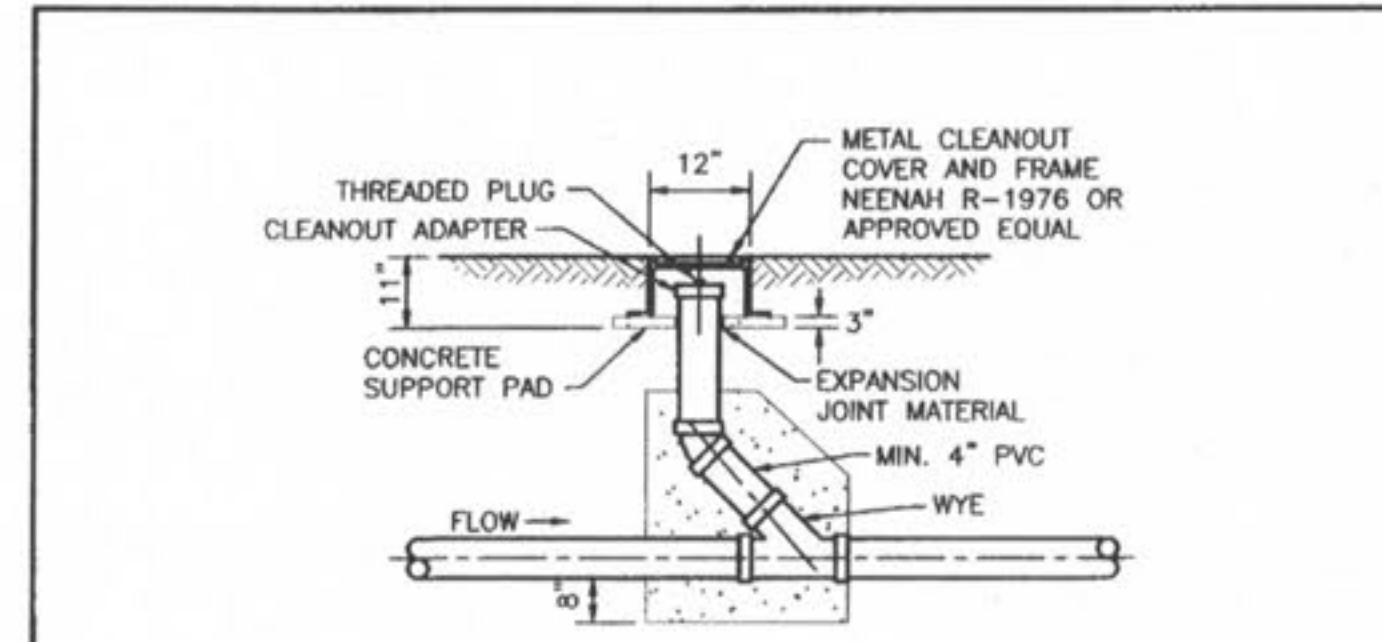


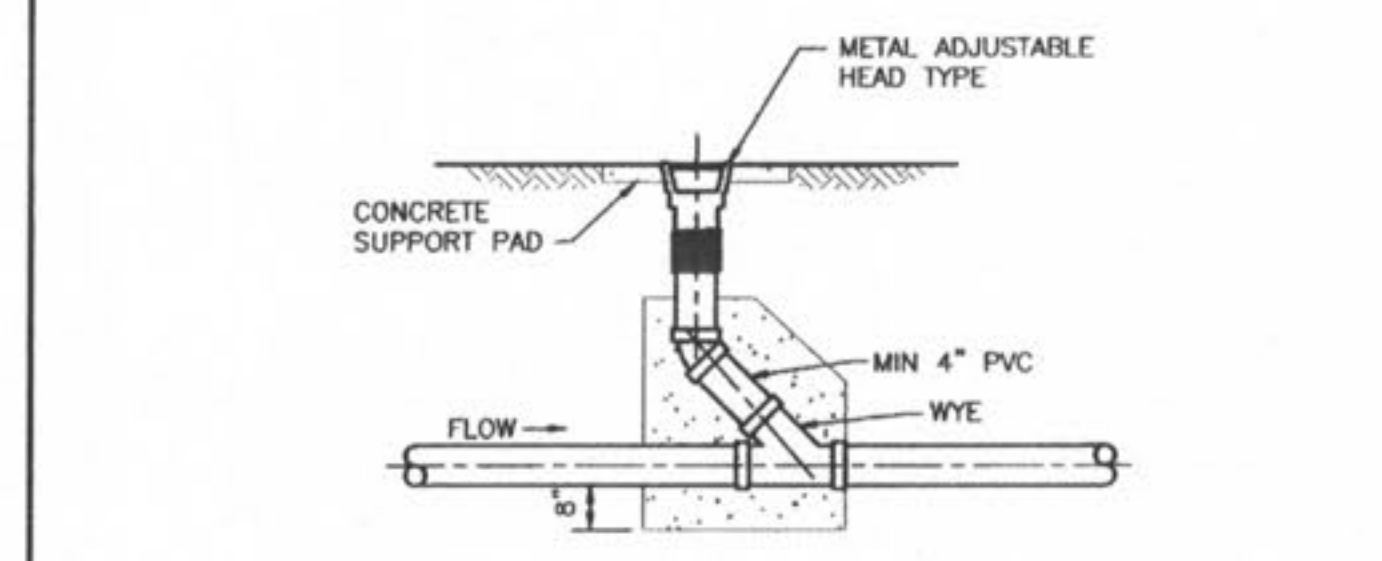
- NOTES:
1. GROUDED RIP-RAP IS REQUIRED AT ALL CREEK CROSSINGS WHERE THE EMBANKMENTS CROSSED ARE STEEPER THAN 1 VERTICAL TO 2 HORIZONTAL RATIO SLOPE; AND ALSO WHERE THERE IS 3 FEET OR LESS COVER OVER THE TOP OF THE SEWER MAIN.
 2. PLACE RIP-RAP ON LOWER 3/4 OF SLOPE, GRADE UPPER 1/4 OF SLOPE AT 1 VERTICAL TO 2 HORIZONTAL SLOPE FOR SOD OR 1 VERTICAL TO 2.5 HORIZONTAL SLOPE FOR SEED AND STRAW.
 3. RIP-RAP TO BE "MSD 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 | Des. By: BSM | App. By: KLA | Detail No. 24 |
| | Chd. By: MDOB | Date: 1-8-01 | |



