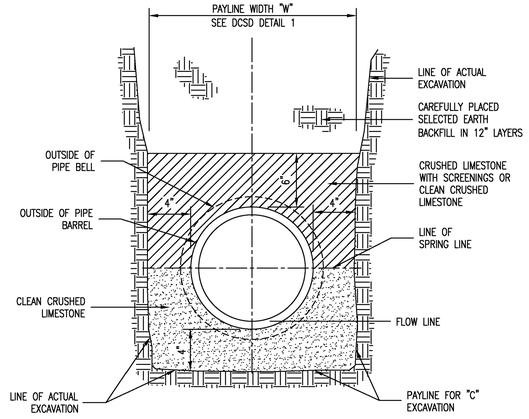


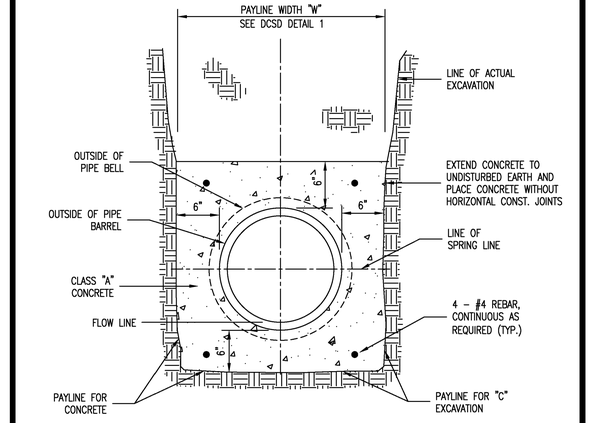
NOTES:
ALL PVC SANITARY SEWER PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3034 STANDARD SPECIFICATION FOR POLYVINYL CHLORIDE SEWER PIPE, SDR-35 OR EQUAL, WITH "CLEAN" 1/2 INCH TO 1 INCH GRANULAR STONE BEDDING UNIFORMLY GRADED. THIS BEDDING SHALL EXTEND FROM 4 INCHES BELOW THE PIPE TO SPRINGLINE 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.

Duckett Creek Sanitary District

Duckett Creek Sanitary District

PIPE BEDDING CLASS "C" (FOR ALL EXCEPT REINFORCED CONCRETE PIPE)

Dwn By:	App By:	Detail No.
BSM	KA	3
Ckd By:	Date:	
MDOB	JULY 2016	



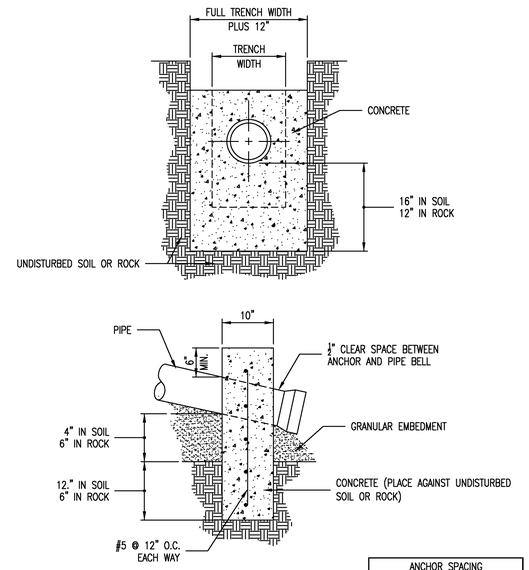
NOTE:
SUPPORT PIPE TO PREVENT DISPLACEMENT DURING PLACEMENT OF CONCRETE.

