

ISSUE	REMARKS/DATE
1	2023-09-28, INITIAL SUBMITTAL
2	2024-02-01, CITY COMMENTS
3	2024-04-17, CITY COMMENTS
4	2024-06-20, FOR APPROVAL

PRECAST CONCRETE MANHOLE

SHAFT STEPS UNIFORMLY SPACED AT MAX. 16" C-C

LINE OF ACTUAL EXCAVATION

COMPACTED CRUSHED LIMESTONE

PRECAST MANHOLE BASE

IF EXCAVATED SPACE OUTSIDE OF MANHOLE WALL EXCEEDS 12", ENCASE SWER PIPE WITH CLASS "A" CONCRETE AND REINFORCE WITH 4-#4 REBAR FOR LENGTH OF ENCASEMENT, DOWEL INTO MANHOLE WALL

SECTION OF MANHOLE	DIMENSION
TOP UPPER TRANSITION	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.

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

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

Duckett Creek Sanitary District

INSIDE FOULWATER DROP MANHOLE (SWEEP INLET)

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

APPROVED PATENTED COMPRESSION TYPE JOINT

GROUT TO SEAL AROUND PIPE

DUCTILE IRON PIPE MAXIMUM DIA. 12"

INSTALL DROP BOWL "A-6" (MFR. RELINER-DURAN INC. OR EQUAL). ATTACH BOWL DIRECTLY UNDER INCOMING PIPE WITH 1" CLEARANCE USING FOUR 3/4" X 3" STAINLESS STEEL BOLTS WITH APPROVED ANCHORS & MASTIC.

FLARED LEG BRACKET (D021 OR EQUAL) ATTACHED WITH 3/8" DIA. X 3" STAINLESS STEEL BOLT WITH APPROVED ANCHOR. USE 3/4" STAINLESS STEEL BAND, MINIMUM 3 BANDS, MAXIMUM 3 FT. SPACING.

DETAIL "A" STANDARD DROP PIPE

INSIDE DROP MANHOLE

OVERDIG

DUCTILE IRON PIPE TO BRIDGE OVERDIG

STEP RUNGS PLACED ON UNOBSTRUCTED WALL

MINIMUM 48" INSIDE DIAMETER

NOTE: ALL INVERTS SHALL HAVE POSITIVE DRAINAGE THROUGH MANHOLE.

Duckett Creek Sanitary District

INSIDE DROP MANHOLE

Own By: MSM App By: KA Detail No. 10
 Ckd By: MDOB Date: DEC. 2015

CAST IRON MANHOLE FRAME

SECTION A-A (230 lbs)

Duckett Creek Sanitary District

CAST IRON MANHOLE FRAME

Own By: BSM App By: KLA Detail No. 11
 Ckd By: MDOB Date: DEC. 2015

MANHOLE FRAME AND COVER

SECTION A-A

Duckett Creek Sanitary District

MANHOLE FRAME AND COVER

Own By: BSM App By: KLA Detail No. 12
 Ckd By: MDOB Date: DEC. 2015

NOTE: IF WATER-TIGHT COVER REQUIRED USE APPROVED BUTYL RUBBER PREFORMED MASTIC SEALANT BETWEEN COVER AND FRAME.

TYPE "T"

NOTE B: PROVIDE 1/8" RAISED LETTERING APPROXIMATELY 3/4" TO 1" HIGH
 B1: DUCKETT CREEK SANITARY DISTRICT
 B2: SANITARY SEWER

TYPE "N"

3 CORE HOLES ON A 18 3/4" DIA. B.C. FOR 3-TYPE "N" CAM LOCKS 120" APART. 7/8" x 3 1/2" STAINLESS STEEL BOLTS

2 - CONCEALED PICKHOLES AT 180°

Duckett Creek Sanitary District

CAST IRON MANHOLE COVERS (LOCK TYPE)

Own By: BSM App By: KLA Detail No. 14
 Ckd By: MDOB Date: DEC. 2015

LOCK LUG

N.T.S.

LOCK LUG

WASHER 1 1/2" O.D. MAX.

WASHER 1 1/2" O.D. MAX.

7/8" x 3 1/2" N.C. STAINLESS STEEL 18-8 HEX HD. BOLT WITH STAINLESS STEEL WASHER N43500 - THREADED TO 1/2" OF THE HEAD

2 1/2" DIA. MIN.

1" DIA.

DRILL & TAP 7/8"-9 N.C.

1 1/2" O.D. MAX. STAINLESS STEEL WASHER

DRILL FOR STAINLESS STEEL HAIR PINS FOR 7/8" DIA. SHAFT

DRILL FOR STAINLESS STEEL HAIR PINS FOR 7/8" DIA. SHAFT

Duckett Creek Sanitary District

LOCKING DEVICE FOR TYPE "N" LOCK TYPE MANHOLE COVER

Own By: BSM App By: KLA Detail No. 16
 Ckd By: MDOB Date: DEC. 2015

MANHOLE STEP FOR PRECAST MANHOLE

SECTION A-A

COPOLYMER POLYPROPYLENE PLASTIC

Duckett Creek Sanitary District

MANHOLE STEP FOR PRECAST MANHOLE

Own By: BSM App By: KA Detail No. 18
 Ckd By: MDOB Date: DEC. 2015

SDR-35 x C900 BELL x SPIGOT ADAPTERS

SIZE CATALOG NO. A B C D E F G H CT PT

4"	334-040	4.56	8.23	4.25	4.10	3.94	4.80	2.72	2.7	.32	.25
6"	334-060	6.68	9.93	6.31	4.57	5.88	6.90	3.72	3.5	.45	.36

Duckett Creek Sanitary District

SDR-35 x C900 BELL AND SPIGOT ADAPTERS

Own By: BSM App By: KA Detail No. 19A
 Ckd By: MDOB Date: DEC. 2015

PROJECT TITLE

HARVEST AT HOPEWELL

O'Fallon, Missouri

O'FALLON PHASE 1B

THE **STERLING** CO. ENGINEERS & SURVEYORS

6055 New Baumgartner Road
 St. Louis, Missouri 63129
 Ph 314-487-0440 Fax 314-487-8944
 www.sterling-eng-sur.com
 Corporate Certificate of Authority #001348

Date: 05-20-2024
 Michael G. Boarding
 License No. MO E-28643
 Professional Engineer

HARVEST HOPEWELL, LLC
 5091 New Baumgartner Road
 St. Louis, Missouri 63129

DCSD SANITARY DETAILS

P+Z No. 21-004994
 City No. 21-011444
 Date: 05-20-2024
 Job No. 20-09-327

Page No.

DTL-4

IMP

FINAL PLAN Approval Date: Dec. 16, 2021

Drawing name: V:\20090227 Highway N Acambridge\Drawings\Improvements\9227 IMP DETAILS.dwg, Plotted on: May 20, 2024 - 10:25am, Plotted by: jhaldenhaus