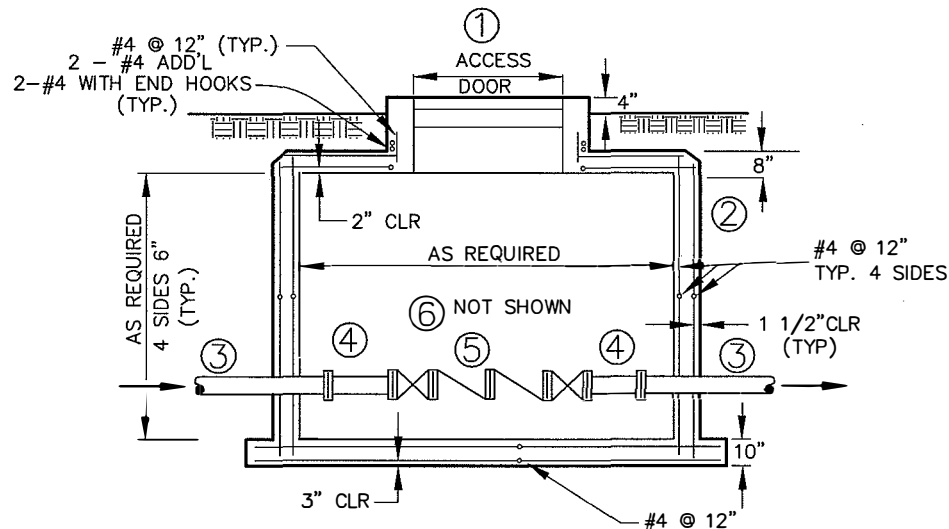
W08



(END SECTION)



(PLAN VIEW)



(CROSS SECTION)

LEGEND

- ① 4'-0" X 4'-0" WATERTIGHT ACCESS DOOR.
- ② CAST IN PLACE CONCRETE OR PRECAST CONCRETE.
- ④ DUCTILE IRON FLANGED SHORT JOINT.
- ⑤ FIRE LINE DOUBLE DETECTOR CHECK BACK FLOW PREVENTER ASSEMBLY.
- ⑥ DOMESTIC LINE DOUBLE CHECK BACK FLOW PREVENTER (NOT SHOWN).
INSTALL SIMILAR TO FIRE LINE DDC. SEE PLAN AND END SECTION.

NOTE:

1. INSTALL VAULT SO THAT ONLY THE TOP 4" OF THE HATCH EXTENDS ABOVE FINISH GRADE.

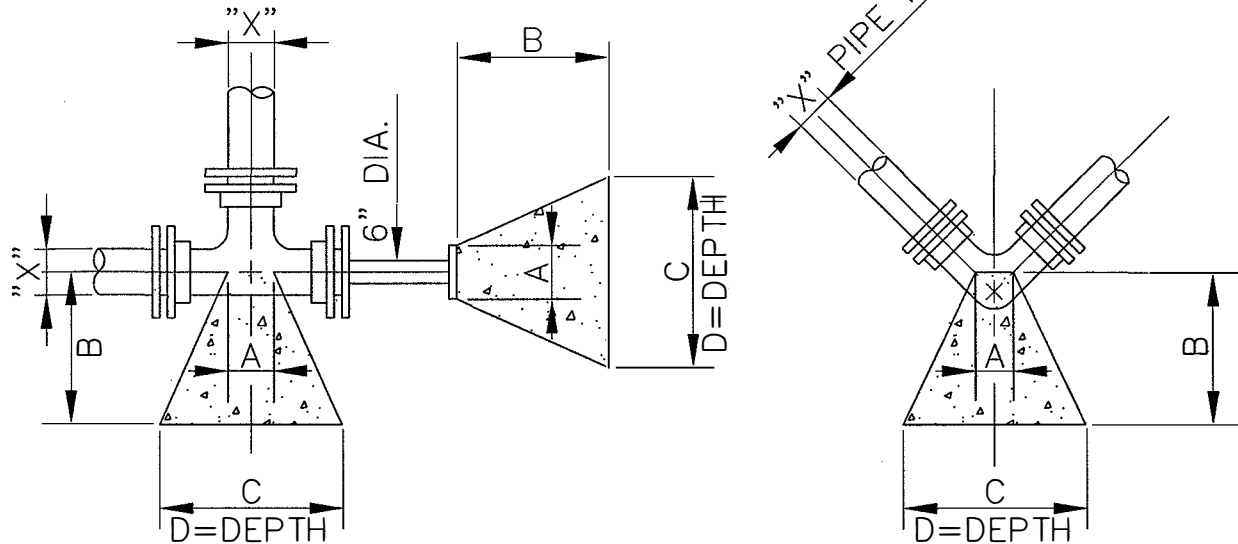


Barrow County
Water & Sewerage Authority

BACKFLOW PREVENTER VAULT

STANDARD CONSTRUCTION DETAILS
SCALE: NONE

DATE: OCT 2021



200 PSI TEST PRESSURE (MAXIMUM)
2000 PSF SOIL BEARING (MINIMUM)

BLOCKING DIMENSIONS						
DEAD END & TEES		X*	A	B	C	D
		12'	1'-0"	3'-6"	7'-0"	4'-0"
		10"	1'-0"	2'-6"	4'-0"	2'-6"
		8"	0'-10"	2'-3"	3'-3"	2'-0"
		6"	0'-8"	1'-6"	2'-6"	1'-6"
BENDS	90°	12"	1'-0"	4'-6"	8'-0"	5'-0"
		10"	1'-0"	3'-6"	5'-0"	2'-9"
		8"	0'-10"	2'-9"	4'-0"	2'-3"
		6"	0'-8"	2'-0"	3'-0"	1'-9"
	45°	12"	1'-0"	3'-6"	6'-0"	4'-0"
		10"	1'-0"	1'-9"	3'-0"	2'-6"
		8"	0'-10"	1'-6"	2'-6"	2'-0"
		6"	0'-8"	1'-3"	2'-0"	1'-6"
	22 1/2°	12"	1'-0"	3'-0"	4'-0"	3'-0"
		10"	1'-0"	1'-4"	2'-6"	1'-6"
		8"	0'-10"	1'-0"	2'-0"	1'-3"
		6"	0'-8"	0'-9"	1'-6"	1'-0"
	11 1/4°	12"	1'-0"	2'-6"	3'-0"	2'-0"
		10"	1'-0"	0'-6"	1'-6"	1'-3"
		8"	0'-10"	0'-6"	1'-4"	1'-0"
		6"	0'-8"	0'-6"	1'-0"	0'-9"

X* = DIAMETER OF PIPE TO BE BLOCKED



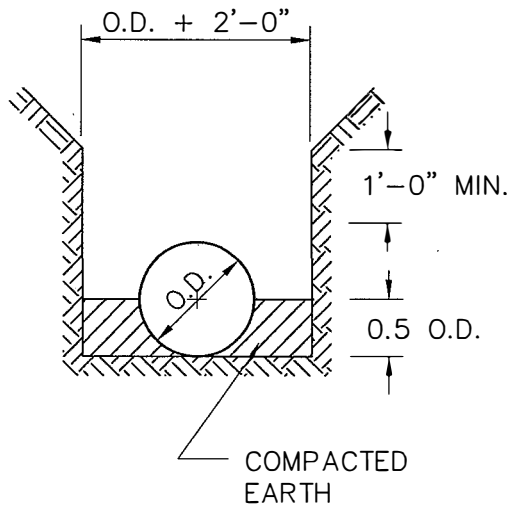
Barrow County
Water & Sewerage Authority

