SANITARY SEWER AS - BUILTS

~~PLANS FOR THE CONSTRUCTION OF SANITARY SEWERS~~

FOR

O'FALLON CHRISTIAN CHURCH

PART OF THE NORTHEAST QUARTER OF SECTION 30
TOWNSHIP 47 NORTH RANGE 3 EAST
ST. CHARLES COUNTY, MO

GENERAL NOTES

1) Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.

2) All manhole and inlet tops built without elevations furnished by the Engineer will be the responsibility of the Sewer Contractor.

3) 8" P.V.C. sanitary sewer pipe shall meet the following standards. A.S.T.M.-D-3034 SDR-35, with wall thickness compression joint A.S.T.M.-D-3212. An appropriate rubber seal waterstop as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures.

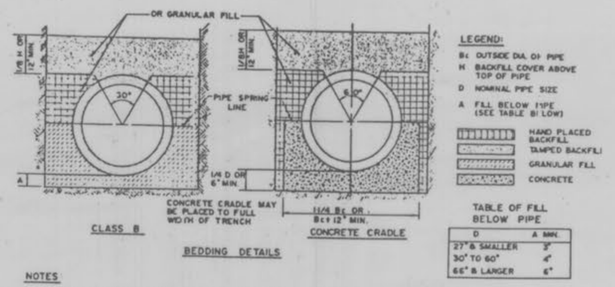
4) All filled places, including trench backfills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 90% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M. D-698).

5) All trench backfills under paved areas shall be granular backfill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench backfills may be earth material (free of large clods or stones) and shall be water jetted.

6) All construction and materials used shall conform to current City of O'Fallon Standards.

7) All P.V.C. sanitary sewer pipe shall be embedded as shown on Bedding Details.

8) SITE BENCHMARK: Iron pipe at N.E. property corner of O'Fallon Christian Church. Elevation: 640.39



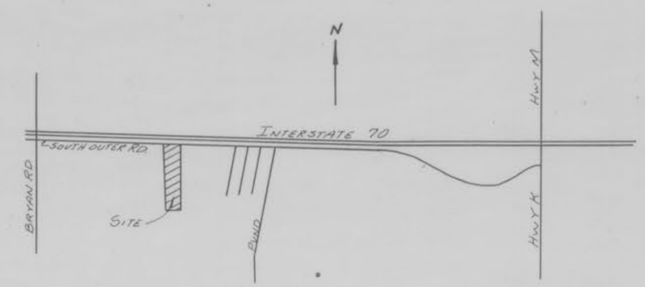
BEDDING DETAILS

TABLE OF FILL BELOW PIPE

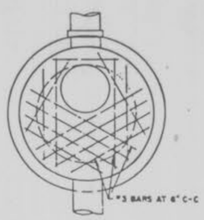
D	A MIN.
27" & SMALLER	3"
30" TO 60"	4"
66" & LARGER	6"

NOTES

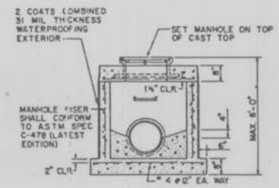
1. GRANULAR FILL TO BE CRUSHED STONE OR PEA GRAVEL WITH NOT LESS 95% PASSING 1/2" AND NOT LESS THAN 95% TO BE RETAINED ON A #4, TO BE PLACED IN NOT MORE THAN 6" LAYERS AND COMPACTED BY SLICING WITH A SHOVEL. (1/2" & #4 REFERS TO SIEVE SIZE)
2. TAMPED BACKFILL SHALL BE FINELY DIVIDED JOB EXCAVATED MATERIAL FREE FROM DEBRIS, ORGANIC MATERIAL AND STONES, COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHO STANDARD METHOD T-99. GRANULAR FILL MAY BE SUBSTITUTED FOR TAMPED BACKFILL TO TOP OF THE PIPE.
3. HAND PLACED BACKFILL SHALL BE FINELY DIVIDED MATERIAL FREE FROM DEBRIS AND STONES.
4. ALL BEDDING DETAILS APPLY TO BUILDING SEWER SERVICE LINES AS WELL AS OTHER SEWERS.
5. CONCRETE CRADLE SHALL BE USED WHEN TRENCH WIDTH EXCEEDS 24" PLUS THE PIPE DIAMETER FOR 36" ID & LARGER PIPE, OR EXCEEDS PIPE OD PLUS 16" FOR SMALLER THAN 36" PIPE.
6. PVC PIPE SHALL BE BEDDED IN ACCORDANCE WITH ASTM D 2321 USING CLASS I (3/4" TO 1/4") GRANULAR MATERIAL.



