

**GENERAL NOTES:**

1. The Contractor shall comply with all applicable safety regulations. All construction shall be completed following most recent City of Wichita Standards, Specifications and Special Provisions.

2. Contractor will be required to provide notice to utility companies a minimum of seventy-two (72) hours prior to any excavation, as follows:

Kansas One-Call (316)687-2470

The Contractor must notify the following in case of an emergency:

- AT&T 1-800-245-8464
- Black Hills Energy 1-800-694-8989
- City of Wichita Water 1-316-268-4555
- City of Wichita Sewer 1-316-268-4073
- City of Wichita Stormwater 1-316-268-4090
- City of Wichita Traffic 1-316-268-4034
- Cox Communications 1-888-249-3530
- Kansas Gas Service 1-888-482-4950
- Westar Energy 1-800-544-4857

3. Utility service lines, poles, etc. are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their locations, as shown on the plans, represent the best information obtainable for design. The Contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

4. Rubble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations, in the opinion of the Engineer, that will leave an unsightly appearance will not be approved. All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in water of the United States or wetlands is subject to U.S. Corps of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archeological investigations unless buried in a previously approved borrow location.

5. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

6. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days notice prior to start of construction.

7. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

8. The Water Distribution Division shall field located water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, valve boxes or fire hydrants damaged during construction shall be repaired by Contractor at his own expense. Valve boxes and water meters within the project limits shall be adjusted to match field grades.

9. The Contractor shall notify the consultant engineer and Tom Mason at 316-268-4574 with the City of Wichita with the anticipated construction start date and notify them of project completion. Staking and inspection for this project will be the responsibility of the Contractor.

10. If traffic will be impacted by construction, a traffic control plan must be submitted and approved by the City Traffic Engineer, Brian Coon at traffic@wichita.gov before construction can begin. The Contractor shall be responsible for all traffic control measures to facilitate construction. All construction zone markings and signage shall conform to the latest version of the Manual on Uniform Traffic Control Devices (MUTCD) as published by the US Dept. of Transportation, Federal Highway Administration. All costs associated with construction markings and signage shall be the Contractor's responsibility.

11. All elevations shown are NAVD 88.

12. All areas disturbed during construction that will not be under proposed pavement shall be restored to match existing conditions.

13. All stubs and plugged pipes shall be located with green plastic tape in the same manner as risers.

14. Connecting to Existing Manholes:  
Prior to laying sewer lines using existing stubs in existing manholes, the Contractor shall expose and verify the elevation, grade and alignment of existing stubs and notify the Engineer of any deviation from the plans. Where connection to an existing manhole that does not have an existing stub or the stub is unusable due to elevation grade or alignment, the Contractor shall bore cut into existing manhole wall to make connection using approved water stop gasket, and reshape the existing manhole invert to provide smooth flow. The cost to connecting to existing manholes is incidental to the project.

15. Contractor shall limit the extent of trench open overnight and weekends to less than 50 feet.

16. Contractor shall provide positive drainage away from all manhole covers.

17. The Contractor shall prevent any construction debris from entering the existing sanitary sewer during construction.

18. The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractors proposed method for maintaining sewage flow shall be submitted and approved by the Sewer Maintenance Division (316-268-4073) prior to starting and by-passing of sewage flows.

19. Any over excavation from manhole and pipe removal shall be backfilled with AB-3 compacted to 90-95% ASTM D698.

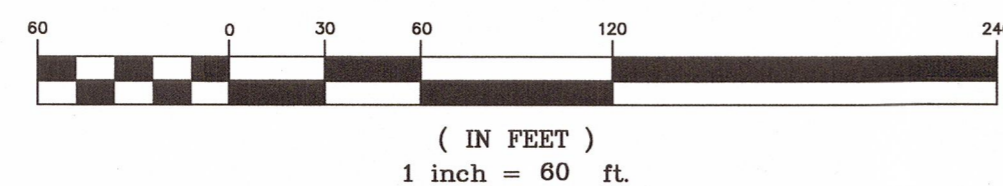
20. City Maintenance of sanitary sewer mains ends at last structure within the easement or right-of-way.

21. Any sidewalk, drive approach, curb, or street pavement removed to construct project must have a pavement cut permit and be replaced by the City contractor. Permits can be obtained by calling 316-268-4501 or 316-268-4480.

