

**APPENDIX - TABLE OF CONTENTS**  
**STANDARD DETAIL DRAWINGS**

JACKSON COUNTY UTILITY AUTHORITY  
WATER AND SEWER STANDARD SPECIFICATIONS

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**General Drawings**

Typical Trench Detail for Utility Line	G-1
Typical Trench Bedding and Backfill Installation Details	G-2
Typical Trench Repair and Backfill and Bedding Installation Details	G-3
Typical Trench Repair Details	G-4
Trench Width Table	G-5
Separation Requirements for Water and Sewer Lines	G-6
Typical Detail for Water and Sewer Lines Crossing	G-7
Typical Thrust Block Details for Pressure Pipe	G-8
Typical Restraining Length Chart for Pressure Pipe	G-9
Typical Restraining Length Details for Pressure Pipe	G-10
Typical Bore Cross Section	G-11
Typical Bore Profile Section	G-12

**Pressure Sewer Drawings**

Pump Station General Notes	PS-1
Standard Duplex Pump Station Plan View	PS-2
Standard Duplex Pump Station Section View	PS-3
Control Panel Details	PS-4
Electrical Diagram for Duplex Pump Station	PS-5
Above-Ground Valve Package Pump Station, Valves and Controls (Alt.)	PS-6
Simplex Grinder Pump Station	PS-7
Pressure Sewer Service Connection Detail	PS-8
Miscellaneous Pressure Sewer Details and STEP Tank Notes	PS-9
STEP Tank Detail for De-Centralized Sanitary Sewer System	PS-10
Typical Combination Sewage Air Valve Installation with Vault	PS-11
Typical Combination Sewage Air Valve Section A-A	PS-12

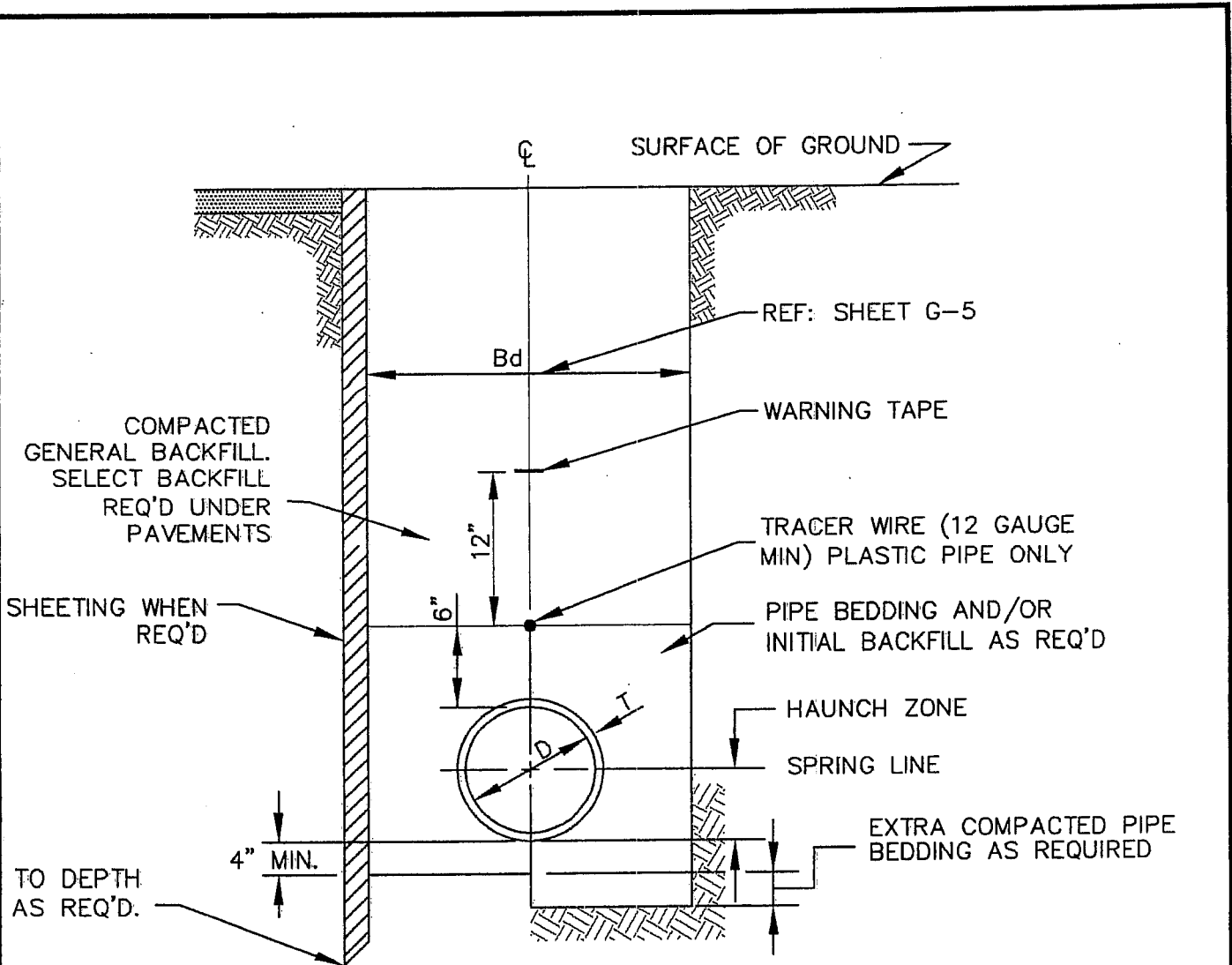
**Gravity Sewer Drawings**

Section Single Wye Service	SS-1
Plan Sewer Service Detail	SS-2
Sewer Cleanout Detail	SS-3
Terminal Cleanout Detail	SS-4
Service Connection for Deep Sewer, Slopes Greater Than 25 Percent	SS-5
Sewer Manhole Frame and Cover	SS-6
Sewer Manhole Plan View	SS-7
Manhole Invert Plan View	SS-8
Section A-A of 4' or 5' Diameter Manhole	SS-9
Section B-B of 4' or 5' Diameter Manhole	SS-10
6', 7', 8' or 9' Diameter Standard Manhole Detail	SS-11
Typical Drop Inlet Connection at Manhole	SS-12
Typical Detail of Sewer Pipe Connection to Existing Manhole	SS-13
Force Main Connection to Manhole	SS-14

Miscellaneous Manhole Details	SS-15
Manhole Step Detail	SS-16
Typical Detail of Concrete Encasement and/or Collar	SS-17
Detail of Pipe Plug	SS-18

### **Water Drawings**

Typical Gate Valve Detail	PW-1
Air Release Corporation Stop Detail	PW-2
Typical Fire Hydrant Assembly (Elevation)	PW-3
Typical Fire Hydrant Assembly (Plan and Notes)	PW-4
Typical Water Meter Detail	PW-5
Typical Blow-Off Assembly	PW-6
Typical Water Service Connection to Water Main	PW-7
Typical Line Stop Detail	PW-8
Line Stop Completion Plug Detail	PW-9
Typical Detail of Concrete Encasement	PW-10



**TYPICAL TRENCH DETAIL FOR UTILITY LINE**

N.T.S.

**NOTE:**

1. CONTRACTOR TO DETERMINE REQUIREMENTS FOR SHEETING AND FOR SLOPING WALL OF TRENCH BASED ON SOIL CONDITIONS.
2. ENGINEER OF RECORD TO DETERMINE BEDDING AND BACKFILL INSTALLATION BASED ON SOIL CONDITIONS AND PIPE MATERIAL. (SEE DETAILS DWG. G2 AND G3 FOR INSTALLATION CLASSES)
3. TRENCH REPAIRS THROUGH EXISTING PAVEMENTS NOT MADE WITHIN 24 HOURS OF TRENCH CLOSURE SHALL RECEIVE TEMPORARY REPAIR WITH CLAY GRAVEL COURSE OVERLAIN WITH 1" THICK LAYER WASHED GRAVEL, MDOT SIZE 67. TEMPORARY REPAIR SURFACES SHALL BE MAINTAINED DAILY UNTIL FINAL TRENCH REPAIRS ARE COMPLETED.



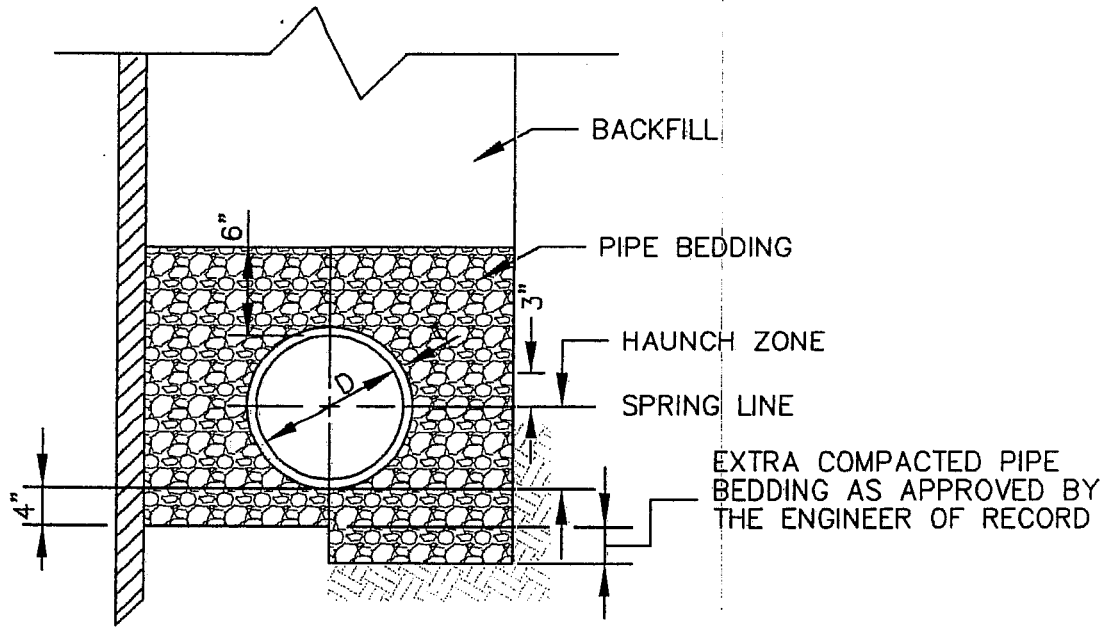
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TYPICAL TRENCH  
DETAIL FOR  
UTILITY LINE

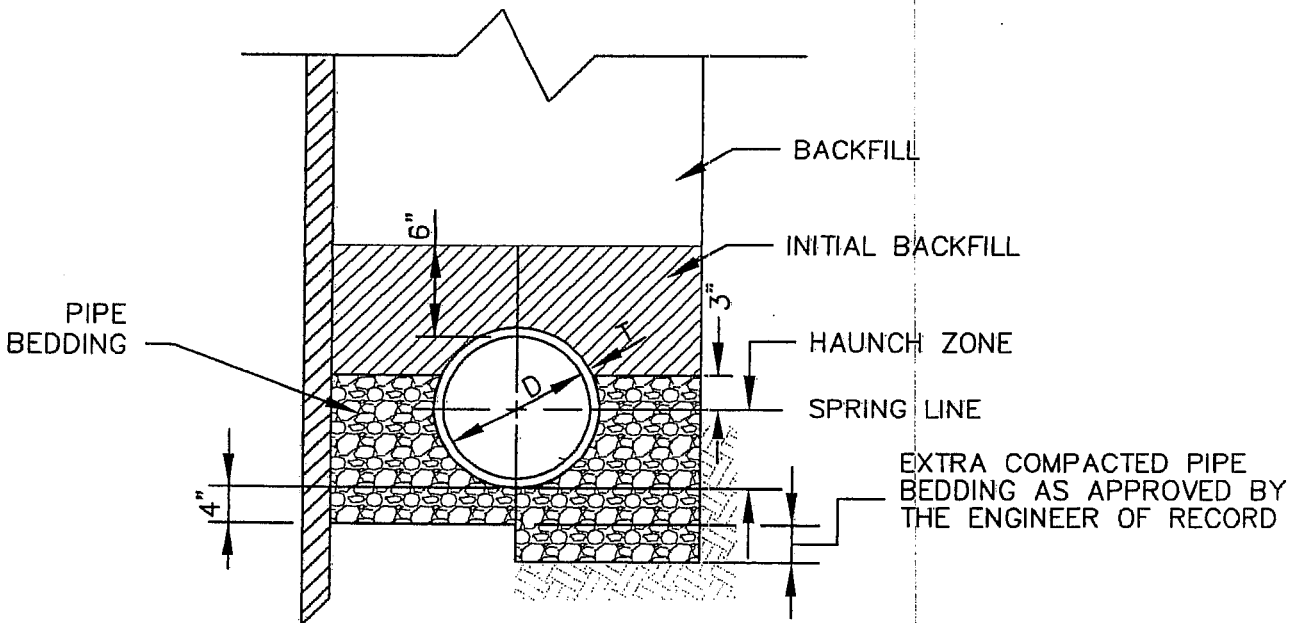
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**G-1**



**CLASS "D" INSTALLATION**

N.T.S.



**CLASS "C" INSTALLATION**

N.T.S.



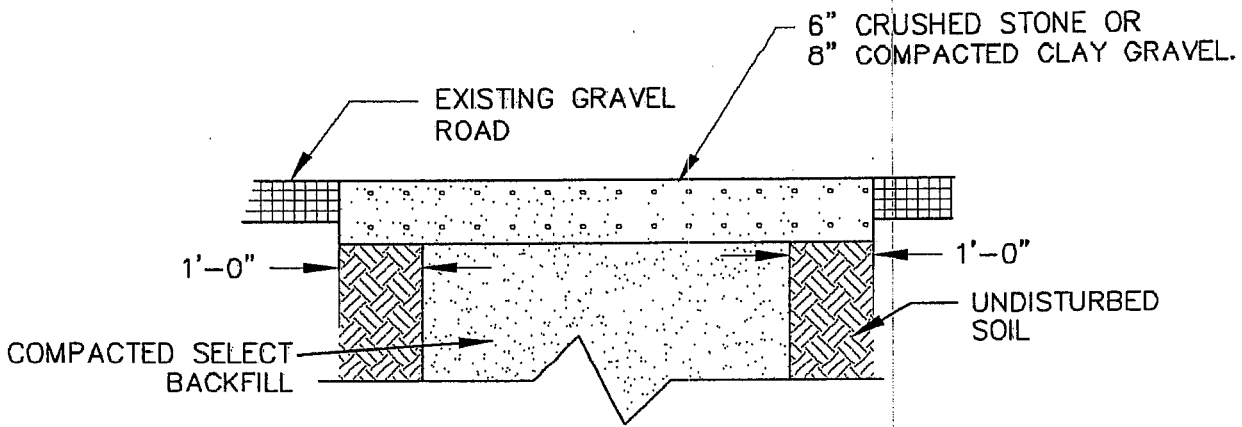
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**TYPICAL TRENCH  
BEDDING AND  
BACKFILL  
INSTALLATION  
DETAILS**

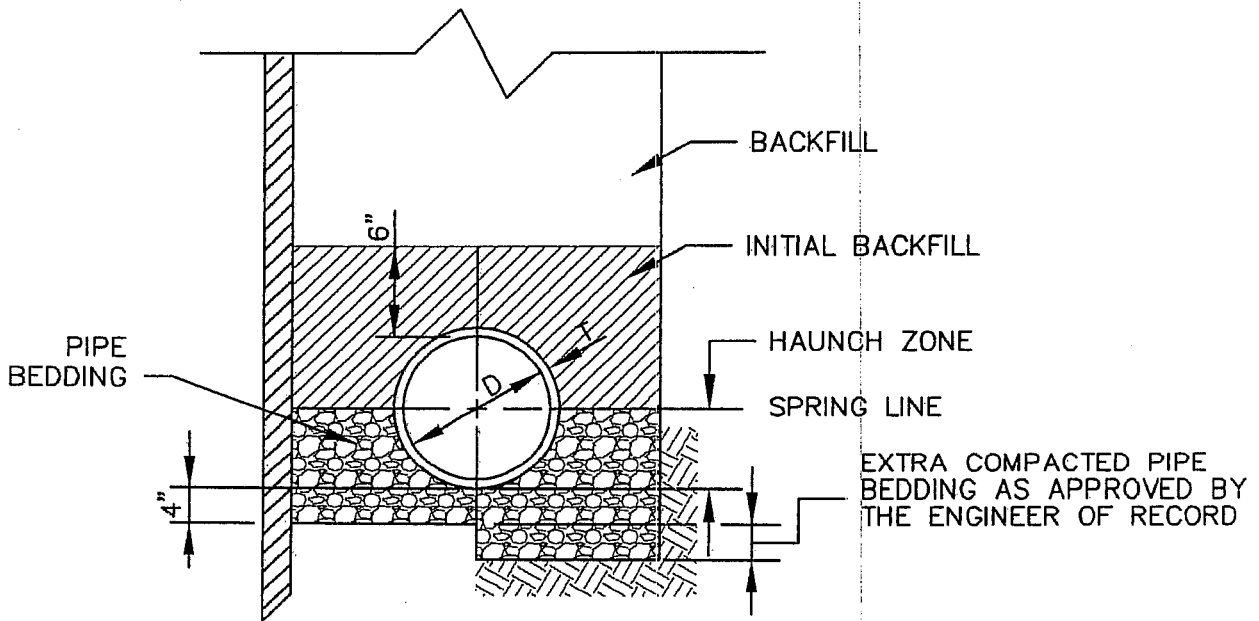
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**G-2**



**TYPICAL TRENCH REPAIR IN GRAVEL ROAD/DRIVE**

N.T.S.



**CLASS "B" INSTALLATION**

N.T.S.



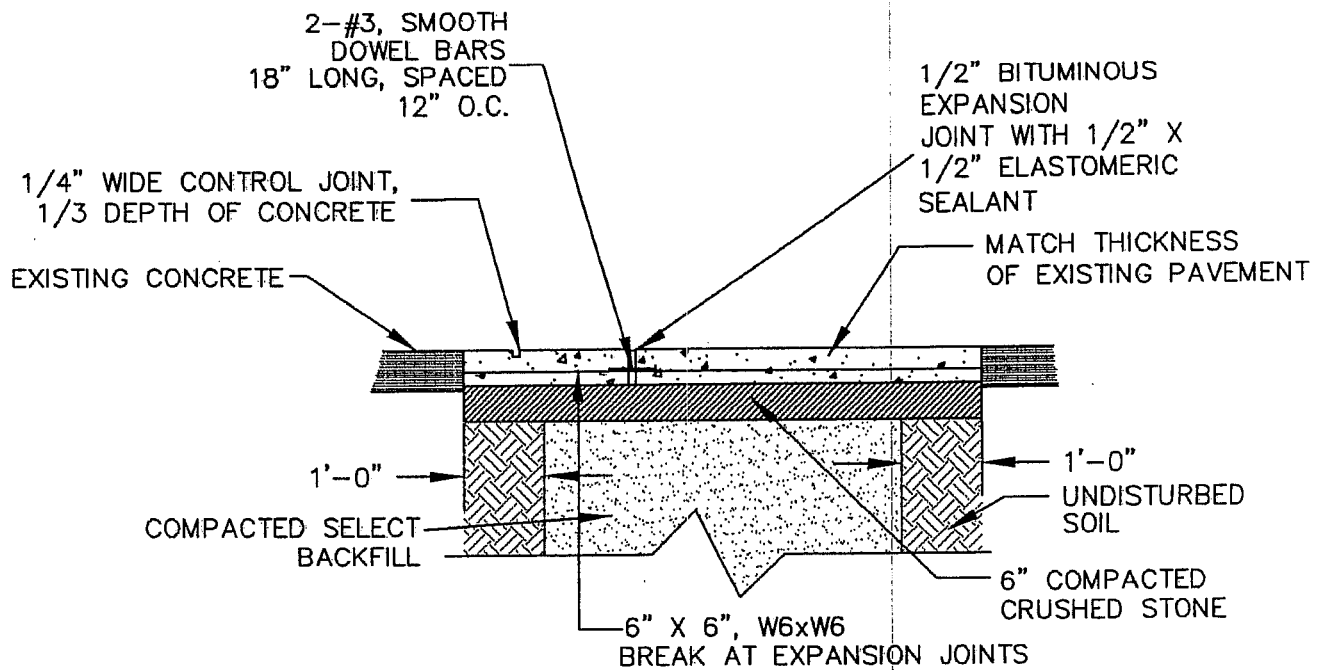
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STANDARDS**

**TYPICAL TRENCH  
REPAIR AND  
BACKFILL AND  
BEDDING  
INSTALLATION  
DETAILS**

PAGE NUMBER:

**G-3**

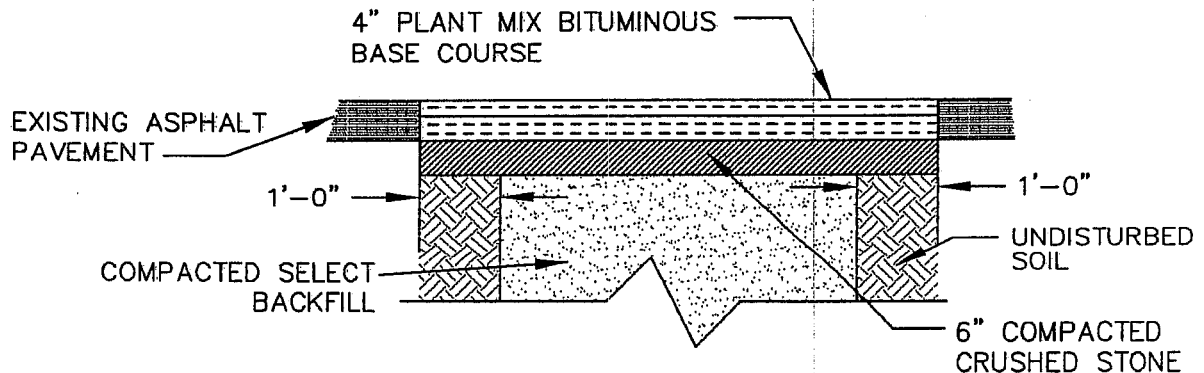


## TYPICAL TRENCH REPAIR IN CONCRETE PAVEMENT

### NOTES:

N.T.S.

1. EXPANSION JOINTS IN CONCRETE TO BE SPACED EVERY 30 FEET.
2. CONTROL JOINTS TO BE SPACED EVERY 10 FEET (CENTERED IN CONCRETE).



## TYPICAL TRENCH REPAIR IN ASPHALT ROAD/DRIVE

N.T.S.

### GENERAL NOTE:

SAW CUT LIMITS OF ALL TRENCHES IN PAVEMENTS.



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TYPICAL TRENCH  
REPAIR DETAILS

PAGE NUMBER:

G-4

TRENCH WIDTH TABLE		
PIPE SIZE (IN.)	MAX. TRENCH WIDTH-Bd (FT.)	TRENCH VOLUME PER FOOT OF DEPTH (CY/LF)
8	3.00	0.111
10	3.50	0.130
12	3.50	0.130
15	4.00	0.148
18	4.00	0.148
24	4.50	0.167
30	5.00	0.185
36	6.00	0.222
42	6.50	0.240
48	7.00	0.259
54	7.50	0.278
60	8.00	0.296
72	9.25	0.343
78	9.75	0.361
84	10.50	0.389

**NOTE:**

THE TRENCH WIDTH TABLE CAN BE USED TO CALCULATE QUANTITIES FOR ITEMS OF WORK RELATED TO THE PLACEMENT OF PIPE INCLUDING SELECT BACKFILL, FILL, AND TRENCH REPAIR ITEMS.



