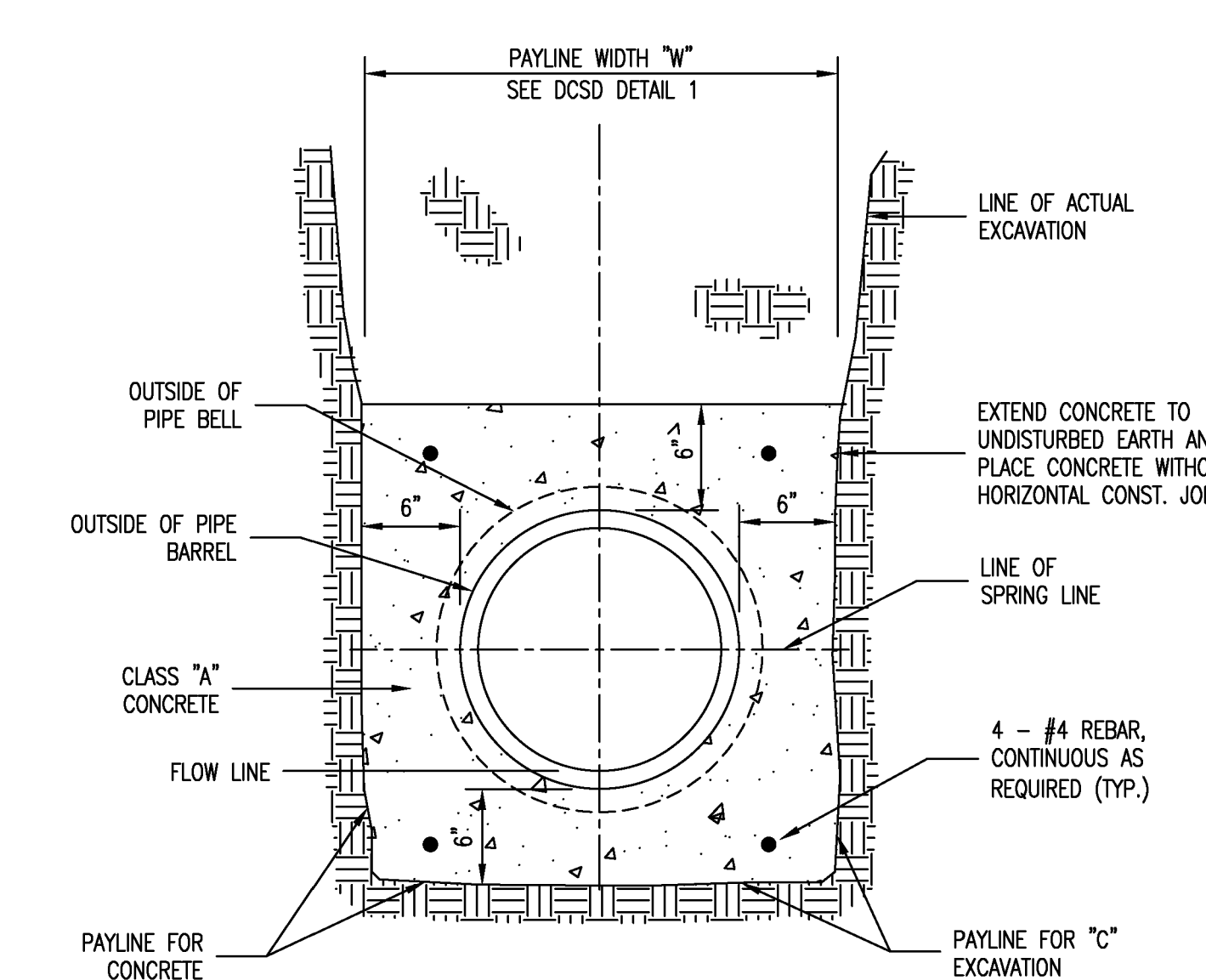