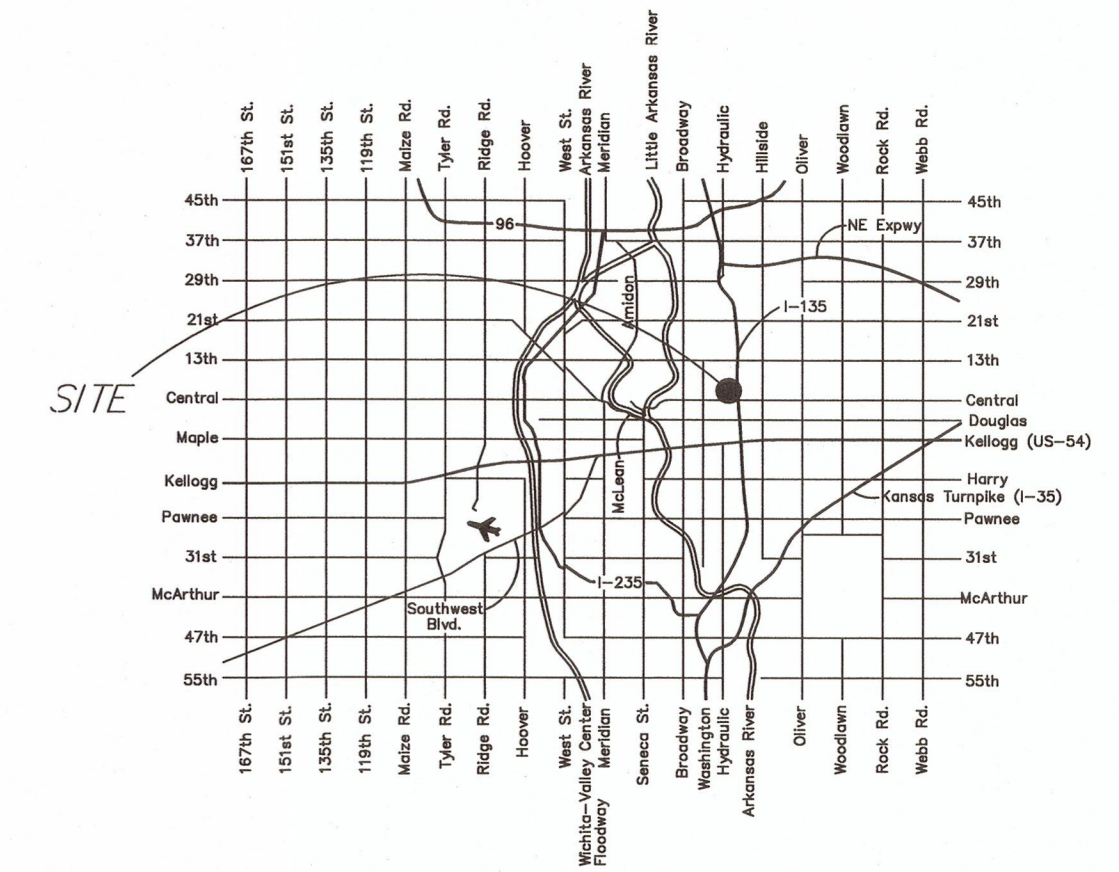
**T. Mason - City of Wichita, Inspector  
Release Date: 11/29/2016  
: apr 11/30/2016**



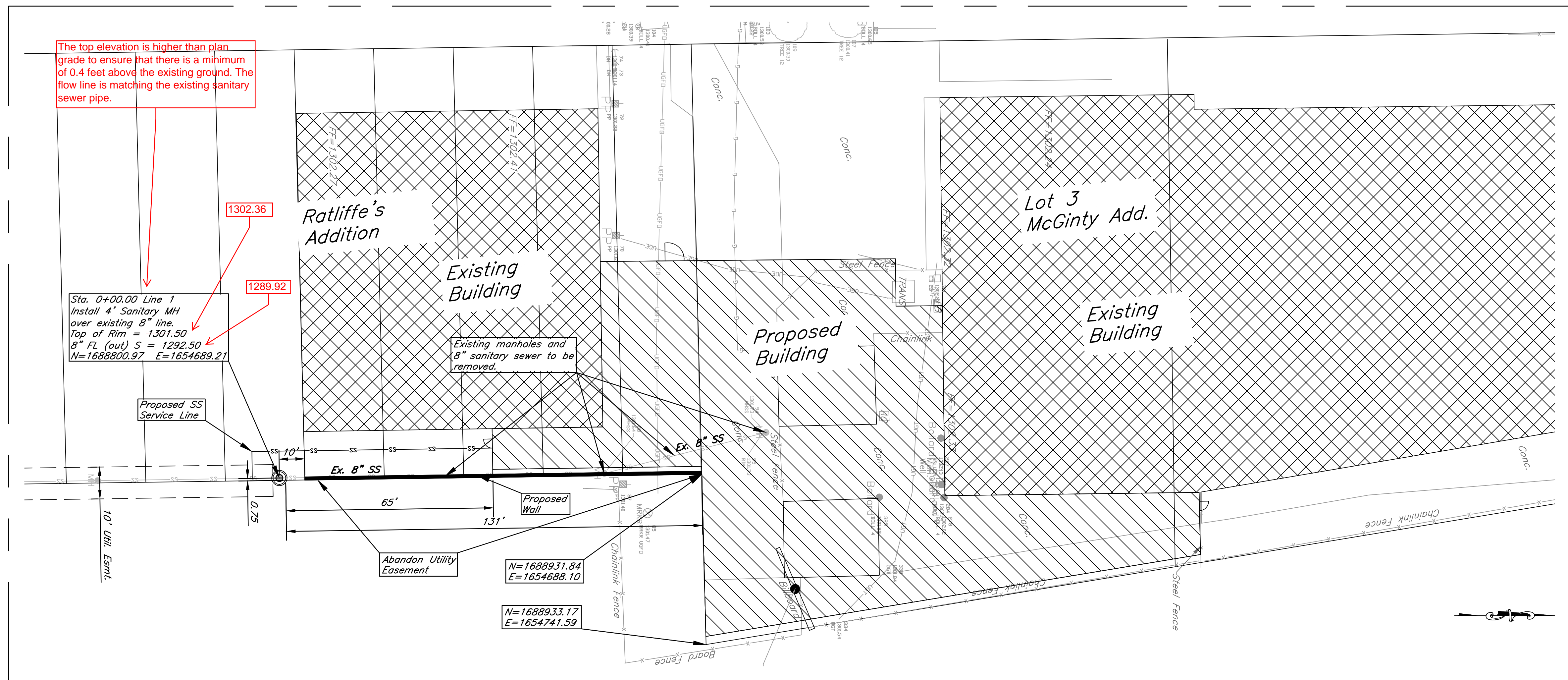
DATE: 03.07.2016  
THIS SHEET HAS BEEN  
SIGNED, SEALED AND  
DATED ELECTRONICALLY



