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Plumbing Designer: Kyle Plumbing  
13160 Toussig Avenue  
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Professional Seal:  
  
GREG V. GLADOV  
PE-028241  
126-015  
Professional Engineer  
The Professional Engineer shall be responsible for the design and construction of the project and shall not be held responsible for any other design or construction work performed by the contractor or other persons employed by the contractor or other persons employed by the contractor or other persons employed by the contractor.

Project Title:  
O'Fallon, Missouri 63366

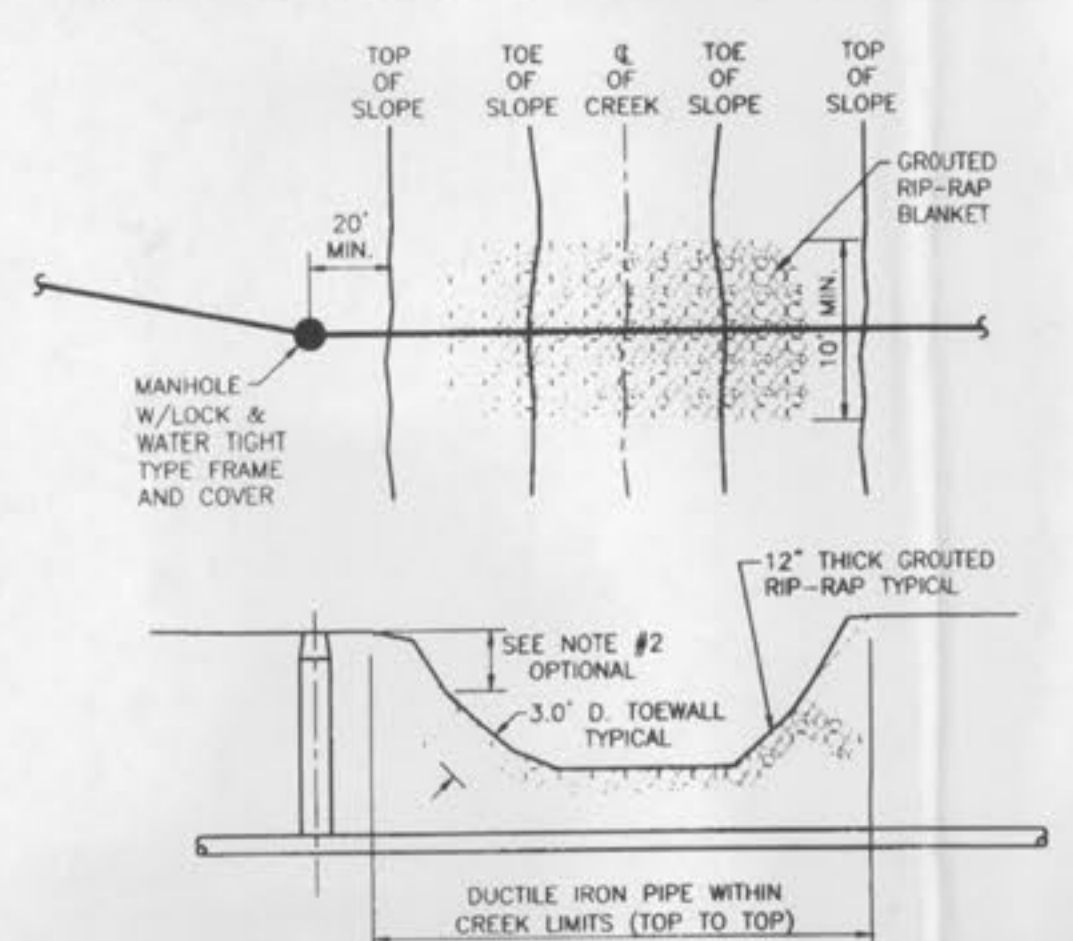
**PROJECT:**  
**Park Place**  
Independent and Assisted Living Apartments  
Phoenix Parkway (Village M)

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No.	Revision Description	Date
1	CITY OF O'FALLON, DCSD	1-07-05