Duckett Creek Sanitary District

Duckett Creek Sanitary District

TYPICAL CONCRETE ENCASEMENT

Dwn By:	App By:	Detail No.
BSM	KA	4
Ckd By:	Date:	
MDOB	DEC. 2015	



SIDE ELEVATION

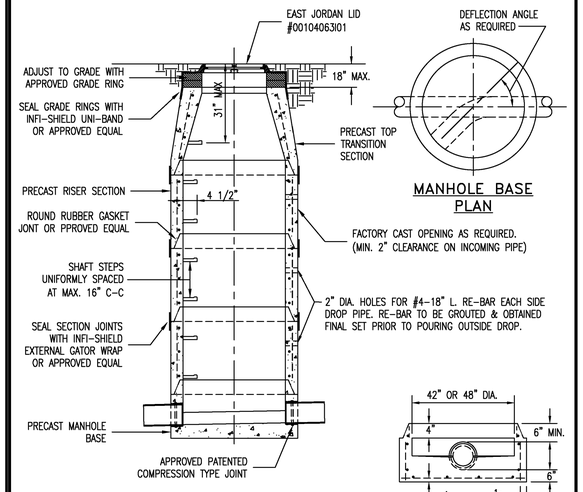
ANCHOR SPACING	
SLOPE	MAX. DISTANCE
15%-35%	36'
35%-50%	24'
>50%	12' OR ONE PER JOINT OF PIPE

Duckett Creek Sanitary District

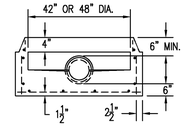
Duckett Creek Sanitary District

CONCRETE ANTI-SLIP COLLAR FOR PVC PIPE ON PIPE SLOPES FROM 15% TO 50%

Dwn By:	App By:	Detail No.
MSM	KA	5
Ckd By:	Date:	
	DEC. 2015	



MANHOLE BASE PLAN



BASE SECTION

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.

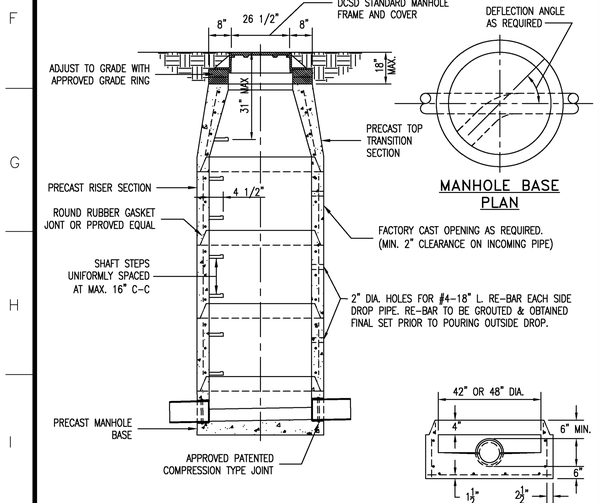
SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

Duckett Creek Sanitary District

Duckett Creek Sanitary District

PRECAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18" IN FLOODWAY AREAS

Dwn By:	App By:	Detail No.
MSM	KLA	6
Ckd By:	Date:	
	DEC. 2015	



MANHOLE BASE PLAN

BASE SECTION

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.

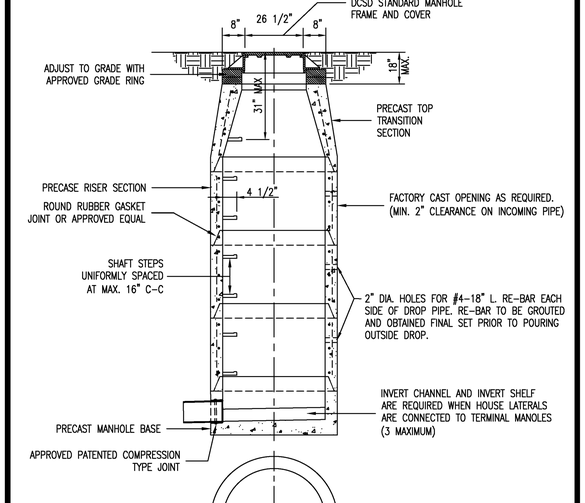
SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

Duckett Creek Sanitary District

Duckett Creek Sanitary District

PRECAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"BSM

Dwn By:	App By:	Detail No.
BSM	KLA	7
Ckd By:	Date:	
MDOB	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.