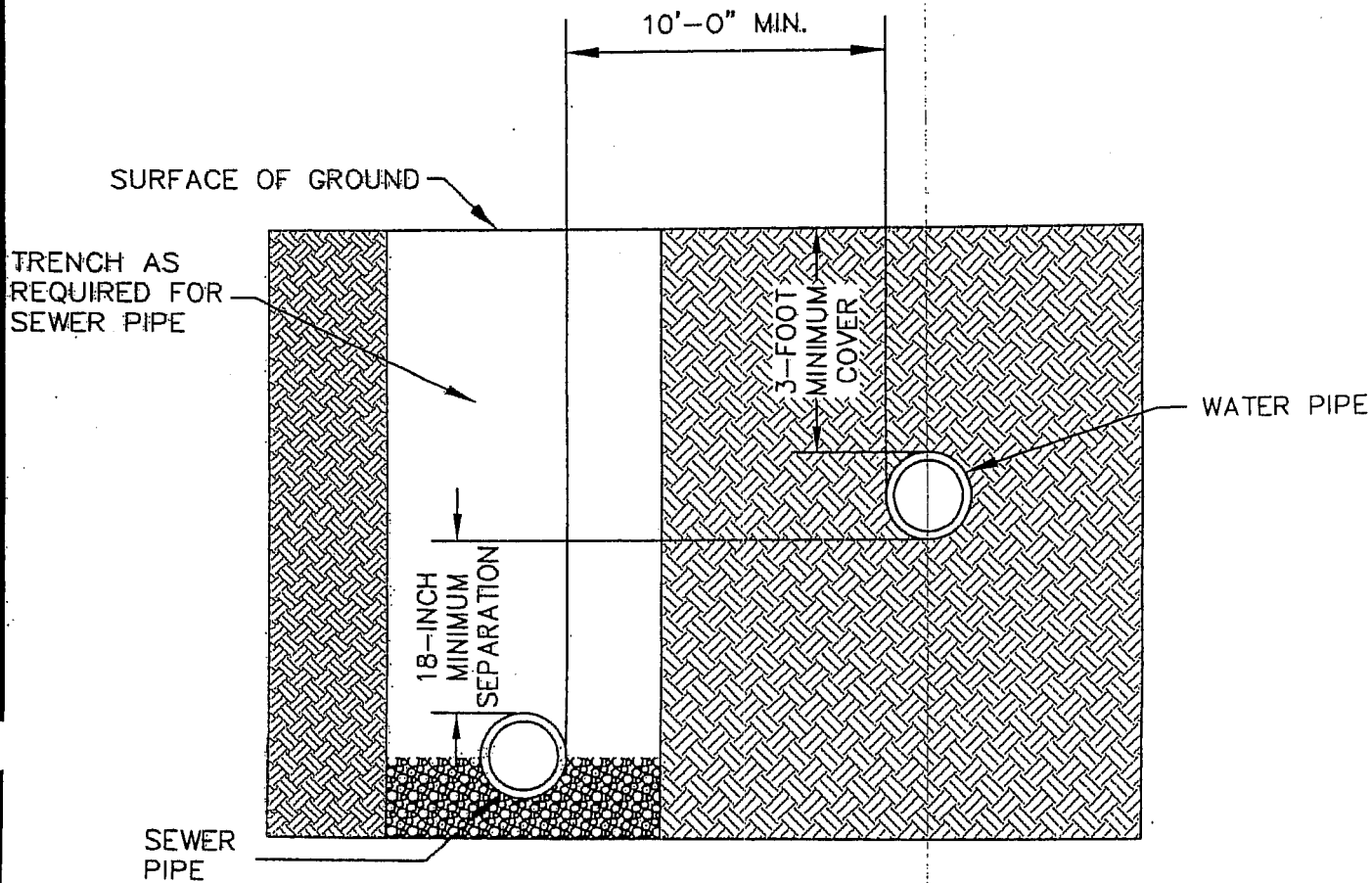
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TRENCH WIDTH  
TABLE

PAGE NUMBER:

**G-5**



**SEPARATION REQUIREMENTS FOR WATER AND SEWER LINES LOCATED WITHIN 10 FOOT HORIZONTAL**

N.T.S.



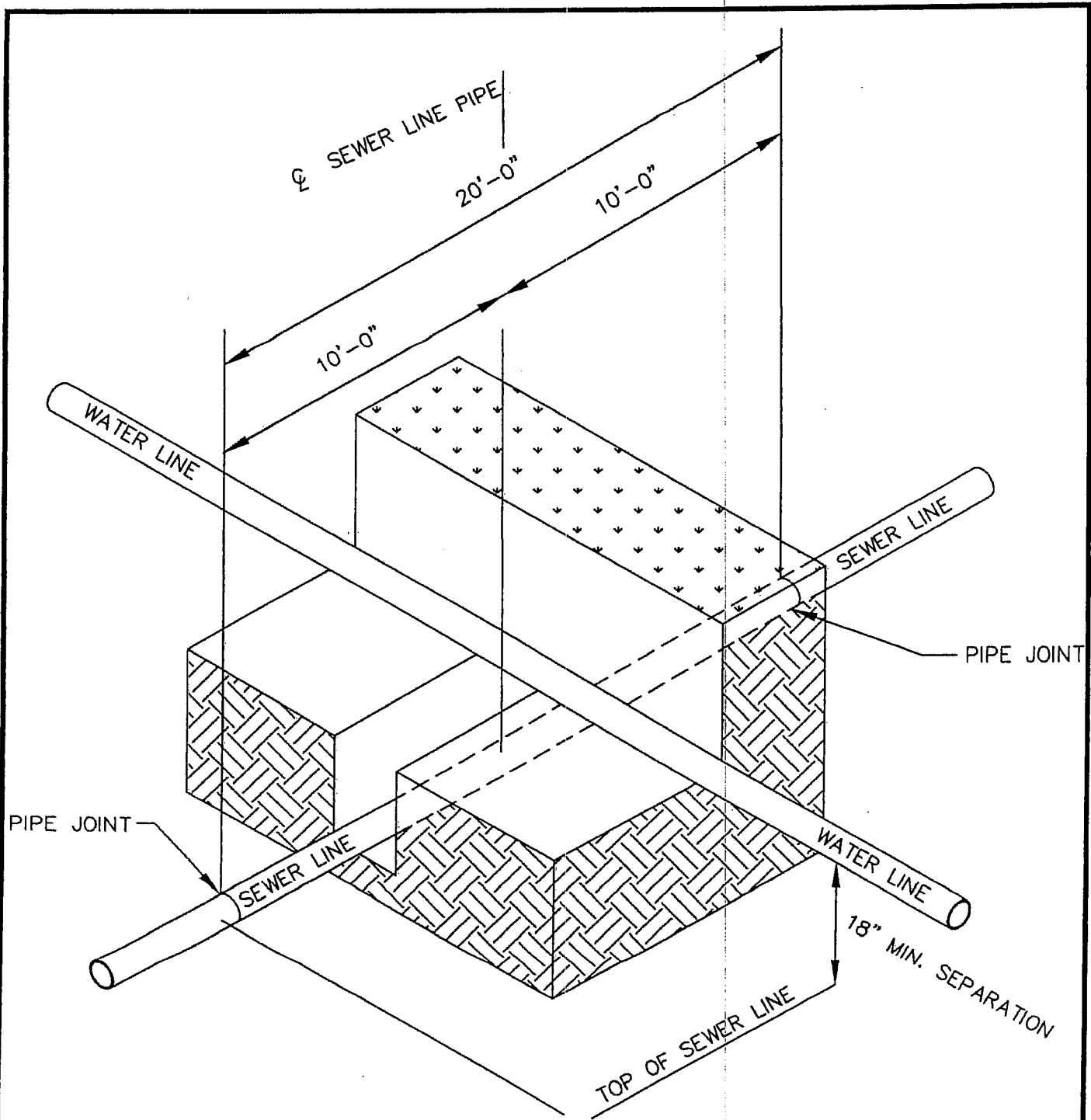
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**SEPARATION  
REQUIREMENTS  
FOR WATER AND  
SEWER LINES**

PAGE NUMBER:

**G-6**



**TYPICAL DETAIL FOR WATER LINE AND SEWER LINE CROSSING REQUIREMENTS**

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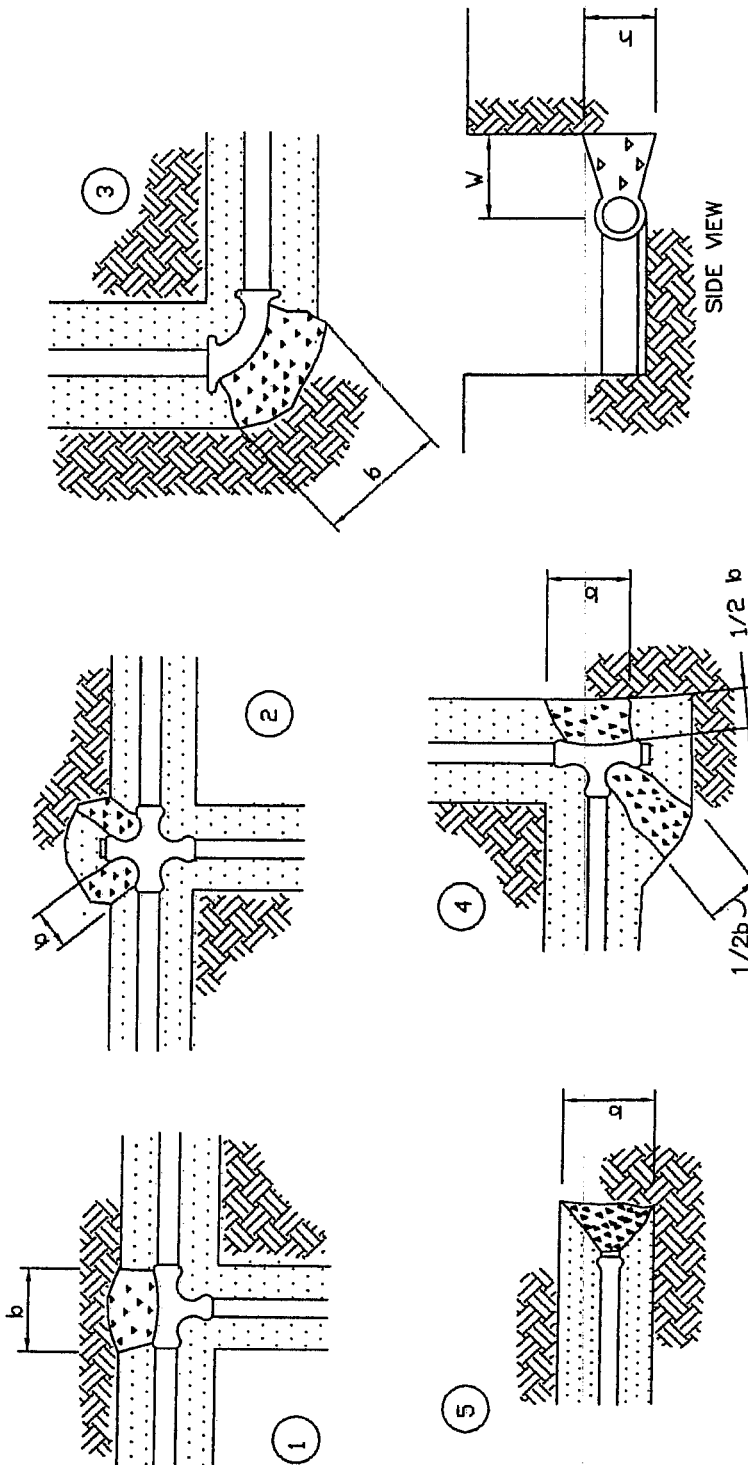
**TYPICAL DETAIL FOR  
WATER LINE AND  
SEWER LINE  
CROSSING**

PAGE NUMBER:

**G-7**

THRUST BLOCKING DIMENSIONS

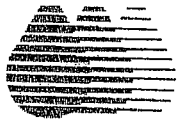
DIA. OF PIPE	TEE ①		CROSS ②		BENDS ③		TEE ④		DEAD END ⑤		W
	b	h	b	h	b	h	b	h	b	h	
</= 4"	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
6"	2.0'	2.0'	2.0'	2.0'	2.0'	2.0'	2.0'	2.0'	2.0'	2.0'	1.5'
8"	3.0'	2.0'	3.0'	2.0'	4.0'	2.0'	3.0'	2.0'	3.0'	2.0'	1.5'
12"	5.0'	2.5'	5.0'	2.5'	5.0'	2.5'	5.0'	2.5'	5.0'	2.5'	2.0'
											2.5'



- ① TEE
- ② CROSS USED AS TEE
- ③ 90° BEND, 45° BEND, 22 1/2° BEND
- ④ TEE USED AS ELBOW
- ⑤ DEAD END

NOTE:  
 THRUST BLOCKING DIMENSIONS BASED  
 ON SOIL BEARING PRESSURE OF 1500  
 PSF, SAFETY FACTOR OF 1.5 AND TEST  
 PRESSURE OF 100 PSI. IF CONDITIONS  
 VARY IN THE FIELD ENGINEER SHALL  
 MODIFY DIMENSIONS BASED ON SPECIFIC  
 SOIL CONDITIONS.

THRUST BLOCKING DETAILS  
NTS



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 STANDARDS

TYPICAL THRUST  
 BLOCK DETAILS FOR  
 PRESSURE PIPE

PAGE NUMBER:

G-8



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CONSTRUCTION  
STANDARDS

TYPICAL RESTRAINING  
LENGTH CHART FOR  
PRESSURE PIPE

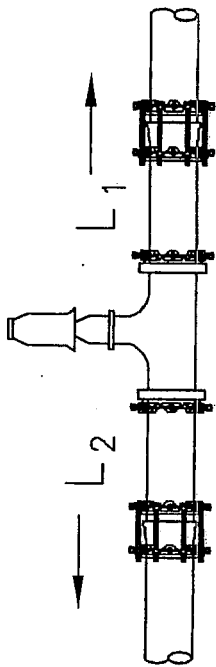
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G-9

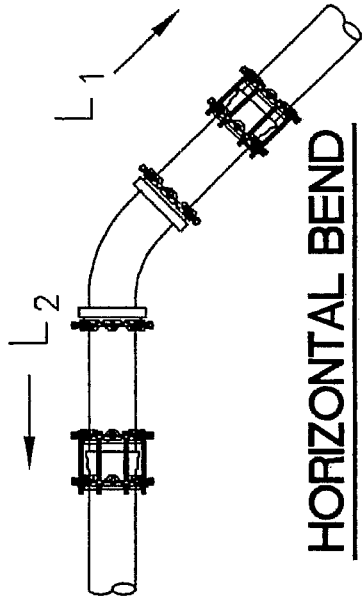
RESTRAINING LENGTHS FOR JOINT RESTRAINTS

	MAIN PIPE SIZE - 4"			MAIN PIPE SIZE - 6"			MAIN PIPE SIZE - 8"		
	L1	L2	L3	L1	L2	L3	L1	L2	L3
HORIZONTAL RESTRAINTS									
DEAD END	39'	39'		55'	55'		72'	72'	
90° ELBOW	13'	13'		18'	18'		23'	23'	
45° ELBOW	5'	5'		7'	7'		10'	10'	
22 1/2° ELBOW	4'	4'		4'	4'		5'	5'	
11 1/4° ELBOW	4'	4'		4'	4'		4'	4'	
GATE VALVE	39'	39'		55'	55'		72'	72'	
TEE 4" BRANCH	3'	3'	20'	3'	3'	11'	3'	3'	3'
6" BRANCH	3'	3'		3'	3'	35'	3'	3'	29'
8" BRANCH	3'	3'		3'	3'		3'	3'	52'
10" BRANCH	3'	3'		3'	3'		3'	3'	
VERTICAL RESTRAINTS									
45° ELBOW	4'	16'		6'	23'		7'	30'	
22 1/2° ELBOW	4'	8'		4'	11'		4'	14'	
11 1/4° ELBOW	4'	4'		4'	5'		4'	7'	

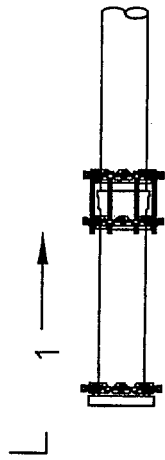
NOTE: MINIMUM RESTRAINED LENGTHS AS SHOWN ARE BASED ON THE FOLLOWING CONDITIONS - PIPE: C-900 PVC; SOIL TYPE: SILTY SAND, TEST PRESSURE: 150 PSI, SAFETY FACTOR: 1.5, DEPTH OF BURY: 3 FT, TRENCH TYPE: AS SPECIFIED IN THESE STANDARD DRAWINGS, TEE FITTING PIPE JOINT MINIMUM LENGTH: 3 FT, MINIMUM DEPTH OF LOW SIDE OF VERTICAL BEND: 4 FEET. IF THESE ARE NOT THE CONDITIONS ENCOUNTERED IN THE FIELD, CONTRACTOR SHOULD CONTACT PRODUCT REPRESENTATIVE FOR THE REQUIRED RESTRAINING LENGTHS OR FOR PIPE SIZES GREATER THAN 8 INCH NOMINAL DIAMETER.



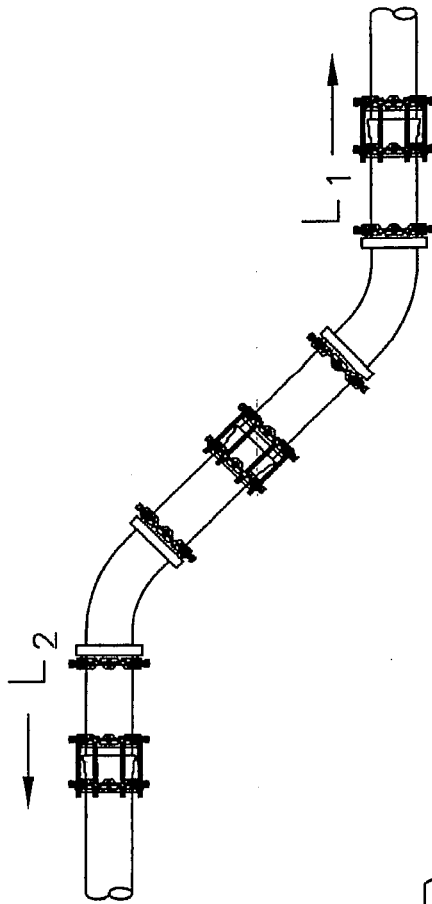
GATE VALVE



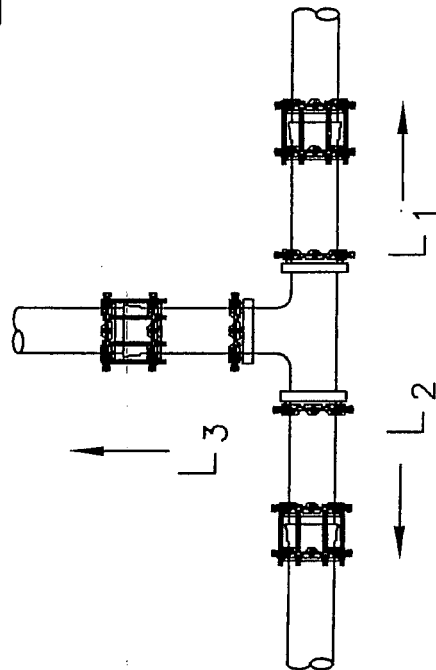
HORIZONTAL BEND



DEAD END



VERTICAL BEND



TEE CONNECTION



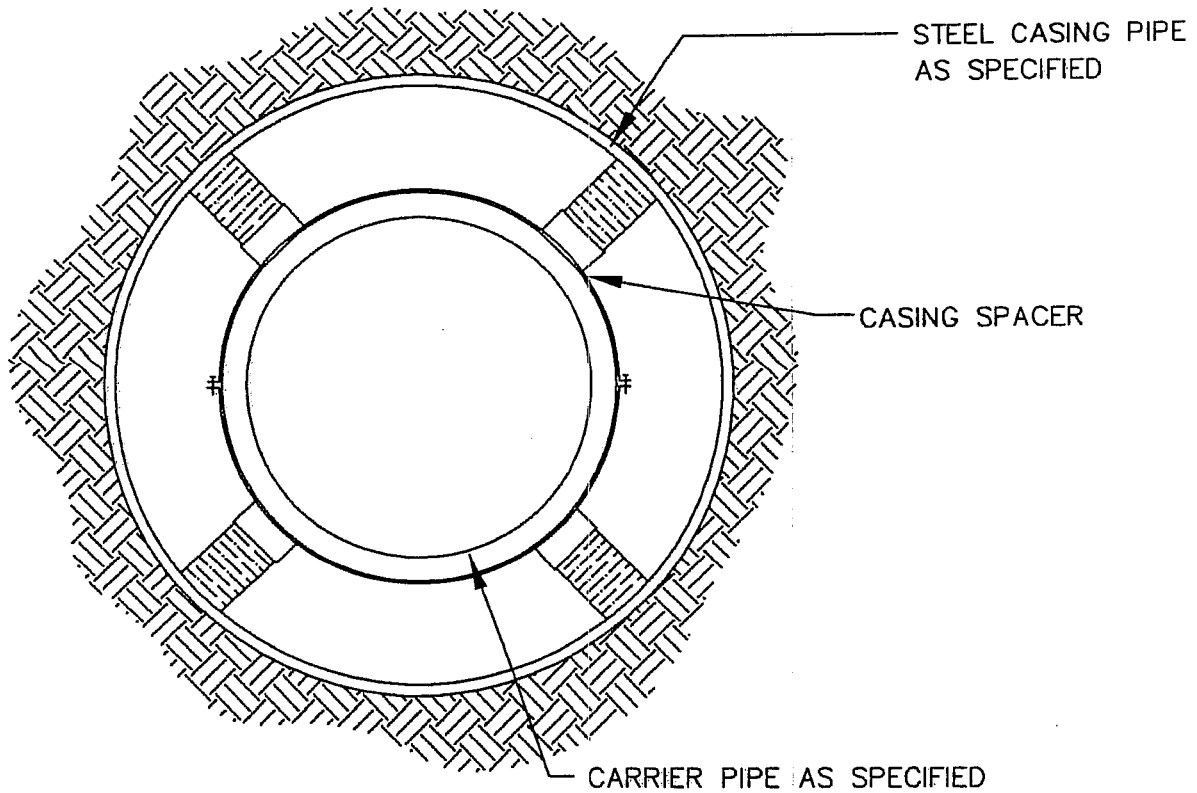
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STANDARDS

TYPICAL RESTAINING  
LENGTH DETAILS FOR  
PRESSURE PIPE

PAGE NUMBER:

G-10



## TYPICAL BORE CROSS SECTION

N.T.S.

CASING PIPE O.D. (inches)	MINIMUM WALL THICKNESS (inches)	
	HIGHWAYS	RAILROADS *
12 3/4 AND UNDER	0.188	0.250
16	0.250	0.281
18	0.250	0.312
20	0.250	0.344
24	0.281	0.406
30	0.312	0.469
36	0.375	0.531

\* MEETS A.R.E.A. "SPECIFICATIONS FOR PIPELINE FOR CONVEYING NON-FLAMMABLE SUBSTANCES."



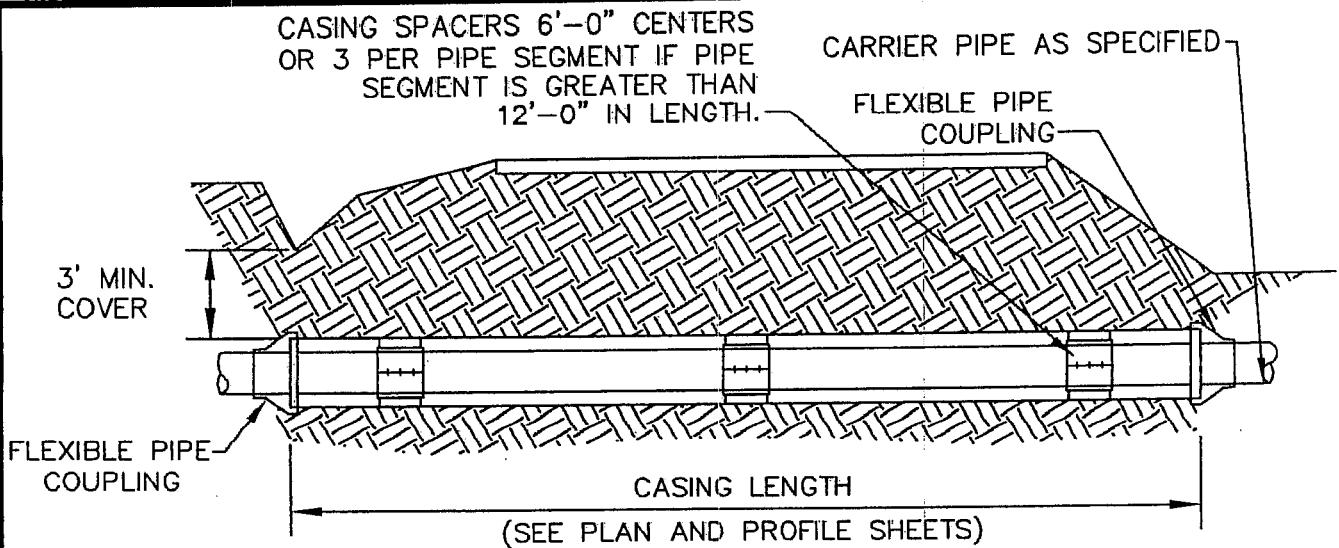
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CONSTRUCTION  
STANDARDS**

TYPICAL BORE  
CROSS SECTION

PAGE NUMBER:

**G-11**



## TYPICAL BORE PROFILE SECTION

N.T.S.