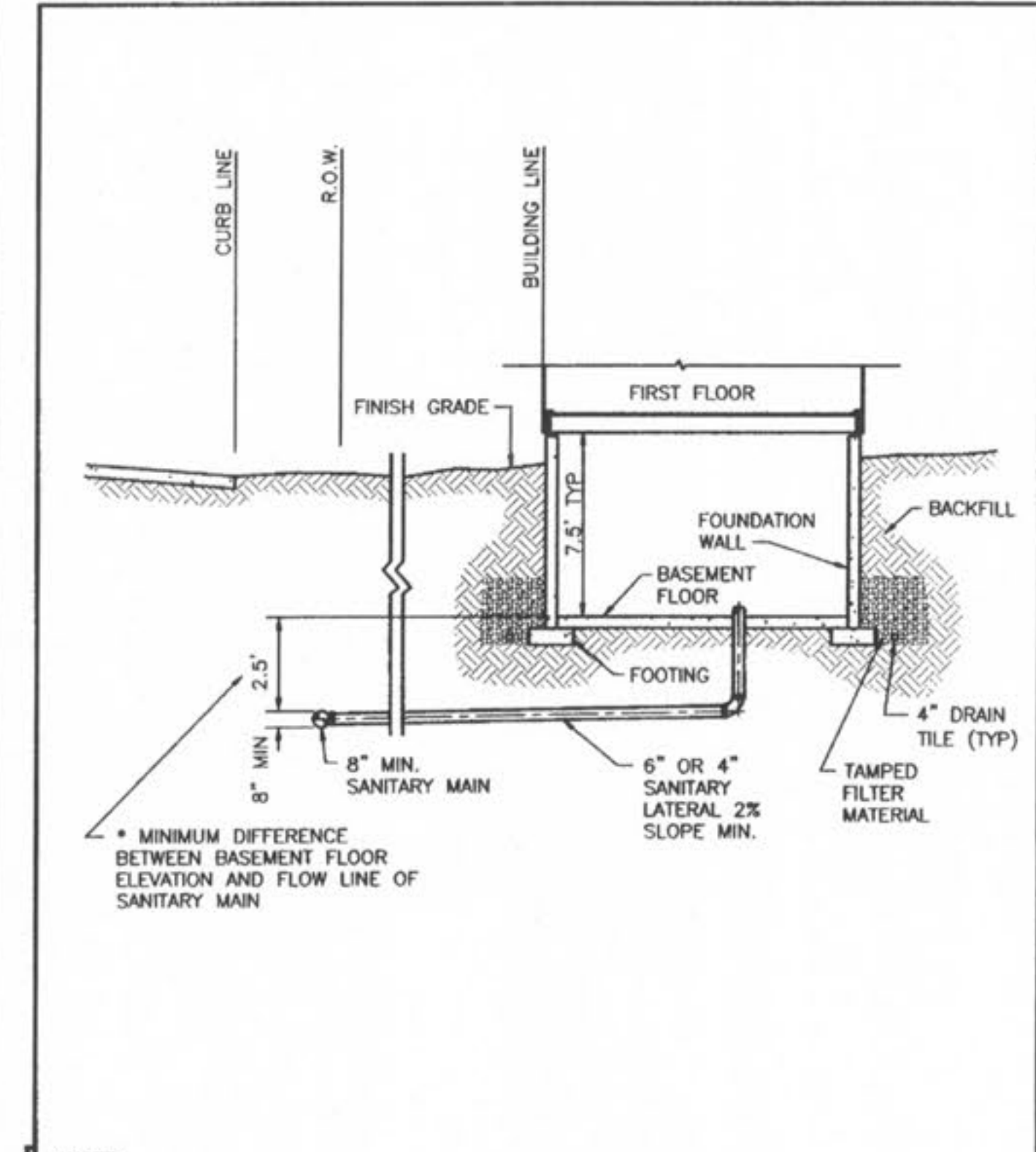
METAL FRAME AND COVER TYPE CLEANOUT



ADJUSTABLE HEAD TYPE CLEANOUT

Duckett Creek Sanitary District

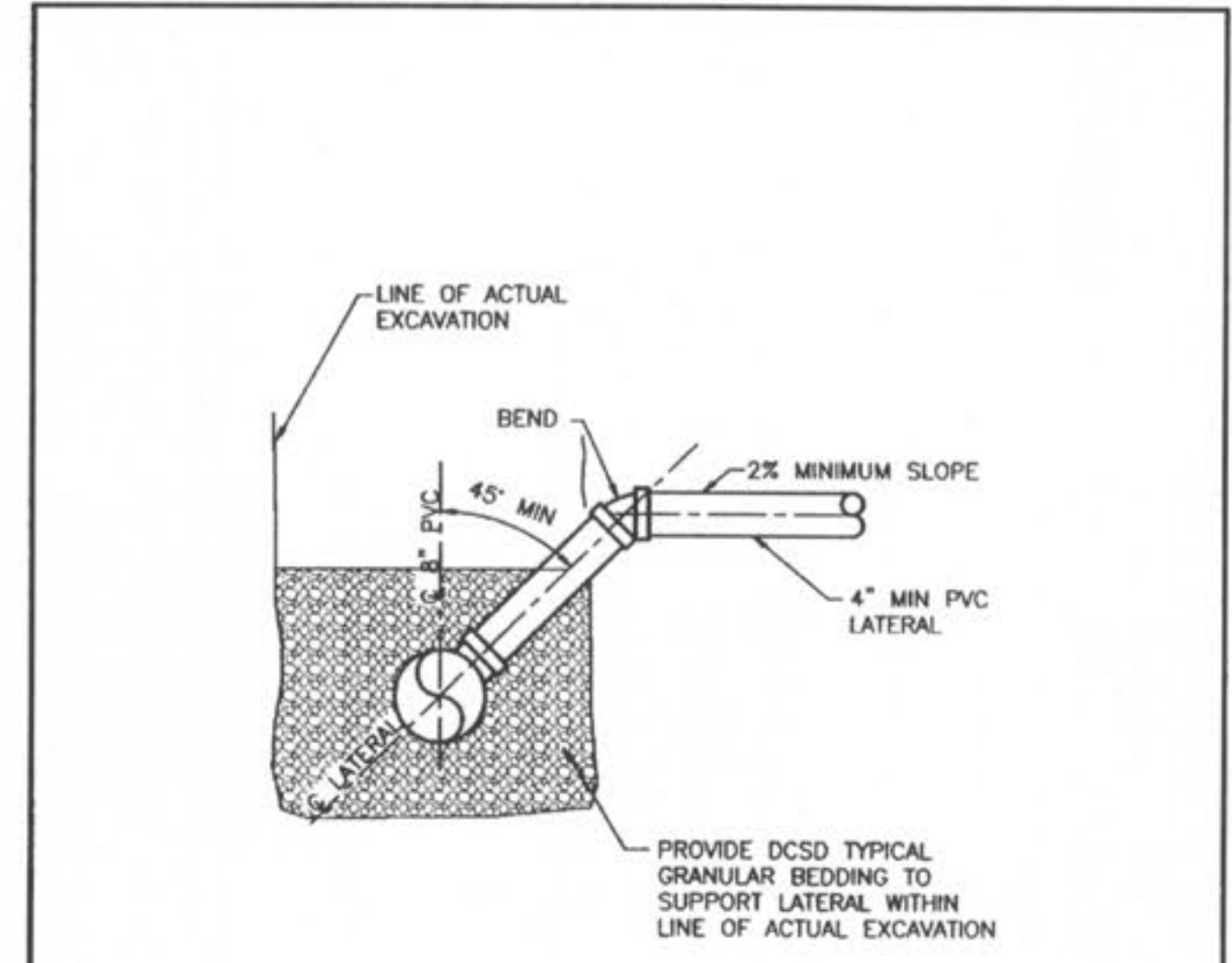
| | | | |
|--|---------------|--------------|---------------|
| TYPICAL SEWER LATERAL CLEANOUT DETAILS | Des. By: BSM | App. By: KLA | Detail No. 25 |
| | Chd. By: MDOB | Date: 1-8-01 | |