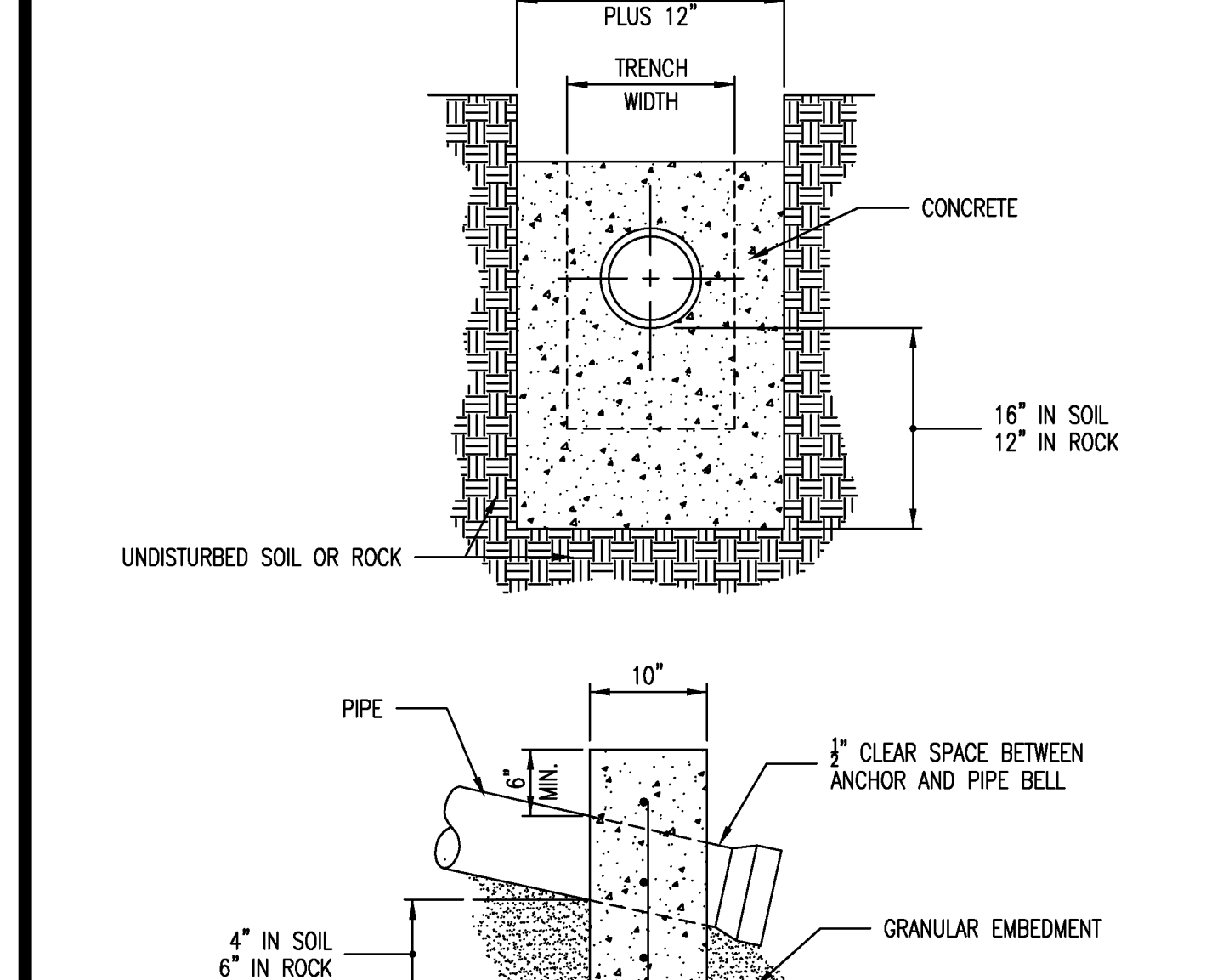