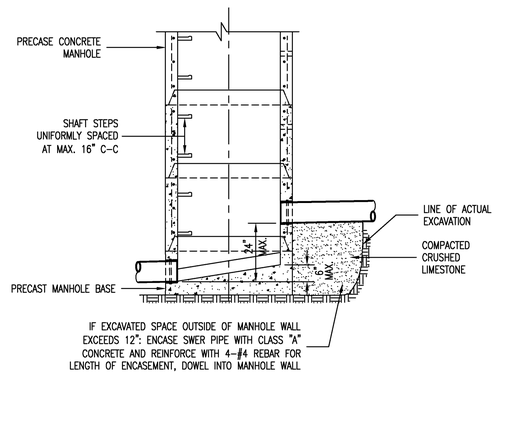
SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

Duckett Creek Sanitary District

Duckett Creek Sanitary District

TERMINAL MANHOLE FOR SEWERS 8" THROUGH 18"

Dwn By:	App By:	Detail No.
BSM	KLA	8
Ckd By:	Date:	
MDOB	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.

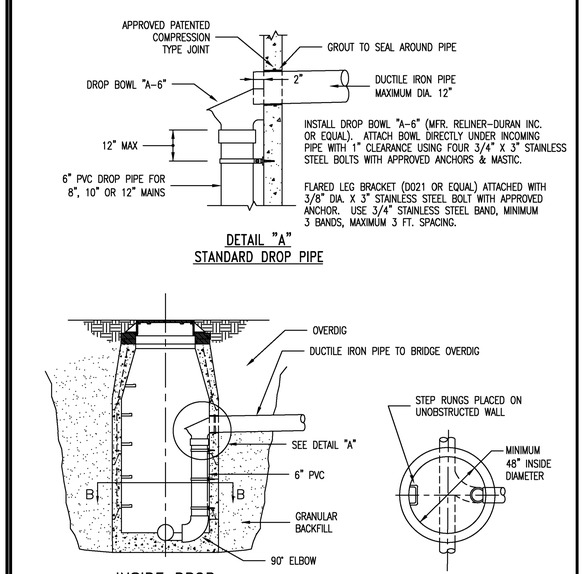
SEE A.S.T.M. C-478 FOR MINIMUM STEEL REQUIREMENTS.

Duckett Creek Sanitary District

Duckett Creek Sanitary District

INSIDE FOULWATER DROP MANHOLE (SWEEP INLET)

Dwn By:	App By:	Detail No.
BSM	KA	9
Ckd By:	Date:	
MDOB	DEC. 2015	



DETAIL "A" STANDARD DROP PIPE

INSIDE DROP MANHOLE

SECTION B-B

NOTES:
1. ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.
2. INSIDE DROP CONNECTION SHALL NOT ENTER AT A JOINT.

Duckett Creek Sanitary District

Duckett Creek Sanitary District

INSIDE DROP MANHOLE

Dwn By:	App By:	Detail No.
MSM	KA	10
Ckd By:	Date:	
	JULY 2016	

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

OCHRAN
530A E. Independence Dr.
Union, Missouri 63084
636-584-0540 (fax)
636-584-0542 (tel)
mail@ochranengr.com
• 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 on this site, contractor shall contact Missouri One Call for utility location information.

All OSHA rules & regulations established for the type of construction involved in these plans shall be strictly followed (ie. Trenching, Blasting, etc.)

STATE OF MISSOURI
TIMOTHY SCHOWE
Timothy Schowe
NUMBER PE-2018000268
5-9-22
PROFESSIONAL ENGINEER

THE STREETS OF CALEDONIA
PHASE 4 RESIDENTIAL
O'FALLON, MISSOURI

REVISION:	DATE:	DRN. BY:	APPD. BY:

DETAIL SHEET

DRN. BY: JMM APPD. BY: ERR
DATE: MAY 09, 2022
SCALE: NO SCALE
PROJ. NO.: 17-6821
DWG. NO.: C14.09

Drawing name: F:\17-6821 - 280 Acre Tract along Hwy 40, O'Fallon, MO\AutoCad Drawings\6821 - Plan Sheets\Construction Drawings\PH4 Residential Plans\39_Detail Sheet - Phase 4.dwg Tab: C14.09 Plotted on: May 08, 2022 - 4:08pm Plotted by: jmeyer