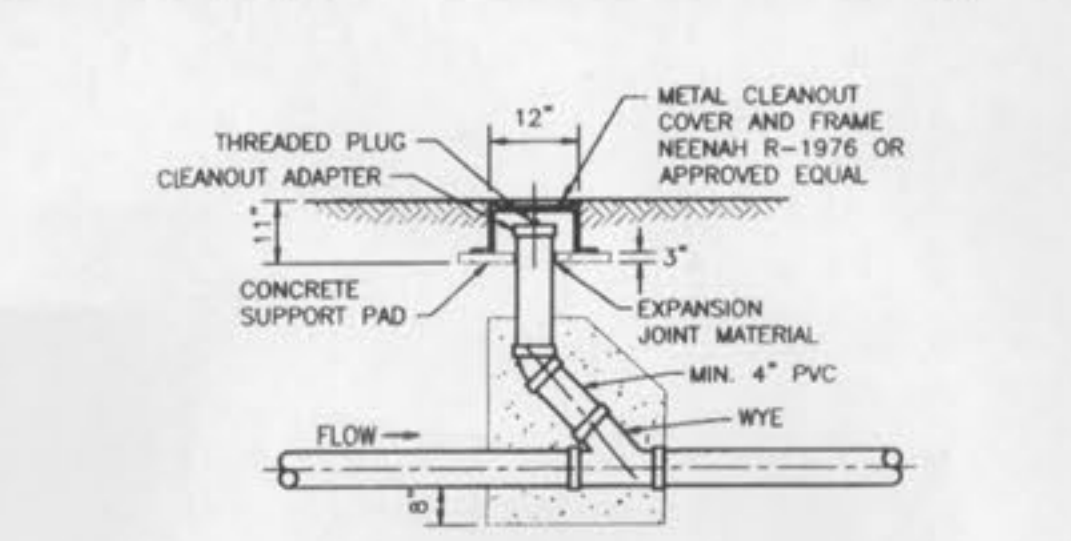
**BUILDING PERMIT SET**  
Sheet Title:  
DCSC DETAILS 4

Project Number: 04188  
Sheet Number:  
Drawn By: C.V.C.  
Issue Date: NOV. 15, 2004  
**C14**