### GENERAL NOTES - BORING OR JACKING:

1. UTILITY LINE CROSSING UNDER PAVED ROADS, STATE AND U.S. HIGHWAY RIGHT-OF-WAY AND RAILROAD RIGHT-OF-WAY SHALL BE ENCASED AND PLACED BY BORING OR JACKING AS SHOWN ON PLANS. BORING OR JACKING SHALL EXTEND AS REQ'D BY THE GOVERNING AGENCY. WORK SHALL BE DONE AS SHOWN HEREIN AND REQ'D BY THE AUTHORITY.
2. ALL UTILITY LINE SHALL HAVE A MINIMUM COVER OF 36" EXCEPT WHERE LESS COVER IS INDICATED ON THE DRAWINGS. ALL TRENCH EXCAVATION! WITHIN RIGHT-OF-WAY AND NOT UNDER PAVING SHALL BE BACKFILLED BY TAMPING IN 6" LAYERS. ALL SURPLUS MATERIAL SHALL BE REMOVED FROM THE RIGHT-OF-WAY AND EXCAVATION FINISHED FLUSH WITH SURROUNDING GROUND.
3. CARRIER PIPE SHALL BE AS SHOWN ON PLAN VIEW SHEETS AND AS CALLED FOR IN SPECIFICATIONS.
4. WHERE GRASS IS DISTURBED BY EXCAVATION OR BACKFILLING OPERATION, SUCH AREAS SHALL BE REPLACED BY MULCH SEEDING ON ALL SLOPES OF 5% OR LESS. ALL SLOPES OVER 5% SHALL BE REPLACED WITH BLOCK SODDING.
5. THE INSTALLATION OF SAID FACILITY SHALL BE DONE UNDER THE PURVIEW OF ALL GOVERNING AGENCIES AND THE AUTHORITY.
6. THE CONTRACTOR SHALL MAKE NECESSARY ARRANGEMENTS FOR VEHICULAR TRAFFIC AROUND SAID POINT DURING SUCH WORK AND TO PLACE BARRICADES, WARNING SIGNS, SIGNALS, LIGHTS AND IF NECESSARY, WATCHMEN FOR THE PROTECTION OF THE ROADWAY AND/OR RAILROAD TRAVEL WAY.



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CONSTRUCTION  
STANDARDS**

TYPICAL BORE  
PROFILE SECTION

PAGE NUMBER:

**G-12**

## GENERAL NOTES

### CONCRETE NOTES

1. CONCRETE SHALL BE AIR ENTRAINED AND HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
2. DETAILS, WORKMANSHIP AND GENERAL PROCEDURE SHALL CONFORM TO ACI 318, ACI 315, AND ACI 301 UNLESS OTHERWISE NOTED.
3. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL DEFORMED BARS MEETING A.S.T.M. A-615 SPECIFICATIONS, LATEST EDITION, WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI.
4. ALL REINFORCEMENT SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE A.C.I. DETAILING MANUAL NO. SP-66, LATEST EDITION. ALL HOOKS SHALL BE STANDARD HOOKS UNLESS OTHERWISE NOTED.
5. LOCATION AND POSITION OF CONSTRUCTION JOINTS OTHER THAN THAT SHOWN ON THE DRAWINGS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE. ALL DISCREPANCIES FOUND SHALL BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH WORK.
7. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A HAND-RUBBED FINISH.
8. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4".
9. INTERIOR OF WET WELL AND VALVE BOX SHALL BE COATED WITH 40-60 MIL WARREN EPOXY COATING SYSTEM.

### ALUMINUM HATCH NOTES

1. DESIGN LIVE LOAD FOR COVERS = 300 PSF
2. ALL COVERS TO HAVE LOCKDOWN DOORS

### STRUCTURAL NOTES

1. ALL ANCHOR BOLTS SHALL BE TYPE 304 STAINLESS STEEL.
2. FABRICATOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

### MECHANICAL NOTES

1. PUMPS, CONTROL PANELS, AND ALL ACCESSORIES PERTINENT TO PUMP INSTALLATION SHALL BE PROVIDED BY A SINGLE SUPPLIER TO INSURE CONSISTENCY.
2. STATIONS SHALL CONTAIN SUBMERSIBLE PUMPS CAPABLE OF PASSING A MINIMUM 3" DIAMETER SOLID.
3. THE DESIGN POINT FOR THE SUBMERSIBLE PUMP SHALL BE DEPEND ON CONDITIONS.
4. THE SUBMERSIBLE PUMP INSTALLED SHALL PROVIDE A FACTORY SUPPLIED GUIDE RAIL SYSTEM MEETING MANUFACTURER RECOMMENDATIONS. GUIDE RAIL SYSTEMS SHALL BE STAINLESS STEEL.



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STANDARDS

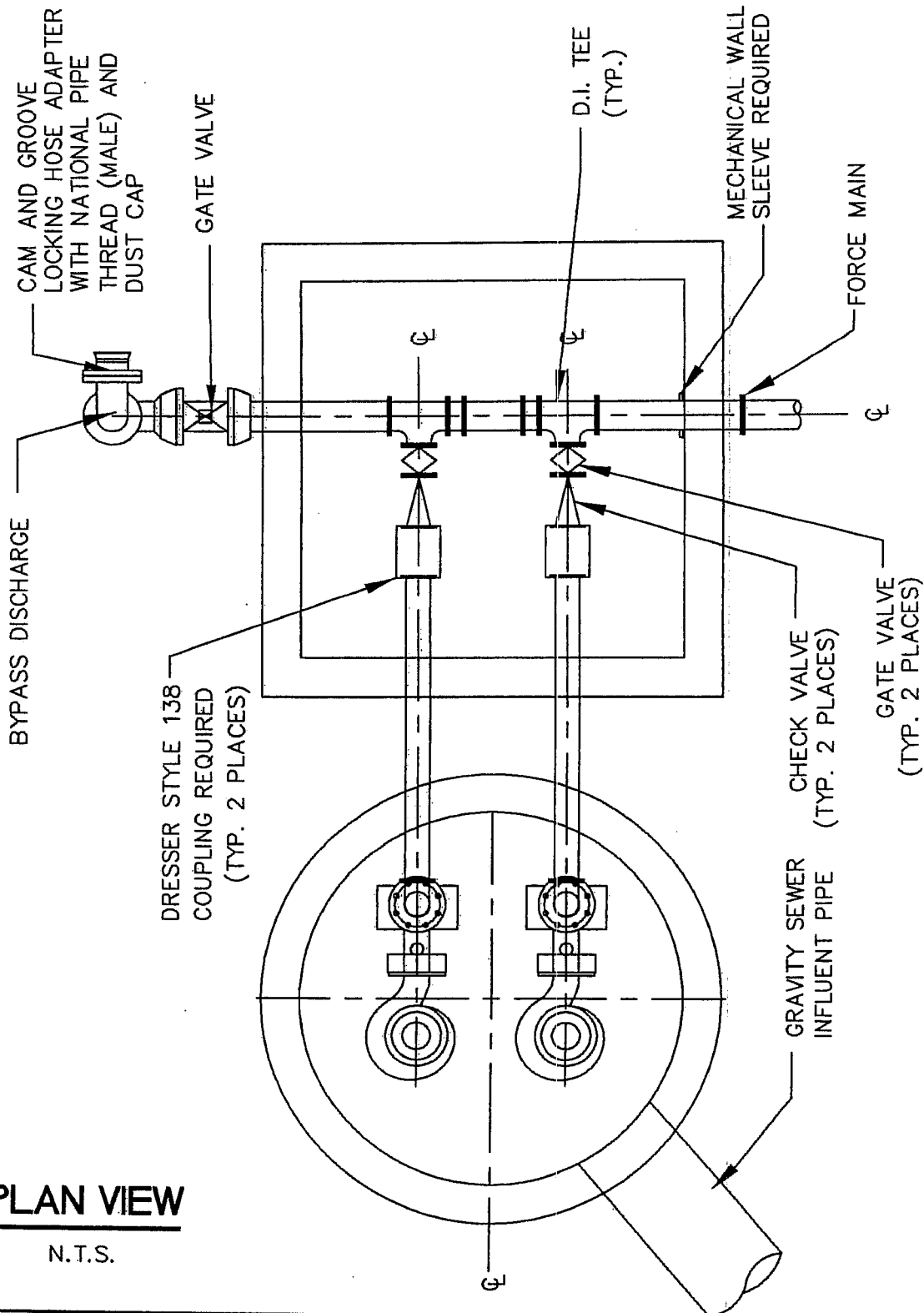
PUMP STATION  
GENERAL NOTES

PAGE NUMBER:

PS-1

**PLAN VIEW**

N.T.S.



- NOTE:
1. THE STATION SHALL BE READILY ACCESSIBLE BY MAINTENANCE VEHICLES DURING ANY WEATHER.
  2. STATION SHALL HAVE 6" THICK CRUSHED STONE ACCESS DRIVE AND PAD. ACCESS DRIVE SHALL BE 12' WIDE (MIN.). PAD DIMENSIONS SHALL BE AS REQ'D BY THE AUTHORITY FOR ACCESS.
  3. MECHANICAL WALL SLEEVES SHALL BE REQ'D WHEN PIPE PENETRATES ANY WALL. SLEEVES SHALL BE BY LINK-SEAL OR APPROVED EQUAL.



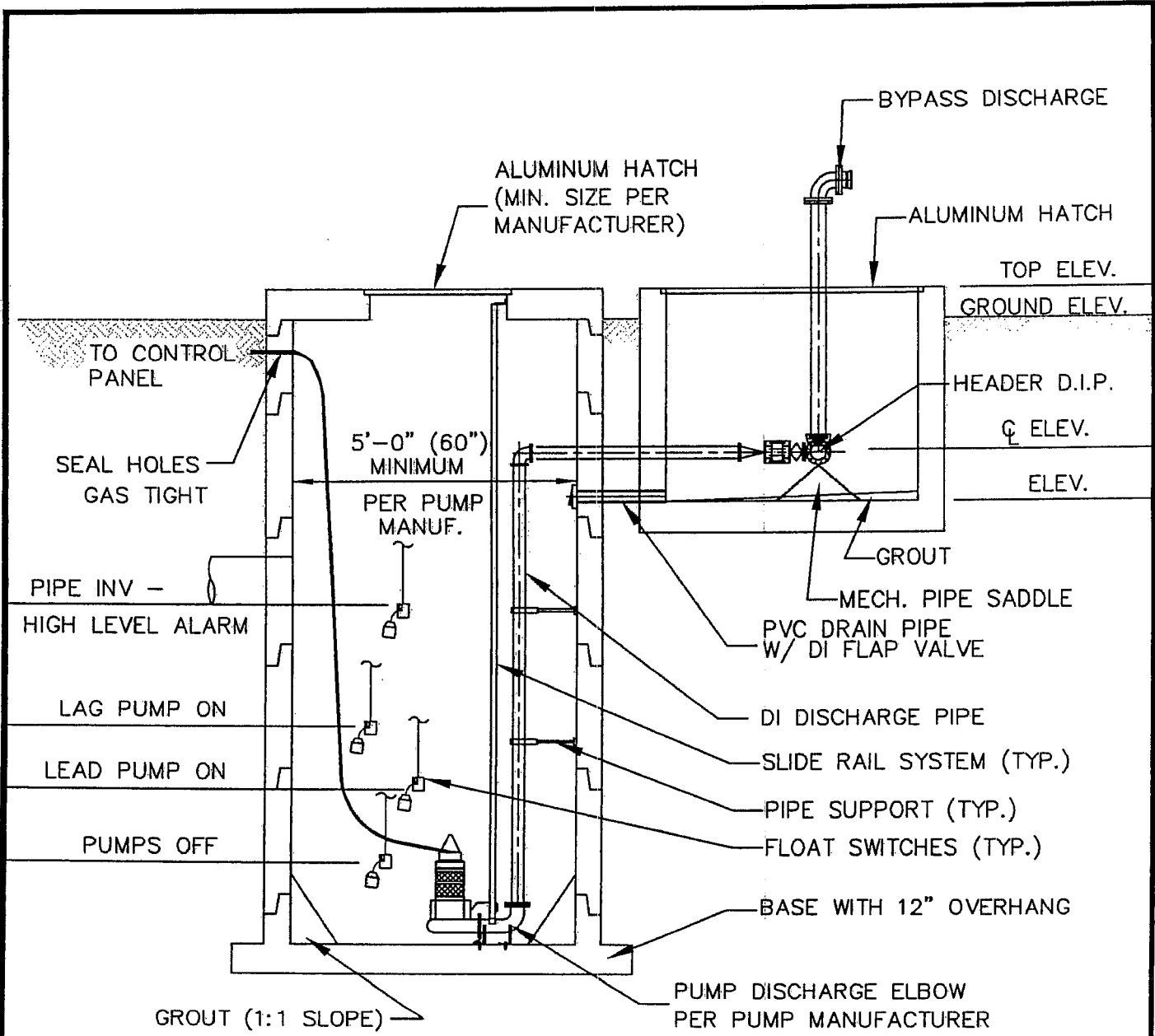
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**STANDARD DUPLEX  
PUMP STATION  
PLAN VIEW**

PAGE NUMBER:


**PS-2**

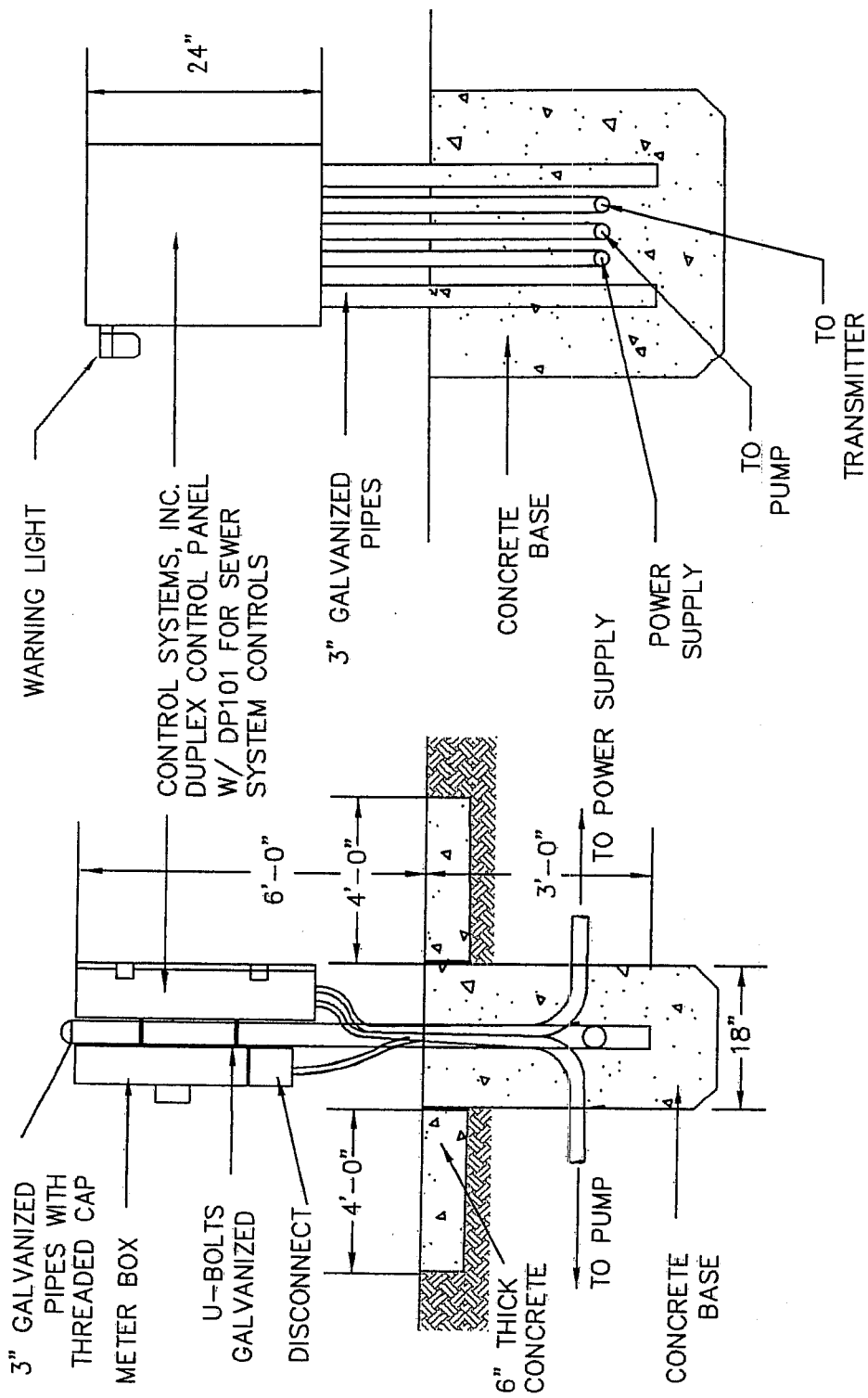


**LIFT STATION SECTION**

N.T.S.

PUMP STATION GROUND ELEVATION SHALL BE A MINIMUM OF 1' ABOVE 100 YEAR FLOOD ELEVATION AS DETERMINED BY FEMA FLOODMAPS.

 <p><b>JACKSON COUNTY UTILITY AUTHORITY</b></p>	<p><b>JACKSON COUNTY UTILITY AUTHORITY CONSTRUCTION STANDARDS</b></p>	<p>STANDARD DUPLEX PUMP STATION SECTION VIEW</p> <hr/> <p>PAGE NUMBER: <b>PS-3</b></p>
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**TYPICAL CONTROL PANEL DETAILS**

N.T.S.

- NOTE:
1. ELECTRICAL CONDUIT ABOVE GROUND SHALL BE RIGID GALVANIZED TYPE CONDUIT FROM THE BEND TO ITS TERMINATION POINT.
  2. BOTTOM OF PANEL SHALL BE AT LEAST 1' ABOVE 100 YEAR FLOOD ELEVATION AS DETERMINED BY FEMA FLOOD MAPS.



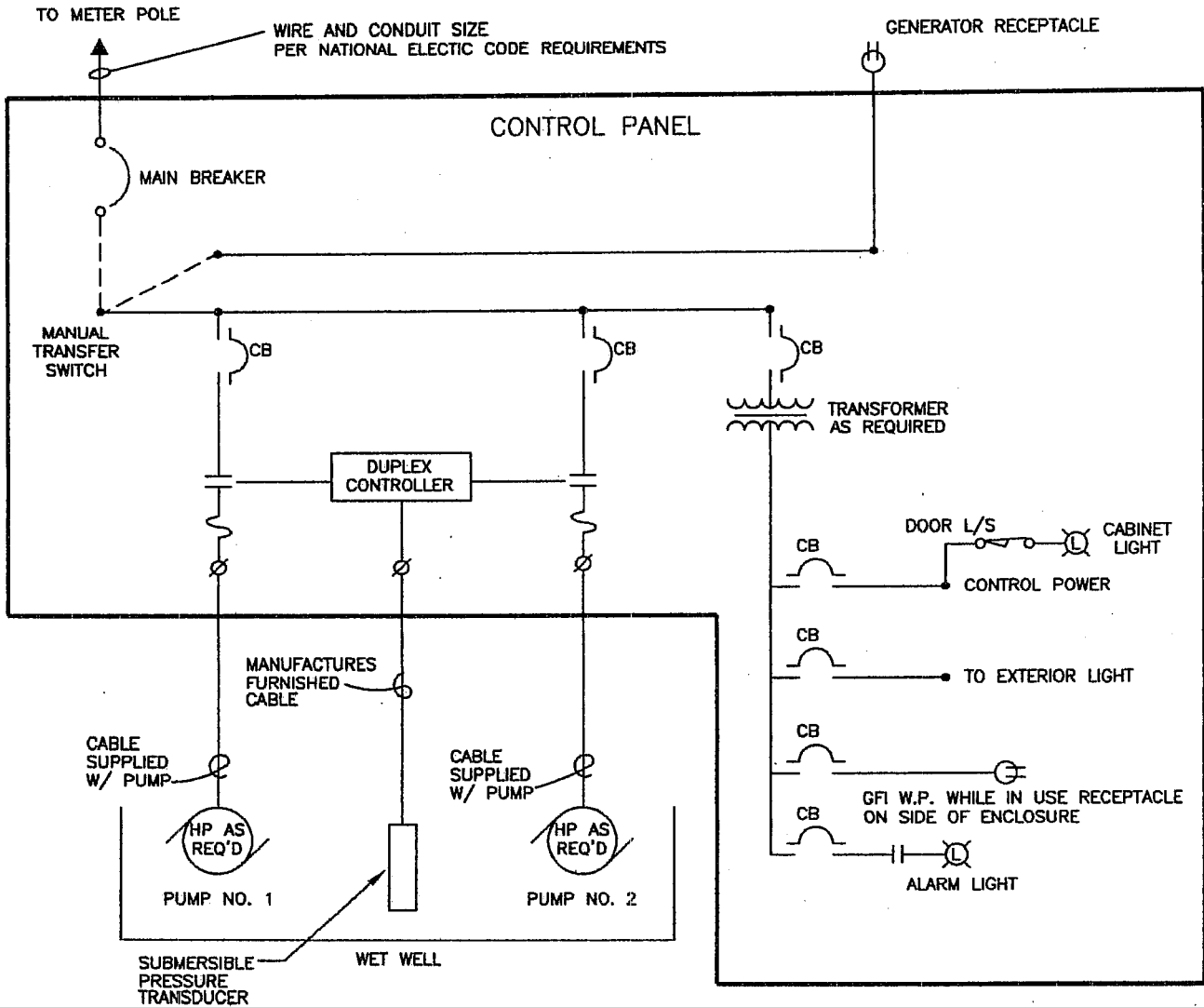
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STANDARDS

CONTROL PANEL  
DETAILS

PAGE NUMBER:

PS-4



## ELECTRICAL DIAGRAM

N.T.S.

TYPICAL ALL DUPLEX STATIONS  
MOTOR SIZE AND ELECTRICAL BREAKER RATING WILL VARY



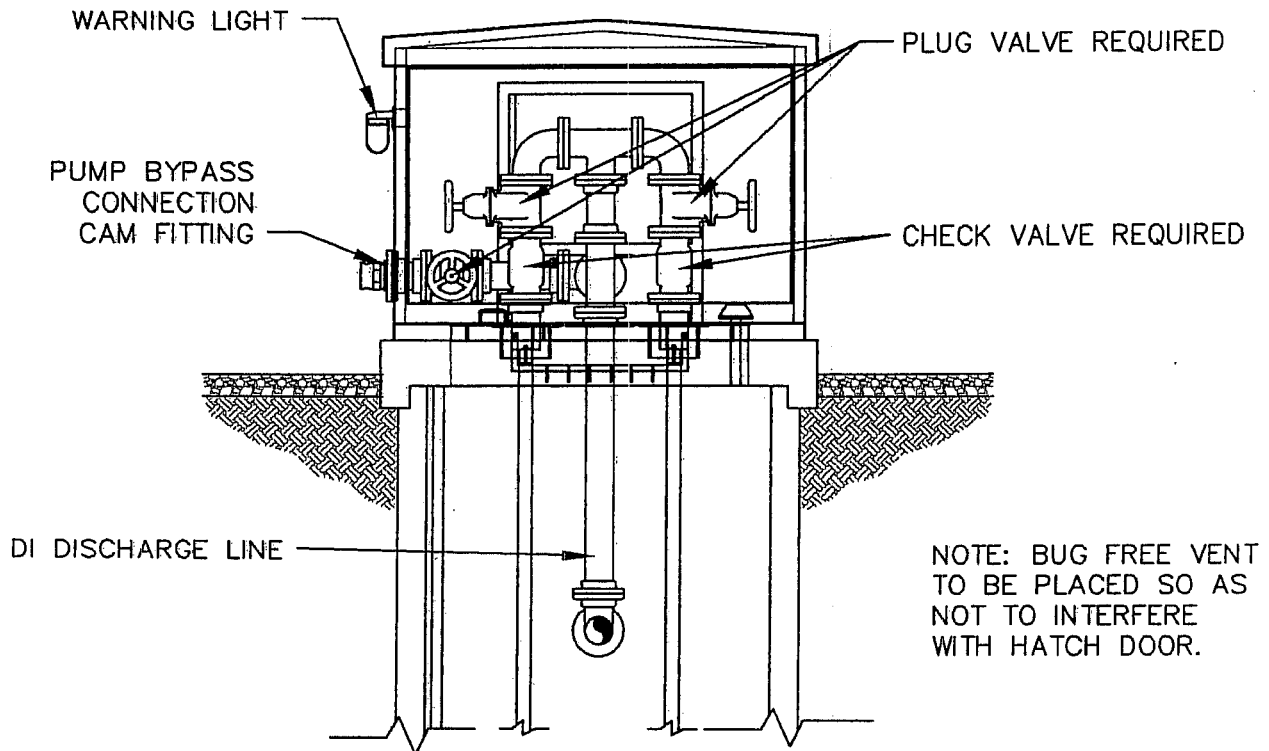
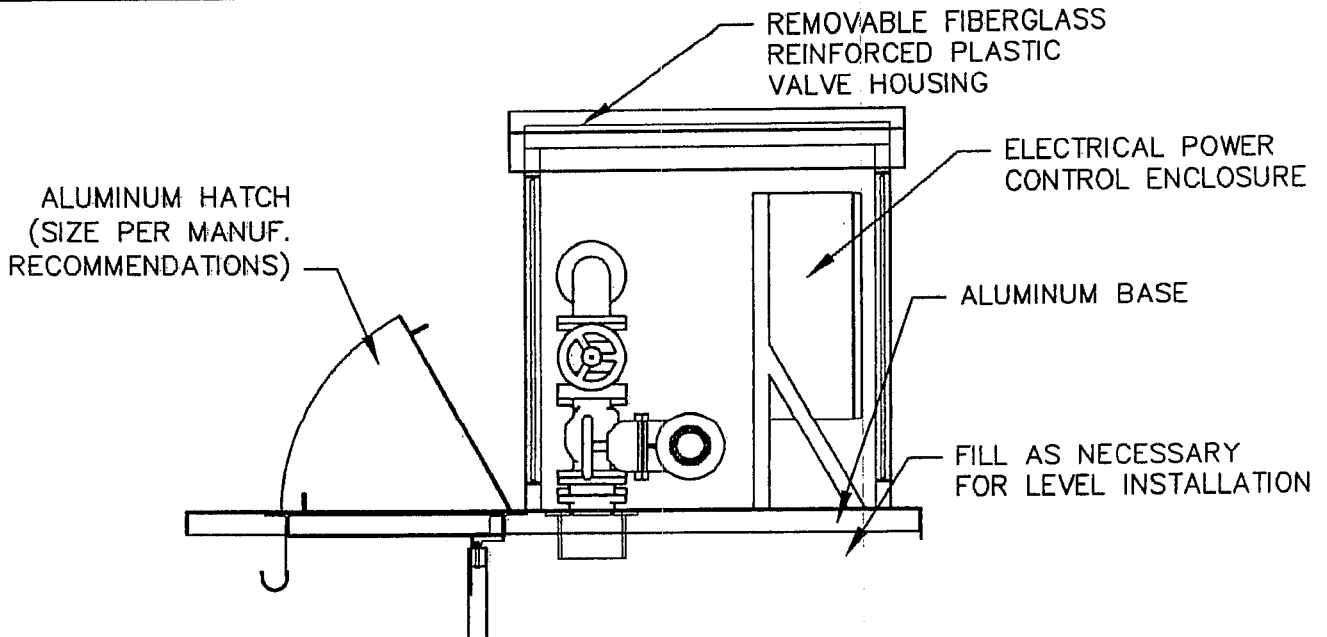
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ELECTRICAL DIAGRAM  
FOR DUPLEX  
PUMP STATION

PAGE NUMBER:

**PS-5**



**ABOVE GROUND VALVE CONFIGURATION**

N.T.S.