# SANITARY SEWER to serve United Machine at 602 N. Hydraulic Lots 1-3, McGinty Addition CITY OF WICHITA, KANSAS Gary Janzen, P.E., City Engineer 2267 PPS (607861)



The top elevation is higher than plan grade to ensure that there is a minimum of 0.4 feet above the existing ground. The flow line is matching the existing sanitary sewer pipe.

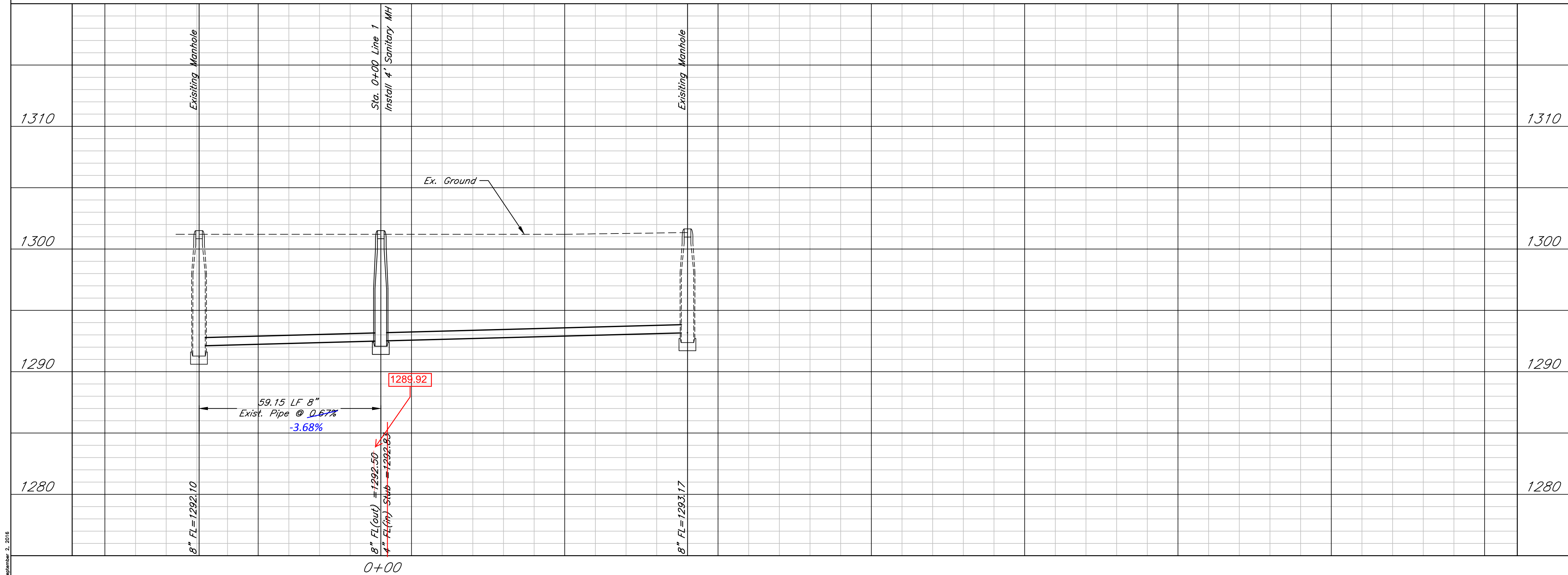


**AS BUILTS**

Contractor: Bob the Sewer Guy  
 Inspector: Matt Perez  
 Date: 11/28/2016

**KEMILLER ENGINEERING PA**

117 E. Lewis,  
 Wichita, KS 67202 (316)264-0242



VERTICAL SCALE (IN FEET)  
 1 inch = 5 ft.