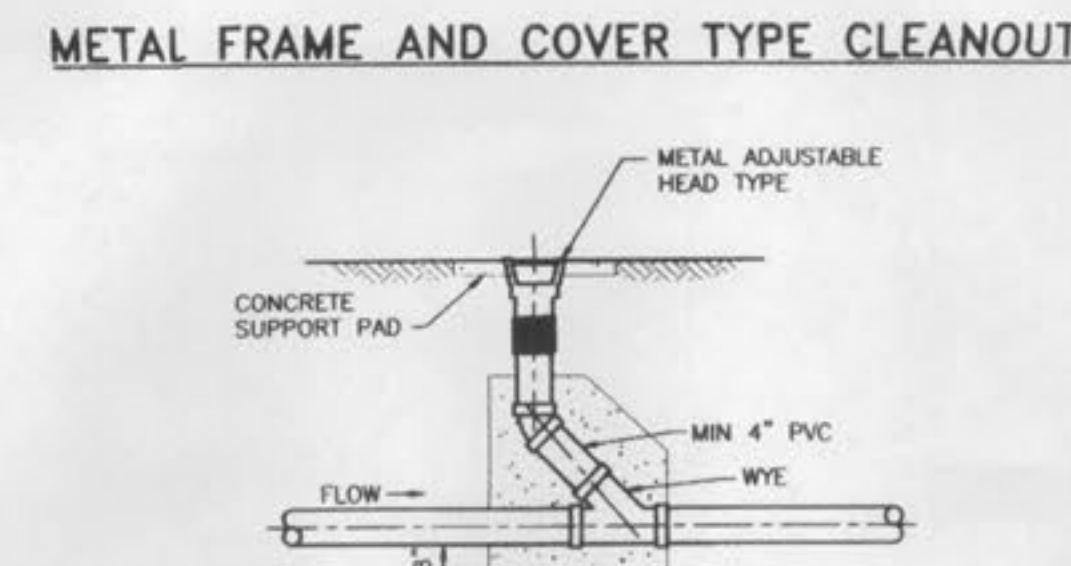


**NOTES:**  
1. GROUDED RIP-RAP IS REQUIRED AT ALL CREEK CROSSINGS WHERE THE EMBANKMENTS CROSSED ARE STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL RATIO SLOPE, AND ALSO WHERE THERE IS 3 FEET OR LESS COVER OVER THE TOP OF THE SEWER MAIN.  
2. PLACE RIP-RAP ON LOWER 3/4 OF SLOPE, GRADE UPPER 1/4 OF SLOPE AT 1 VERTICAL TO 2 HORIZONTAL SLOPE FOR SOD OR 1 VERTICAL TO 2.5 HORIZONTAL SLOPE FOR SEED AND STRAW.  
3. RIP-RAP TO BE "M50" 5' GRADATION, MINIMUM 12" THICK, GROUDED WITH 8 SACK MIX SAND-CEMENT SLURRY, BROOM FINISH.  
4. INCORPORATE A 3 FEET DEEP TOE WALL ON EMBANKMENT'S UPPER EDGE OF RIP-RAP.  
5. TOP SURFACE OF RIP-RAP SHOULD NOT BE HIGHER THAN ADJACENT GROUND SURFACE.  
6. IF PIPE HAS LESS THAN 12" COVER, A PAVED CHANNEL MAY BE REQUIRED.  
7. DUCTILE IRON PIPE IS REQUIRED WITHIN THE CREEK LIMITS.

**DUCKETT CREEK SANITARY DISTRICT**  
TYPICAL CREEK CROSSING  
Drawn By: BSM, App. By: KLA, Detail No. 24  
Check By: MDOB, Date: 1-8-01