NOTES:  
 ALL PVC SANITARY SEWER PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3034 STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE SEWER PIPE, SDR-35 OR EQUAL, WITH "CLEAN" 1/2 INCH TO 1 INCH GRANULAR STONE BEDDING UNIFORMLY GRADED. THIS BEDDING SHALL EXTEND FROM 4 INCHES BELOW THE PIPE TO SPRINGLINE OF PIPE. IMMEDIATE BACKFILL OVER PIPE SHALL CONSIST OF SAME SIZE "CLEAN" OR "MINUS" STONE FROM SPRINGLINE OF PIPE TO 6 INCHES ABOVE THE TOP OF PIPE. FINAL BACKFILL MATERIAL SHALL BE OF SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT AS OTHER MATERIAL IS SPECIFIED. DEBRIS, FROZEN MATERIAL, LARGE ROCKS OR STONES, OR OTHER UNSTABLE MATERIALS SHALL NOT BE USED WITHIN 2 FEET FROM TOP OF PIPE.



NOTE:  
 SUPPORT PIPE TO PREVENT DISPLACEMENT DURING PLACEMENT OF CONCRETE.

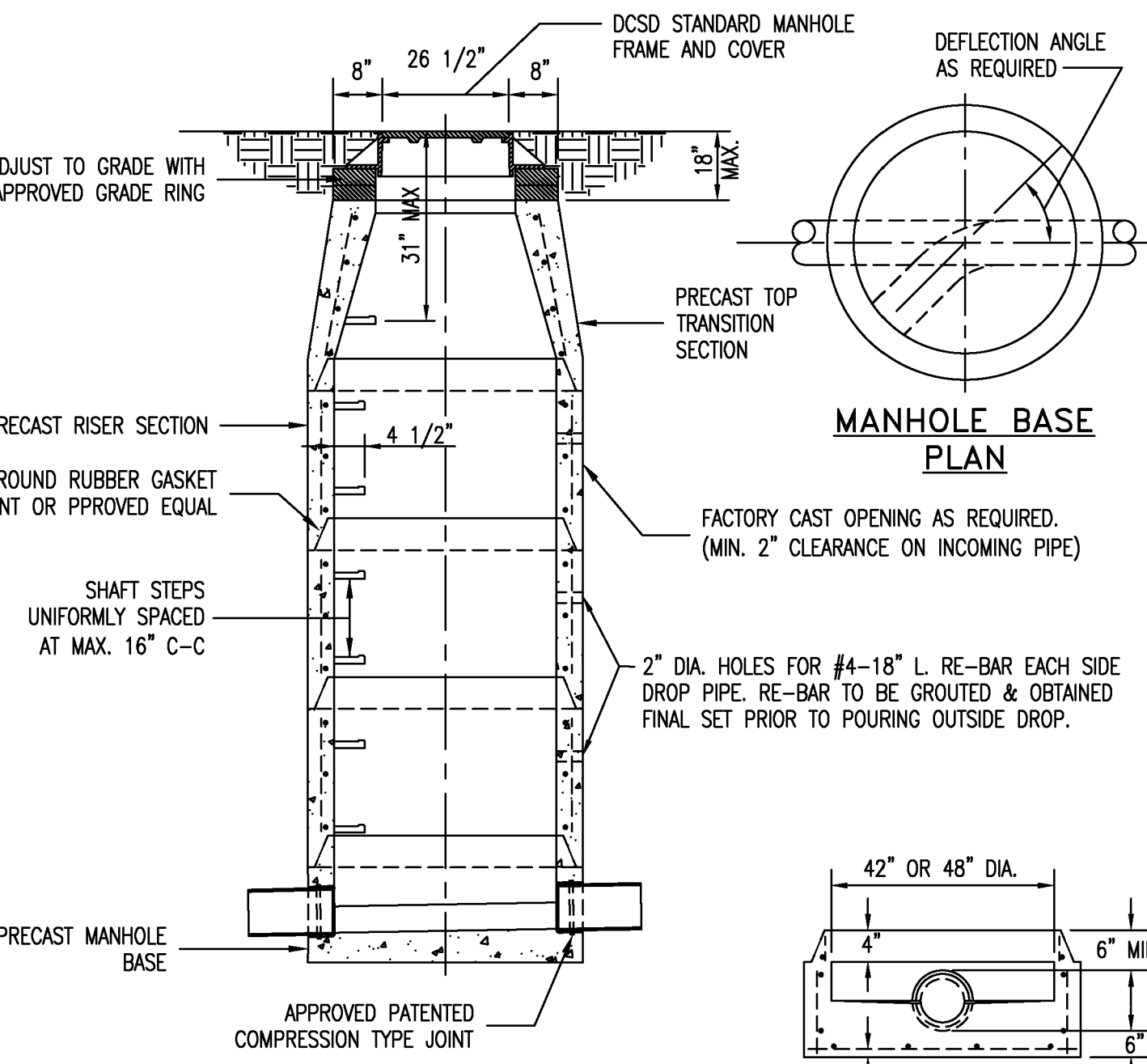


ANCHOR SPACING	
SLOPE	MAX. DISTANCE
15%-35%	36"
35%-50%	24"
>50%	12" OR ONE PER JOINT OF PIPE

**Duckett Creek Sanitary District**  
 PIPE BEDDING CLASS "C" (FOR ALL EXCEPT REINFORCED CONCRETE PIPE)  
 Down By: BSM App By: KA Detail No: 3  
 Ckd By: MDOB Date: JULY 2016

**Duckett Creek Sanitary District**  
 TYPICAL CONCRETE ENCASUREMENT  
 Down By: BSM App By: KA Detail No: 4  
 Ckd By: MDOB Date: DEC. 2015