*NOTE: DIFFERENCE IN DEPTH INCREASES WITH PIPE SIZE

Duckett Creek Sanitary District

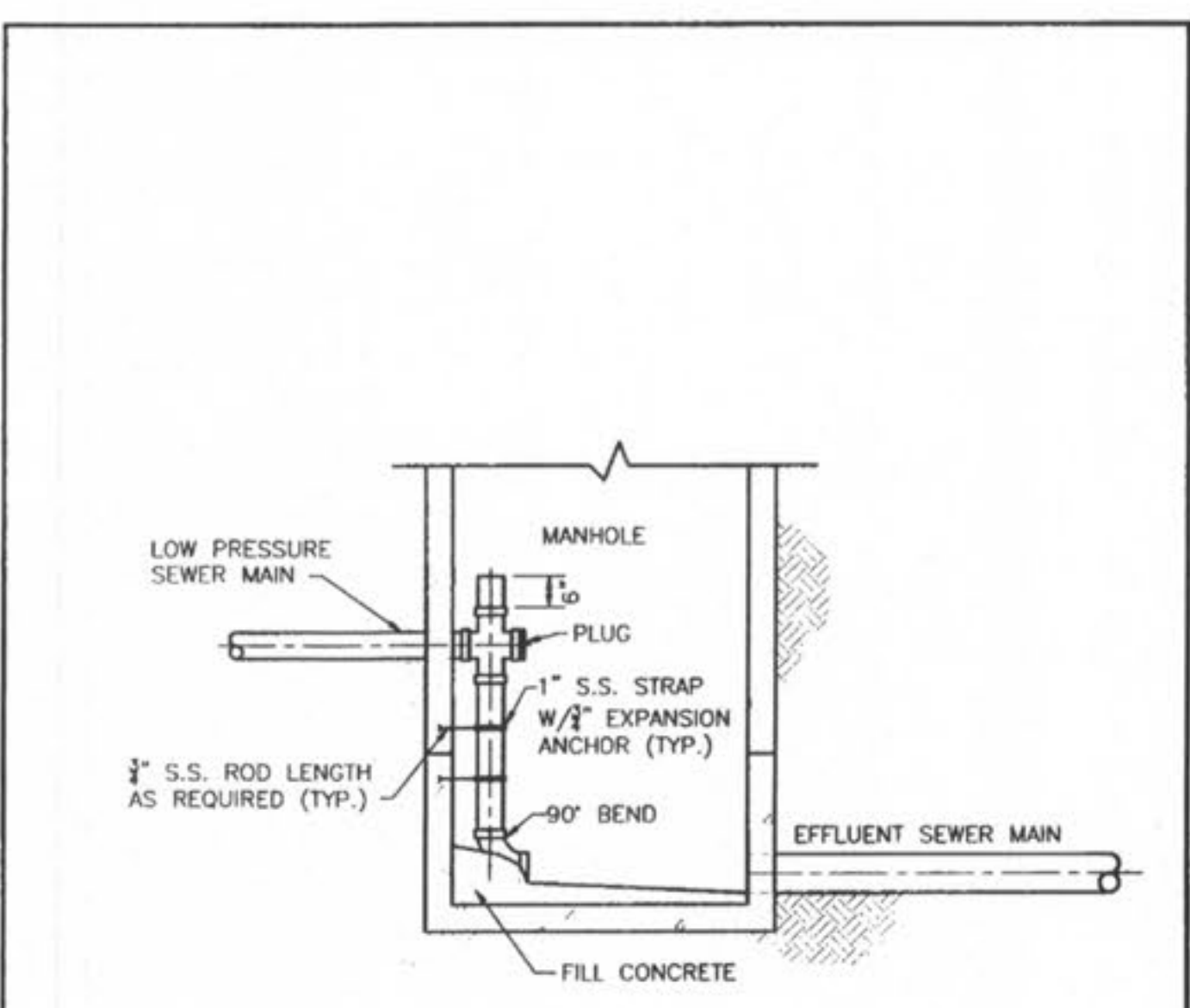
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| TYPICAL SANITARY SEWER LATERAL PROFILE | Des. By: BSM | App. By: KLA | Detail No. 26 |
| | Chd. By: MDOB | Date: 1-9-01 | |