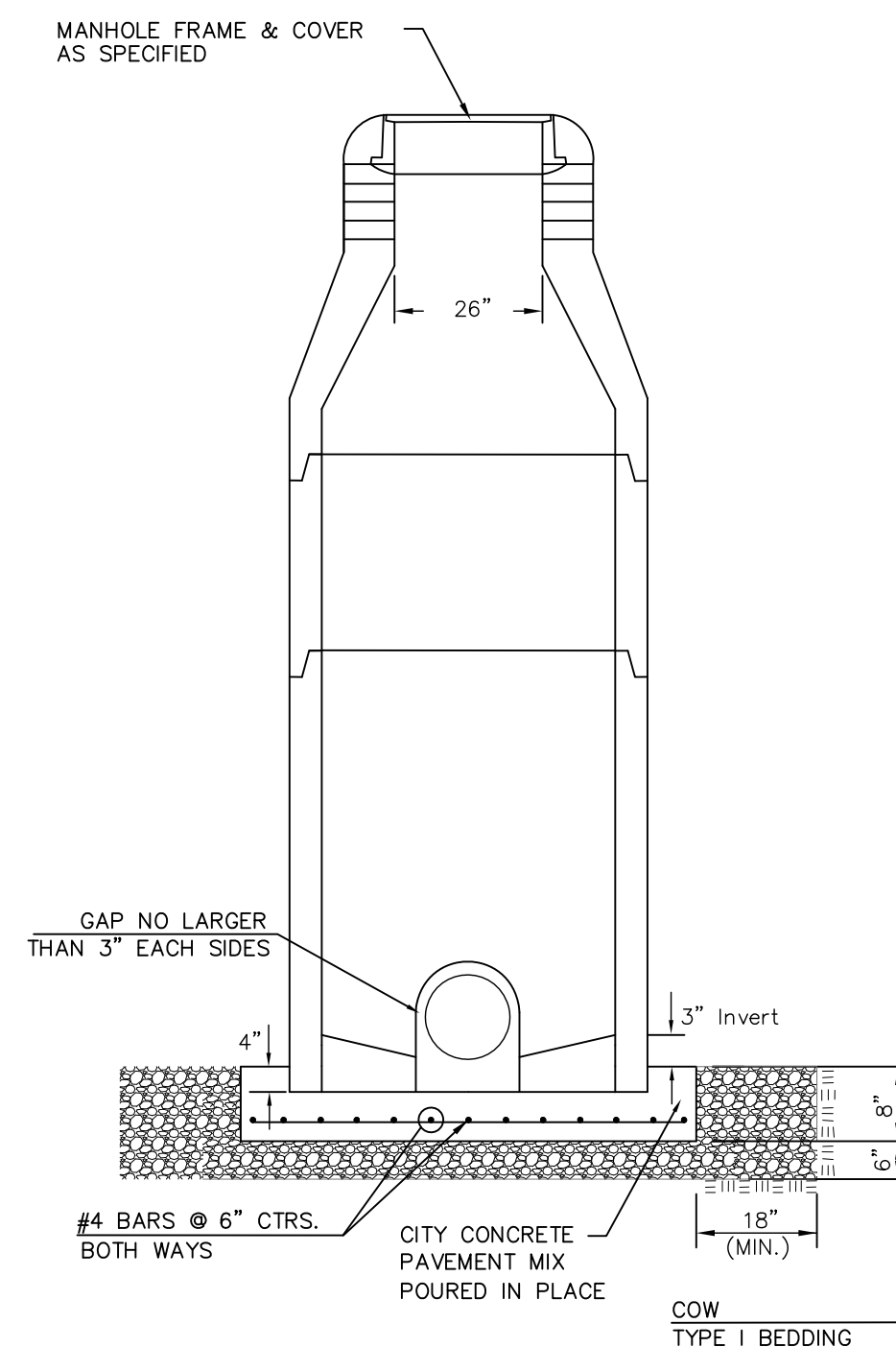
HORIZONTAL SCALE (IN FEET)  
 1 inch = 20 ft.