THRUST BLOCKING

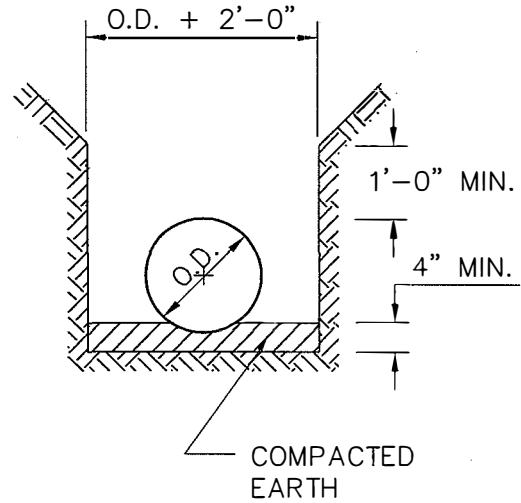
STANDARD CONSTRUCTION DETAILS

SCALE: NONE

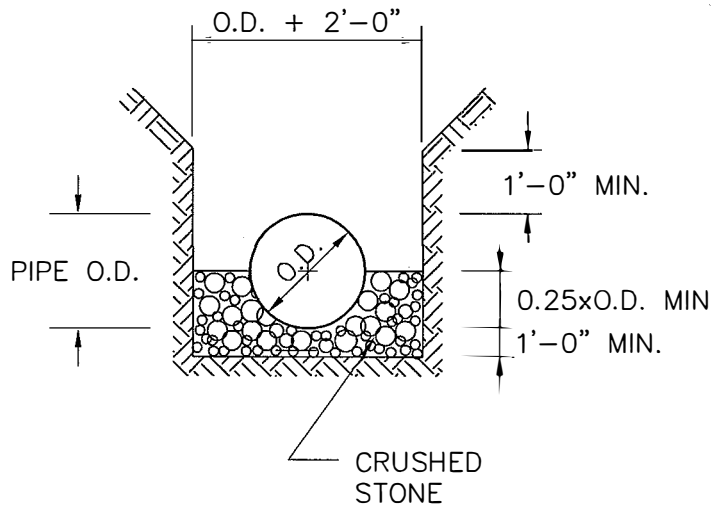
DATE: OCT 2021



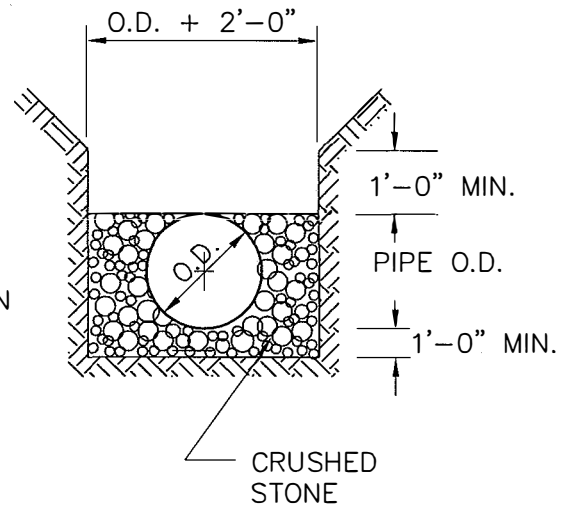
TYPE 2



TYPE 3



TYPE 4



TYPE 5

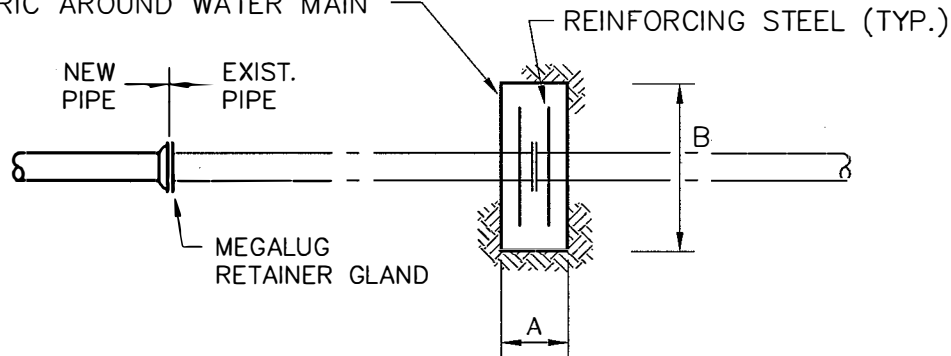


Barrow County
Water & Sewerage Authority

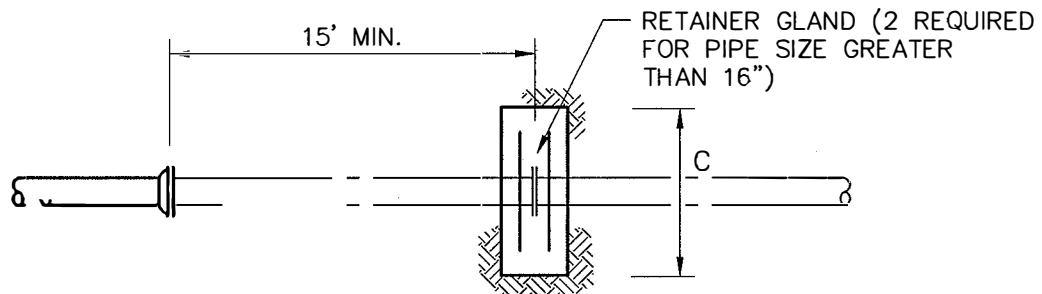
WATER MAIN BEDDING

STANDARD CONSTRUCTION DETAILS
SCALE: NONE DATE: OCT 2021

POUR CONCRETE THRUST BLOCKING
AGAINST UNDISTURBED EARTH
CONCENTRIC AROUND WATER MAIN



PLAN



SECTION

WATER MAIN DIAM.	CONC. COLLAR DIM.			STEEL REINFORCING
	A	B	C	
24"	1'-9"	9'-0"	9'-0"	#9 @ 8" O.C. EW EF
20"	1'-6"	7'-8"	7'-8"	#9 @ 12" O.C. EW EF
16"	1'-3"	6'-6"	6'-6"	#8 @ 12" O.C. EW EF
12"	1'-2"	5'-3"	5'-3"	#7 @ 12" O.C. EW EF
6" OR 8"	1'-0"	4'-0"	4'-0"	#6 @ 12" O.C. EW EF

