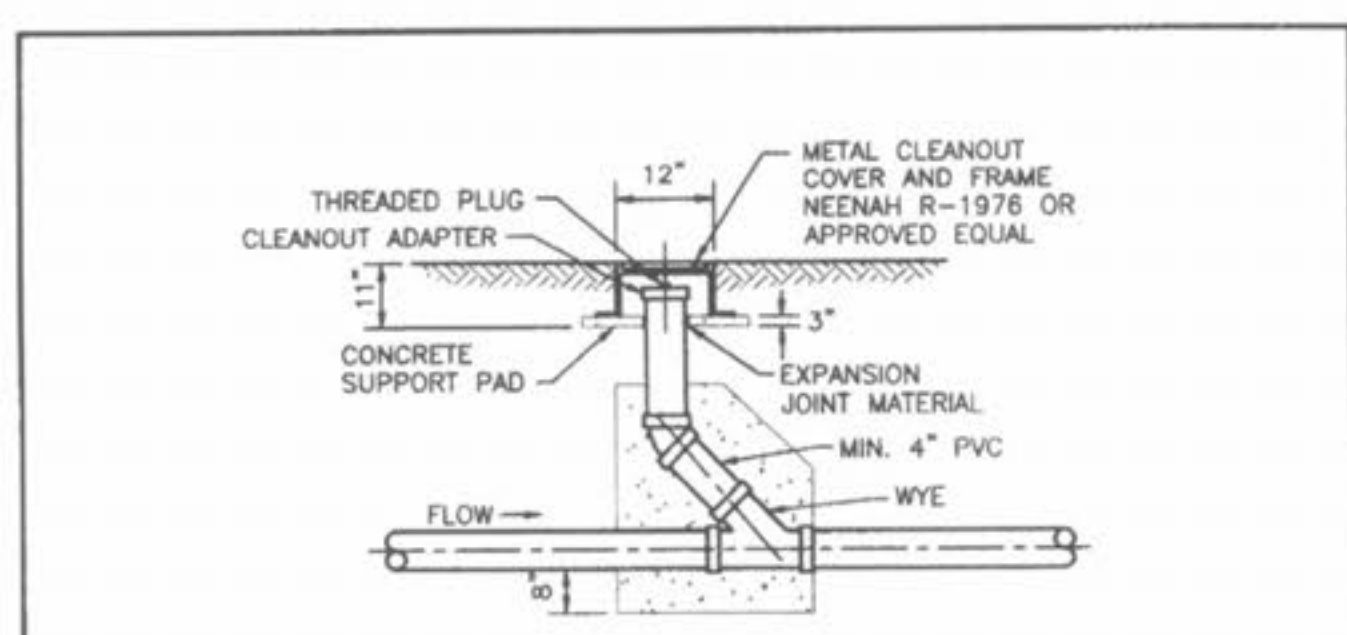


- NOTES:
1. GROUTED RIP-RAP IS REQUIRED AT ALL CREEK CROSSINGS WHERE THE EMBANKMENTS CROSSED ARE STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL RATIO SLOPE, AND ALSO WHERE THERE IS 3 FEET OR LESS COVER OVER THE TOP OF THE SEWER MAIN.
 2. PLACE RIP-RAP ON LOWER 3/4 OF SLOPE, GRADE UPPER 1/4 OF SLOPE AT 1 VERTICAL TO 2 HORIZONTAL SLOPE FOR SOD OR 1 VERTICAL TO 2.5 HORIZONTAL SLOPE FOR SEED AND STRAW.
 3. RIP-RAP TO BE "MSD 5" GRADATION, MINIMUM 12" THICK, GROUTED 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.