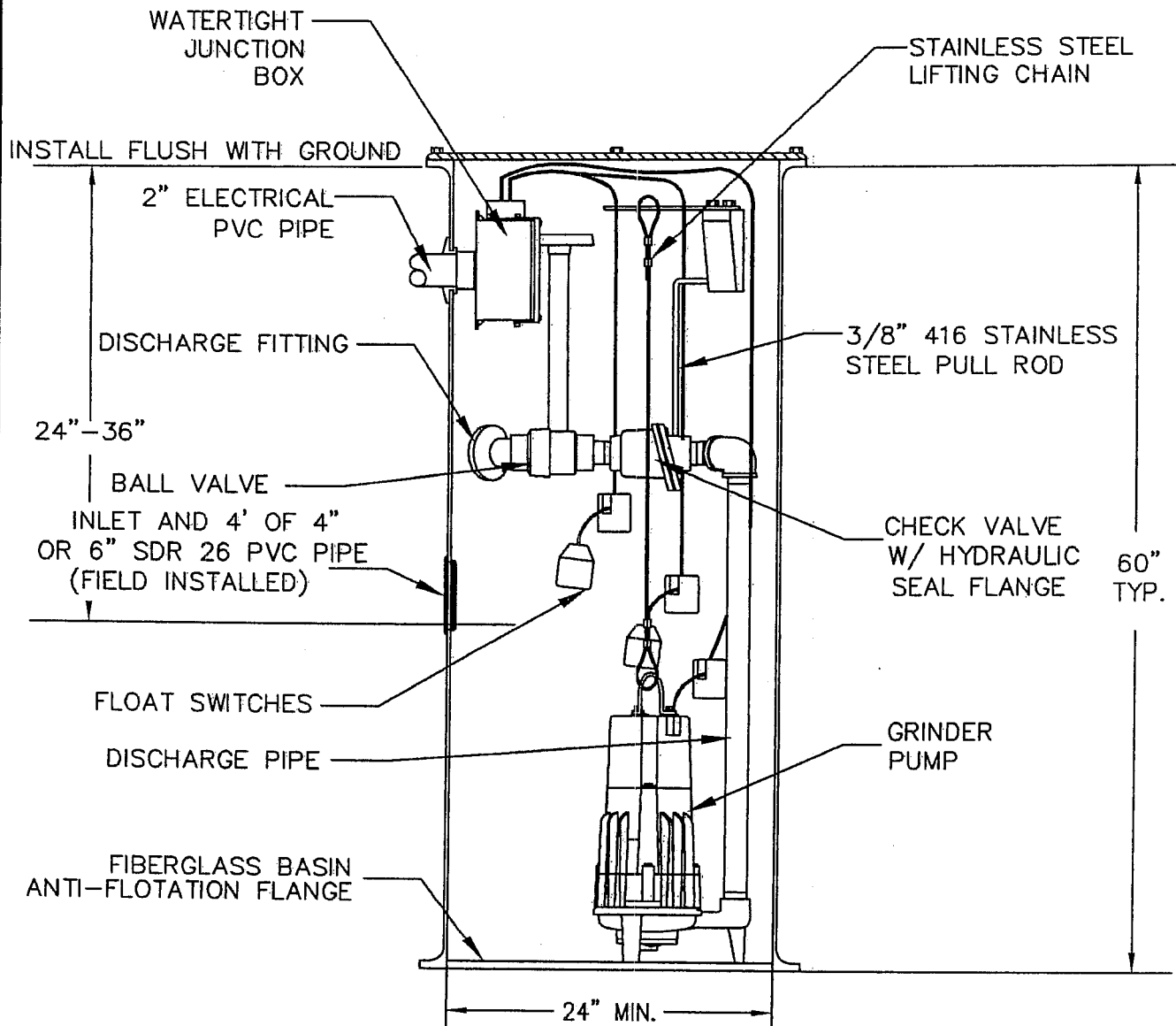
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ABOVE-GROUND  
VALVE PACKAGE  
PUMP STATION  
VALVES AND  
CONTROLS (ALT.)

PAGE NUMBER:

**PS-6**



## SIMPLEX GRINDER PUMP STATION

N.T.S.

NOTE: CONTROL PANEL TO BE MOUNTED ON HOUSE AT LEAST 4 FEET ABOVE GROUND.



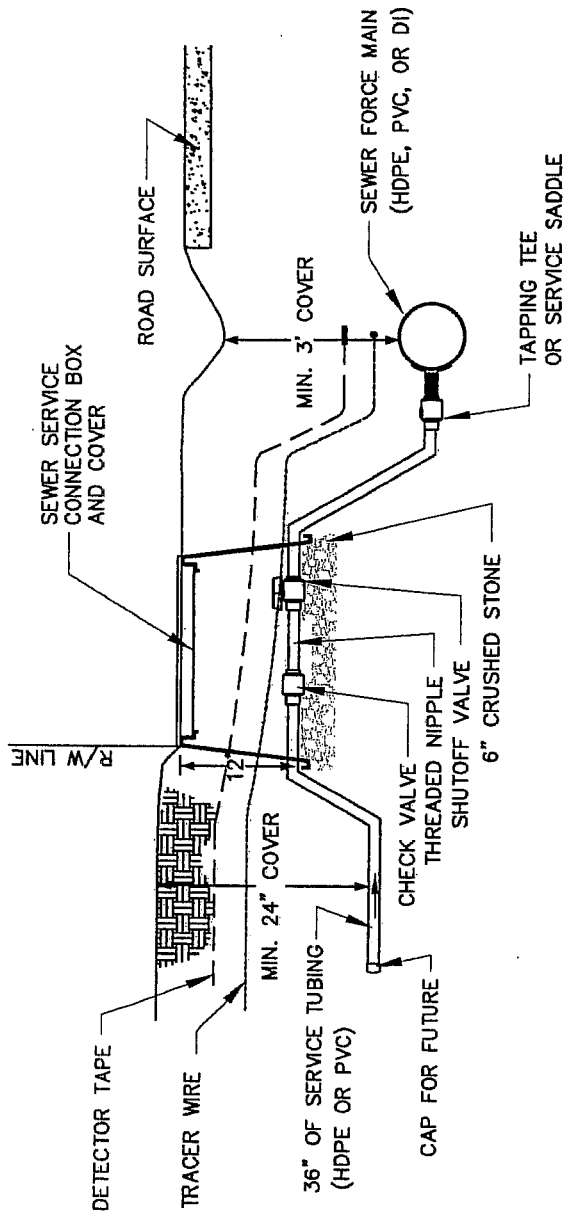
JACKSON COUNTY  
UTILITY AUTHORITY

JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

SIMPLEX GRINDER  
PUMP STATION  
DETAIL

PAGE NUMBER:

PS-7



## PRESSURE SEWER SERVICE CONNECTION DETAIL

N.T.S.

**NOTE:**

ALL STEP TYPE TANKS AND GRINDER PUMP STATIONS SHALL REQUIRE THIS CONNECTION TO SEWER FORCE MAIN. CONTRACTOR SHALL INSTALL A CONNECTION FOR EACH INDIVIDUAL LOT AND VALVE ASSEMBLY AND INSTALL CAP ON EACH SERVICE FOR FUTURE CONNECTION. MINIMUM SERVICE TUBING SIZE SHALL BE 1" FOR STEP TANK TYPE SYSTEM AND 1 1/4" FOR LOW PRESSURE GRINDER TYPE SYSTEM, UNLESS OTHERWISE APPROVED BY THE AUTHORITY.



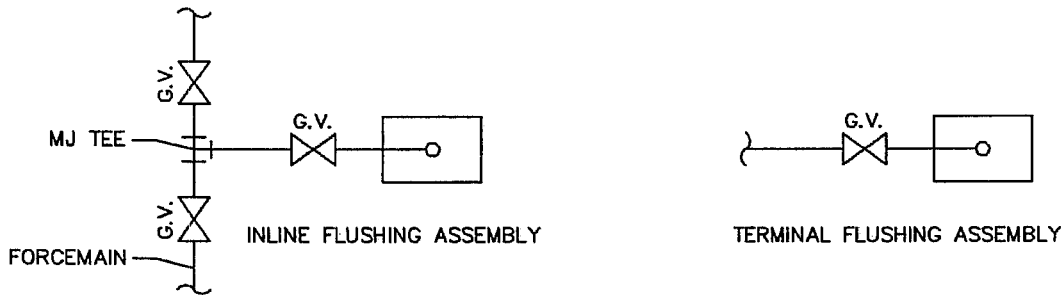
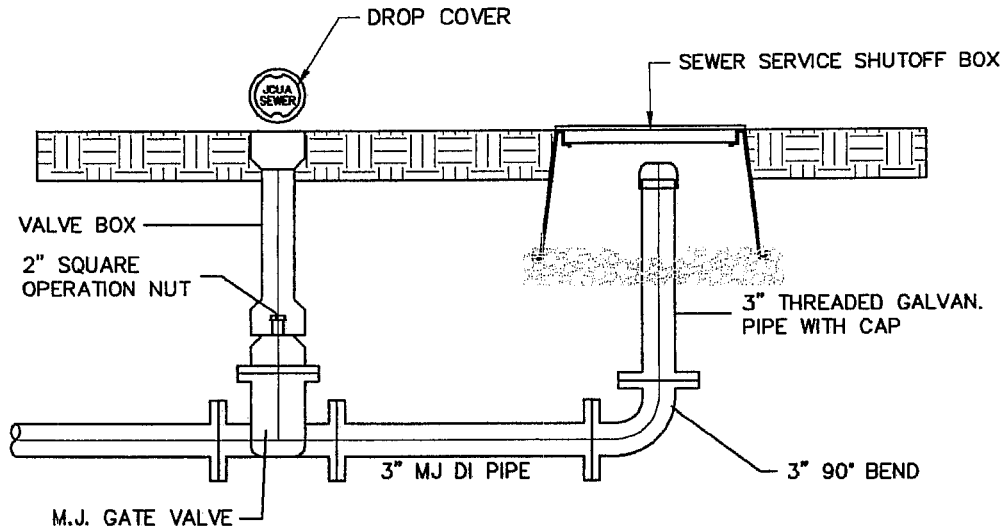
**JACKSON COUNTY  
UTILITY AUTHORITY**

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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

PRESSURE SEWER  
SERVICE CONNECTION  
DETAIL

PAGE NUMBER:

**PS-8**



## FLUSHING ASSEMBLY

N.T.S.

STEP TYPE (SEPTIC TANK) NOTES. SEE DETAIL PS-10:

1. SEPTIC TANK AND LID TO BE CONSTRUCTED OF 4,000 PSI CONCRETE.
2. TANK BOTTOM AND WALLS SHALL BE MONOLITHICALLY CONSTRUCTED. TOP SLAB SHALL BE POURED ON THE WALLS WITH WALL REINFORCEMENT EXTENDING INTO THE TOP SLAB. REINFORCEMENT FOR THE TANK SHALL BE #6/6 6"X6" WWF.
3. PROVIDE MANHOLE ACCESS AT EACH END OF TANK.
4. TANK AND LID TO BE COATED INSIDE AND OUT WITH THURO-SEAL OR OTHER APPROVED SEALANT.
5. TANK SHALL BE TESTED FOR LEAKS AND CERTIFIED BY THE MANUFACTURER PRIOR TO DELIVERY TO THE SITE.
6. SEPTIC TANKS IN TRAFFIC AREAS SHALL BE SPECIFICALLY DESIGNED FOR THE PROJECT CONDITIONS, CONTACT JACKSON COUNTY UTILITY AUTHORITY FOR REQUIREMENTS.



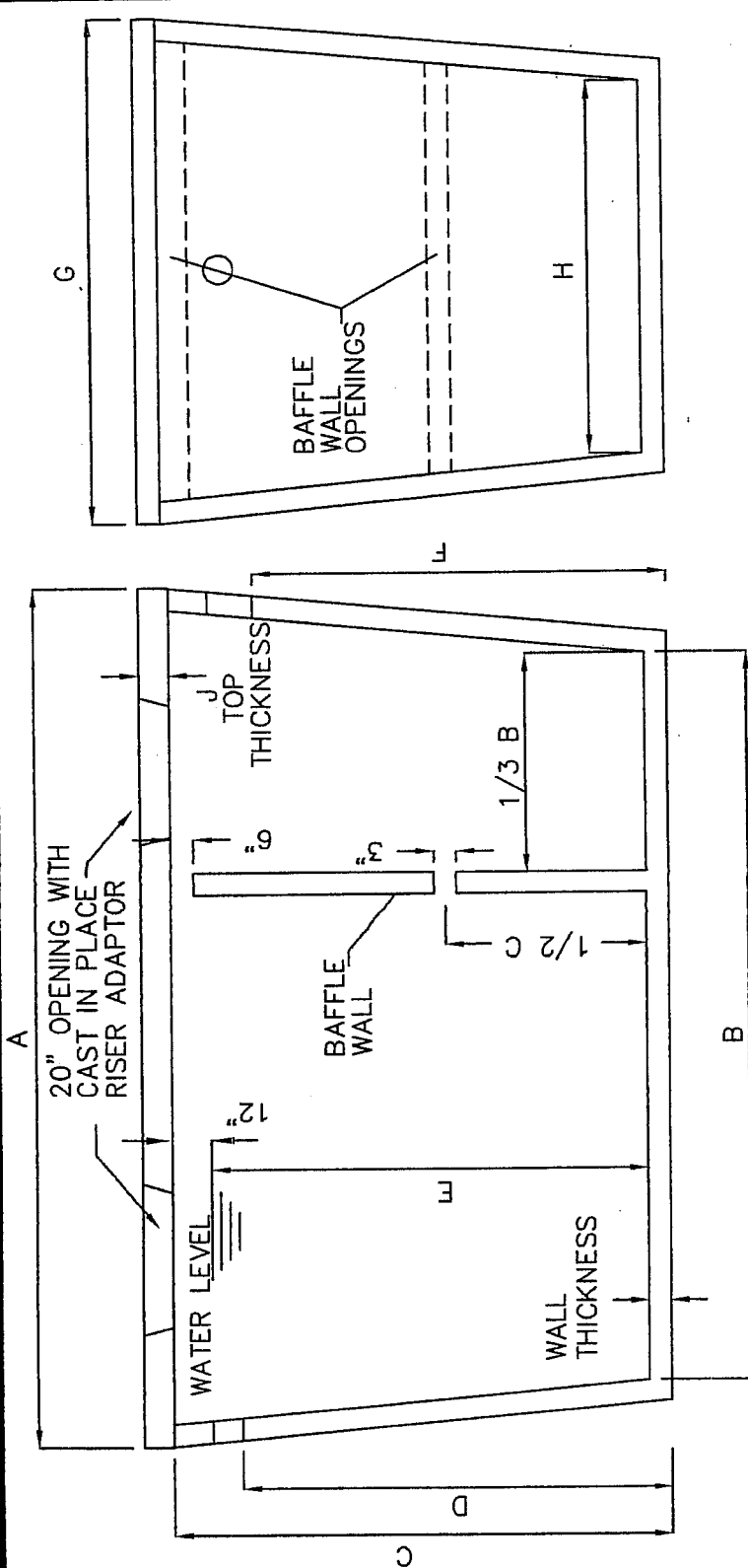
**JACKSON COUNTY  
UTILITY AUTHORITY**

**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

MISCELLANEOUS  
PRESSURE SEWER  
DETAILS AND STEP  
TANK NOTES

PAGE NUMBER:

PS-9



TANK SIZE	LENGTH	HEIGHT	INFLUENT HEIGHT	LIQUID LEVEL	EFFLUENT HEIGHT	WIDTH	WALLS & BTM. THICK.	TOP THICK.
1000 GALLON	8'-8"	5'-0"	4'-6"	4'-0"	4'-3"	5'-6"	3"	4"
1500 GALLON	9'-11 1/4"	5'-7"	4'-9 1/4"	4'-4"	4'-6 1/2"	5'-7"	3"	4"
2000 GALLON	14'-0"	4'-7"	4'-0"	3'-6"	3'-9"	6'-8"	4"	6"
3000 GALLON	14'-0"	6'-11 1/2"	5'-9"	5'-4"	5'-6"	6'-8"	4"	6"

STEP TYPE SEPTIC TANK DETAIL

N.T.S.



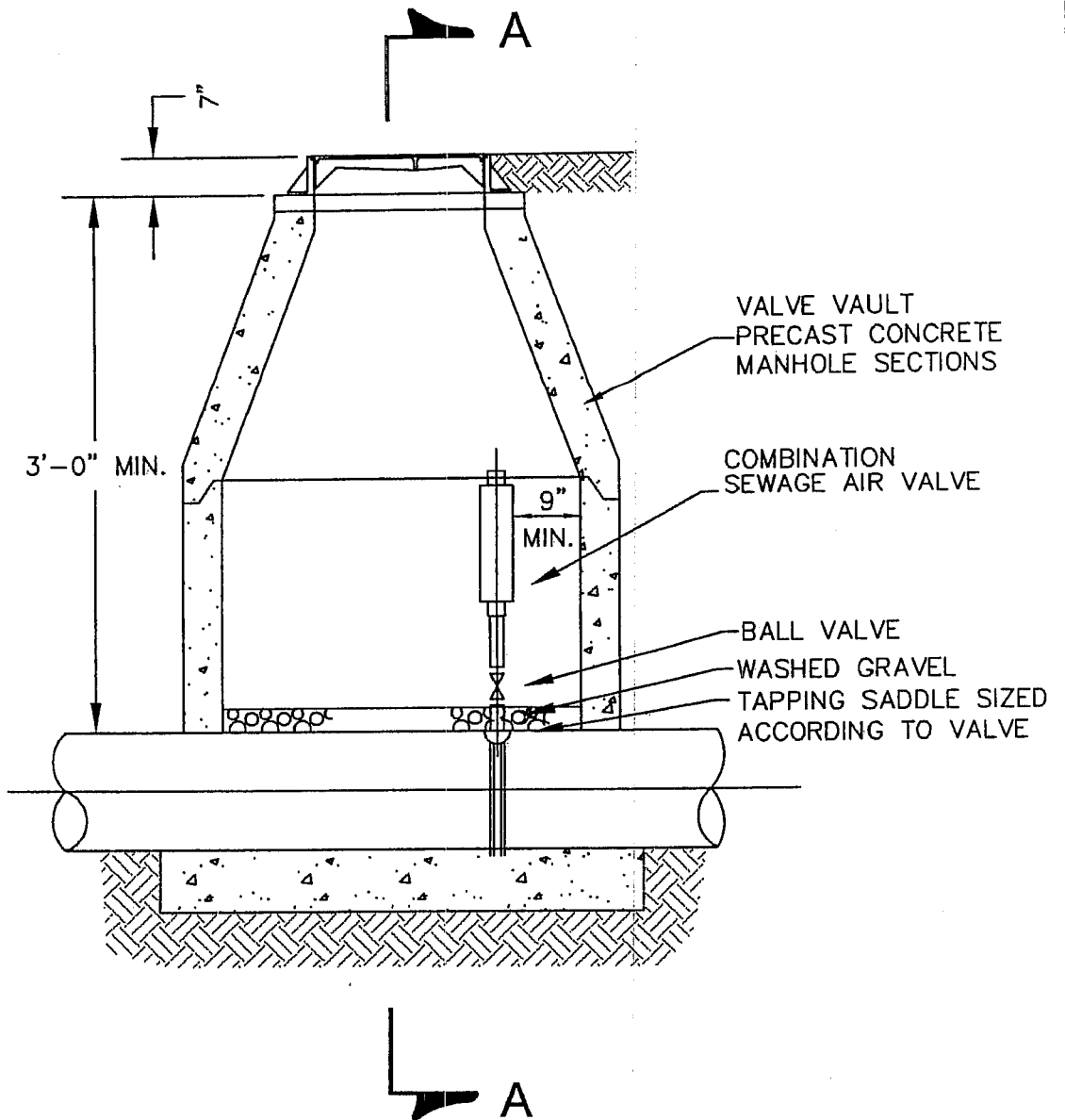
JACKSON COUNTY  
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

STEP TANK DETAIL  
FOR DE-CENTRALIZED  
SANITARY SEWER  
SYSTEM

PAGE NUMBER:

PS-10



TYPICAL COMBINATION SEWAGE VALVE  
INSTALLATION WITH MANHOLE

N.T.S.



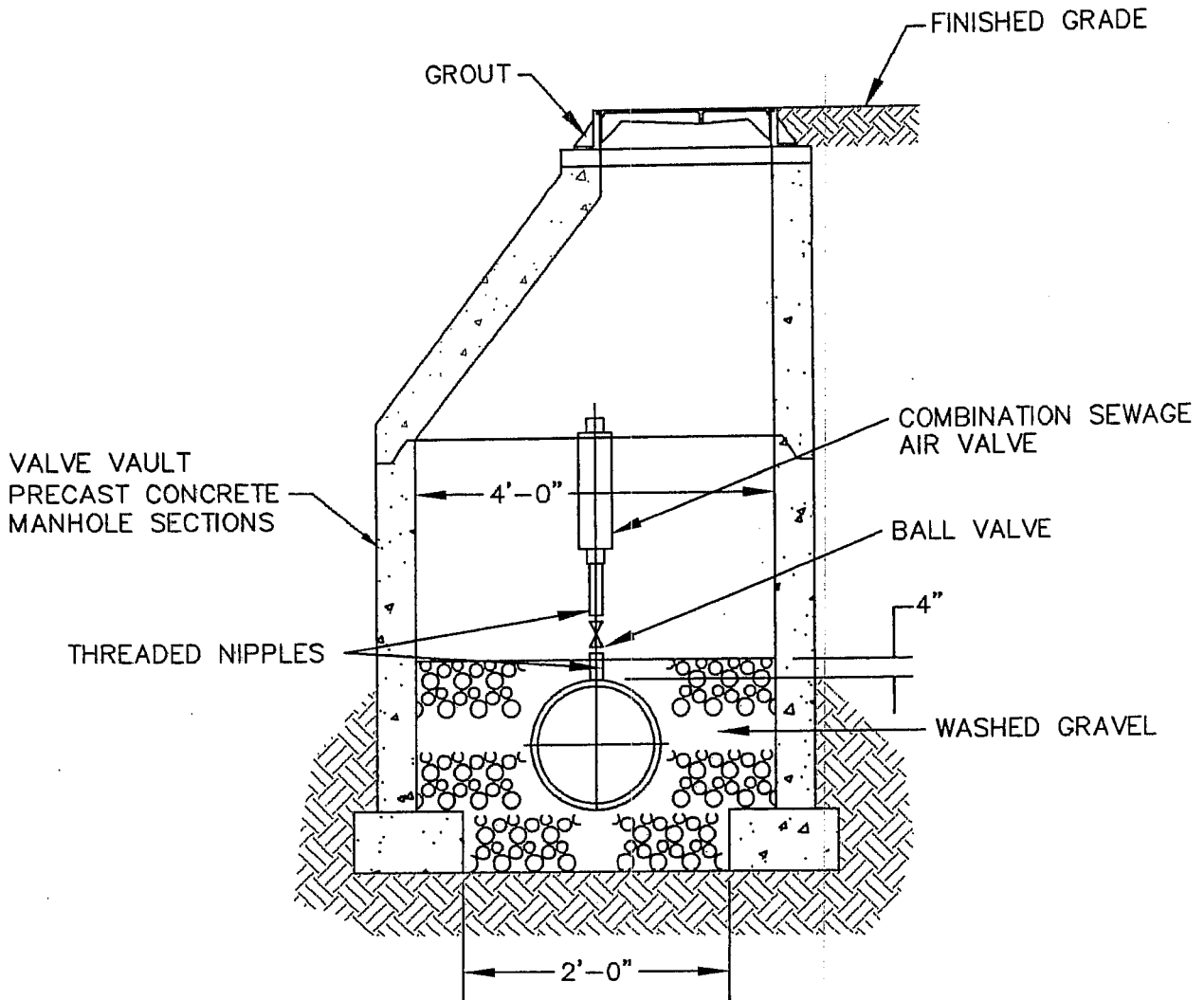
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

TYPICAL COMBINATION  
SEWAGE AIR  
VALVE  
INSTALLATION  
WITH VAULT

PAGE NUMBER:

PS-11



**TYPICAL COMBINATION SEWAGE VALVE**  
**WITH MANHOLE SECTION A-A**

N.T.S.