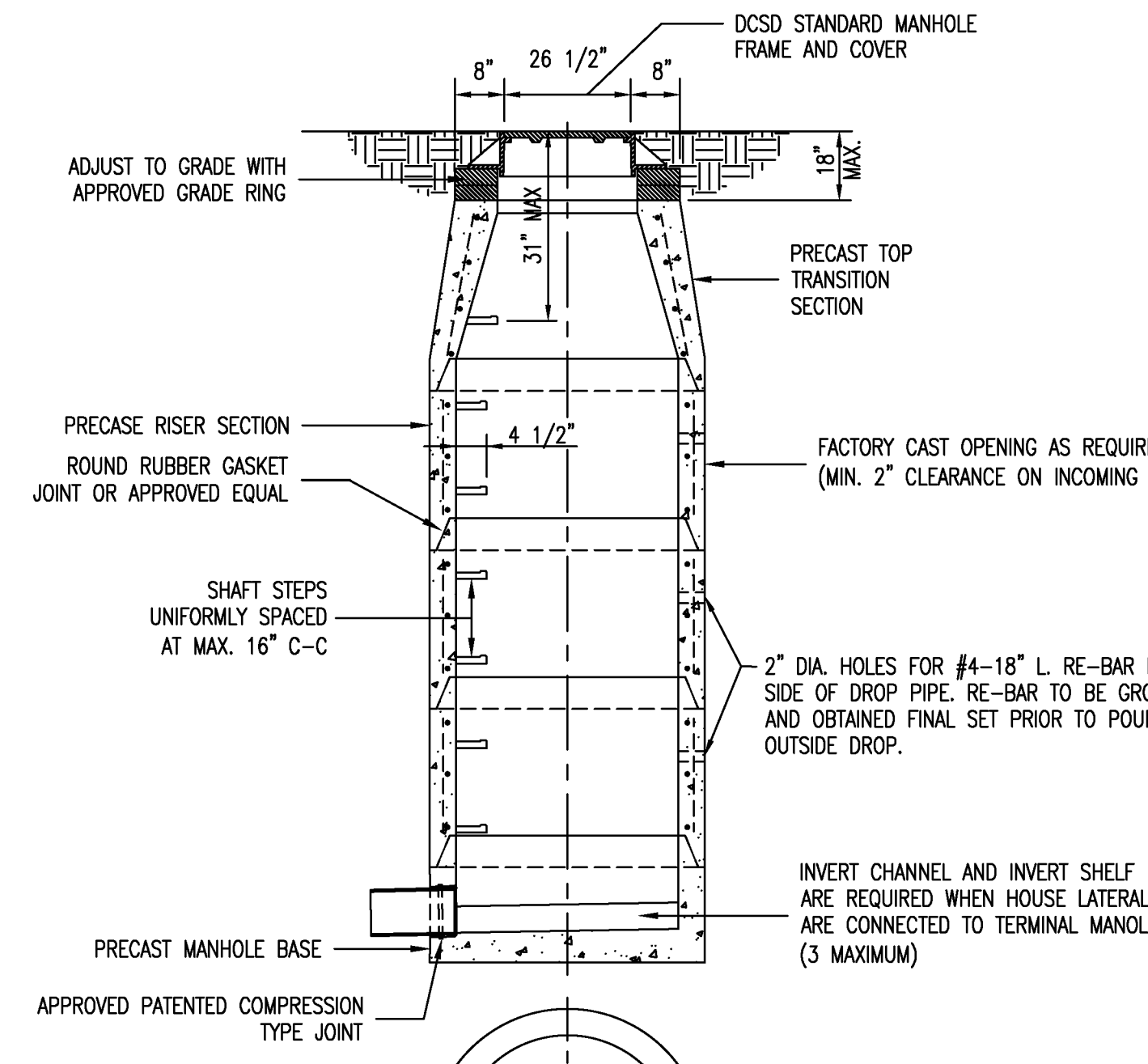
**Duckett Creek Sanitary District**  
 CONCRETE ANTI-SLIP COLLAR FOR PVC PIPE ON PIPE SLOPES FROM 15% TO 50%  
 Down By: MSM App By: KA Detail No: 5  
 Ckd By: MDOB Date: DEC. 2015



SECTION OF MANHOLE		DIMENSION
TOP TRANSITION	UPPER LOWER	26 1/2" DIA. 42" DIA.
BOTTOM SECTION	8" DIA. PIPE	42" DIA.
BOTTOM SECTION	10" THRU 36" DIA. PIPE	48" DIA.
BOTTOM SECTION	42" DIA. PIPE	60" DIA.

NOTES:  
 1. ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.  
 2. BRICK SHALL NOT BE USED ON MANHOLES.

SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

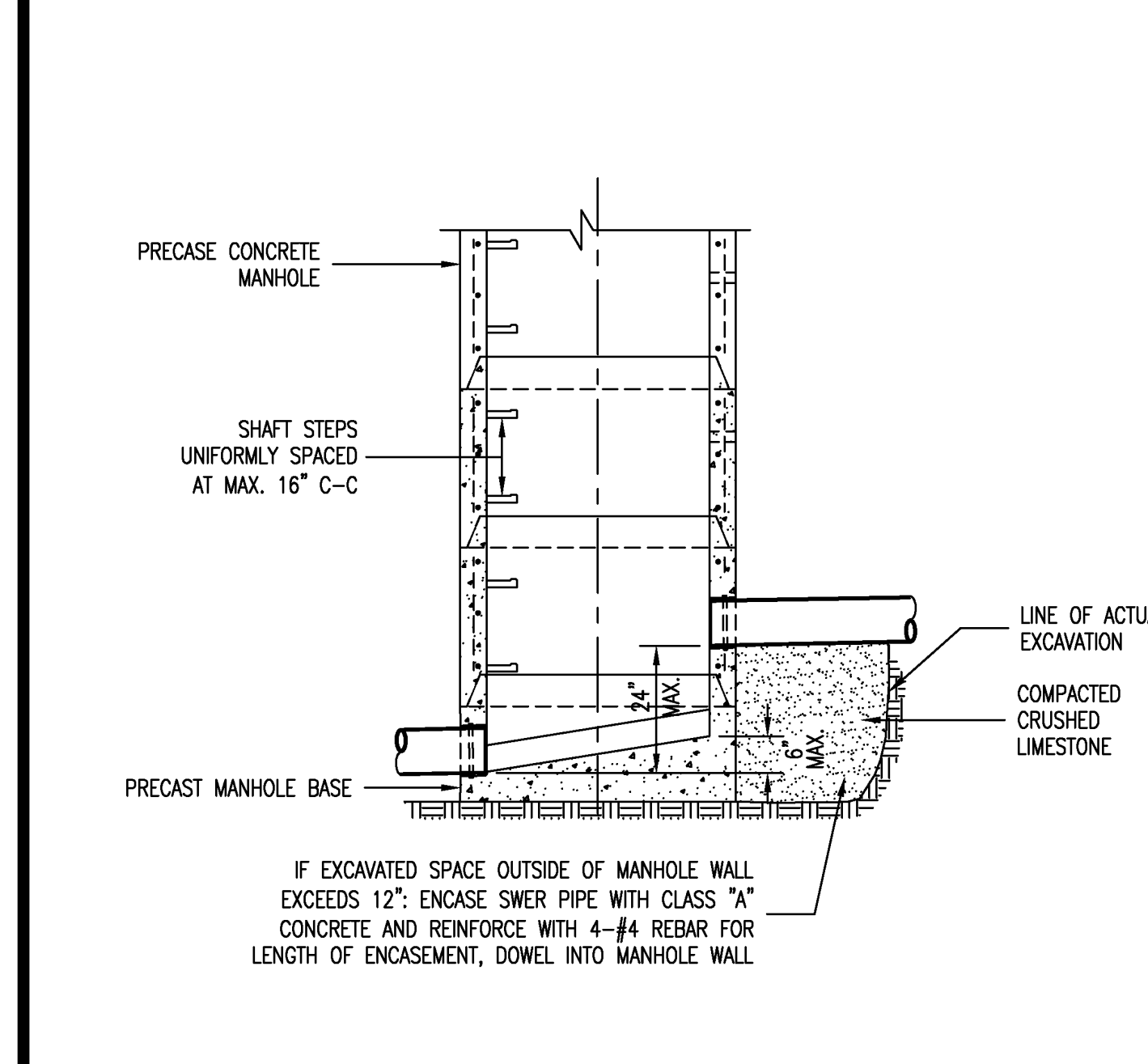


SECTION OF MANHOLE		DIMENSION
TOP TRANSITION	UPPER LOWER	26 1/2" DIA. 42" DIA.
BOTTOM SECTION	8" DIA. PIPE	42" DIA.
BOTTOM SECTION	10" THRU 36" DIA. PIPE	48" DIA.
BOTTOM SECTION	42" DIA. PIPE	60" DIA.

NOTES:  
 1. ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.  
 2. BRICK SHALL NOT BE USED ON MANHOLES.

SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

**Duckett Creek Sanitary District**  
 PRECAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"  
 Down By: BSM App By: KLA Detail No: 7  
 Ckd By: MDOB Date: DEC. 2015