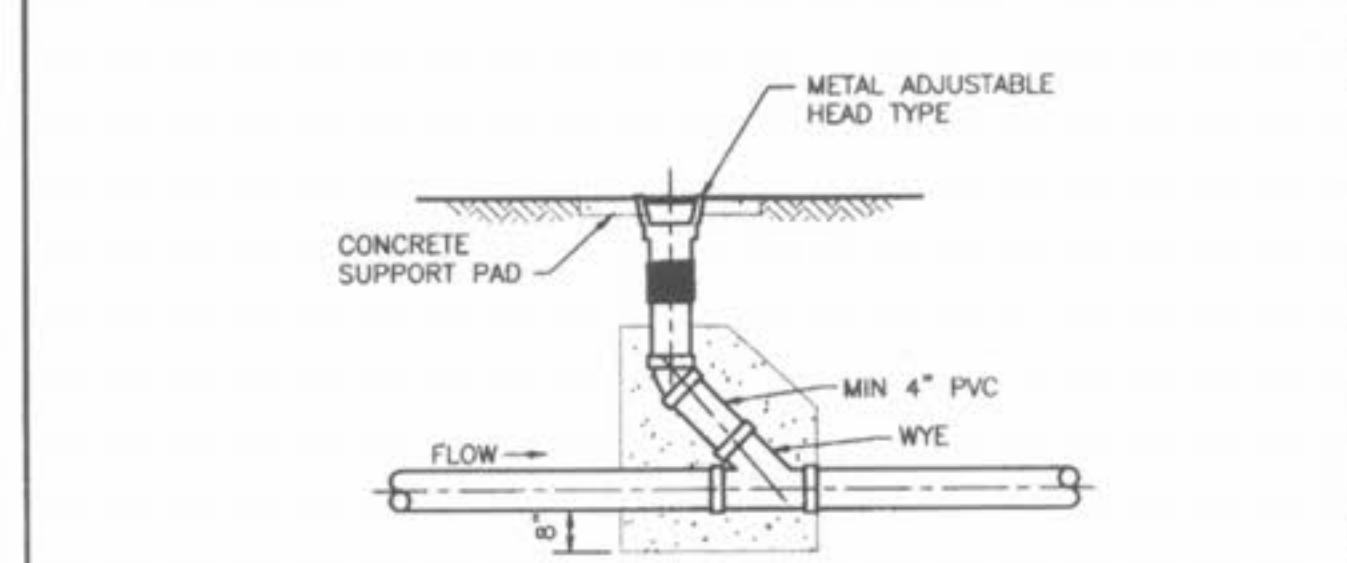
Duckett Creek Sanitary District

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

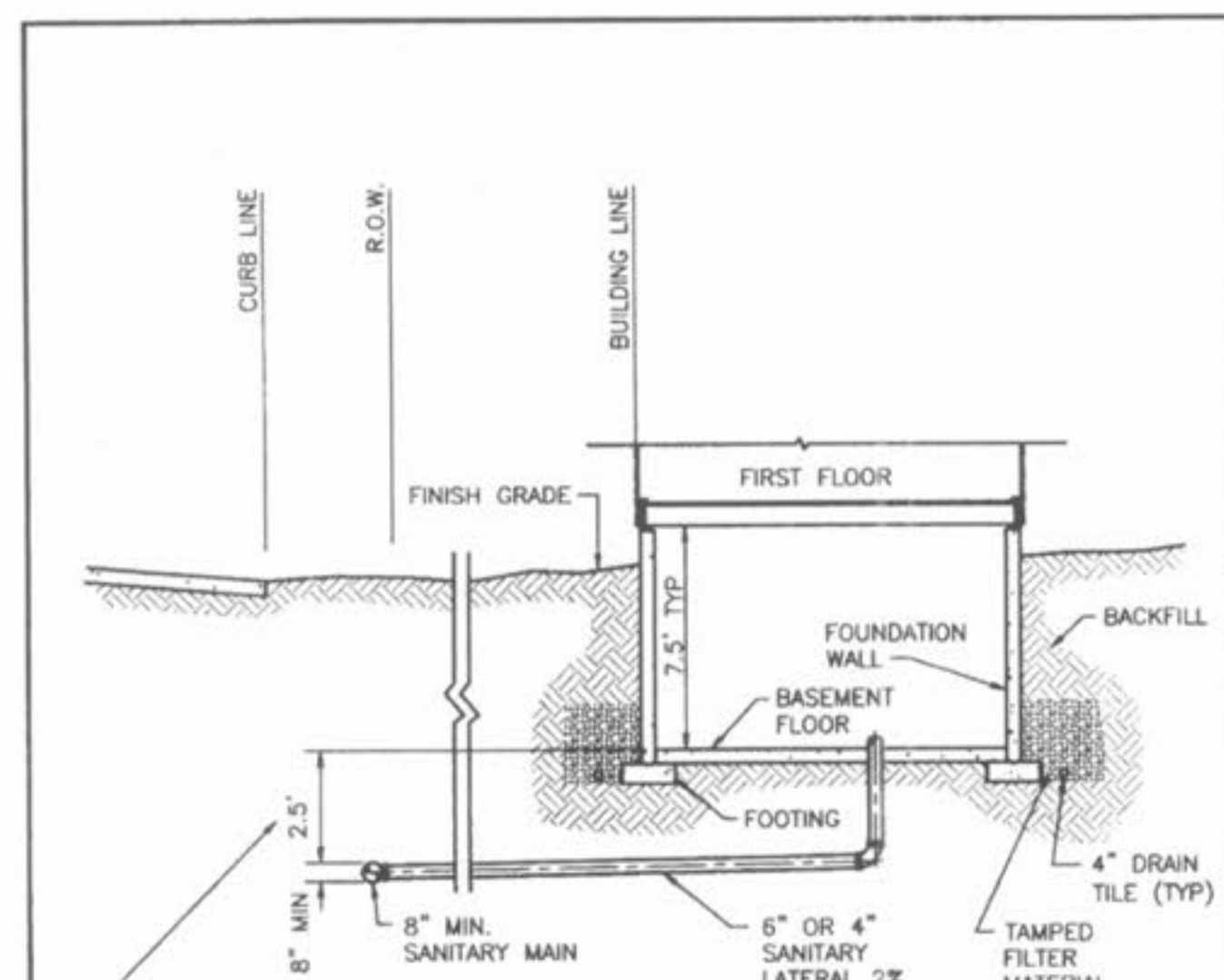