DATE: 08.31.2016  
 THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

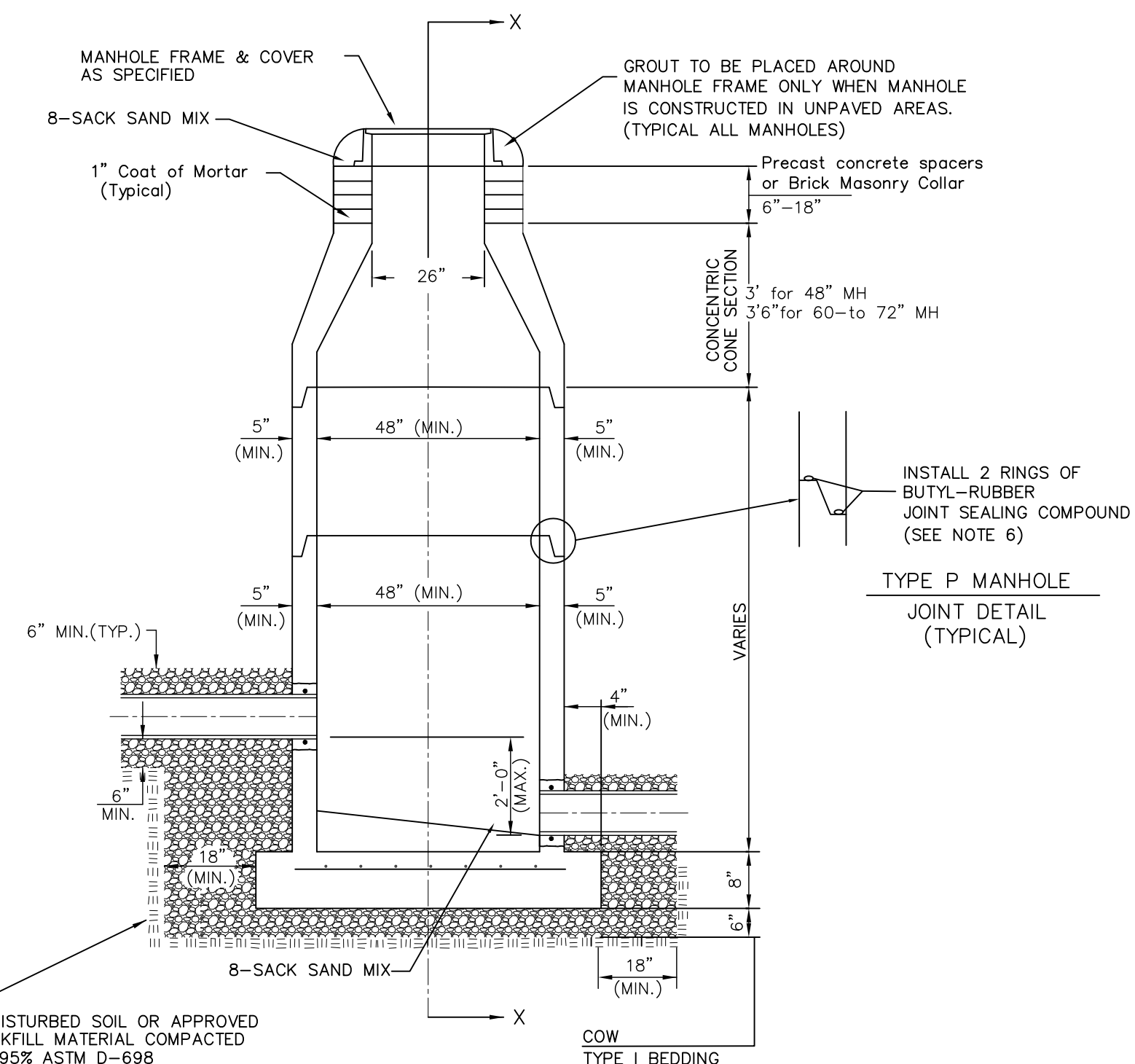
United Machine  
 Plan and Profile  
 Wichita, Kansas

<b>KEMILLER ENGINEERING PA</b> 117 E. Lewis, Wichita, KS 67202 (316)264-0242	PROJECT NUMBER 2267 PPS (607861)			SHEET <b>2.0</b>
	KEM NO. 15188	FILE	DATE 02/2016	
DESIGN KM	DRAWN MP	REVISED 08/2016		