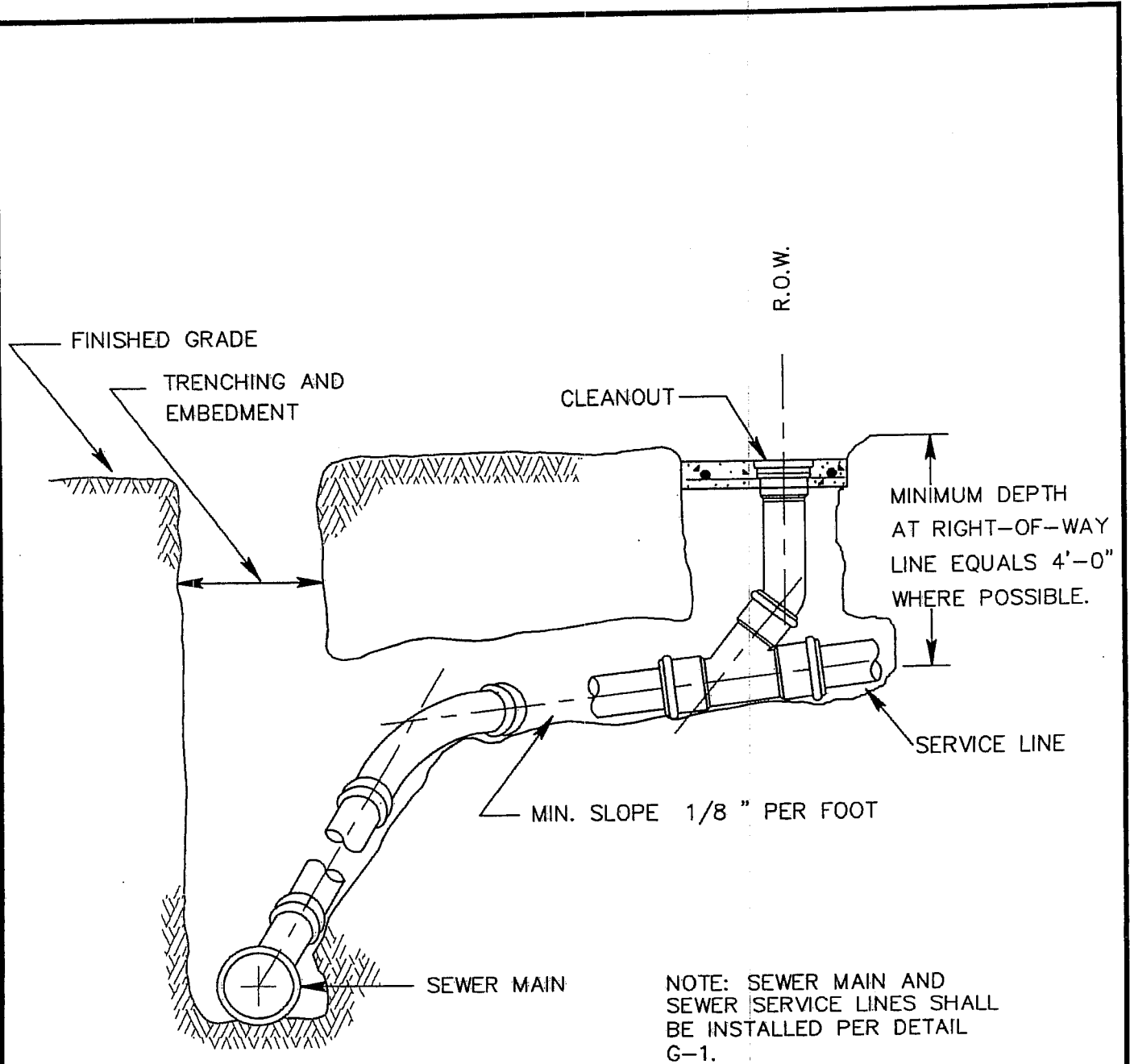
**JACKSON COUNTY  
UTILITY AUTHORITY**

**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

TYPICAL COMBINATION  
SEWAGE AIR VALVE  
SECTION A-A

PAGE NUMBER:


**PS-12**

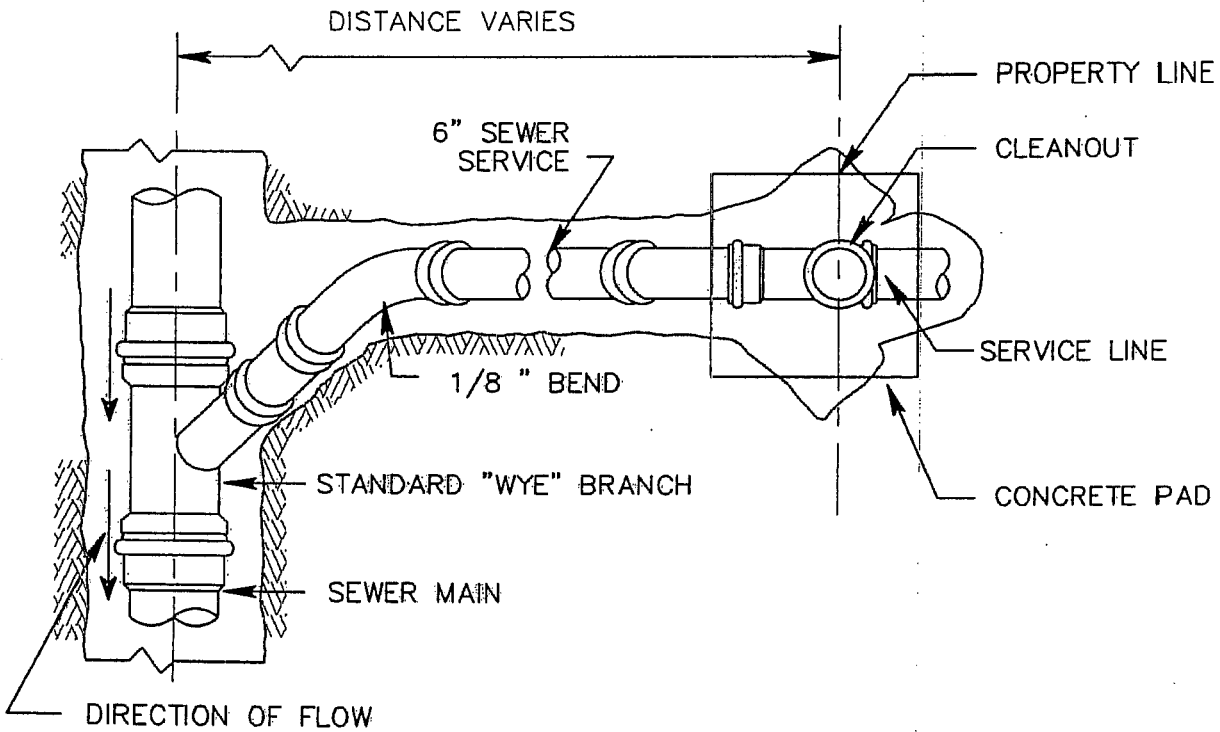


NOTE: SEWER MAIN AND SEWER SERVICE LINES SHALL BE INSTALLED PER DETAIL G-1.

**SECTION - SINGLE WYE SERVICE**

N.T.S.

	<p>JACKSON COUNTY UTILITY AUTHORITY</p>	<p>JACKSON COUNTY UTILITY AUTHORITY CONSTRUCTION STANDARDS</p>	<p>SECTION SINGLE WYE SERVICE</p> <hr/> <p>PAGE NUMBER: <b>SS-1</b></p>
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**PLAN - SINGLE WYE SERVICE**  
**SEWER SERVICE DETAILS**

N.T.S.



JACKSON COUNTY  
 UTILITY AUTHORITY

JACKSON COUNTY  
 UTILITY AUTHORITY  
 CONSTRUCTION  
 STANDARDS

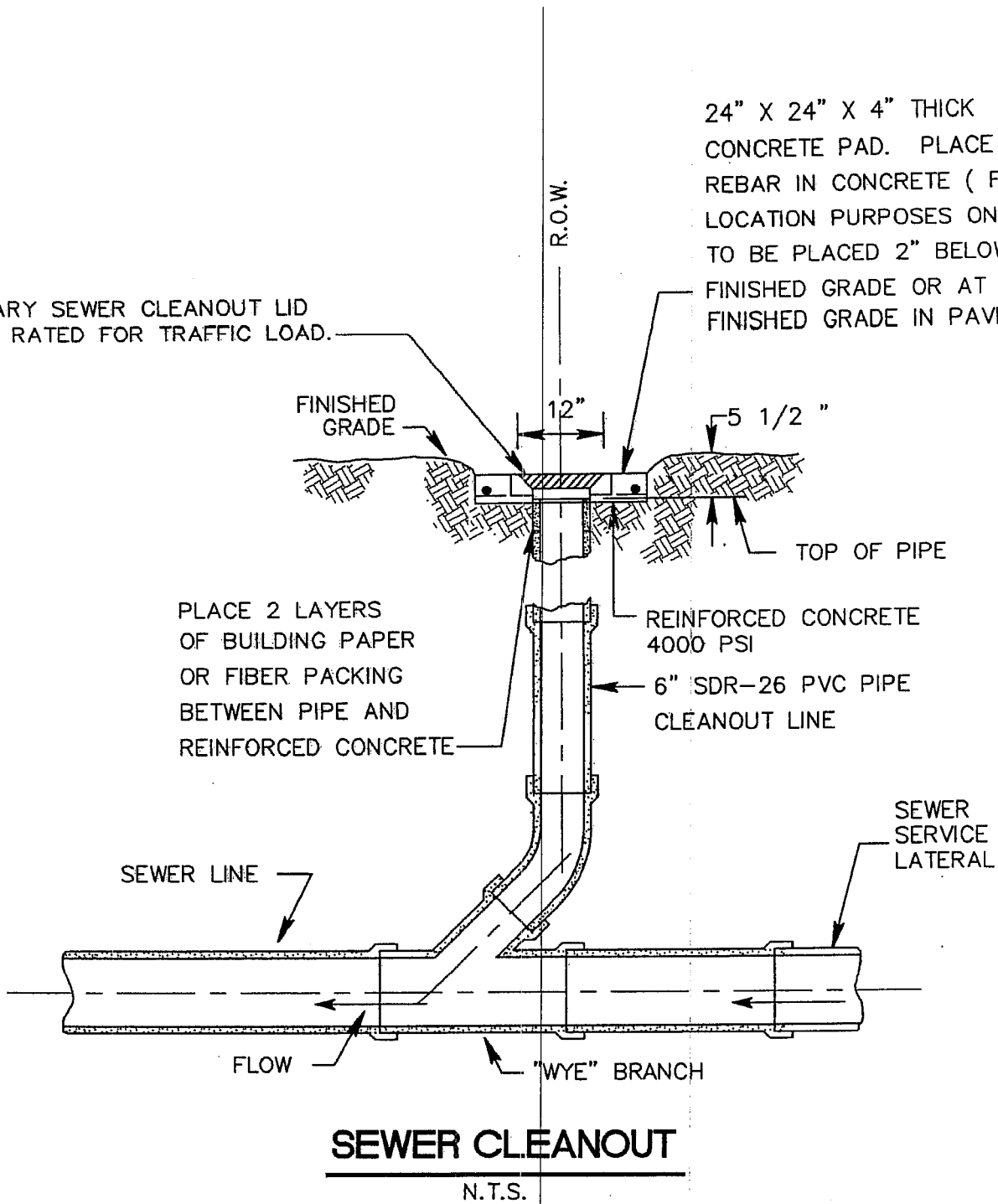
PLAN  
 SEWER SERVICE  
 DETAIL

PAGE NUMBER:

SS-2

SANITARY SEWER CLEANOUT LID  
TO BE RATED FOR TRAFFIC LOAD.

24" X 24" X 4" THICK  
CONCRETE PAD. PLACE 3/4"  
REBAR IN CONCRETE ( FOR  
LOCATION PURPOSES ONLY)  
TO BE PLACED 2" BELOW  
FINISHED GRADE OR AT  
FINISHED GRADE IN PAVEMENT



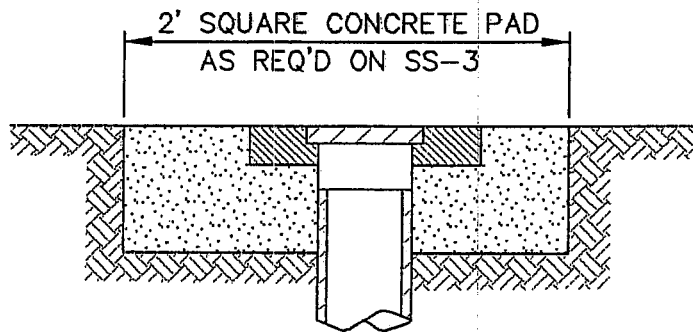
JACKSON COUNTY  
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

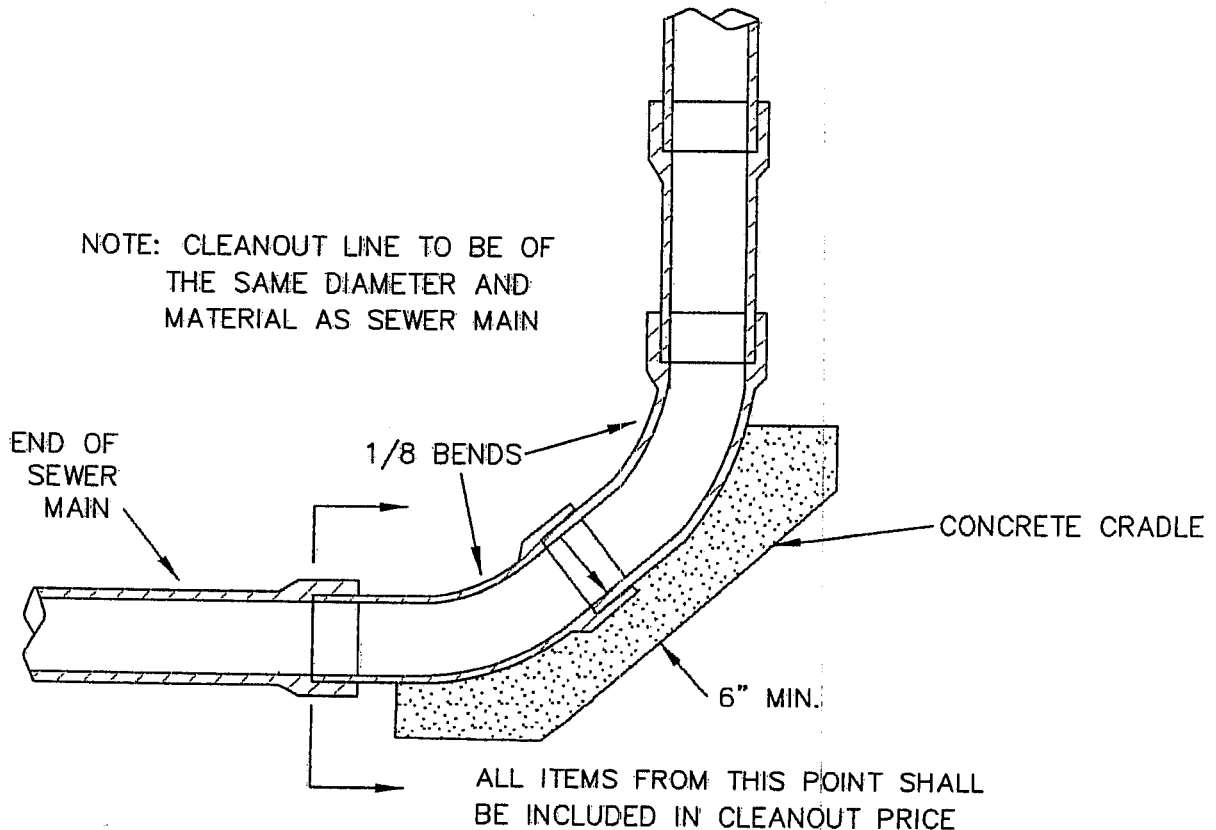
SEWER  
CLEANOUT  
DETAIL

PAGE NUMBER:

SS-3



NOTE: CLEANOUT LINE TO BE OF THE SAME DIAMETER AND MATERIAL AS SEWER MAIN



**TERMINAL CLEANOUT DETAIL**

N.T.S.



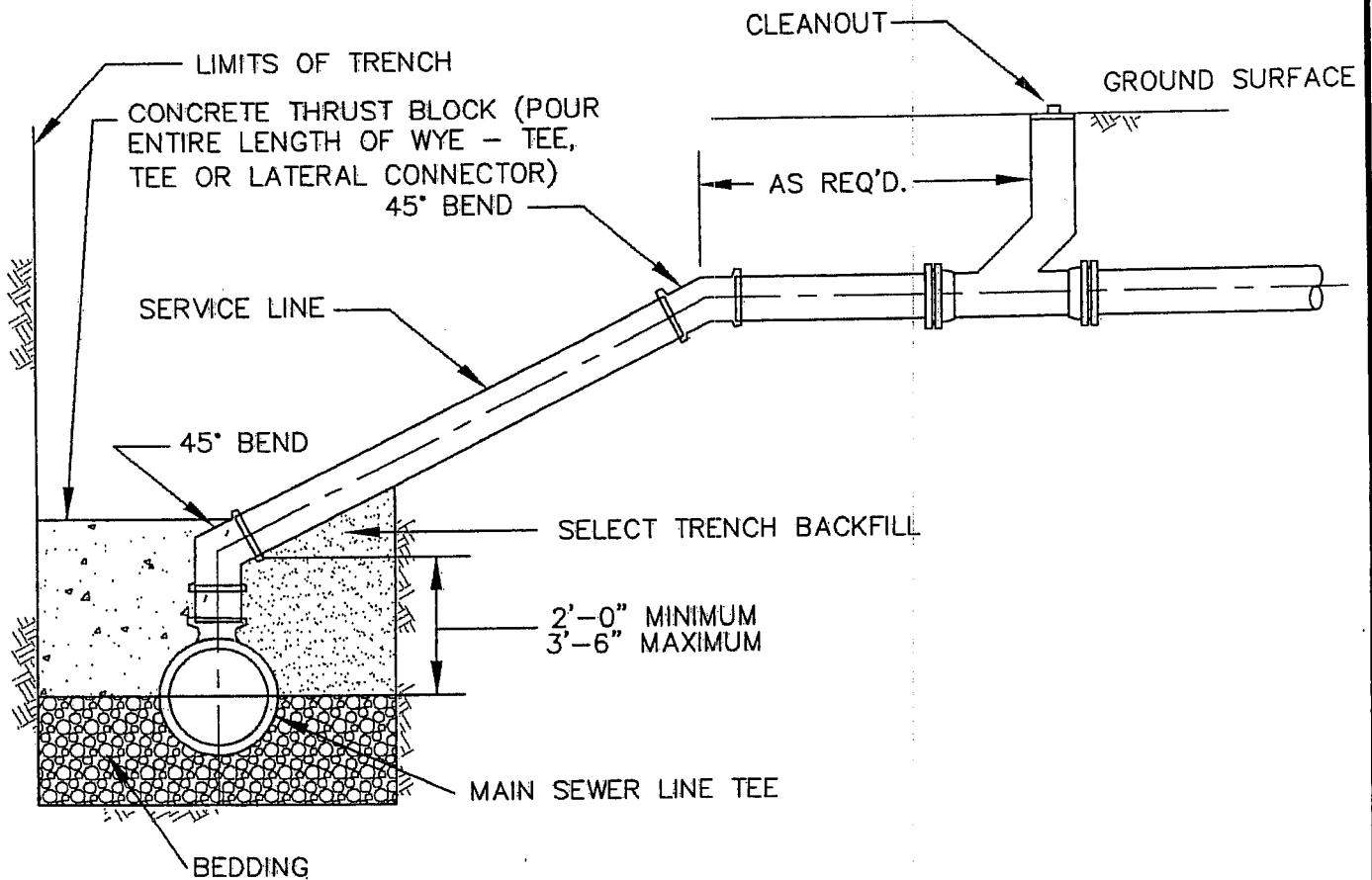
JACKSON COUNTY  
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

TERMINAL CLEANOUT  
DETAIL

PAGE NUMBER:

SS-4



**SERVICE CONNECTION FOR DEEP SEWER  
SLOPES GREATER THAN 25 PERCENT**

N.T.S.



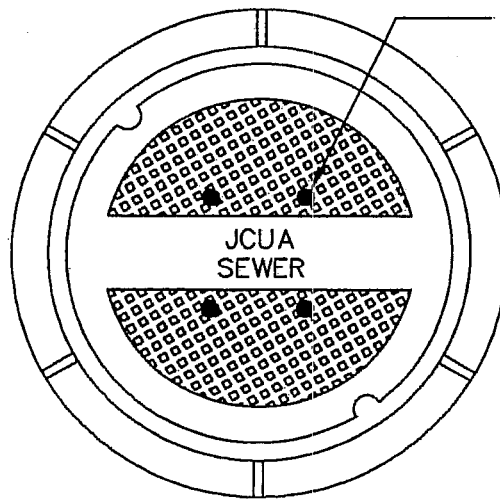
**JACKSON COUNTY  
UTILITY AUTHORITY**

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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

**SERVICE CONNECTION  
FOR DEEP SEWER  
SLOPES GREATER  
THAN 25 PERCENT**

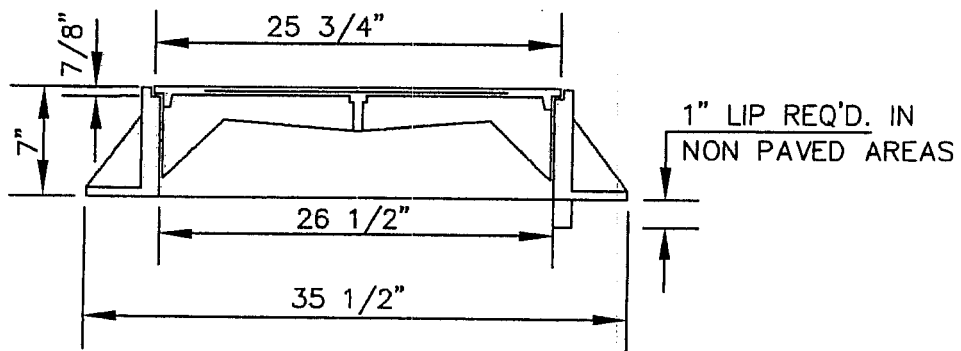
PAGE NUMBER:

**SS-5**



1" HOLES FOR MANHOLES  
COVERS NOT REQUIRED TO  
BE WATERTIGHT

TOP PLAN OF COVER



SECTION

STANDARD MANHOLE FRAME AND COVER

N.T.S.