ADJUSTABLE HEAD TYPE CLEANOUT

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	

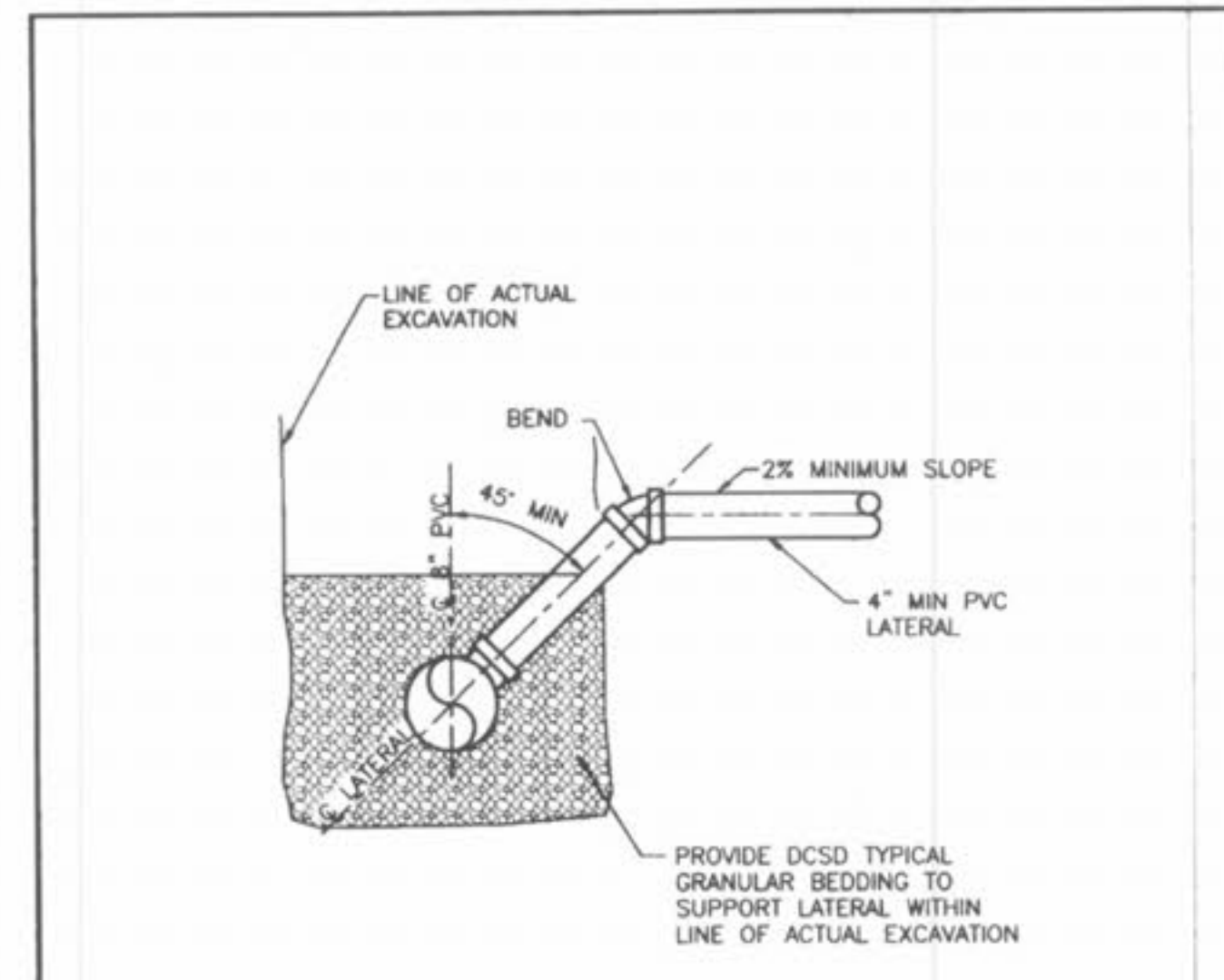


*NOTE: DIFFERENCE IN DEPTH INCREASES WITH PIPE SIZE