TEST PRESSURE: 250 PSI

SOIL BEARING PRESSURE: 3000 PSF



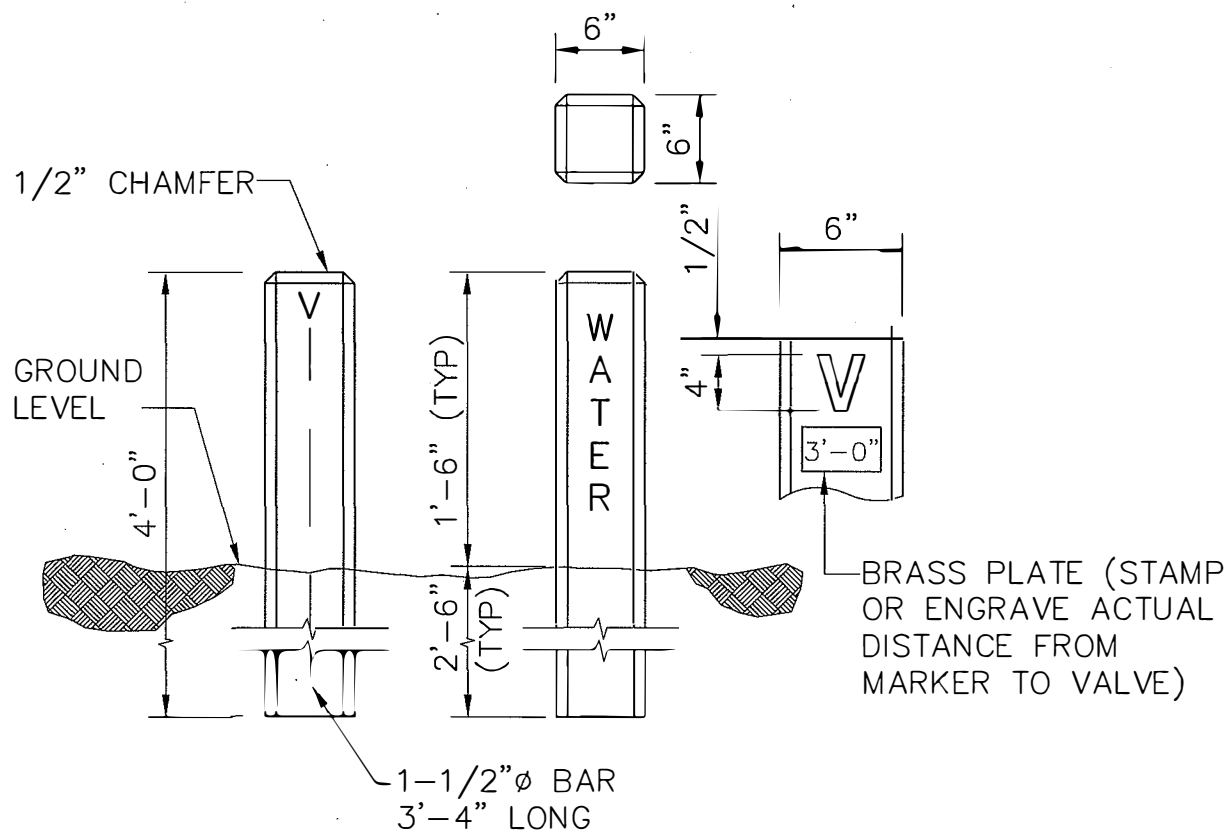
Barrow County
Water & Sewerage Authority

THRUST COLLAR DETAIL

STANDARD CONSTRUCTION DETAILS

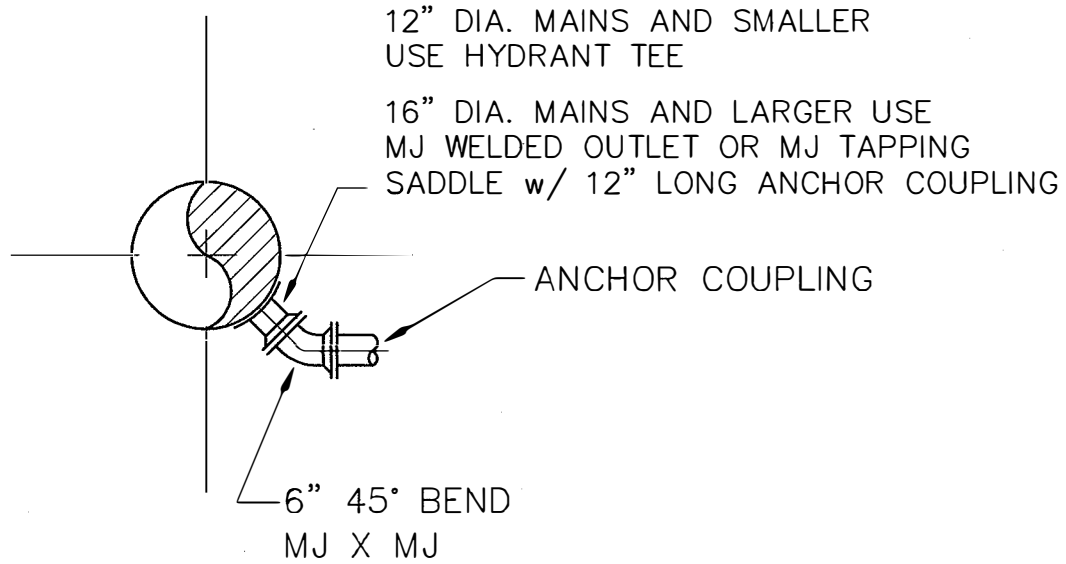
SCALE: NONE

DATE: OCT 2021



WATER VALVE MARKER

STANDARD CONSTRUCTION DETAILS
SCALE: NONE DATE: OCT 2021



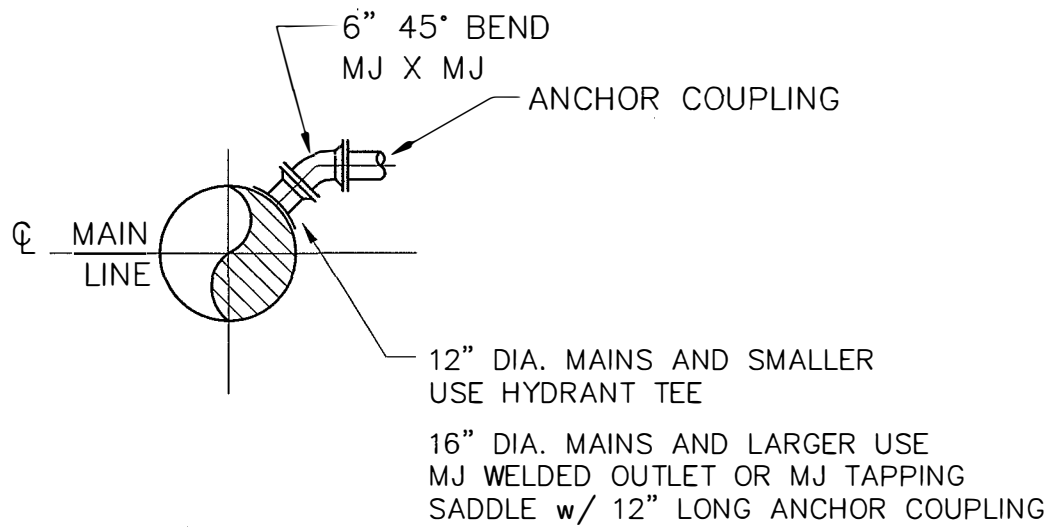
Barrow County
Water & Sewerage Authority