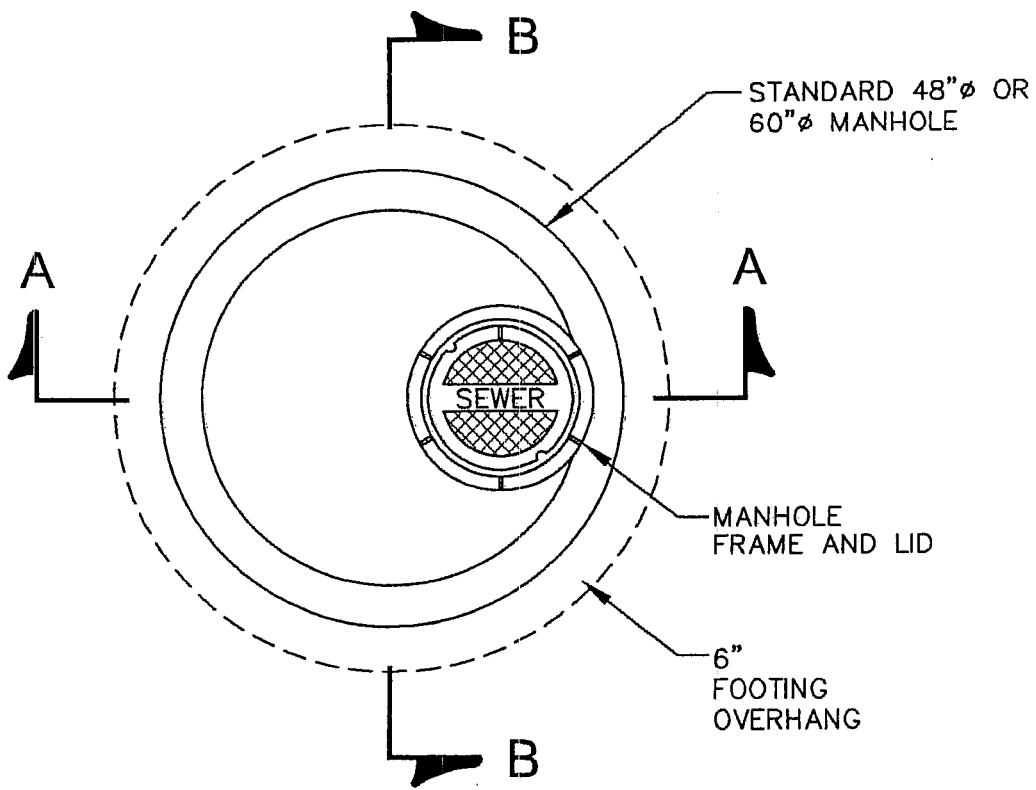
JACKSON COUNTY  
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CONSTRUCTION  
STANDARDS

SEWER MANHOLE  
FRAME AND COVER

PAGE NUMBER:

SS-6



PLAN

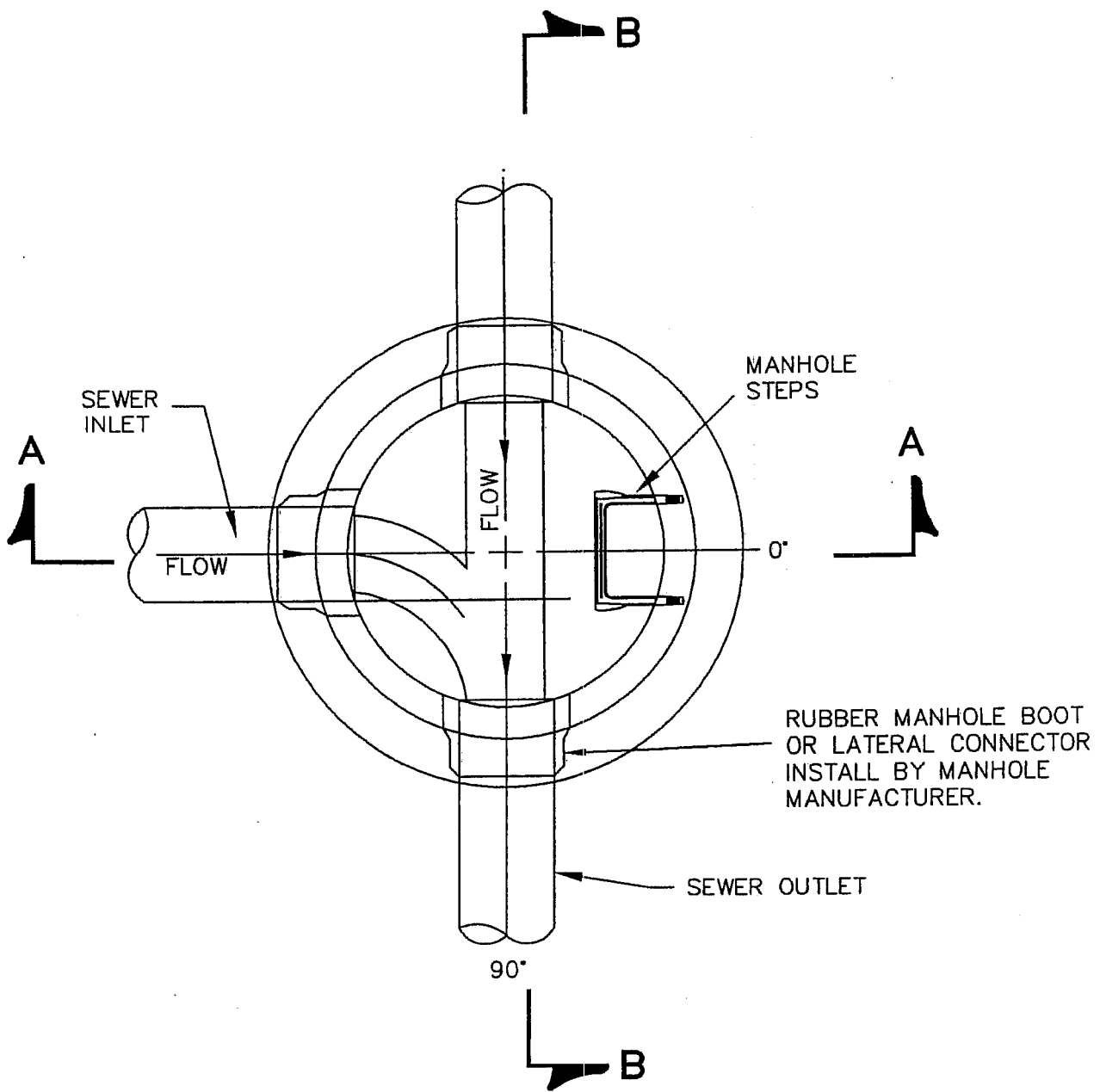


JACKSON COUNTY  
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

MANHOLE  
PLAN VIEW

PAGE NUMBER:  
**SS-7**



**SECTIONAL PLAN  
STANDARD MANHOLE**

N.T.S.



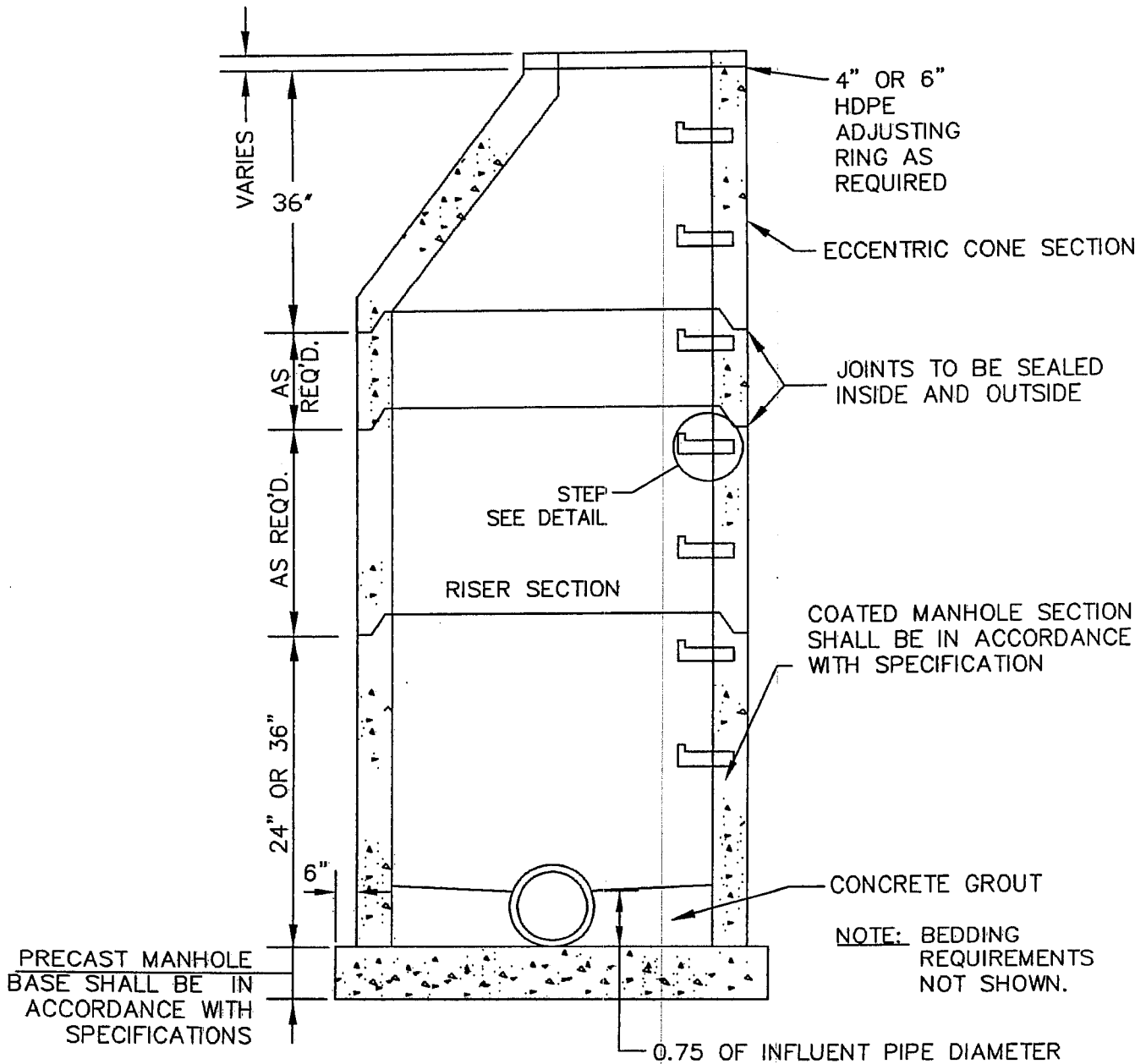
JACKSON COUNTY  
UTILITY AUTHORITY

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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

MANHOLE INVERT  
PLAN VIEW

PAGE NUMBER:

SS-8



**SECTION A-A OF 4' OR 5' PRECAST MANHOLE**

N.T.S.



JACKSON COUNTY  
UTILITY AUTHORITY

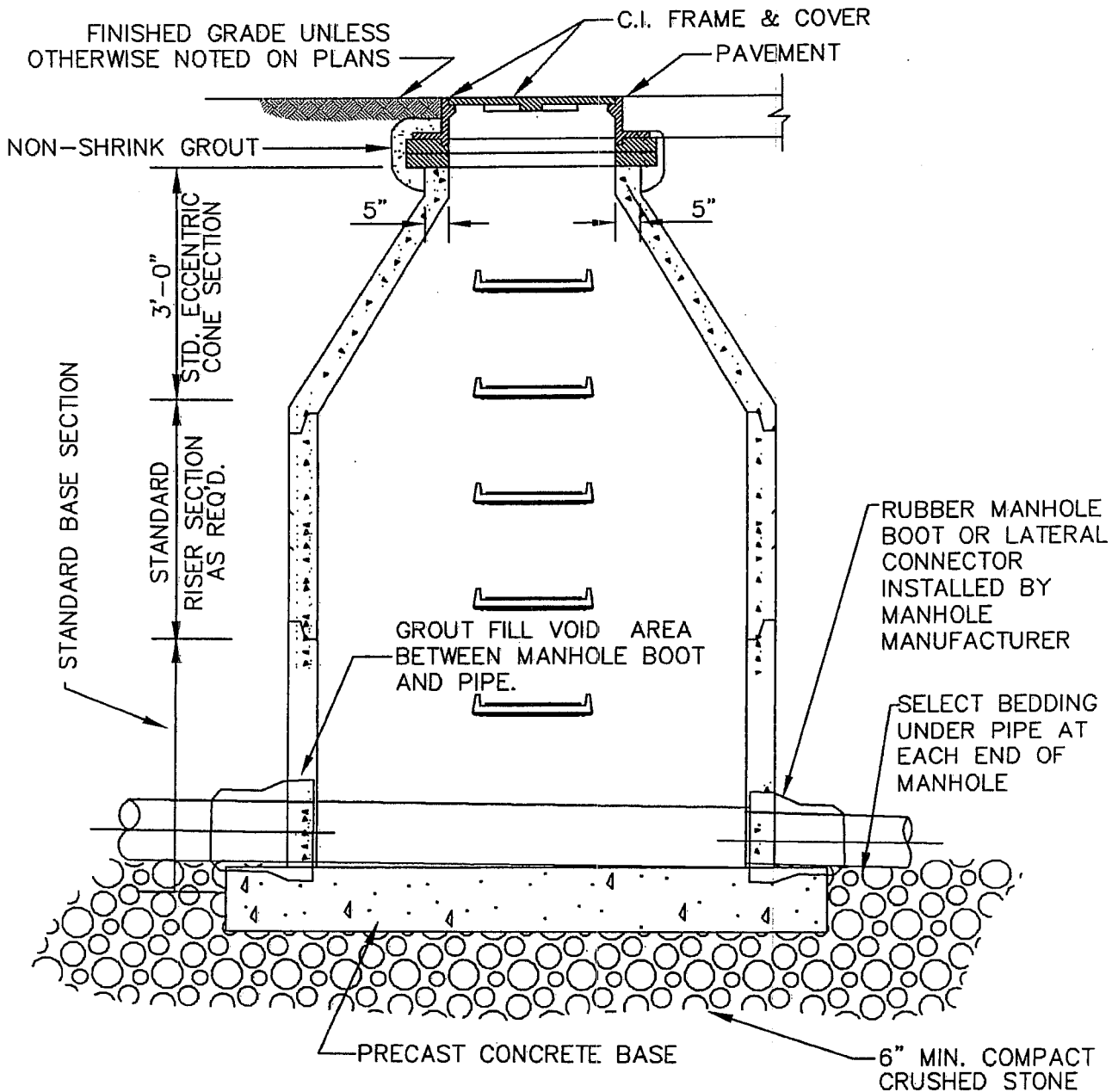
JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

SECTION A-A OF 4'  
OR 5' DIAMETER  
MANHOLE

PAGE NUMBER:

**SS-9**

MINIMUM SLOPE, IF APPLICABLE, THROUGH MANHOLE SHALL NOT BE LESS THAN THE AVERAGE OF THE SLOPES OF THE INCOMING AND OUTGOING SEWER LINE.



**SECTION OF 4' OR 5' PRECAST MANHOLE**

N.T.S.



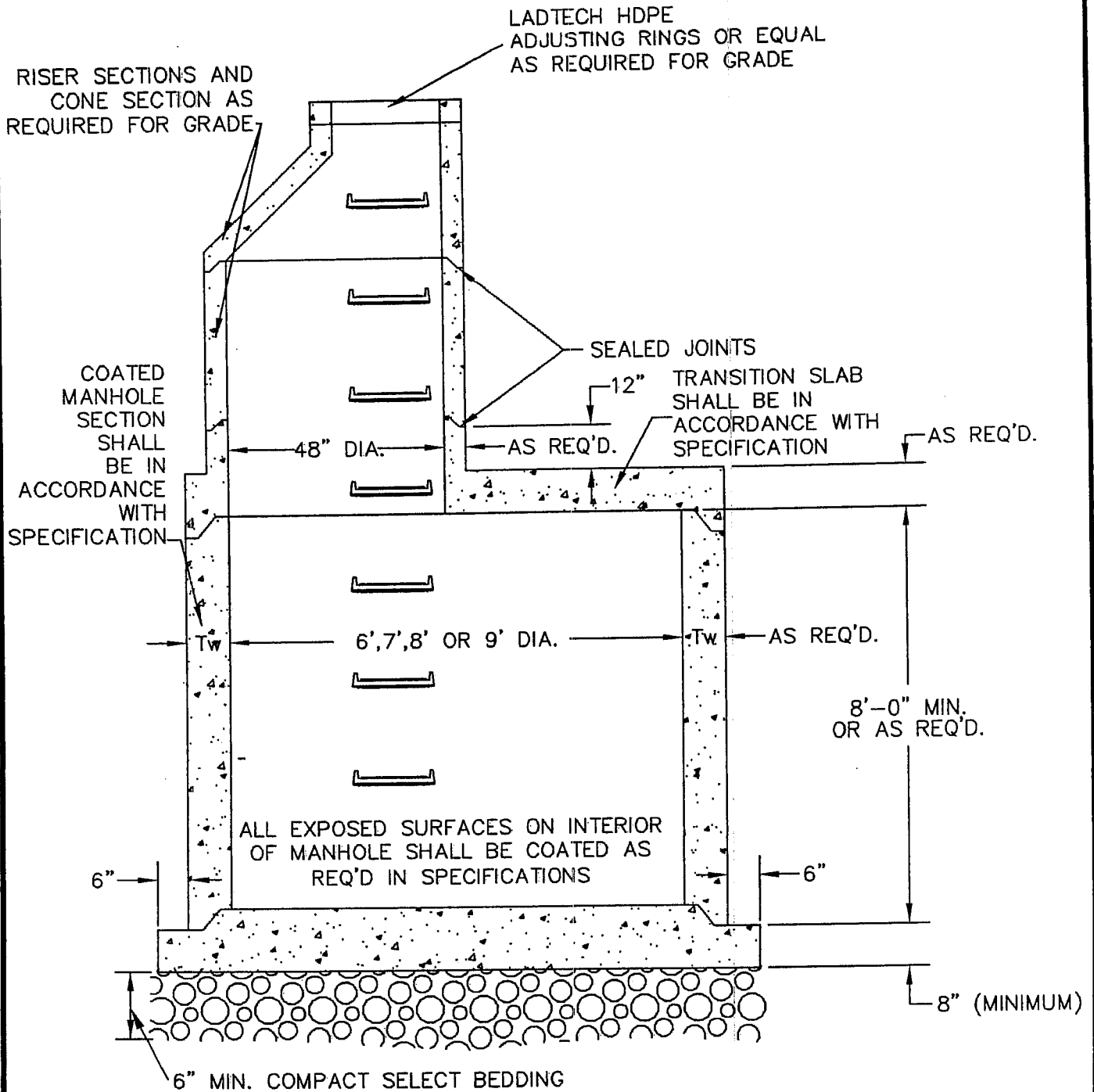
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UTILITY AUTHORITY

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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

SECTION B-B OF 4'  
OR 5' DIAMETER  
MANHOLE

PAGE NUMBER:

**SS-10**



**6', 7', 8' OR 9' STANDARD PRECAST MANHOLE DETAIL**

N.T.S.



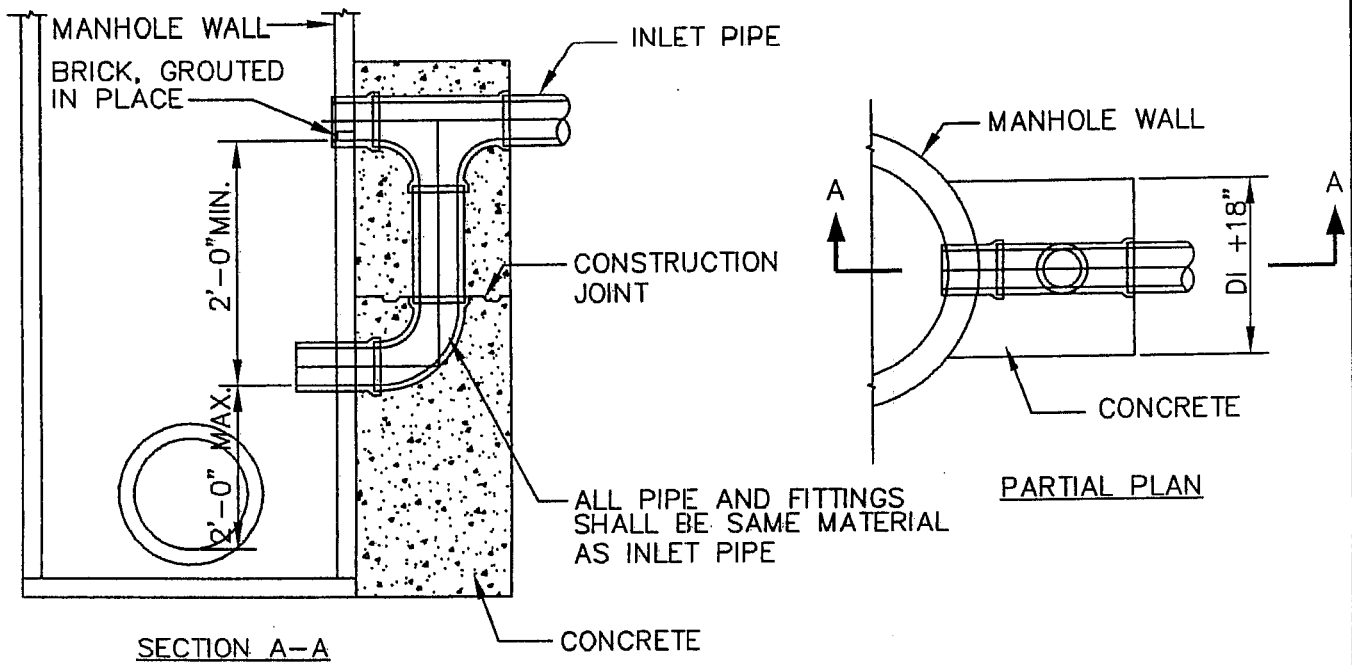
JACKSON COUNTY  
UTILITY AUTHORITY

JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

6', 7', 8', OR 9'  
DIAMETER  
STANDARD  
MANHOLE DETAIL

PAGE NUMBER:

SS-11



## TYPICAL DROP INLET CONNECTION AT MANHOLE

N.T.S.



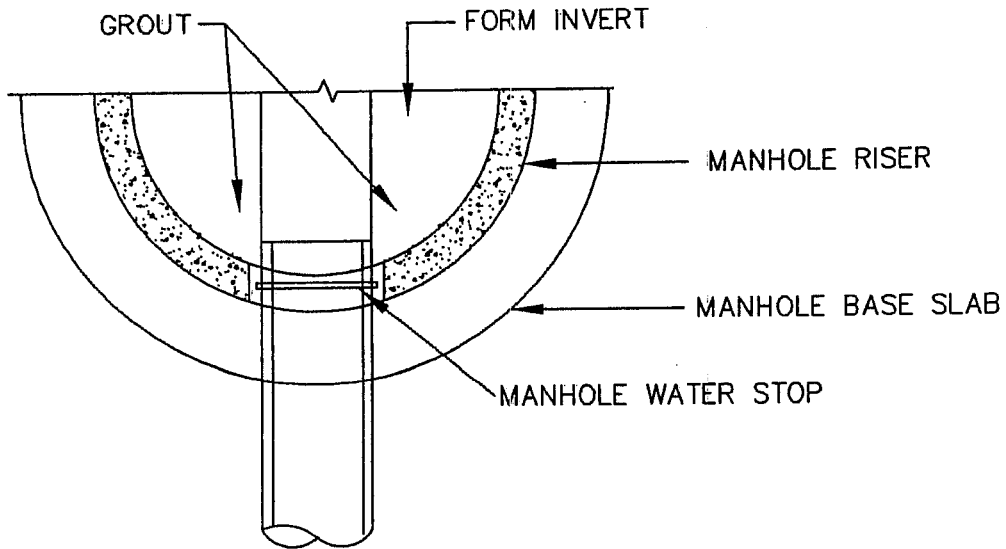
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UTILITY AUTHORITY

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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

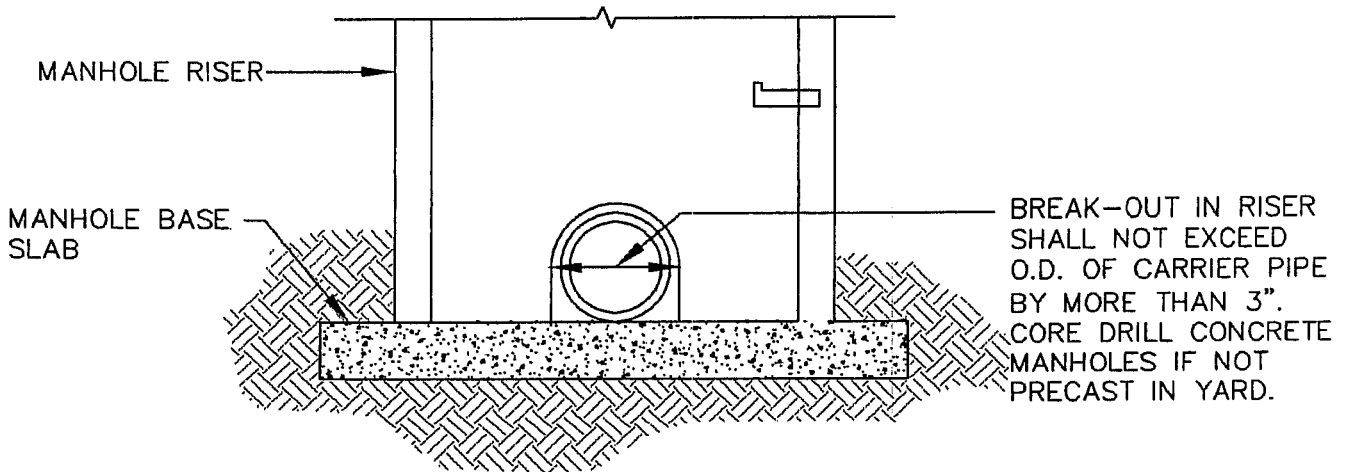
TYPICAL DROP  
INLET CONNECTION  
AT MANHOLE

PAGE NUMBER:

SS-12



**PLAN**



**ELEVATION**

**TYPICAL DETAIL OF SEWER PIPE  
CONNECTION TO EXISTING MANHOLE**

N.T.S.