Duckett Creek Sanitary District

TYPICAL SANITARY SEWER LATERAL PROFILE

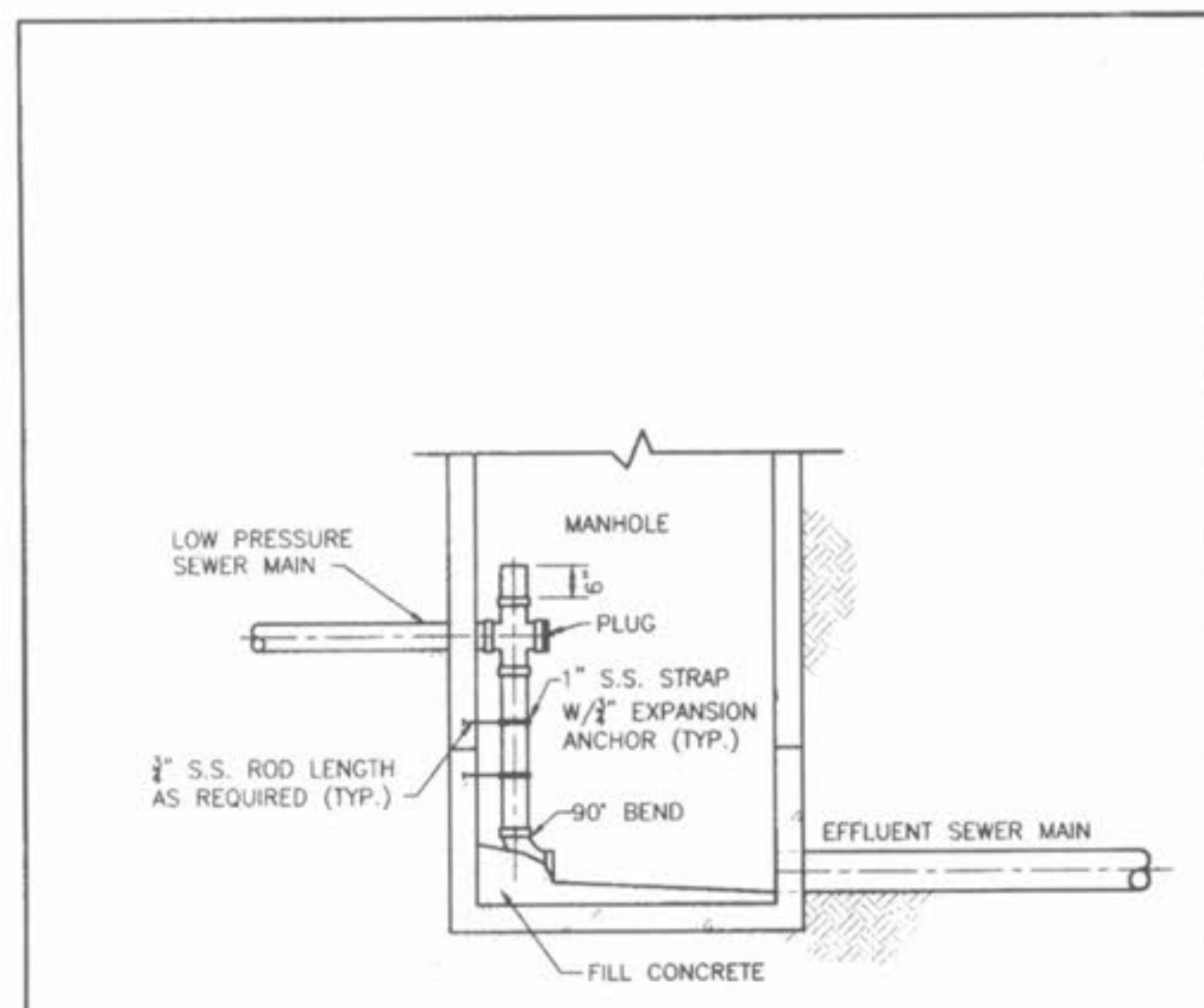
Drawn By: BSM	App By: KLA	Detail No. 26
Check By: MDOB	Date: 1-9-01	