BLOW-OFF CONNECTION

STANDARD CONSTRUCTION DETAILS

SCALE: NONE

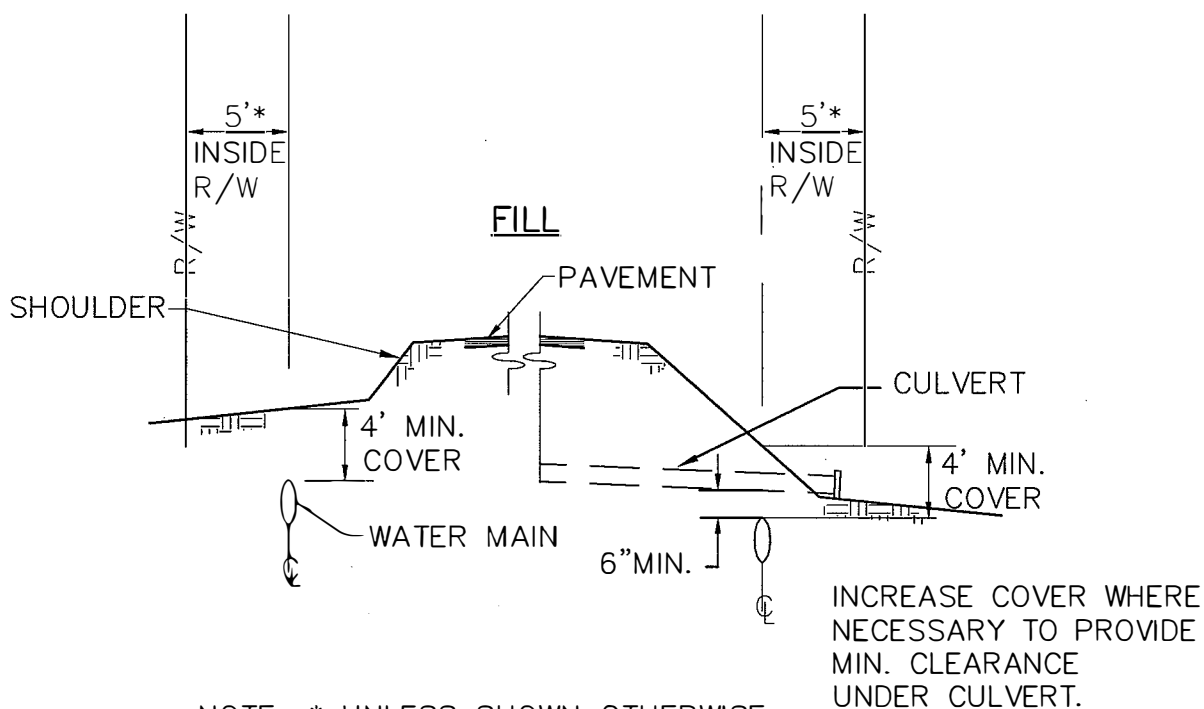
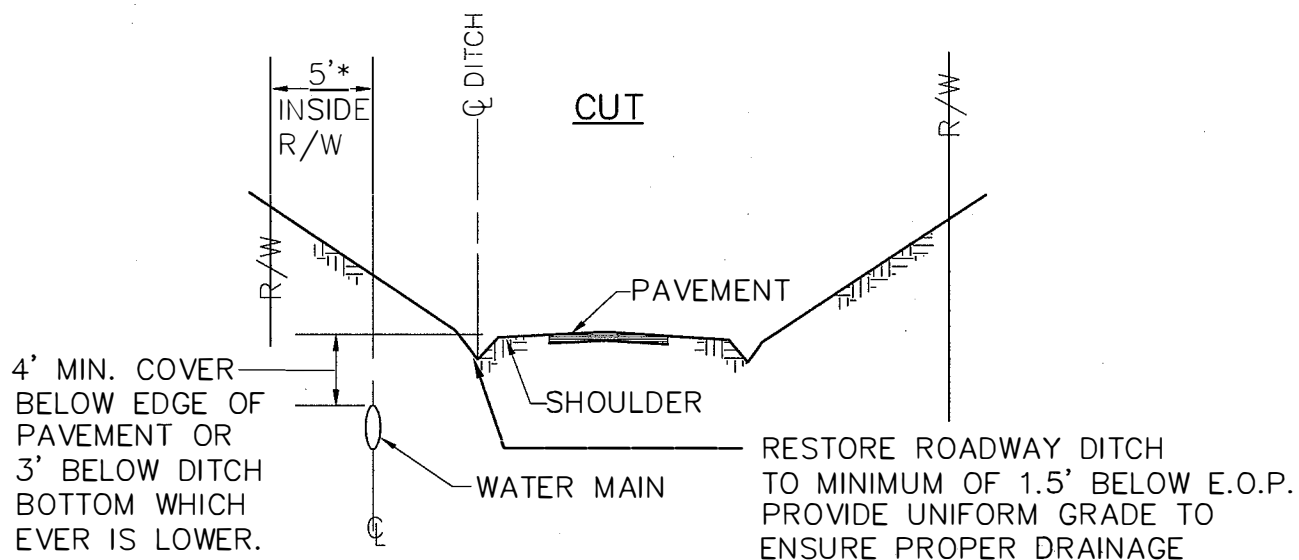
DATE: OCT 2021



Barrow County
Water & Sewerage Authority

AIR RELEASE CONNECTION

STANDARD CONSTRUCTION DETAILS
SCALE: NONE DATE: OCT 2021



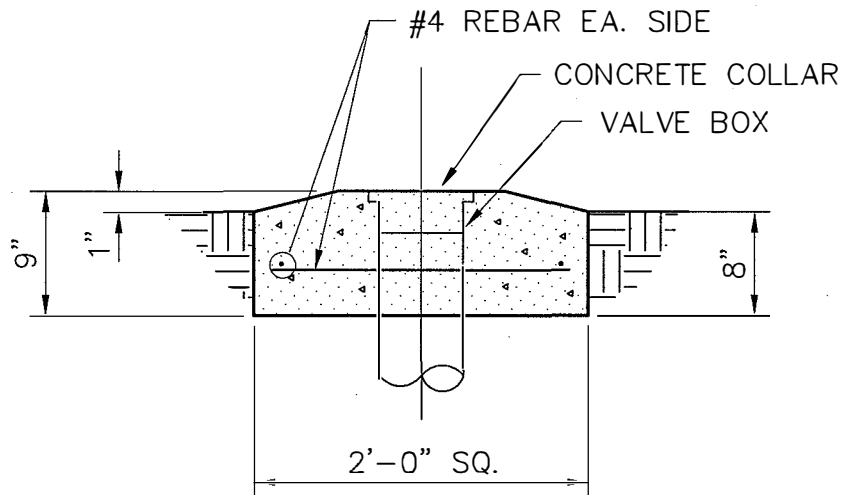
NOTE: * UNLESS SHOWN OTHERWISE.



Barrow County
Water & Sewerage Authority

**WATER MAIN LOCATION FOR
COUNTY AND STATE ROADS**

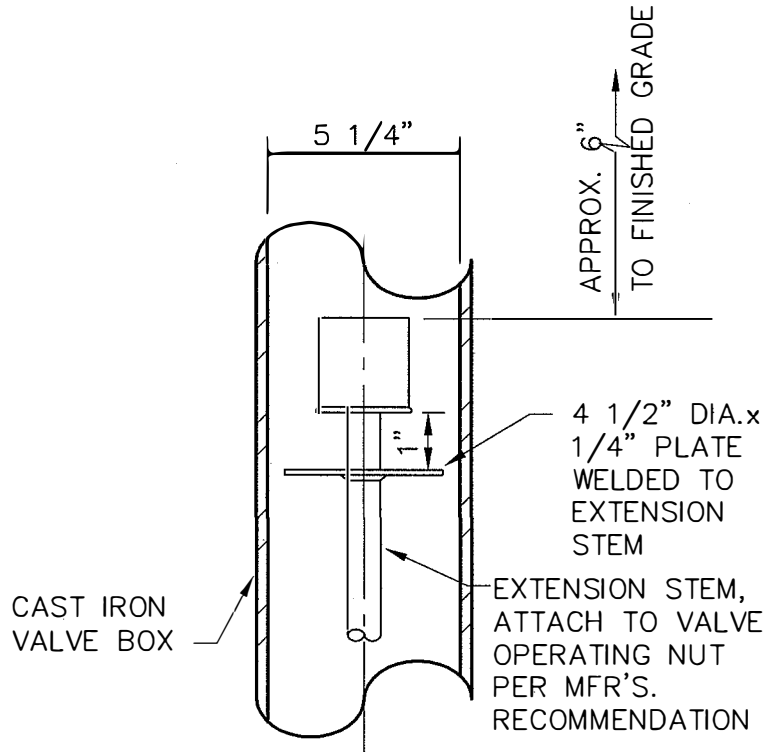
STANDARD CONSTRUCTION DETAILS
SCALE: NONE DATE: OCT 2021