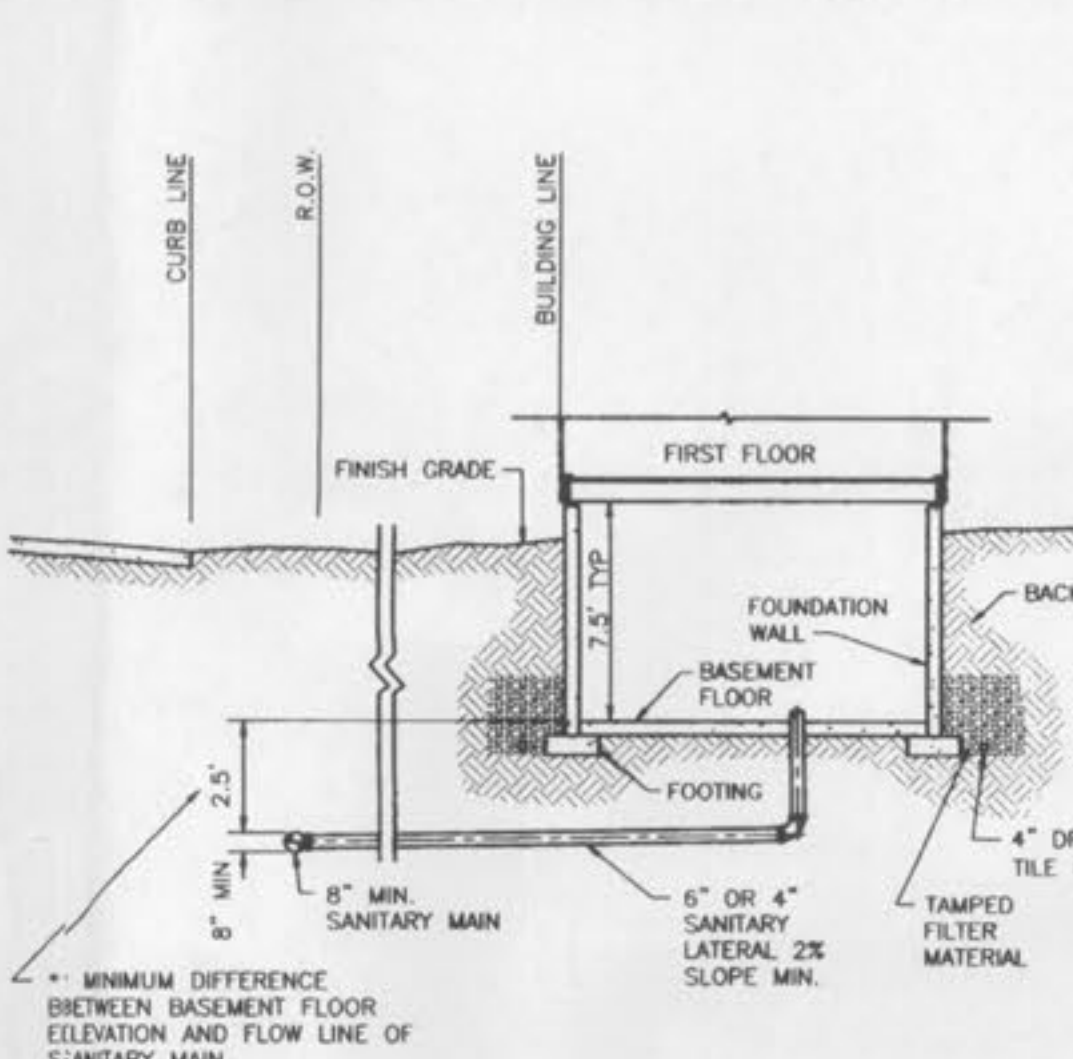


**METAL FRAME AND COVER TYPE CLEANOUT**



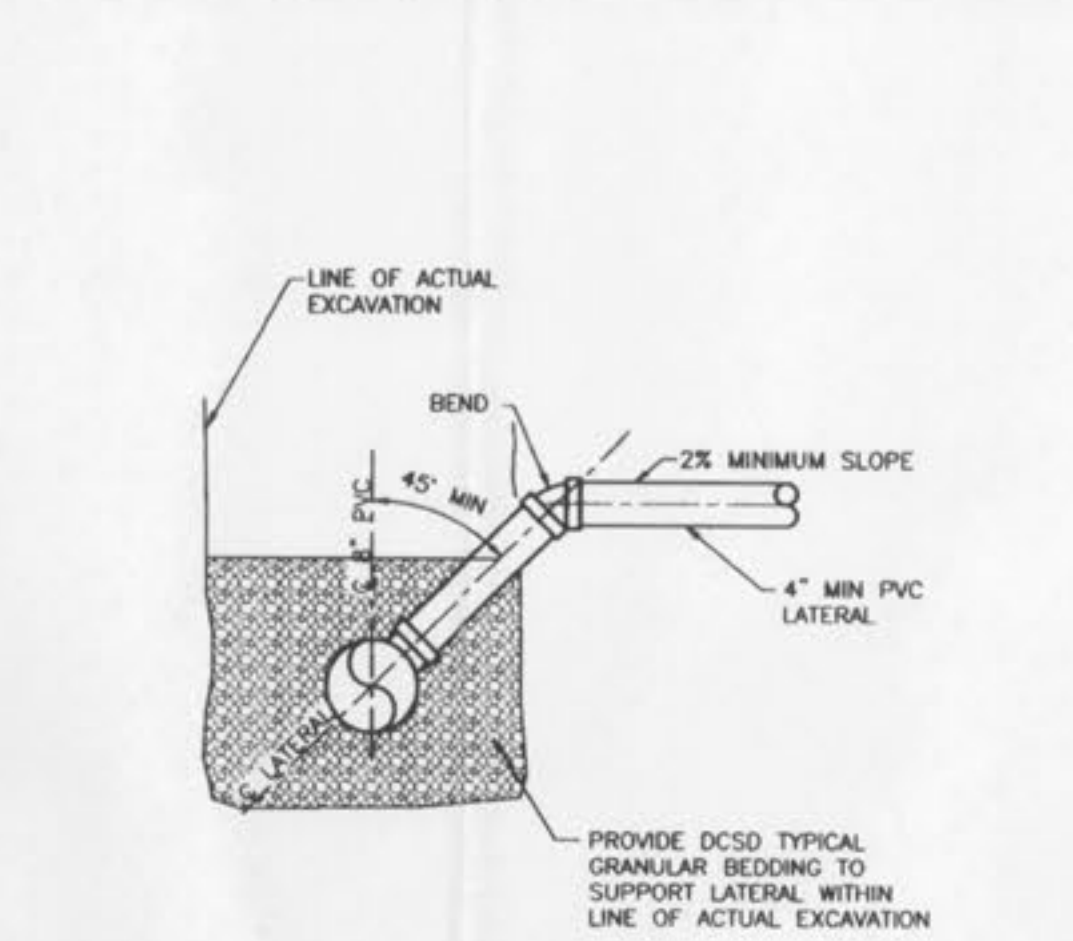
**ADJUSTABLE HEAD TYPE CLEANOUT**

**DUCKETT CREEK SANITARY DISTRICT**  
TYPICAL SEWER LATERAL CLEANOUT DETAILS  
Drawn By: BSM, App. By: KLA, Detail No. 25  
Check By: MDOB, Date: 1-8-01