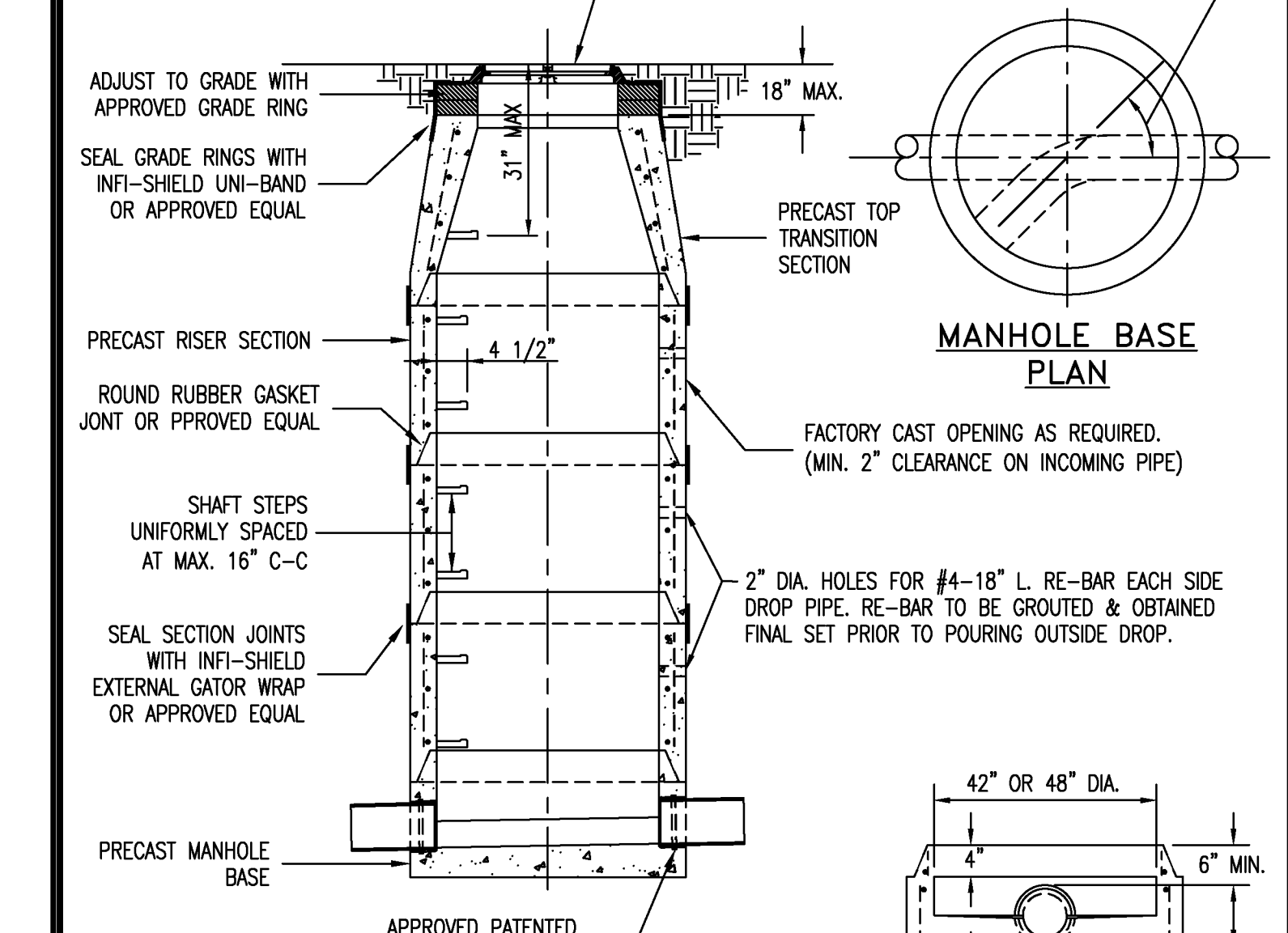
SECTION OF MANHOLE		DIMENSION
TOP TRANSITION	UPPER LOWER	26 1/2" DIA. 42" DIA.
BOTTOM SECTION	8" DIA. PIPE	42" DIA.
BOTTOM SECTION	10" THRU 36" DIA. PIPE	48" DIA.
BOTTOM SECTION	42" DIA. PIPE	60" DIA.