Barrow County
Water & Sewerage Authority

CONCRETE VALVE BOX COLLAR

STANDARD CONSTRUCTION DETAILS
 SCALE: NONE
 DATE: OCT 2021



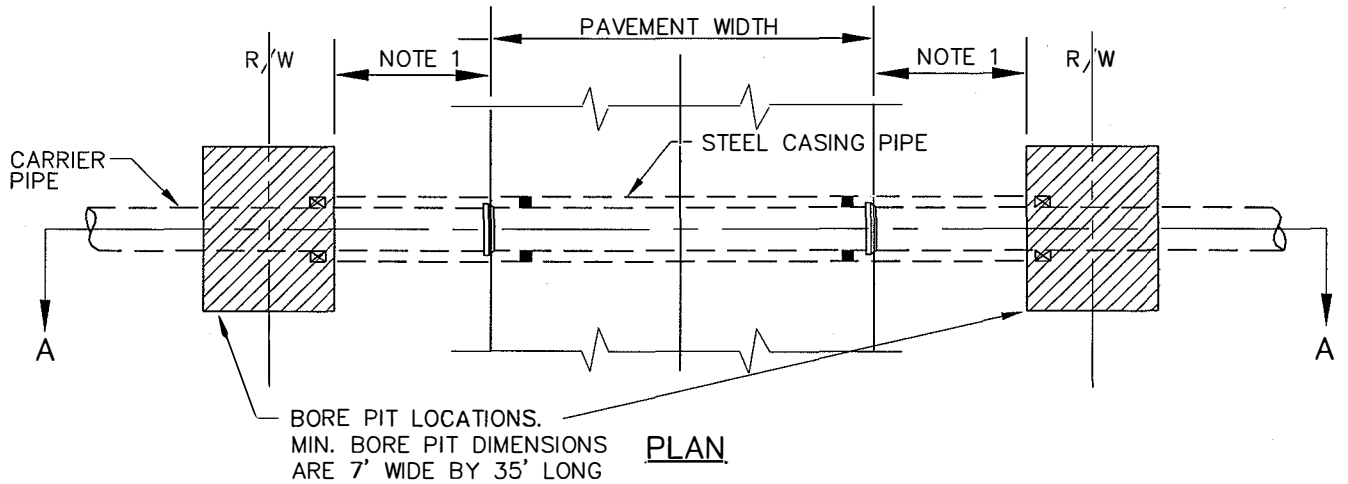
Barrow County
Water & Sewerage Authority

EXTENSION STEM

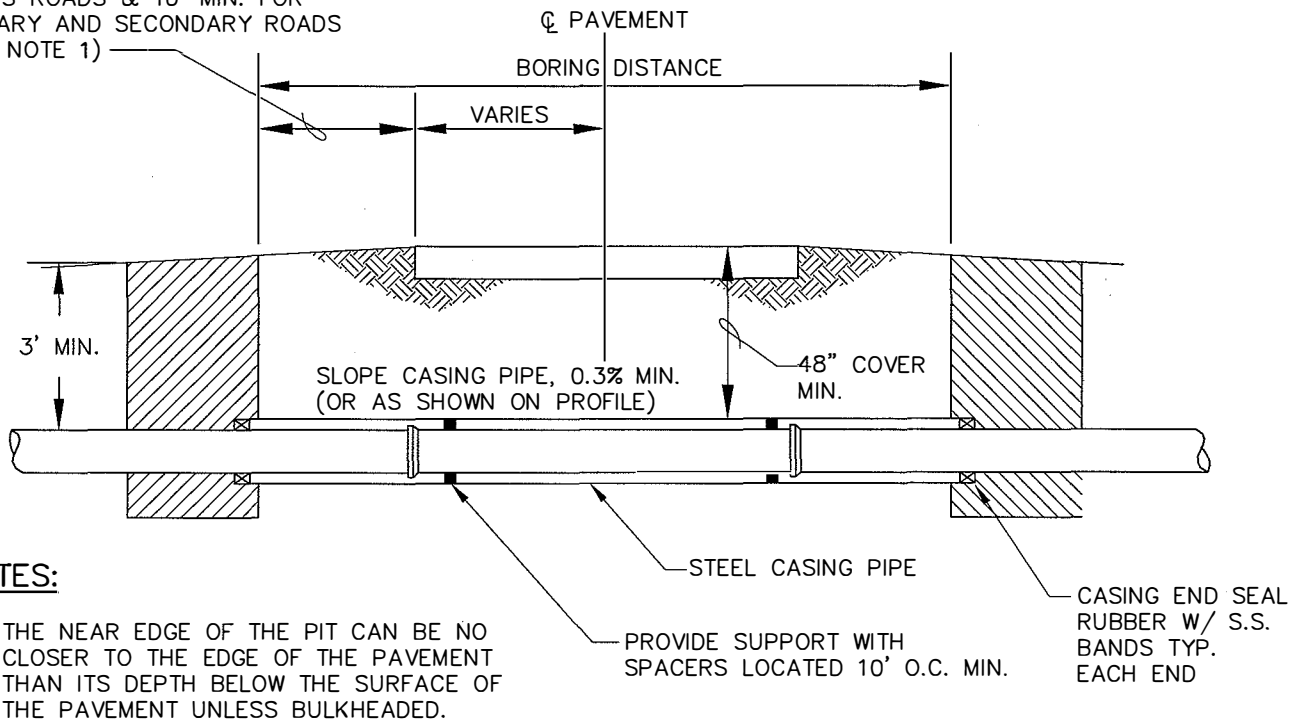
STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCT 2021



30' MIN. FOR CONTROLLED
ACCESS ROADS & 10' MIN. FOR
PRIMARY AND SECONDARY ROADS
(SEE NOTE 1)



NOTES:

1. THE NEAR EDGE OF THE PIT CAN BE NO CLOSER TO THE EDGE OF THE PAVEMENT THAN ITS DEPTH BELOW THE SURFACE OF THE PAVEMENT UNLESS BULKHEADED.