LOCATION MAP
NOT TO SCALE



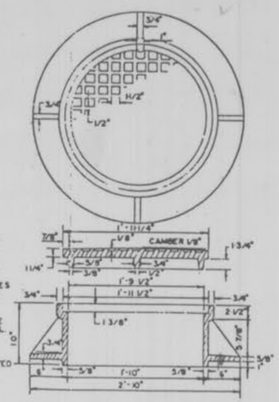
PLAN
STANDARD SHALLOW MANHOLE



SECTION
STANDARD PRECAST SHALLOW MANHOLE

NOTES:

1. ANY MATERIAL EXCAVATED BENEATH PIPE ENTERING OR LEAVING MANHOLES SHALL BE REPLACED WITH CONCRETE.
2. ALL MANHOLE RINGS AND ADJUSTING RINGS SHALL BE SET IN MORTAR.
3. INSIDE DIAMETER OF MANHOLES TO BE 4'-0" FOR PIPE 21" & SMALLER, 5'-0" FOR PIPE 24" THRU 36", 6'-0" FOR PIPE OVER 36".
4. PLASTERING OF INSIDE OF MANHOLES SHALL BE THE OPTION OF THE CONTRACTOR.
5. ALL SEWERS EXTENDING FROM MANHOLES SHALL BE SUPPORTED WITH CONCRETE TO FIRST JOINT.
6. CONTRACTOR SHALL BE PAID FOR 6" CONCRETE ENCASEMENT AROUND PIPE AS SHOWN IN DETAIL.
7. LAMP LINES BEFORE AND AFTER INSTALLATION OF CONCRETE ENCASEMENT.
8. PRECAST MANHOLE SHALL BE WATERPROOFED OUTSIDE.
9. ALL CONC. MANHOLES TO HAVE RUBBER GASKET ON ALL PIPE OPENINGS.

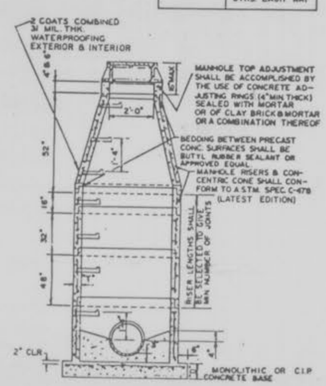


STANDARD MANHOLE RING AND COVER

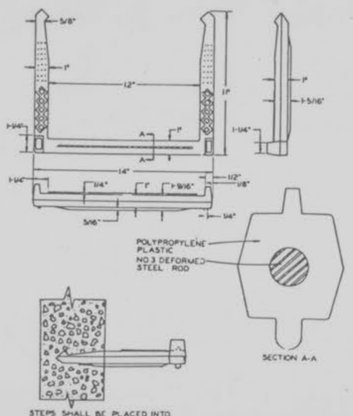
CLAY & BAILEY – NO. 2008 (N° 2014 O-R) *
NEENAH – R-1738 (N° R 1315 F2) *
DEETER – 1315 (N° 1313 O-Ring) *
OR EQUAL

* Indicates bolt down lid

MANHOLE BASE THICKNESS	
DEPTH(FEET)	"D" DIM.
0-20	8" w/#4 BARS @ 12" CTRS. EACH WAY
20-30	8" w/#4 BARS @ 9" CTRS. EACH WAY
30-40	10" w/#5 BARS @ 10" CTRS. EACH WAY



SECTION
PRECAST CONCRETE MANHOLE



MANHOLE STEP

CONSTRUCTION DETAILS

This is to certify that the following as-built locations were located in the field and are correctly shown herein.