Duckett Creek Sanitary District

SANITARY SEWER LATERAL RISER DETAIL

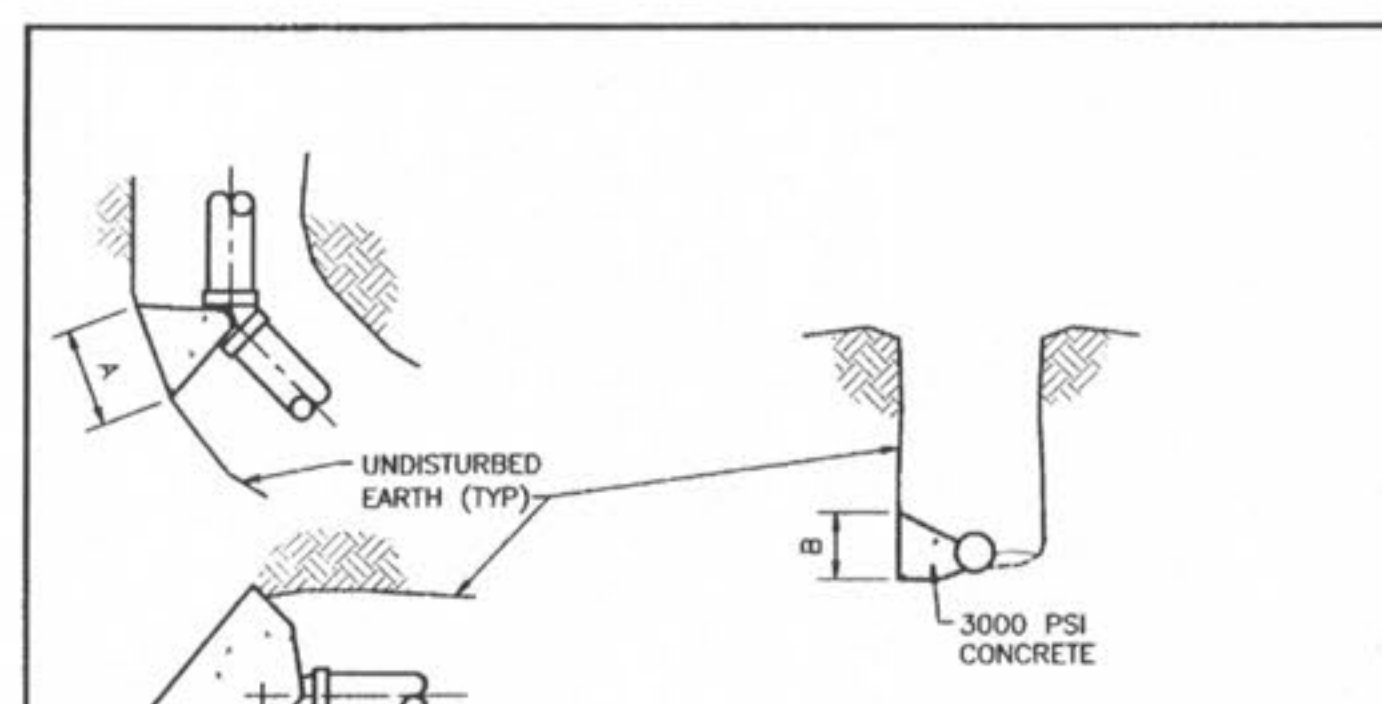
| | | | |
|-------------------------------------|---------------|--------------|---------------|
| SANITARY SEWER LATERAL RISER DETAIL | Des. By: BSM | App. By: KLA | Detail No. 27 |
| | Chd. By: MDOB | Date: 1-9-01 | |



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

Duckett Creek Sanitary District

| | | | |
|---|---------------|--------------|---------------|
| LOW PRESSURE SEWER MAIN CONNECTION AT MANHOLE | Des. By: BSM | App. By: KLA | Detail No. 28 |
| | Chd. By: MDOB | Date: 1-9-01 | |



| MAIN SIZE | A x B | | A x B | | A x B | | A x B | |
|-----------|----------|-----------|-----------|-----------|-------|--|-------|--|
| | 22 1/2" | 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 SIZE SCHEDULE | Des. By: BSM | App. By: KLA | Detail No. 29 |
| | Chd. By: MDOB | Date: 1-9-01 | |

REVISIONS

| DATE | BY | DESCRIPTION |
|--------|-----|-------------------|
| 2/8/08 | BSM | ADD CITY COMMENTS |
| 5/1/08 | KLA | ADD CITY COMMENTS |

DEVELOPER/OWNER:
THE JONES COMPANY HOMES, L.L.C.
 16640 CHESTERFIELD GROVE, SUITE 200
 CHESTERFIELD, MO 63005
 PHONE: (636) 637-7192



PRESTON WOODS - PHASE III
 IMPROVEMENT PLANS
 PRESTON WOODS LANE
 O'FALLON, MO. 63366
SANITARY SEWER DETAILS

planning • engineering • surveying • landscape architecture
Cole and Associates
 INCORPORATED
 10777 sunset office dr.
 saint louis, missouri 63127
 p: 314 984 9887 f: 314 984 0587

DESIGNED BY: JKW
 DRAWN BY: KDK
 CHECKED BY: JFH
 DATE: 12/19/07

Job Number: 07-0178
 Sheet Number: C9.4

NOTE: THE DETAILS SHOWN HEREIN ARE FOR THE PURPOSE OF PRIVATE CONSTRUCTION ONLY. PUBLIC CONSTRUCTION WILL REQUIRE STRICT ADHERENCE TO THE DETAILS PUBLISHED BY DUCKETT CREEK AND ST. CHARLES COUNTY.