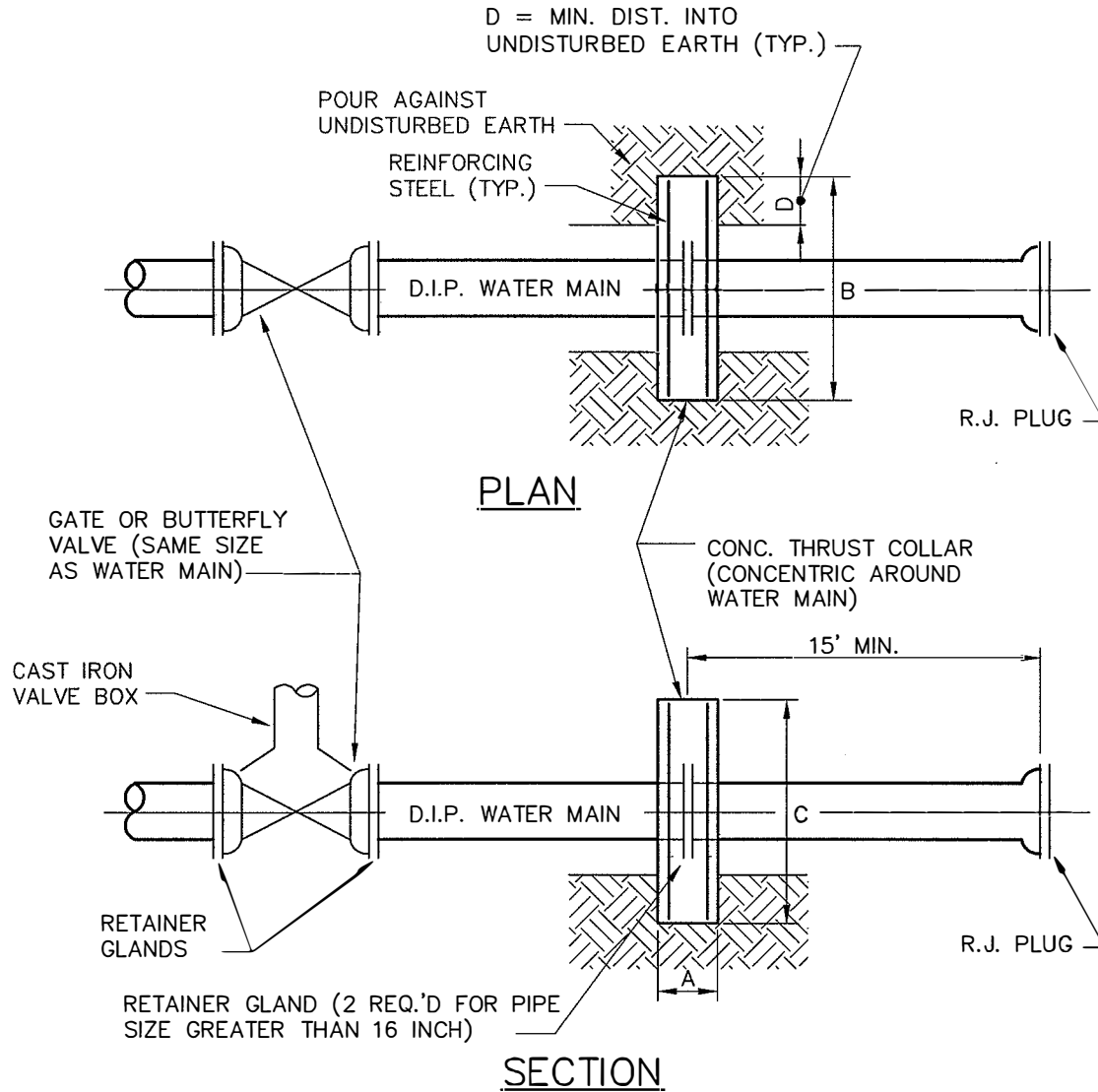
SECTION A-A



Barrow County
Water & Sewerage Authority

JACK AND BORE – CASING PIPE

STANDARD CONSTRUCTION DETAILS
SCALE: NONE DATE: OCT 2021



MAIN DIA	CONCRETE COLLAR DIM.				STEEL REINFORCING
	A	B	C	D	
24"	1'-9"	9'-0"	9'-0"	2'-6"	#9 @ 8" O.C. E.W.E.F.
20"	1'-6"	7'-8"	7'-8"	2'-0"	#9 @ 12" O.C. E.W.E.F.
16"	1'-3"	6'-6"	6'-6"	1'-6"	#8 @ 12" O.C. E.W.E.F.
12"	1'-2"	5'-3"	5'-3"	1'-0"	#7 @ 12" O.C. E.W.E.F.
6" or 8"	1'-0"	4'-0"	4'-0"	0'-8"	#6 @ 12" O.C. E.W.E.F.

TEST PRESSURE: 200 P.S.I. MAX
SOIL BEARING PRESSURE: 3000 P.S.F. MIN



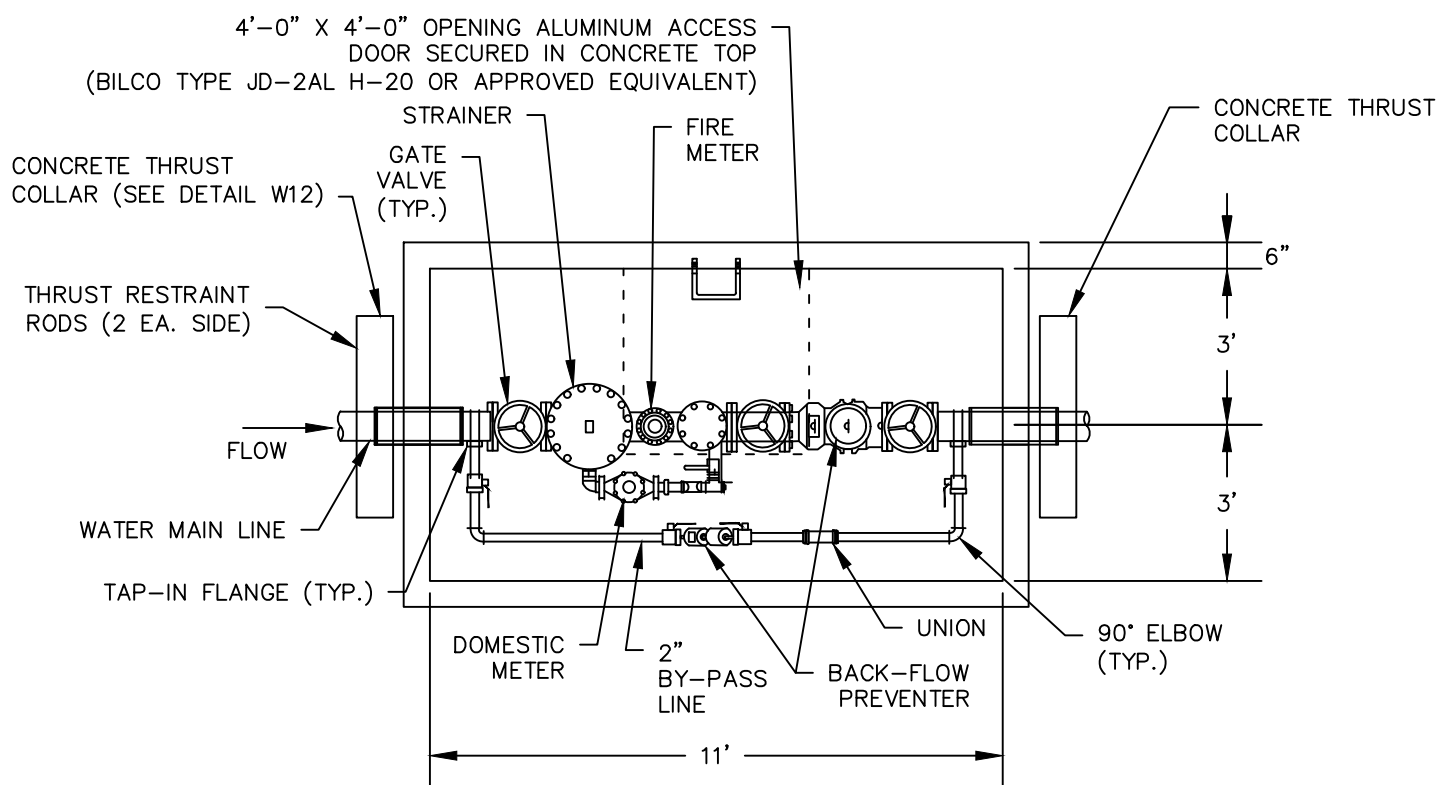
Barrow County
Water & Sewerage Authority