**JACKSON COUNTY  
UTILITY AUTHORITY**

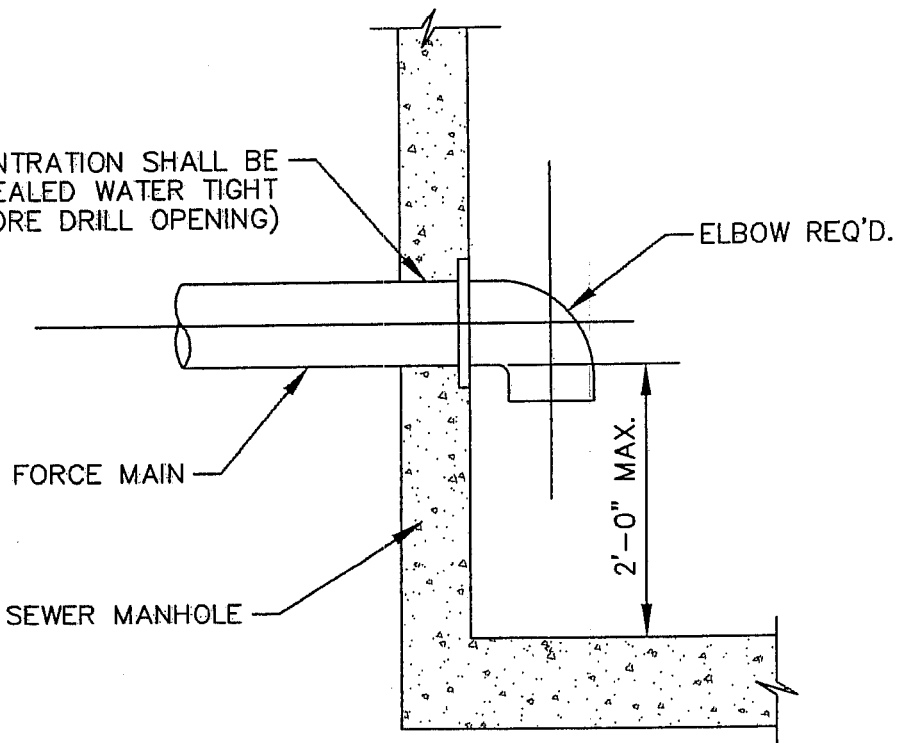
**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

**TYPICAL DETAIL OF  
SEWER PIPE  
CONNECTION TO  
EXISTING MANHOLE**

PAGE NUMBER:

**SS-13**

PIPE PENETRATION SHALL BE  
SEALED WATER TIGHT  
(CORE DRILL OPENING)



## FORCE MAIN CONNECTION TO MANHOLE

N.T.S.



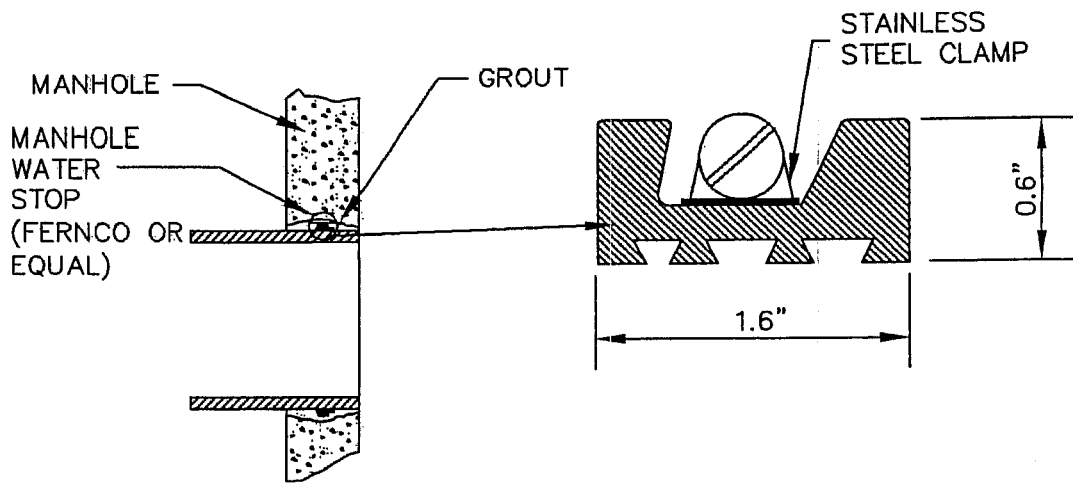
JACKSON COUNTY  
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

FORCE MAIN  
CONNECTION TO  
MANHOLE

PAGE NUMBER:

SS-14

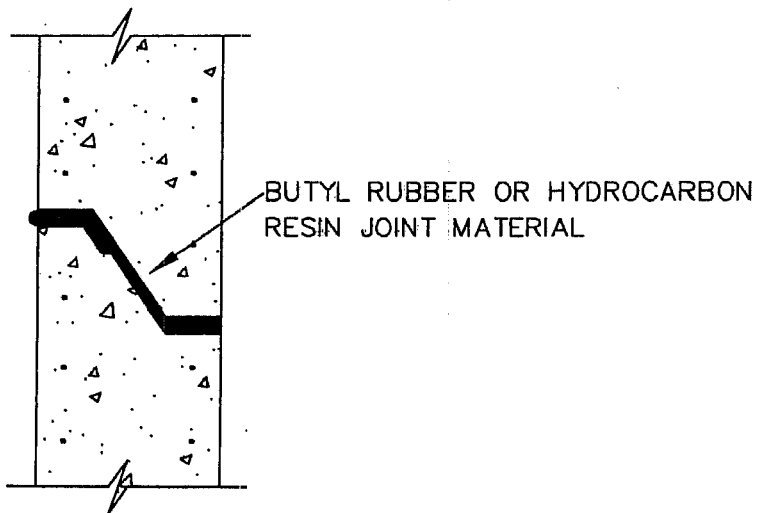


NOTE: MANHOLE CUTOUT SHALL BE ROUGHENED PRIOR TO FILLING VOID AREA BETWEEN MANHOLE AND PIPE

### TYPICAL MANHOLE WATER STOP

EXISTING AND "STRADDLE" MANHOLES

N.T.S.



### PRECAST JOINT DETAIL

N.T.S.



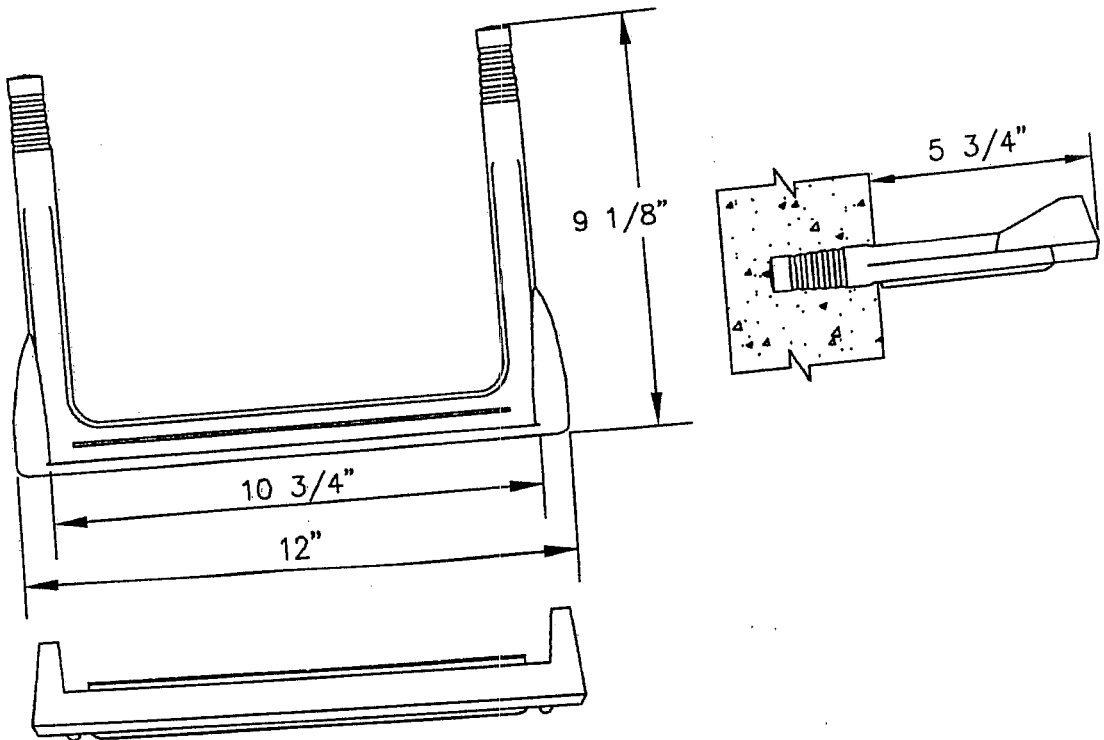
JACKSON COUNTY  
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

MISCELLANEOUS  
MANHOLE DETAILS

PAGE NUMBER:

SS-15



**STEP DETAIL**

N.T.S.



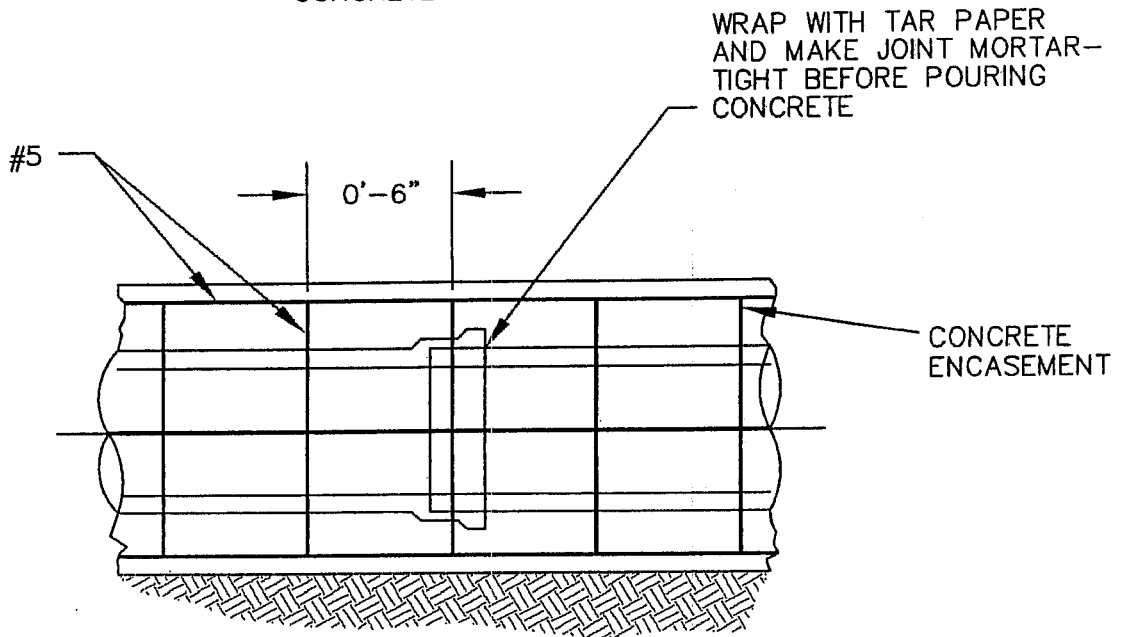
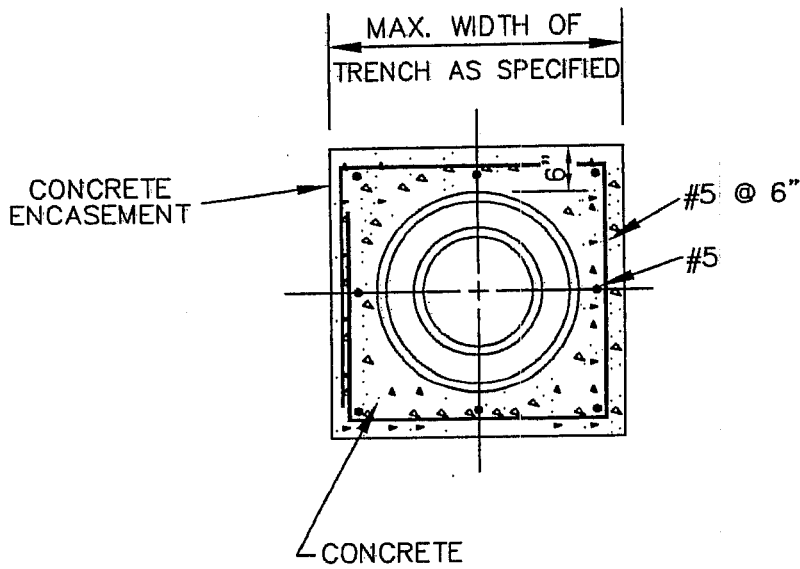
**JACKSON COUNTY  
UTILITY AUTHORITY**

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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

**MANHOLE STEP  
DETAIL**

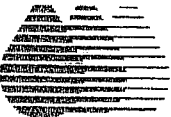
PAGE NUMBER:

**SS-16**



**TYPICAL DETAIL OF CONCRETE  
ENCASEMENT AND/OR COLLAR**

N.T.S.



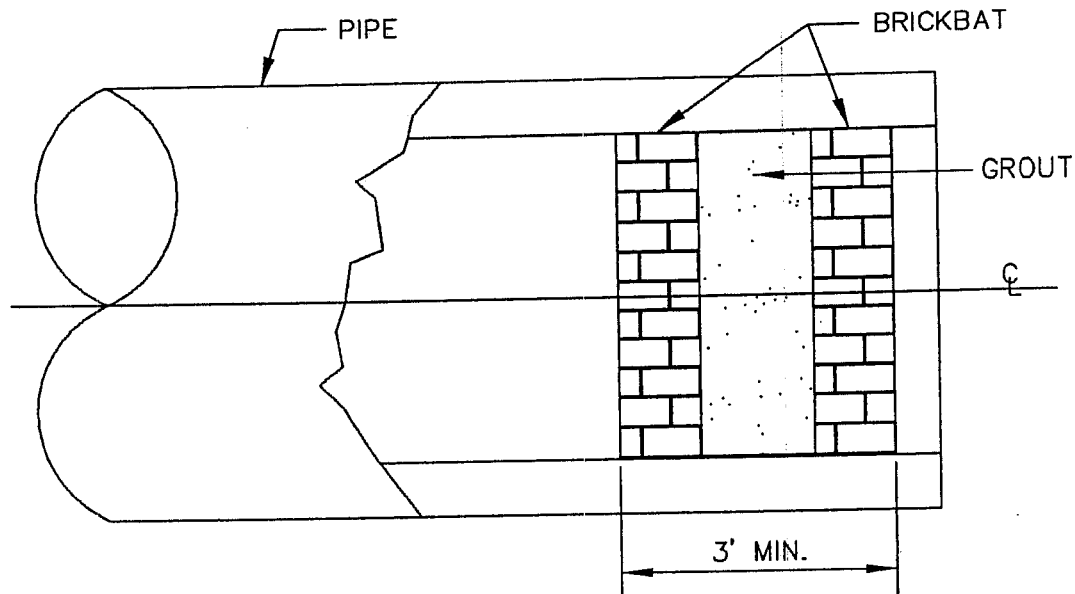
**JACKSON COUNTY  
UTILITY AUTHORITY**

**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

**TYPICAL DETAIL OF  
CONCRETE  
ENCASEMENT  
AND/OR COLLAR**

PAGE NUMBER:

**SS-17**



**DETAIL OF PIPE PLUG**

N.T.S.

NOTE:  
 (DIG AND REMOVE ONE PIPE SECTION PRIOR TO  
 PLACEMENT OF PIPE PLUG.)

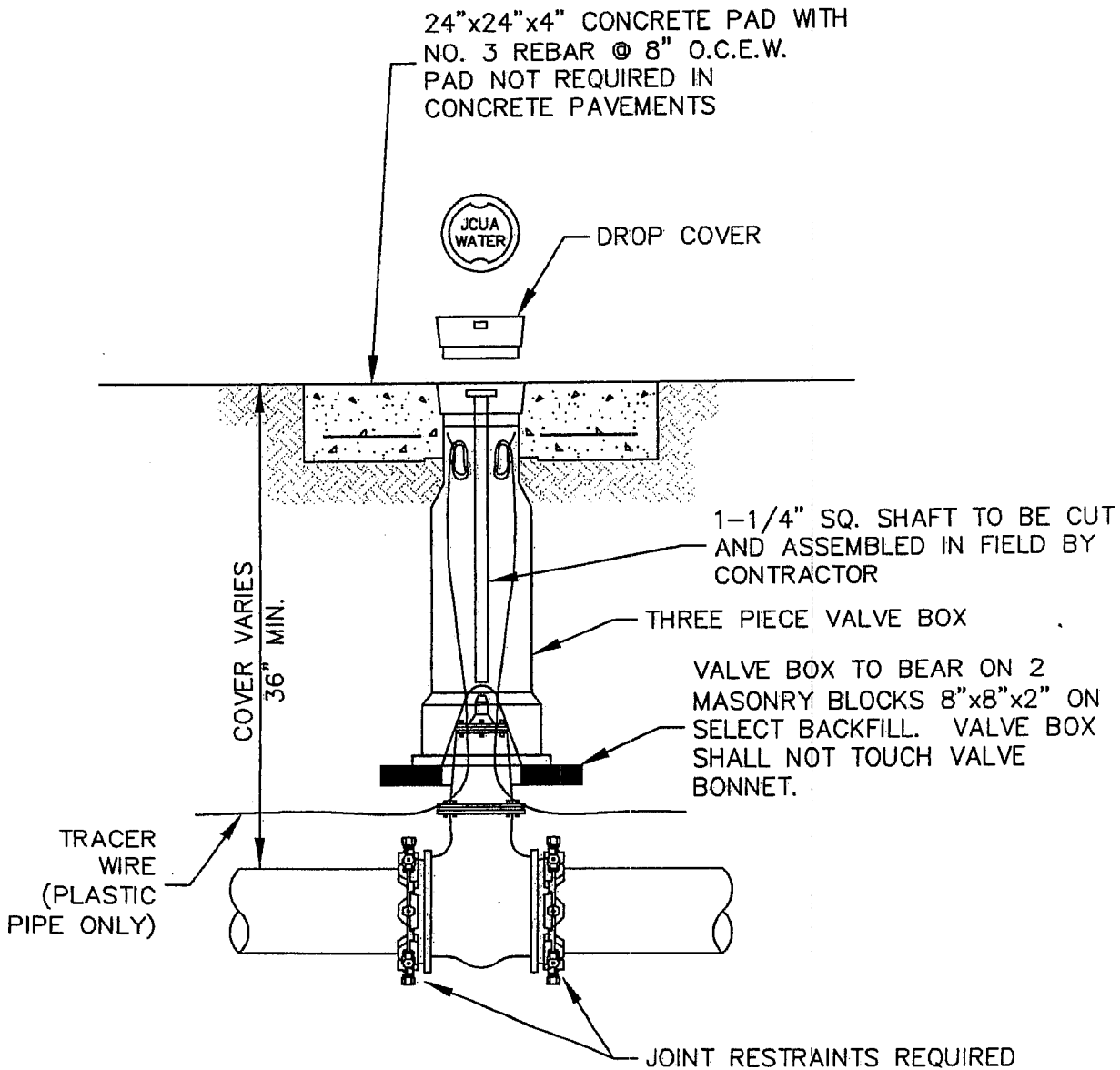


**JACKSON COUNTY  
 UTILITY AUTHORITY**

**JACKSON COUNTY  
 UTILITY AUTHORITY  
 CONSTRUCTION  
 STANDARDS**

DETAIL OF  
 PIPE PLUG

PAGE NUMBER: **SS-18**



**TYPICAL GATE VALVE DETAIL**

N.T.S.

NOTE:

VALVE BOX SHOULD BE LEVEL AND VALVE STEM SHOULD BE CENTERED OF VALVE BOX.



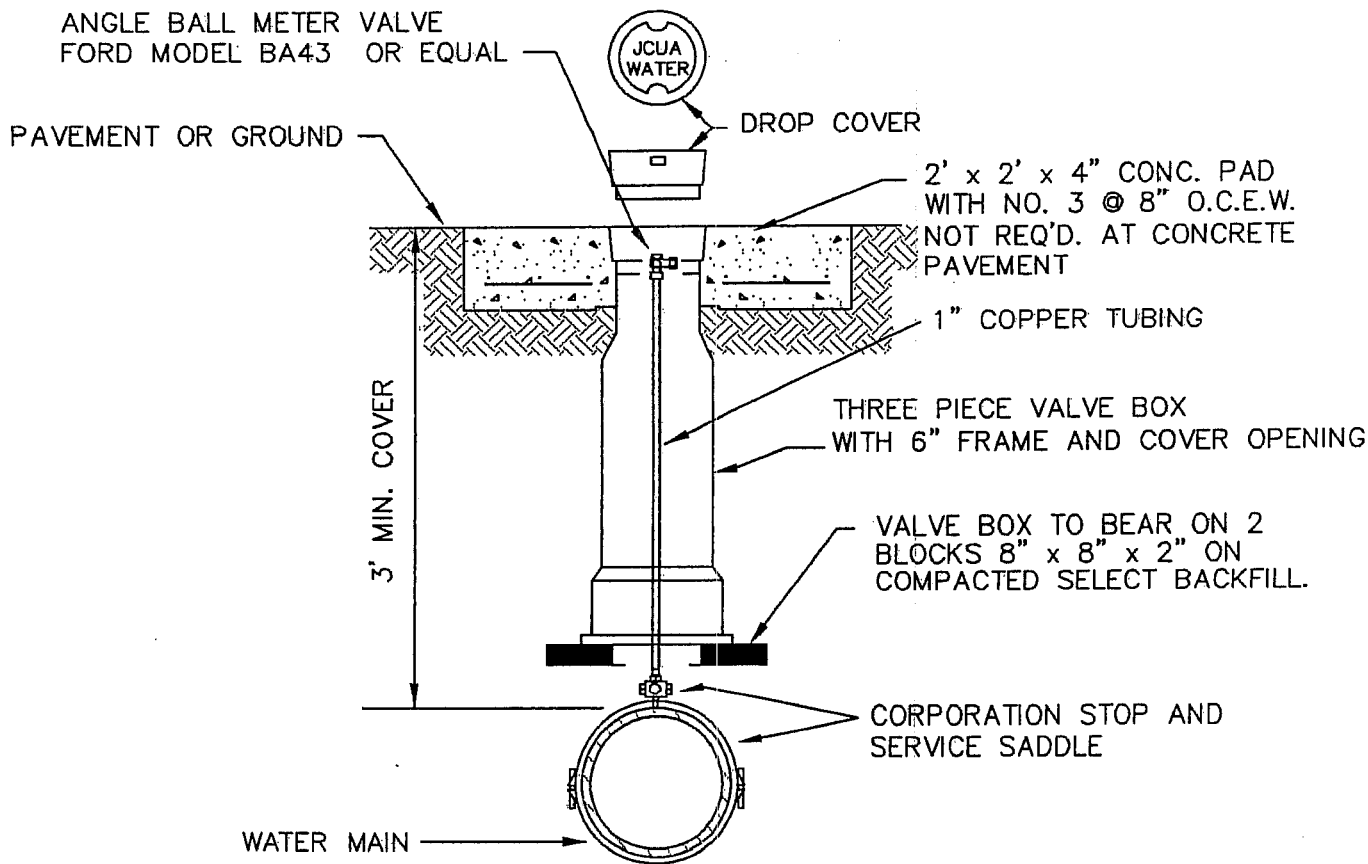
JACKSON COUNTY  
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UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

TYPICAL GATE  
VALVE DETAIL

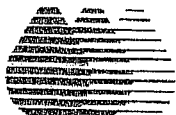
PAGE NUMBER:

PW-1



**AIR RELEASE CORPORATION STOP DETAIL**

N.T.S.