William S. Kankolenski
No. Reg. L.S. #2197

PROPERTY OF CITY OF O'FALLON BUILDING DEPARTMENT

PREPARED FOR:
O'FALLON CHRISTIAN CHURCH
990 SOUTH SERVICE ROAD
O'FALLON, MO 63366

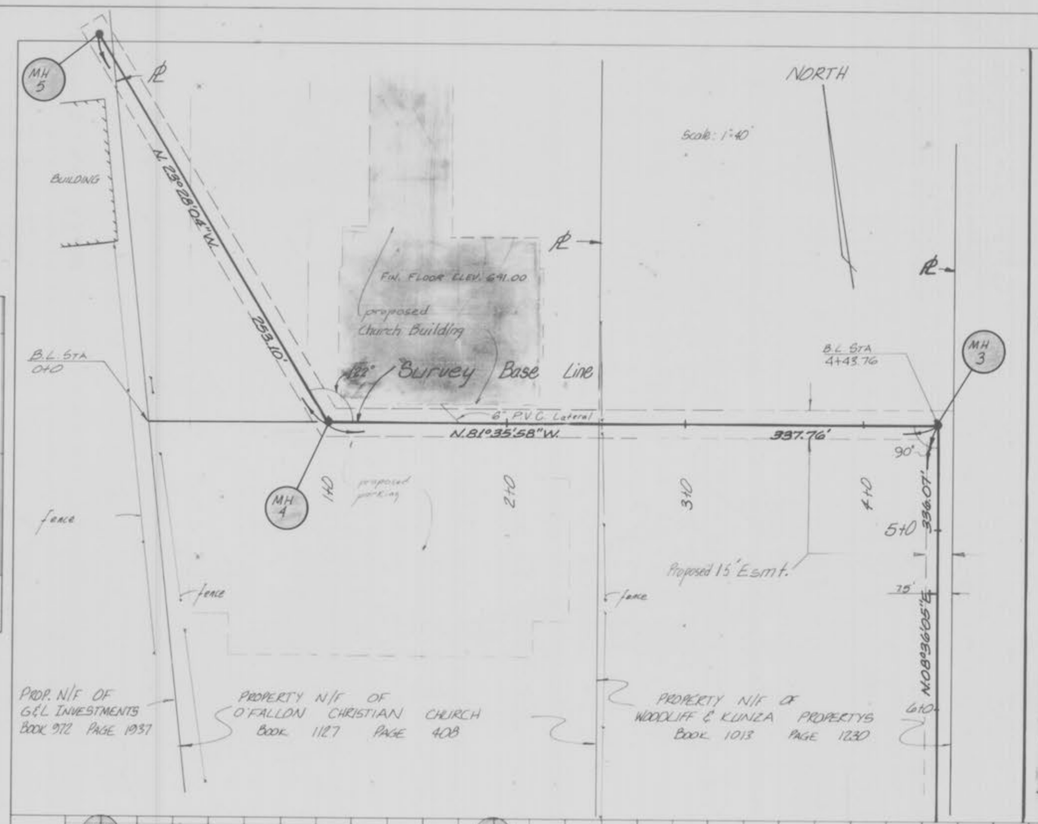
AS-BUILTS ADDED SEPTEMBER , 1989

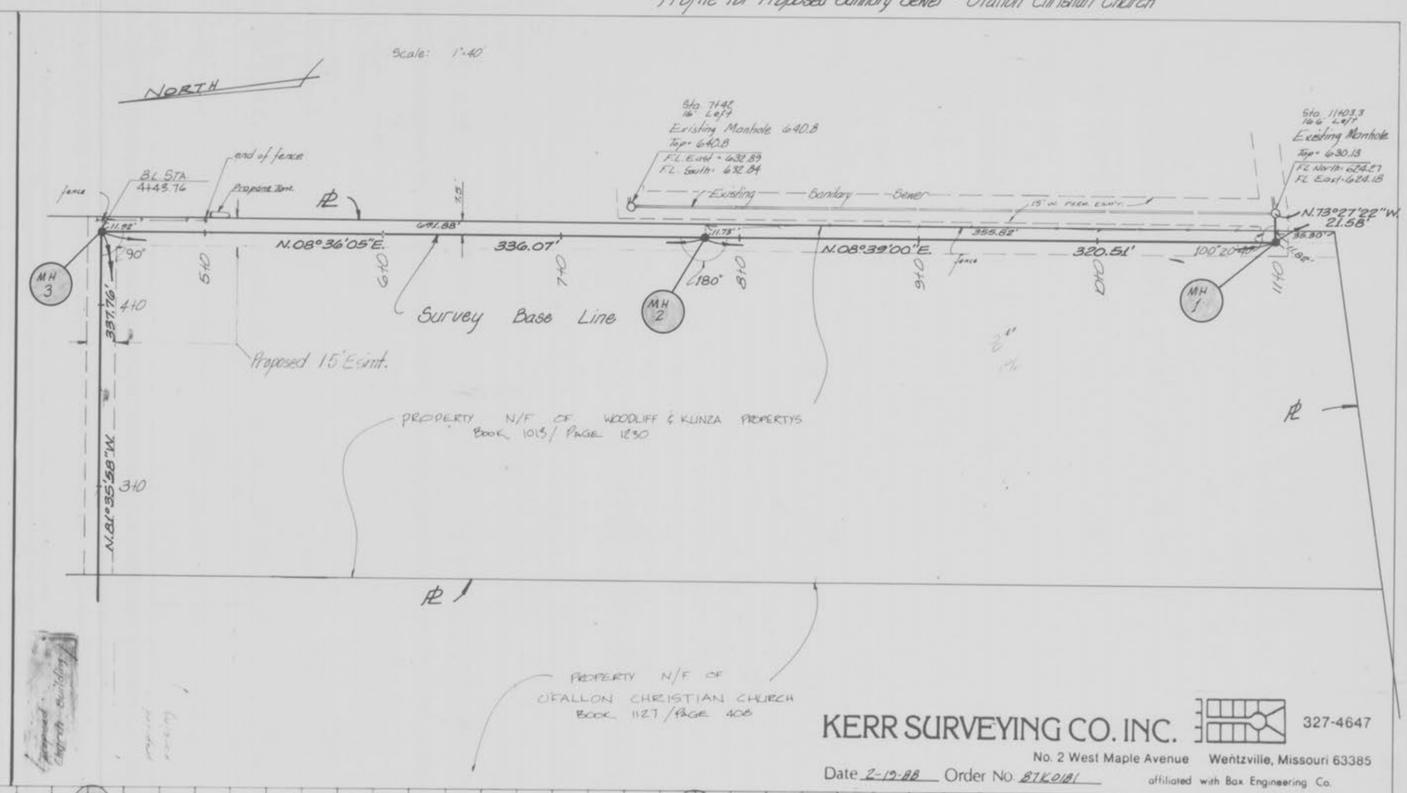
SHEET 1 OF 2

KERR SURVEYING CO. INC. 327-4647
No. 2 West Maple Avenue Wentzville, Missouri 63385
Date 3-30-88 Order No. 87K0181 affiliated with Bax Engineering Co.

REVISED 5/2/88

Profile For Proposed Sanitary Sewer · O'Fallon Christian Church