WATER MAIN STUB-OUT

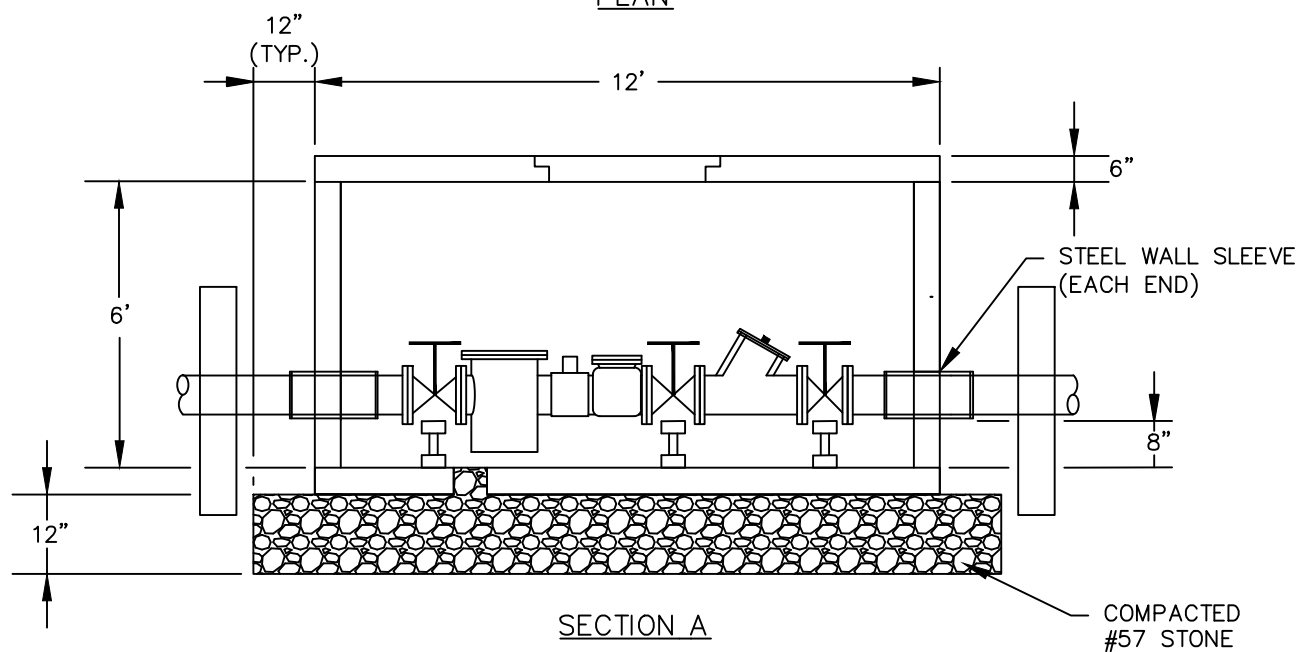
STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCT 2021



PLAN

**NOTE:**

1. PROVIDE ONE METAL PIPE SUPPORT AT EACH GATE VALVE (3 TOTAL).
2. ALL PIPING TO BE DUCTILE IRON.
3. VAULT SHALL BE REINFORCED CONCRETE (MIN. 3000 PSI) IN ACCORDANCE WITH ASTM C858 AND ASTM C913 FOR HS 20-44 WHEEL LOADING.
4. INSTALL ALUMINUM ACCESS DOORS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



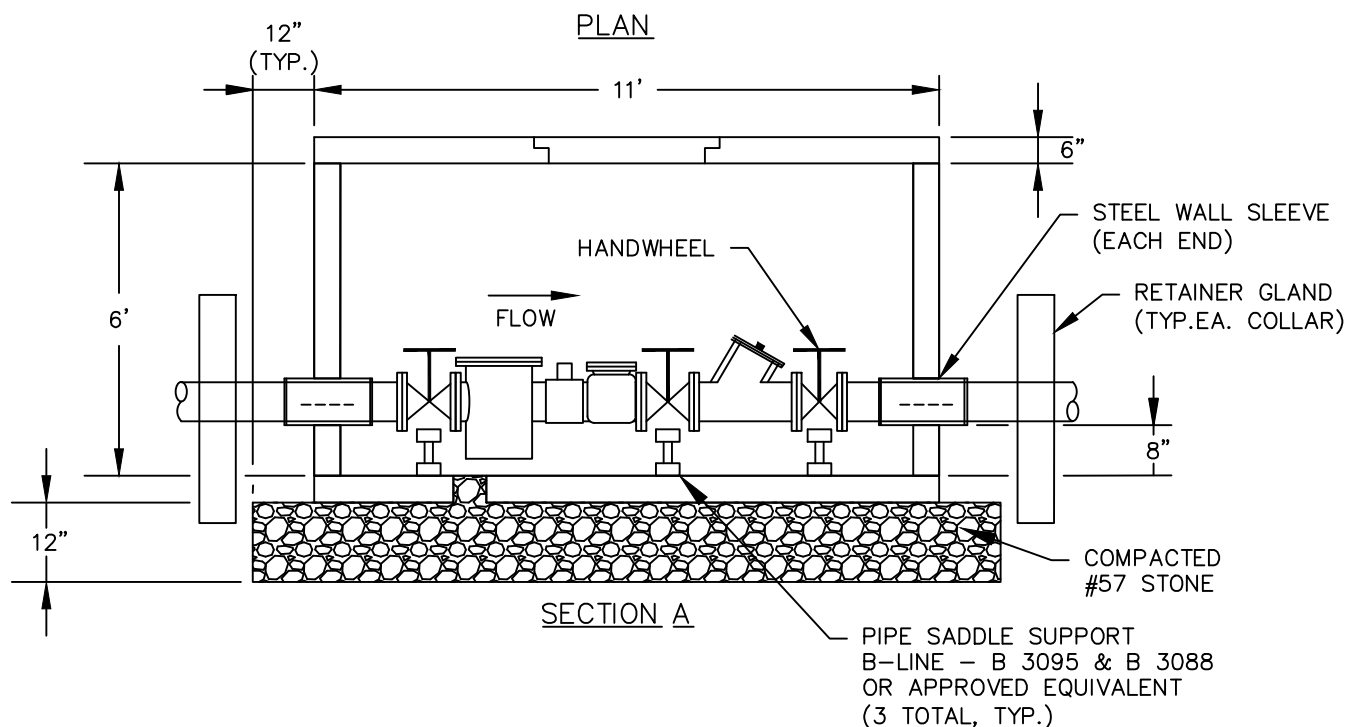
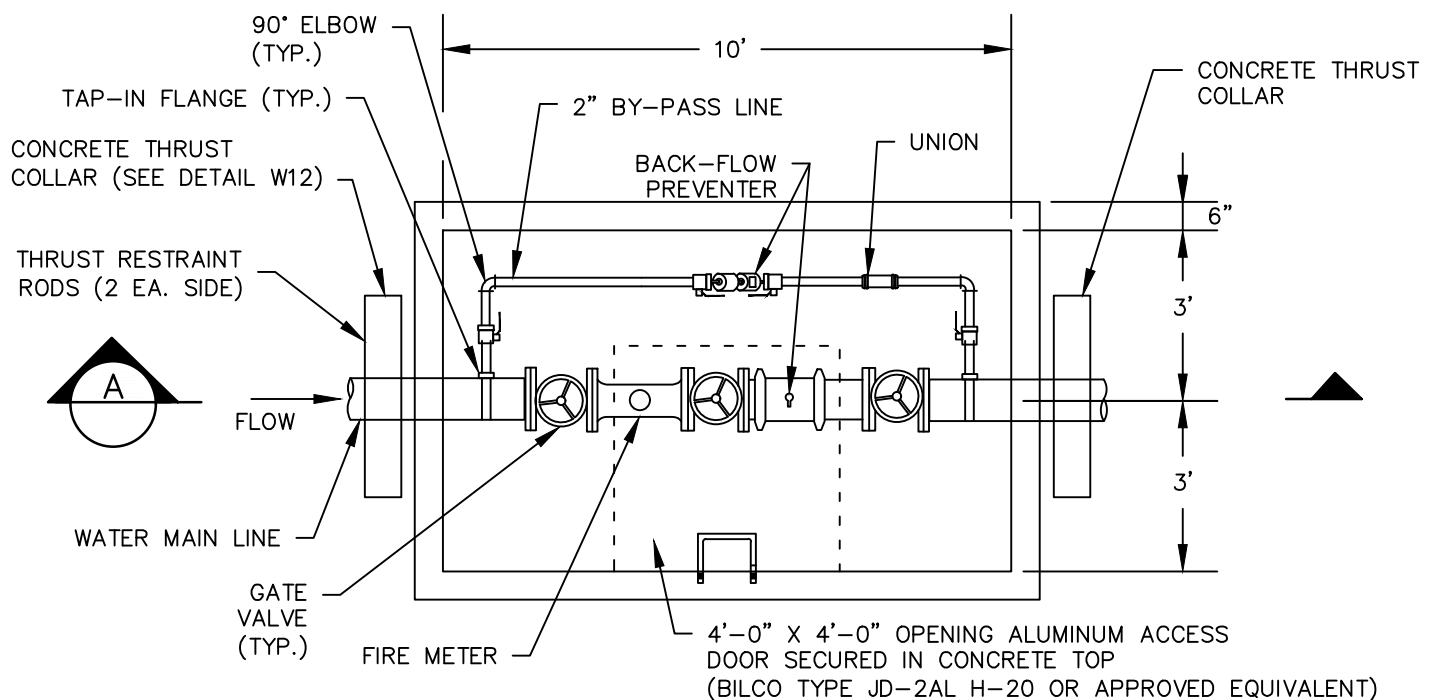
BARROW COUNTY
WATER & SEWERAGE AUTHORITY