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	

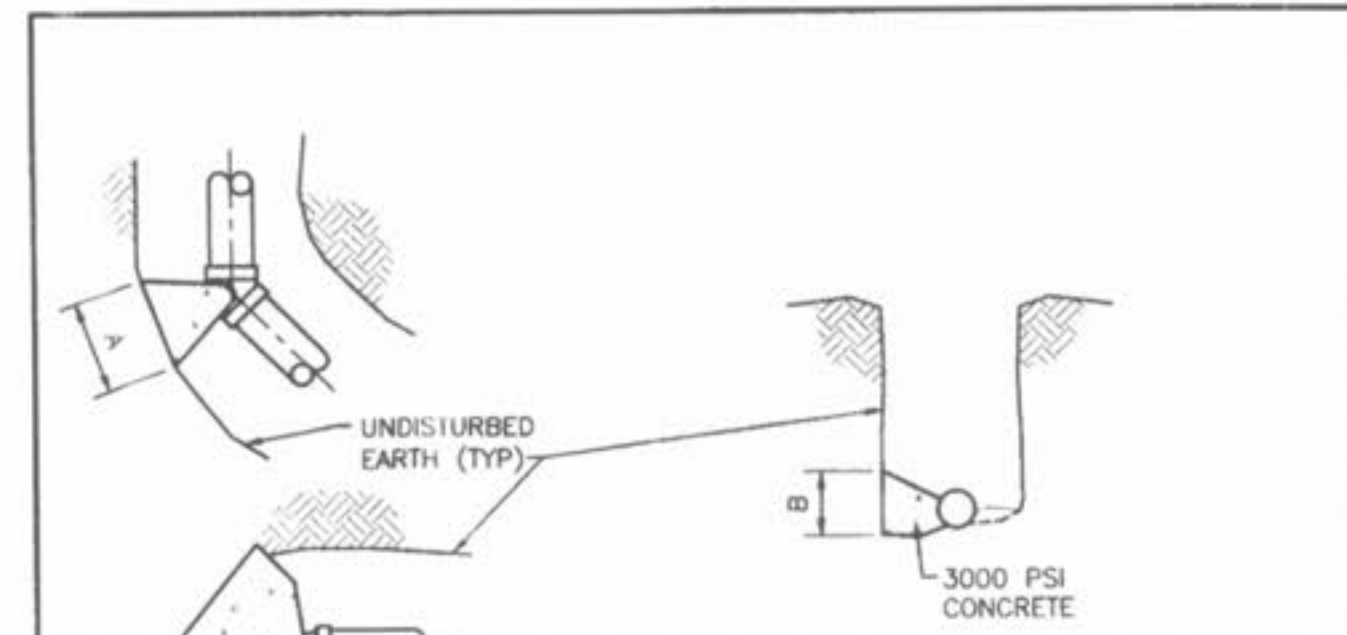


NOTE: INVERT-BOTTOM SHALL BE WORKED TO PROVIDE POSITIVE DRAINAGE THROUGH MANHOLE

Duckett Creek Sanitary District

LOW PRESSURE SEWER MAIN CONNECTION AT MANHOLE

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Duckett Creek Sanitary District

THRUST BLOCK DETAIL AND SIZE SCHEDULE

MAIN SIZE	A x B	A x B	A x B	A x B
	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'

Drawn By: BSM	App By: KLA	Detail No. 29
Check By: MDOB	Date: 1-9-01	

ISSUE	REMARKS/DATE
1	03-02-05 FIRST SUBMITTAL
2	04-04-05 REVISED PER DCSD COMMENTS
3	05-23-05 REVISED PER CITY OF FALLON COMMENTS
4	05-27-05 REVISED PER DCSD COMMENTS
5	06-09-05 REVISED PER PWS&M COMMENTS
6	06-27-05 REVISED PER CITY OF FALLON COMMENTS
7	07-14-05 REVISED PER PWS&M COMMENTS
8	09-08-05 REVISED PER CITY OF FALLON COMMENTS

PREPARED FOR:

SPRINGHURST, L.L.C.
 5081 NEW BAUMGARTNER ROAD
 ST. LOUIS, MISSOURI 63129
 (314) 487-6717



THE **STERLING** CO.
 ENGINEERS & SURVEYORS
 5055 NEW BAUMGARTNER ROAD
 ST. LOUIS, MISSOURI 63129
 E-Mail: Sterling@sterling-eng-sur.com

PROJECT: **THE VILLAGES AT SPRINGHURST**

SHEET TITLE: DCSD CONSTRUCTION DETAILS

DRAWN: _____ DESIGNED: _____ CHECKED: _____

NO.	03	12	269
M.S.D.	SHEET		
P#	CD11		
DIGITAL FILE LOCATION	SEWER-STERLING-2		
ISSUE	03/12/05		
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