NOTES:  
 1. ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.  
 2. BRICK SHALL NOT BE USED ON MANHOLES.

SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

**Duckett Creek Sanitary District**  
 INSIDE FOULWATER DROP MANHOLE (SWEEP INLET)  
 Down By: BSM App By: KA Detail No: 9  
 Ckd By: MDOB Date: DEC. 2015

**Duckett Creek Sanitary District**  
 PRECAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"  
 Down By: BSM App By: KLA Detail No: 7  
 Ckd By: MDOB Date: DEC. 2015



SECTION OF MANHOLE		DIMENSION
TOP TRANSITION	UPPER LOWER	26 1/2" DIA. 42" DIA.
BOTTOM SECTION	8" DIA. PIPE	42" DIA.
BOTTOM SECTION	10" THRU 36" DIA. PIPE	48" DIA.
BOTTOM SECTION	42" DIA. PIPE	60" DIA.

NOTES:  
 1. ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.  
 2. BRICK SHALL NOT BE USED ON MANHOLES.

SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

**Duckett Creek Sanitary District**  
 PRECAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18" IN FLOODWAY AREAS  
 Down By: MSM App By: KLA Detail No: 6  
 Ckd By: MDOB Date: DEC. 2015

**Duckett Creek Sanitary District**  
 PRECAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"  
 Down By: BSM App By: KLA Detail No: 7  
 Ckd By: MDOB Date: DEC. 2015

**Duckett Creek Sanitary District**  
 TERMINAL MANHOLE FOR SEWERS 8" THROUGH 18"  
 Down By: BSM App By: KLA Detail No: 8  
 Ckd By: MDOB Date: DEC. 2015

**Duckett Creek Sanitary District**  
 INSIDE FOULWATER DROP MANHOLE (SWEEP INLET)  
 Down By: BSM App By: KA Detail No: 9  
 Ckd By: MDOB Date: DEC. 2015

**Duckett Creek Sanitary District**  
 INSIDE DROP MANHOLE  
 Down By: MSM App By: KA Detail No: 10  
 Ckd By: MDOB Date: JULY 2016

636-584-0540 (tel.)  
 636-584-0512 (fax)  
 mail@ochran.com  
 530A E. Independence Dr.  
 Union, Missouri 63084

**UCHRAN**  
 Civil Engineering  
 Land Surveying  
 Architecture  
 Site Development  
 General Consulting  
 Master Planning

Missouri State Certificate of Authority Numbers:  
 Survey: 000380  
 Engineering: 001655  
 Architecture: 2002014240

Three working days prior to the start of any excavation call 1-800-465-8716 for utility location information.

All OSHA rules & regulations and regulations of the Missouri Department of Transportation shall be strictly followed (i.e. trenching, blasting, etc.)

STATE OF MISSOURI  
 REGISTERED PROFESSIONAL ENGINEER  
 License No. 001655  
 PE-200602845

THE STREETS OF CALEDONIA  
 PHASE II RESIDENTIAL  
 O'FALLON, MISSOURI

DATE: \_\_\_\_\_  
 DRAWN BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

DATE: \_\_\_\_\_  
 TUG: \_\_\_\_\_  
 ERR: \_\_\_\_\_

DATE: JAN. 13, 2021  
 SCALE: NO SCALE  
 PROJ. NO: 17-6821  
 SHEET NO: C14.08

OWNER/DEVELOPER:  
 DD LAND DEVELOPMENT, LLC  
 10407 BAUR BLVD, SUITE B  
 ST. LOUIS, MO 63132

Drawing name: F:\17-6821 - 260 Acre Tract along Hwy 40, O'Fallon, MO\AutoCad Drawings\6821 - Plan Sheets\Construction Drawings\PH2 Residential\Plans\32-Detail Sheet Phase 2.dwg Tab: C14.08  
 Plotted on: Jan 13, 2021 - 3:51pm Plotted by: jmayor