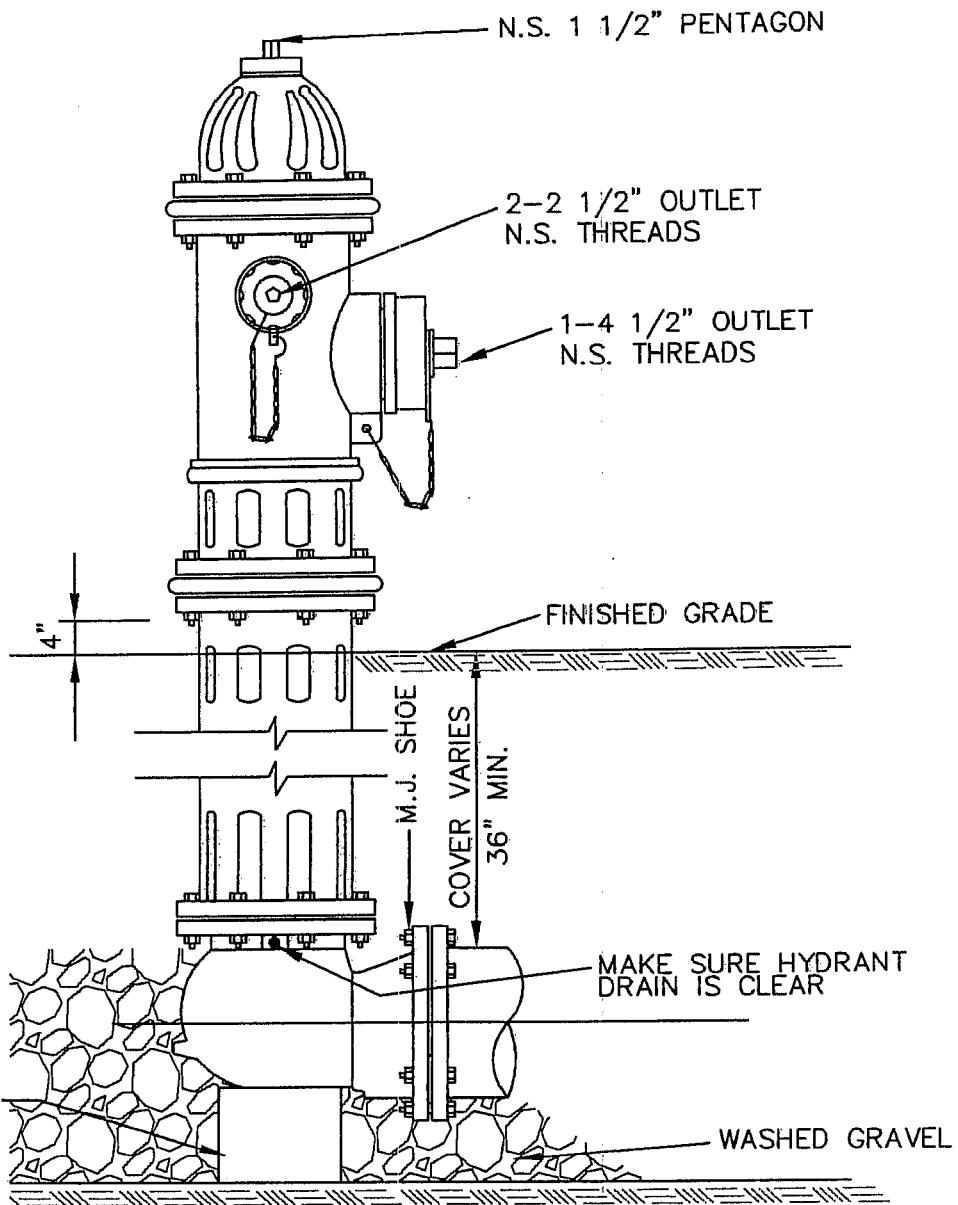
**JACKSON COUNTY  
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**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

**AIR RELEASE  
CORPORATION  
STOP DETAIL**

PAGE NUMBER:

**PW-2**



**ELEVATION**

**TYPICAL FIRE HYDRANT ASSEMBLY**

N.T.S.



**JACKSON COUNTY  
UTILITY AUTHORITY**

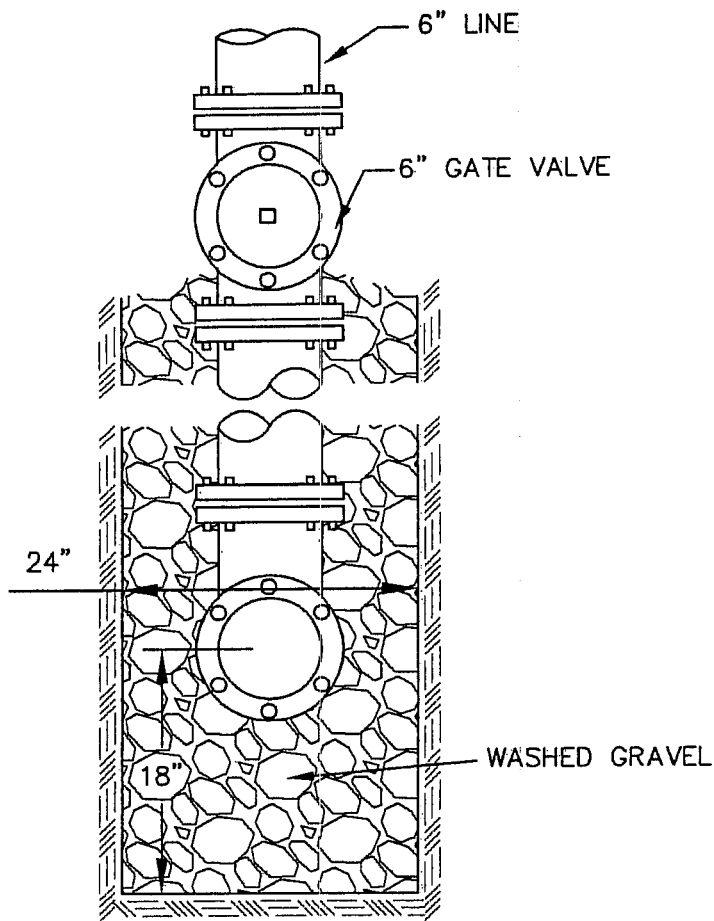
**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

TYPICAL FIRE  
HYDRANT ASSEMBLY  
(ELEVATION)

PAGE NUMBER:

**PW-3**

CONNECT TO 8" OR LARGER WATER MAIN  
HOT TAP WITH TAPPING SLEEVE OR D.I. TEE



PLAN

## TYPICAL FIRE HYDRANT ASSEMBLY

N.T.S.

- NOTES: 1. ALL JOINTS OF FIRE ASSEMBLY SHALL BE RESTRAINED.  
2. GATE VALVES WILL BE REQUIRED ON ALL FIRE HYDRANT LEGS.  
3. FIRE HYDRANT ASSEMBLY IS TO INCLUDE ALL APPURTENANCES INCLUDING THE CONNECTION AT THE MAIN.



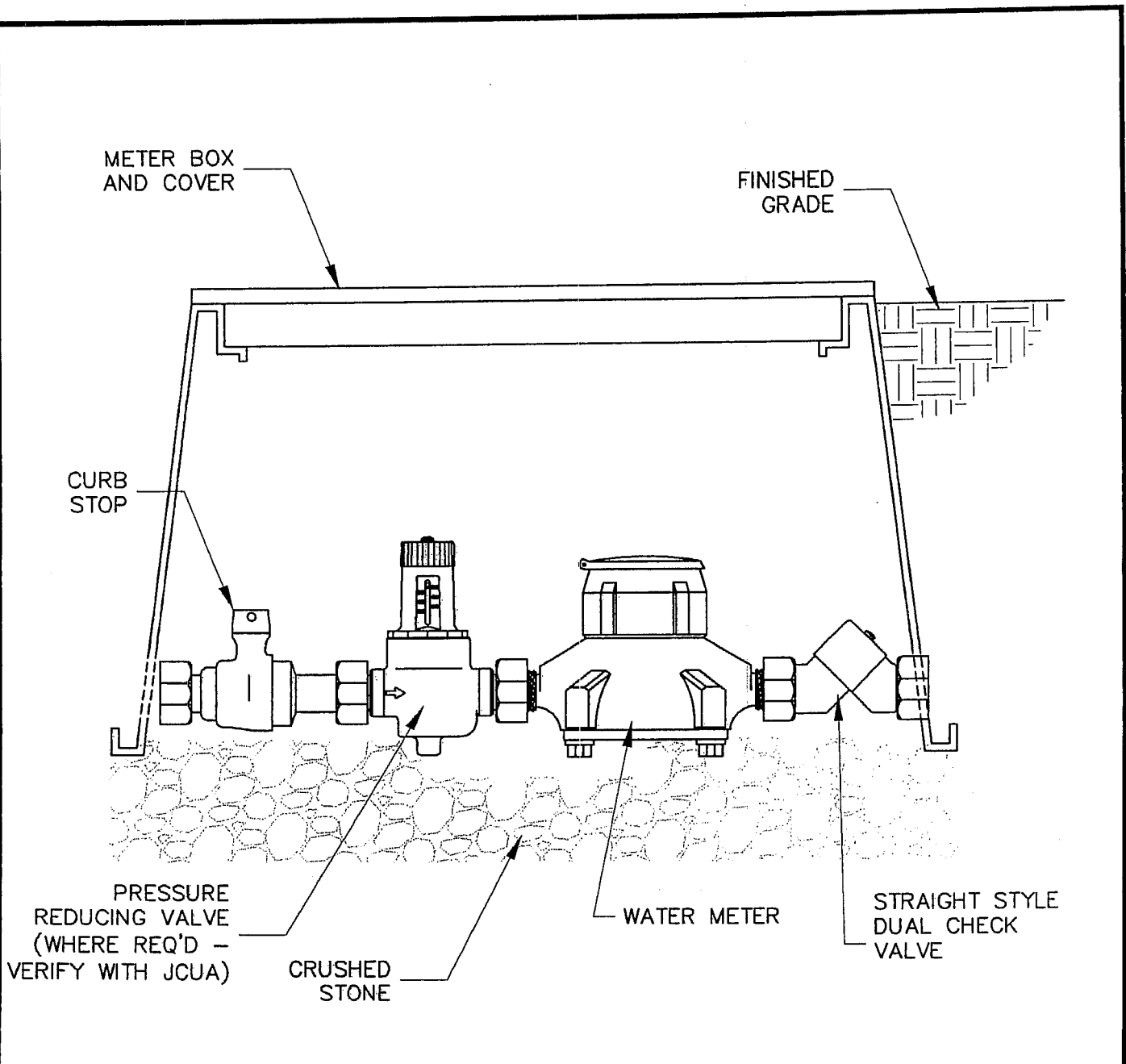
JACKSON COUNTY  
UTILITY AUTHORITY

JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

TYPICAL FIRE  
HYDRANT ASSEMBLY  
(PLAN AND NOTES)

PAGE NUMBER:

PW-4



**TYPICAL WATER METER DETAIL**

N.T.S.

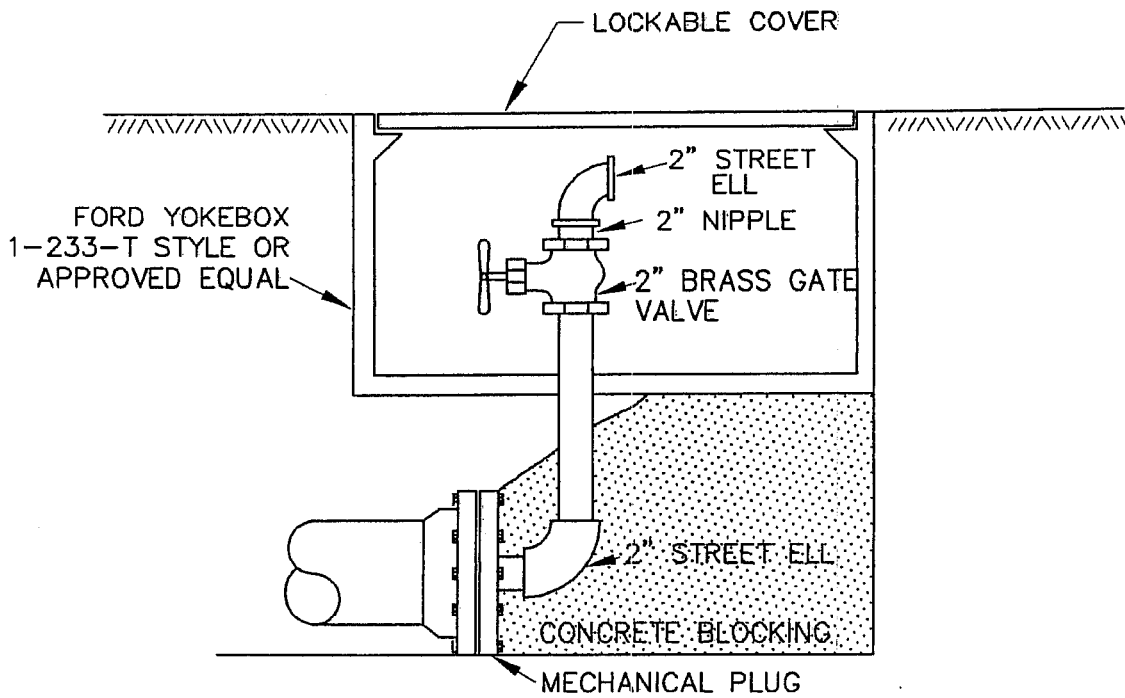


**JACKSON COUNTY  
UTILITY AUTHORITY**

**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

TYPICAL WATER  
METER DETAIL

PAGE NUMBER:  
**PW-5**



## TYPICAL BLOW-OFF ASSEMBLY

N.T.S.

### NOTES:

1. ALL MATERIALS FOR CONSTRUCTION OF BLOW-OFF ASSEMBLY SHALL BE STAINLESS STEEL PIPE.



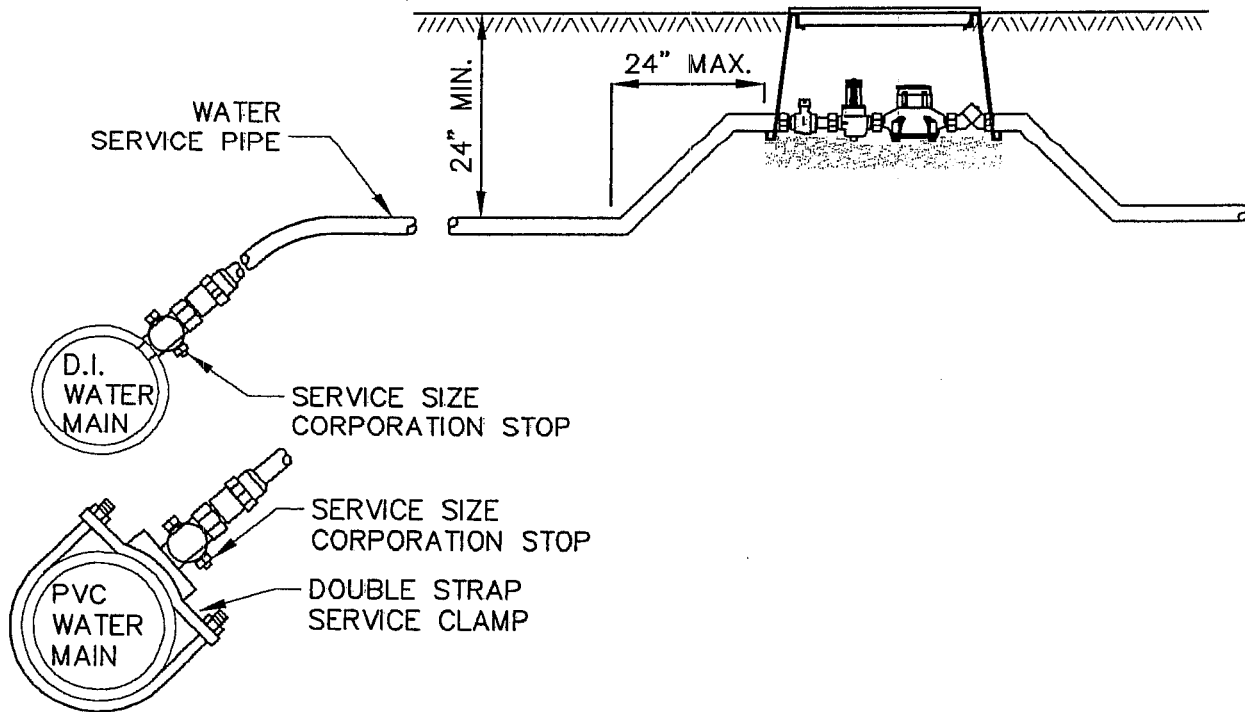
JACKSON COUNTY  
UTILITY AUTHORITY

JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS

TYPICAL BLOW-OFF  
ASSEMBLY

PAGE NUMBER

PW-6



**TYPICAL WATER SERVICE  
CONNECTION TO NEW WATER MAIN**

N.T.S.

**NOTES:**

1. LOCATOR WIRE SHALL BE PLACED ON ALL SERVICE LINES 1½" AND LARGER.



**JACKSON COUNTY  
UTILITY AUTHORITY**

**JACKSON COUNTY  
UTILITY AUTHORITY  
CONSTRUCTION  
STANDARDS**

**TYPICAL WATER  
SERVICE CONNECTION  
TO WATER MAIN**

PAGE NUMBER:

**PW-7**

HI-PRESSURE JACKSCREW  
ACTUATOR w/ FLO-STOP  
FOLDING LINE STOP HEAD

HOUSING

GATE  
VALVE

LINE STOP  
TAPPING SLEEVE

TYPICAL LINE STOP DETAIL

N.T.S.



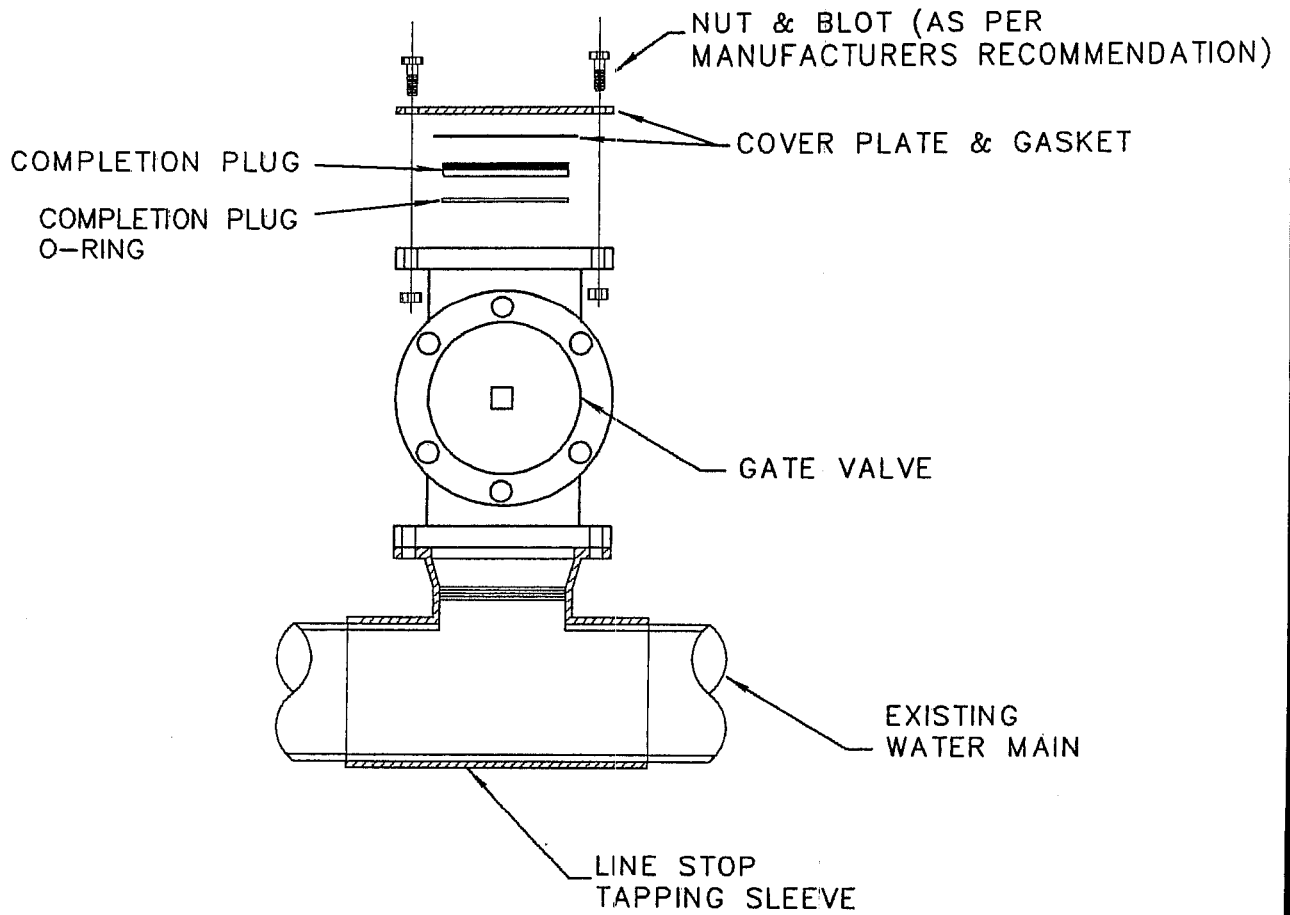
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CONSTRUCTION  
STANDARDS

TYPICAL LINE  
STOP DETAIL

PAGE NUMBER:

PW-8



**LINE STOP - COMPLETION PLUG DETAIL**

N.T.S.



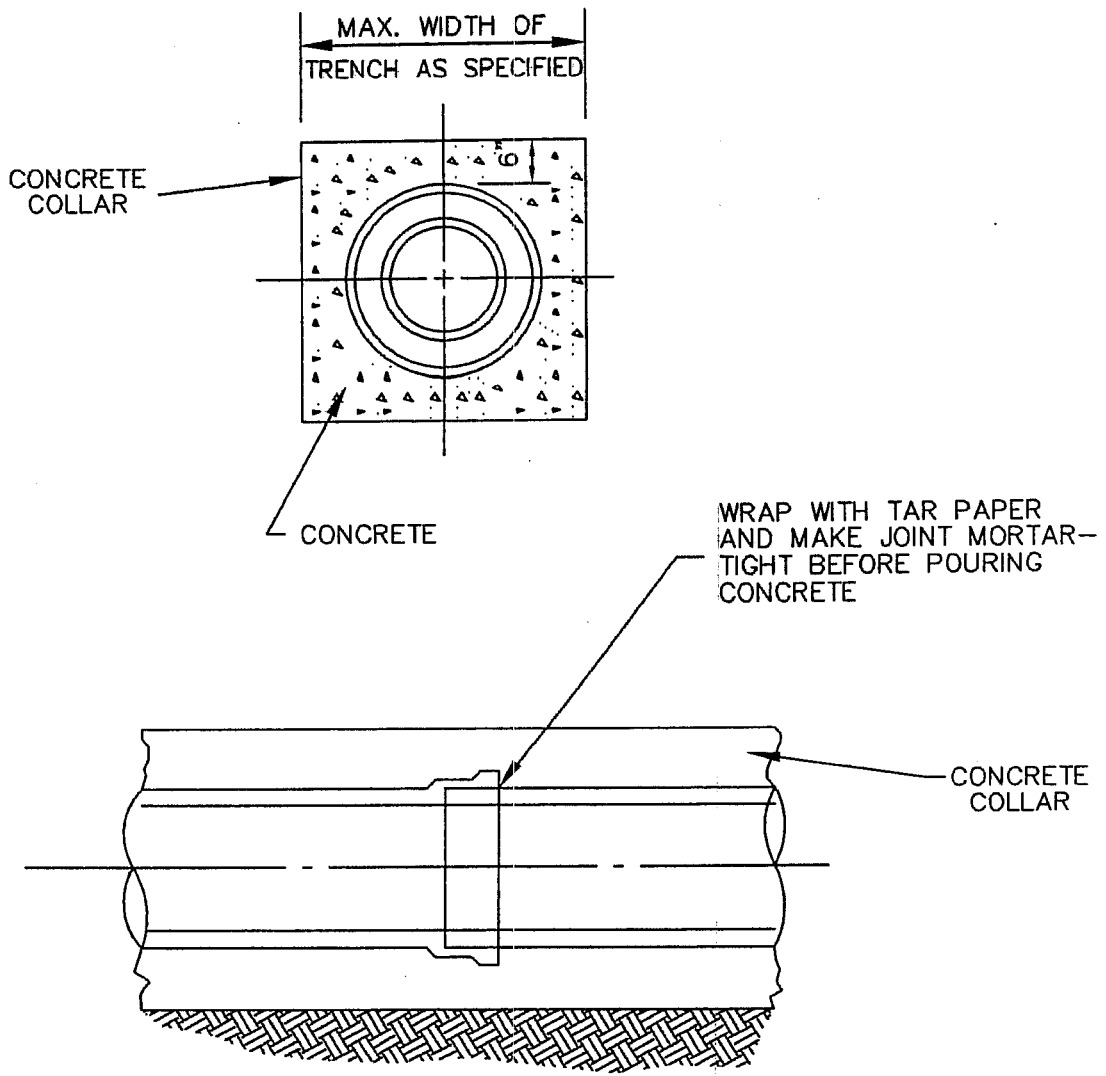
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CONSTRUCTION  
STANDARDS**

**LINE STOP  
COMPLETION  
PLUG DETAIL**


PAGE NUMBER:

**PW-9**



**TYPICAL DETAIL OF CONCRETE ENCASEMENT**

N.T.S.

	<p><b>JACKSON COUNTY UTILITY AUTHORITY</b></p>	<p><b>JACKSON COUNTY UTILITY AUTHORITY CONSTRUCTION STANDARDS</b></p>	<p>TYPICAL DETAIL OF CONCRETE ENCASEMENT</p> <hr/> <p>PAGE NUMBER <b>PW-10</b></p>
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