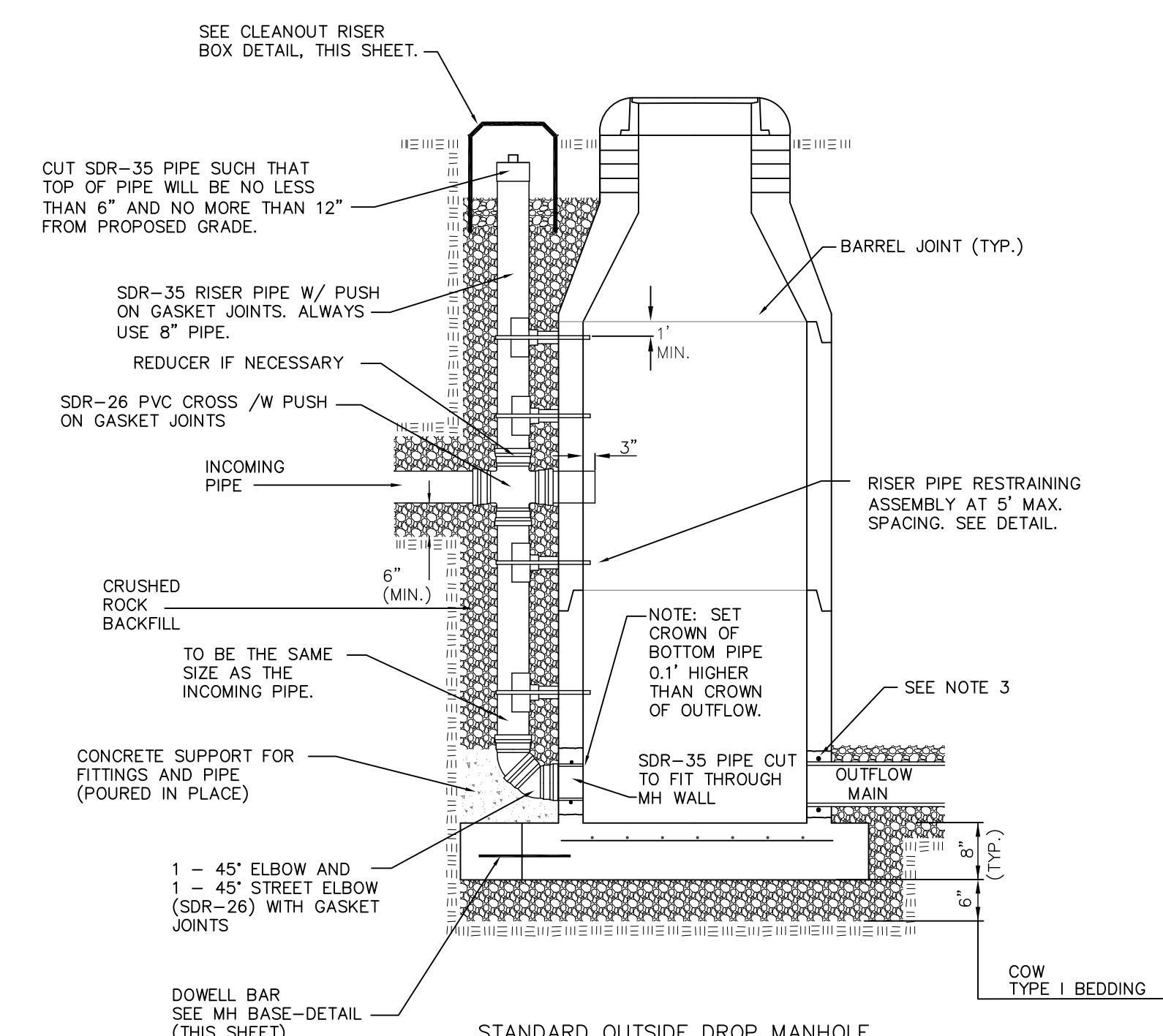
September 1, 2016



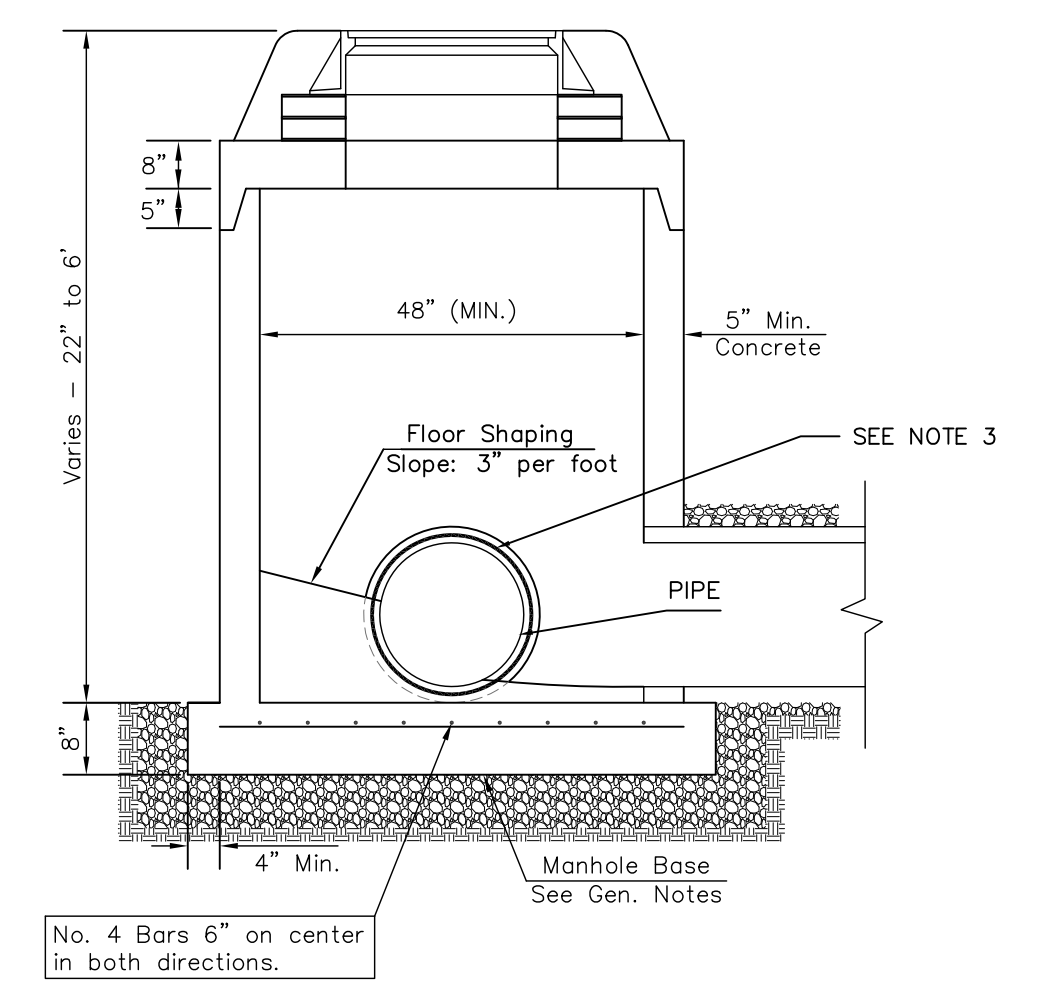
**DOG HOUSE MANHOLE**  
(OVER EXISTING PIPE)  
Not to Scale