KERR SURVEYING CO. INC. 327-4647

No. 2 West Maple Avenue Wentzville, Missouri 63385

Date 2-19-88 Order No. 87L0181 affiliated with Box Engineering Co.

Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.

SITE BENCHMARK: Iron pipe at northeast property corner. ELEV. 640.39

SCALE:
1" = 40' HORZ
1" = 5' VERT

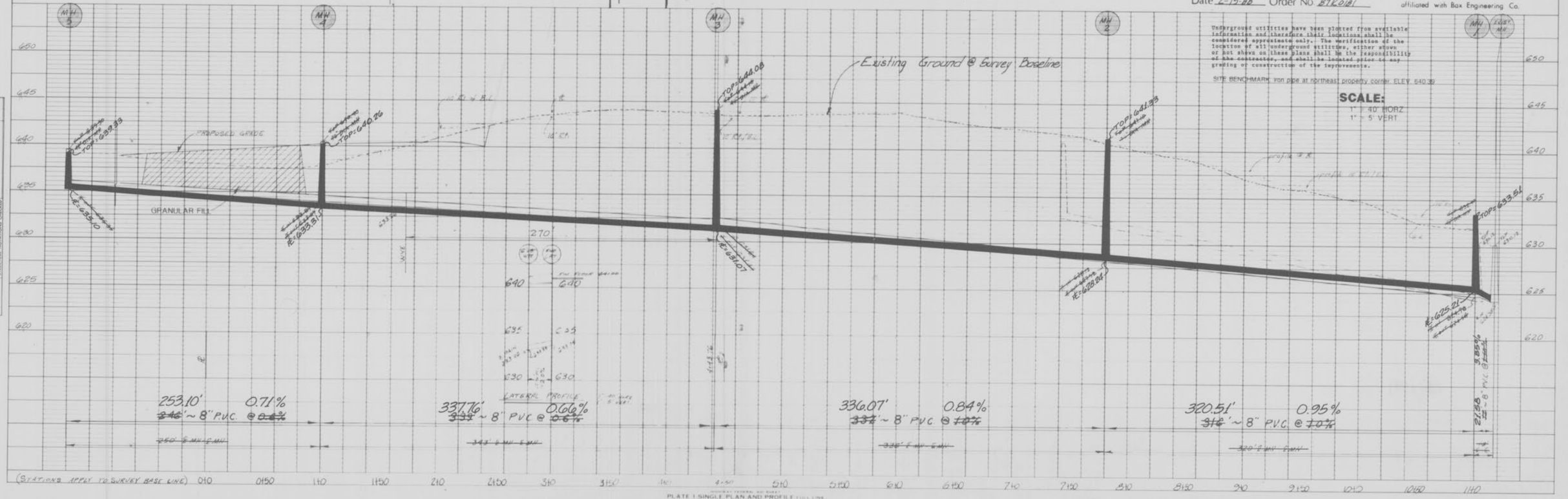


PLATE 1 SINGLE PLAN AND PROFILE

AS-BUILTS ADDED SEPTEMBER , 1989

SHEET 2 OF 2

PROPERTY OF
CITY OF O'FALLON
BUILDING DEPARTMENT