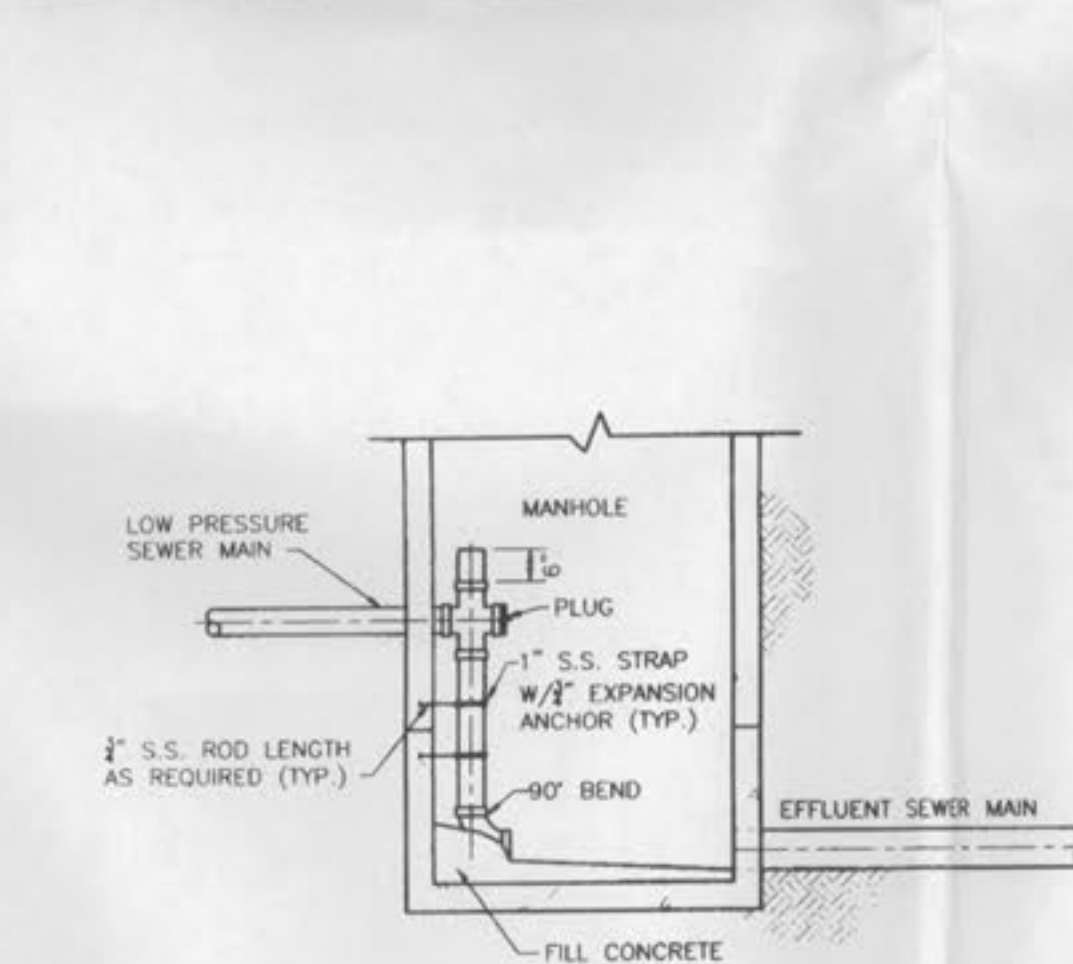


**DUCKETT CREEK SANITARY DISTRICT**  
TYPICAL SANITARY SEWER LATERAL PROFILE  
Drawn By: BSM, App. By: KLA, Detail No. 26  
Check By: MDOB, Date: 1-9-01