**STANDARD MANHOLE**  
Not to Scale



**STANDARD OUTSIDE DROP MANHOLE**  
Not to Scale

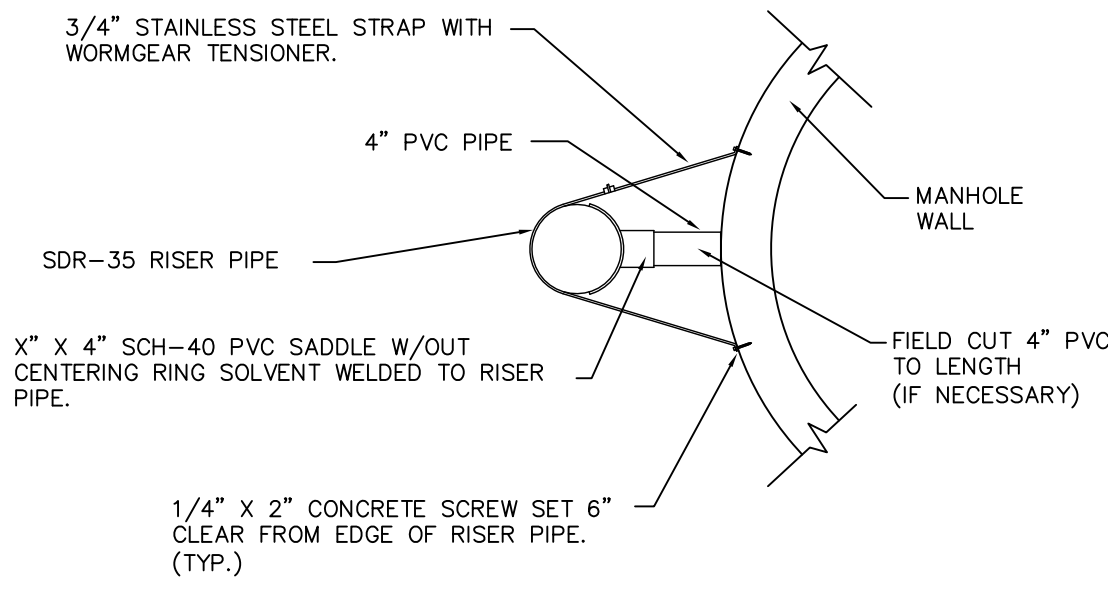


**SHALLOW MANHOLE**  
Not to Scale

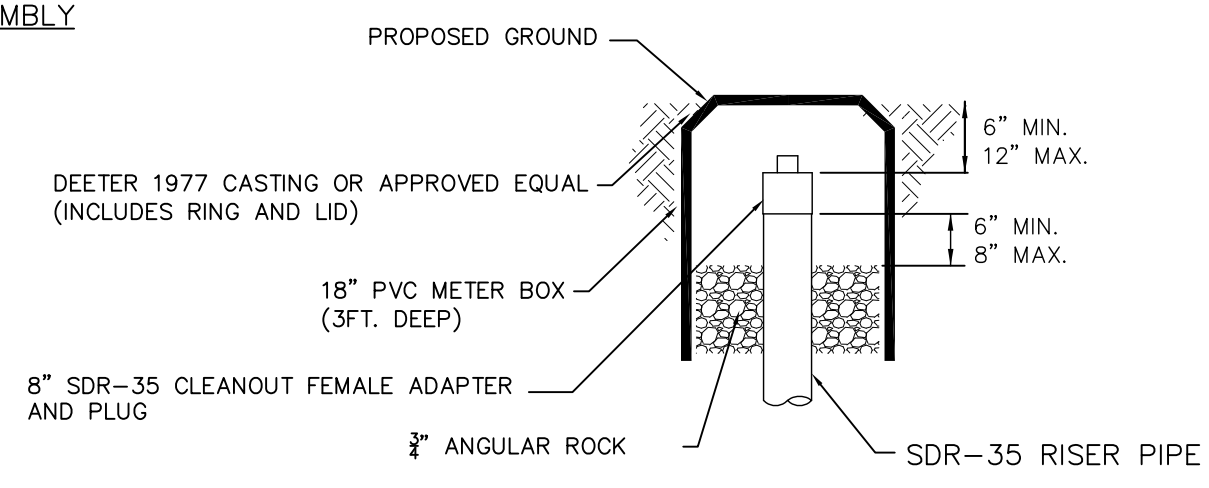
= COW TYPE I BEDDING  
 = UNDISTURBED SOIL