DOMESTIC AND FIRE COMBINATION METER

STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: AUGUST 2023

**NOTE:**

1. PROVIDE ONE METAL PIPE SUPPORT AT EACH GATE VALVE (3 TOTAL).
2. ALL PIPING TO BE DUCTILE IRON.
3. VAULT SHALL BE REINFORCED CONCRETE (MIN. 3000 PSI) IN ACCORDANCE WITH ASTM C858 AND ASTM C913 FOR HS 20-44 WHEEL LOADING.
4. INSTALL ALUMINUM ACCESS DOORS IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



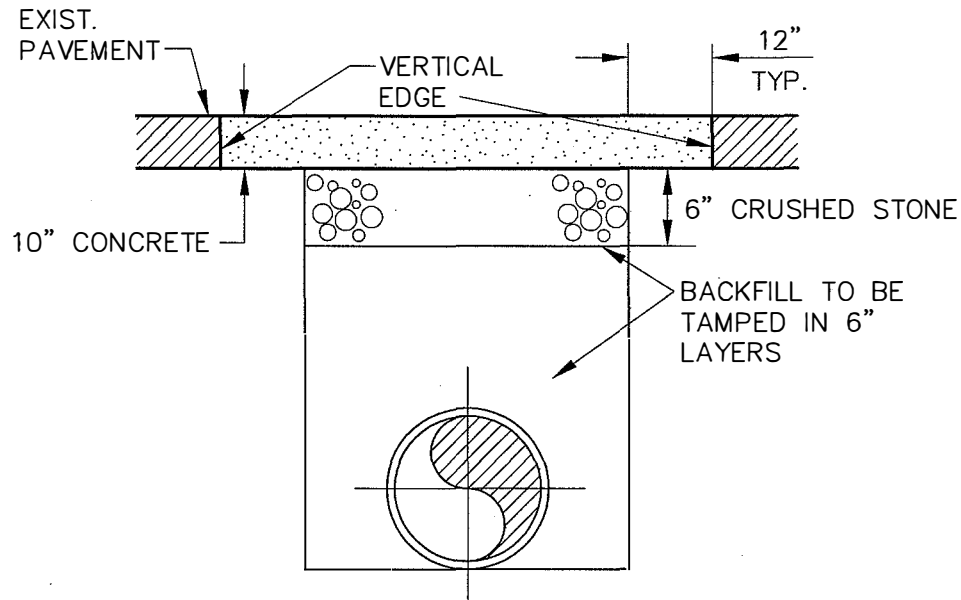
BARROW COUNTY
WATER & SEWERAGE AUTHORITY

FIRE LINE METER

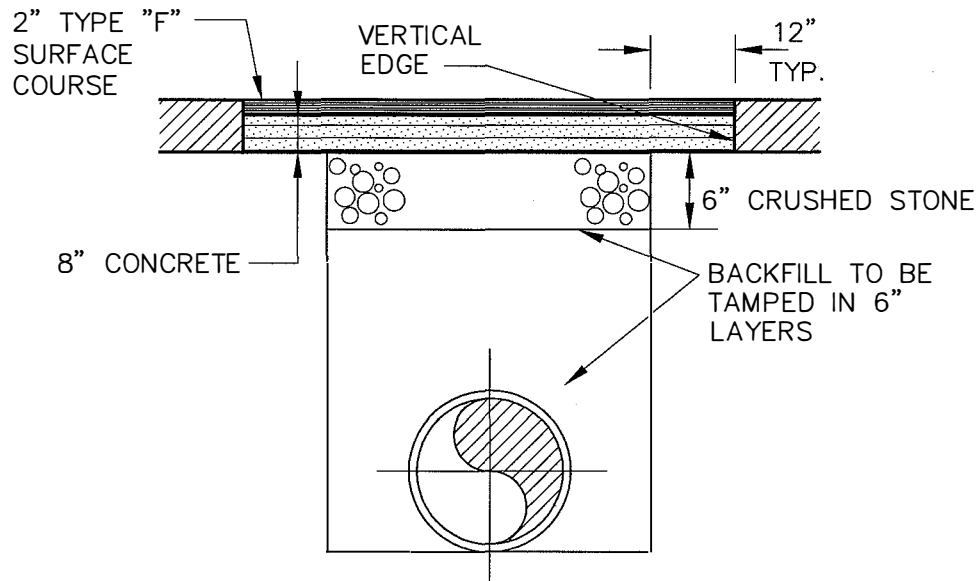
STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: AUGUST 2023



CONCRETE REPLACEMENT
DETAIL



ASPHALT REPLACEMENT
DETAIL



Barrow County
Water & Sewerage Authority

PAVEMENT REPLACEMENT DETAILS

STANDARD CONSTRUCTION DETAILS

SCALE: NONE

DATE: OCT 2021