\*NOTE: DIFFERENCE IN DEPTH INCREASES WITH PIPE SIZE

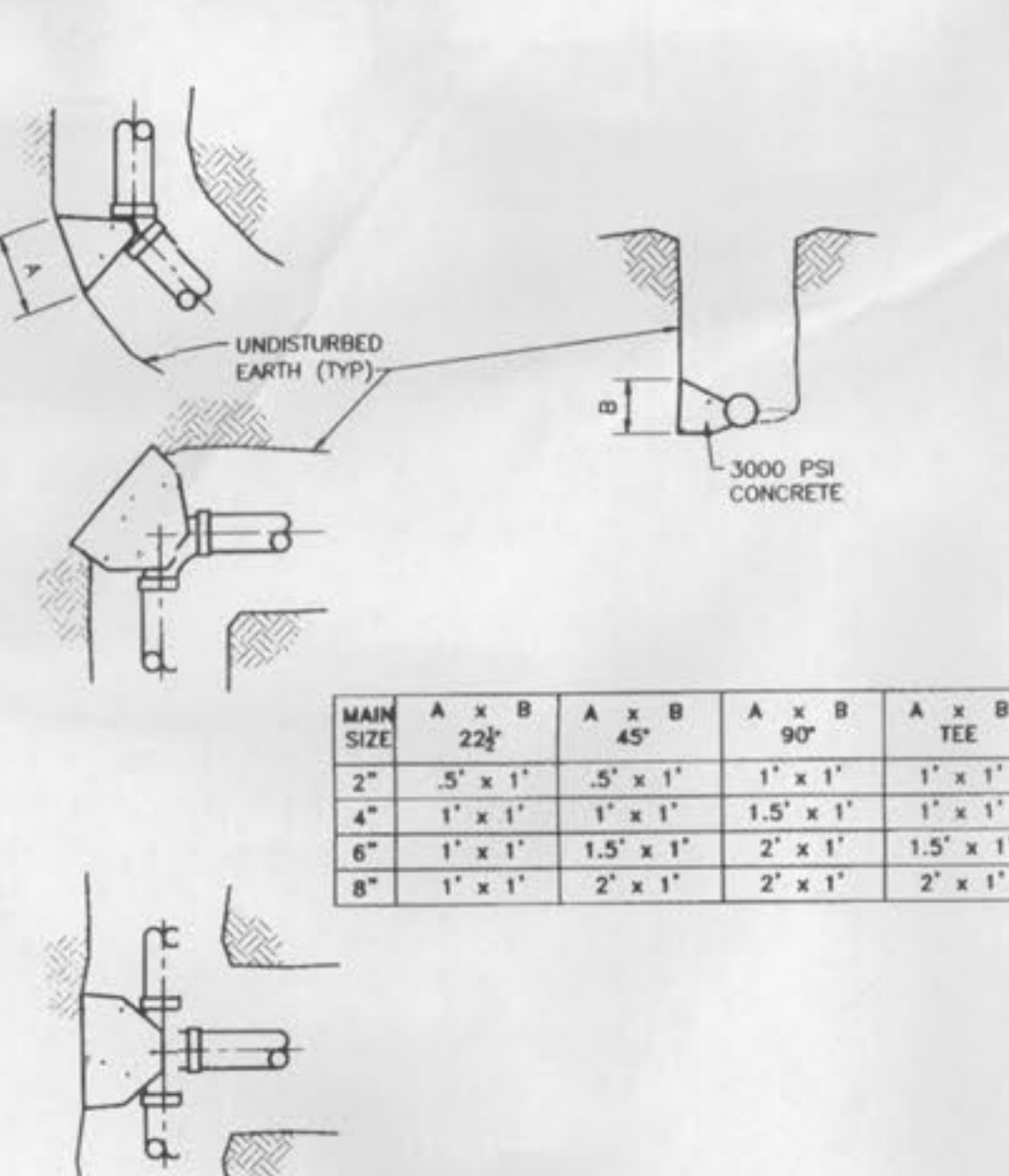


**DUCKETT CREEK SANITARY DISTRICT**  
SANITARY SEWER LATERAL RISER DETAIL  
Drawn By: BSM, App. By: KLA, Detail No. 27  
Check By: MDOB, Date: 1-9-01



**DUCKETT CREEK SANITARY DISTRICT**  
LOW PRESSURE SEWER MAIN CONNECTION AT MANHOLE  
Drawn By: BSM, App. By: KLA, Detail No. 28  
Check By: MDOB, Date: 1-9-01

NOTE: INVERT-BOTTOM SHALL BE WORKED TO PROVIDE POSITIVE DRAINAGE THROUGH MANHOLE



MAIN SIZE	A x B	A x B	A x B	A x B
2"	22"	45"	90"	TEE
2"	.5' x 1'	.5' x 1'	1' x 1'	1' x 1'
4"	1' x 1'	1' x 1'	1.5' x 1'	1' x 1'
6"	1' x 1'	1.5' x 1'	2' x 1'	1.5' x 1'
8"	1' x 1'	2' x 1'	2' x 1'	2' x 1'

**DUCKETT CREEK SANITARY DISTRICT**  
THRUST BLOCK DETAIL AND SITE SCHEDULE  
Drawn By: BSM, App. By: KLA, Detail No. 29  
Check By: MDOB, Date: 1-9-01