### PRECAST MANHOLE GENERAL NOTES

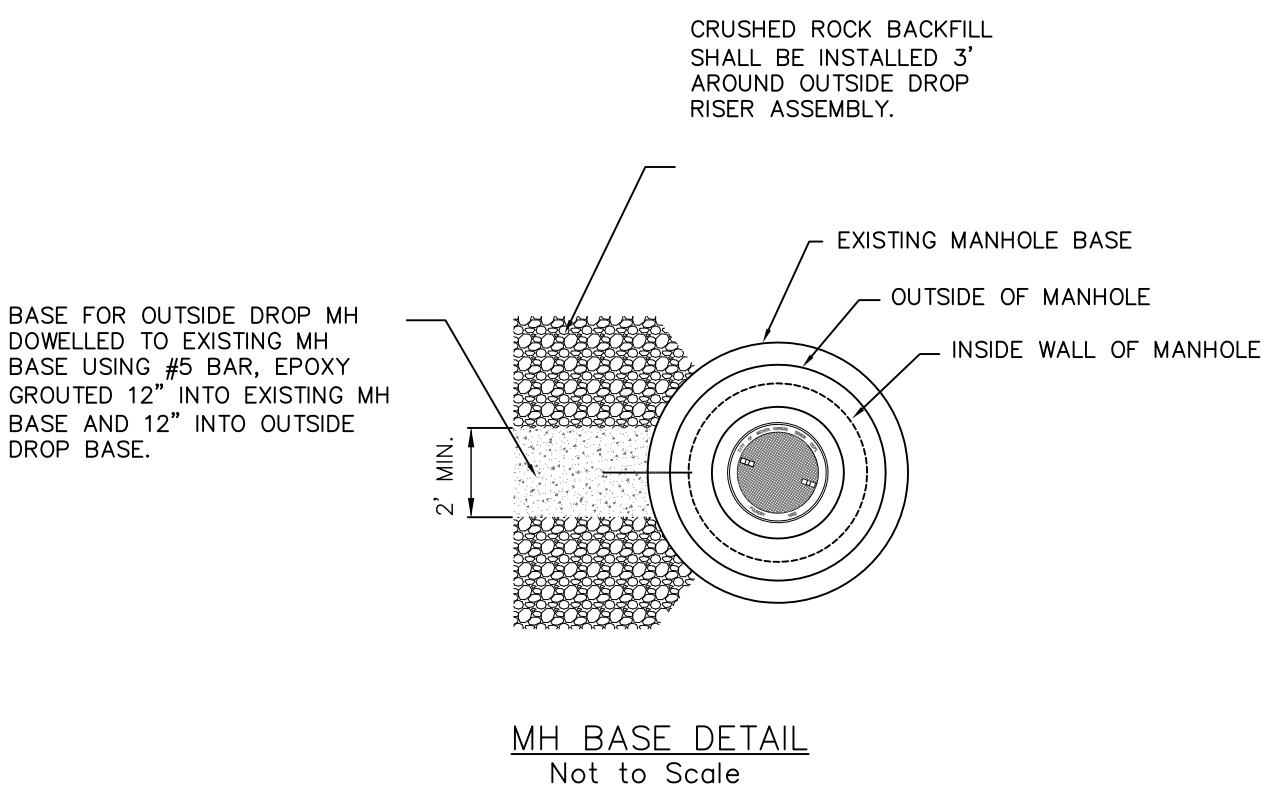
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- APPROVED FLEXIBLE WATERSTOP SHALL BE INSTALLED TO JOIN THE SEWER PIPE TO THE MANHOLE WALL. THE SEWER PIPE SHALL BE SUPPORTED WITH CRUSHED ROCK A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- EXTERIOR MANHOLE WALLS SHALL BE COATED PER SECTION 804.4 OF STANDARD SPECIFICATIONS.
- JOINT SEALING COMPOUND SHALL BE PER 804.4 OF STANDARD SPECIFICATIONS.
- ALL MANHOLE SECTION JOINTS THAT WILL BE IN GROUNDWATER OR GREATER THAN 12' DEEP SHALL BE WRAPPED WITH AN EXTERNAL JOINT SEAL PER SECTION 804.4 OF STANDARD SPECIFICATIONS, AS INDICATED BY THE PLANS.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE FOR DOG HOUSE MANHOLES.
- TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO.4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- WALL THICKNESS SHALL BE 1" GREATER THAN MANHOLE DIAMETER IN FEET.
- OPENINGS SHALL BE CORE DRILLED INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS DRILLED INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
- MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
- THE VERTICAL DROP IN STANDARD MANHOLES SHALL NOT EXCEED 2' REGARDLESS OF PIPE SIZE. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
- PRECAST CONCRETE SPACERS OR BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.
- THE FULL DIAMETER OF THE MANHOLE SHALL EXTEND THE ENTIRE DEPTH OF THE MANHOLE TO THE CONE SECTION. NO REDUCTION IN MANHOLE DIAMETER WILL BE ALLOWED.
- REFER TO PLANS FOR SIZE OF OUTSIDE DROP RISER, SADDLES AND CROSS.



**RISER PIPE RESTRAINING ASSEMBLY**  
Not to Scale



**CLEANOUT RISER BOX DETAIL**  
Not to Scale



**MH BASE DETAIL**  
Not to Scale

SANITARY SEWER MANHOLE DIAMETERS		
DIAMETER	DEPTH	PIPE SIZE
4'	0'-15'	8"-18"
5'	>15'-30'	21"-30"
6'	>30'	36"-60"



REVISED JANUARY 2015

**PRECAST  
SANITARY SEWER  
MANHOLE**

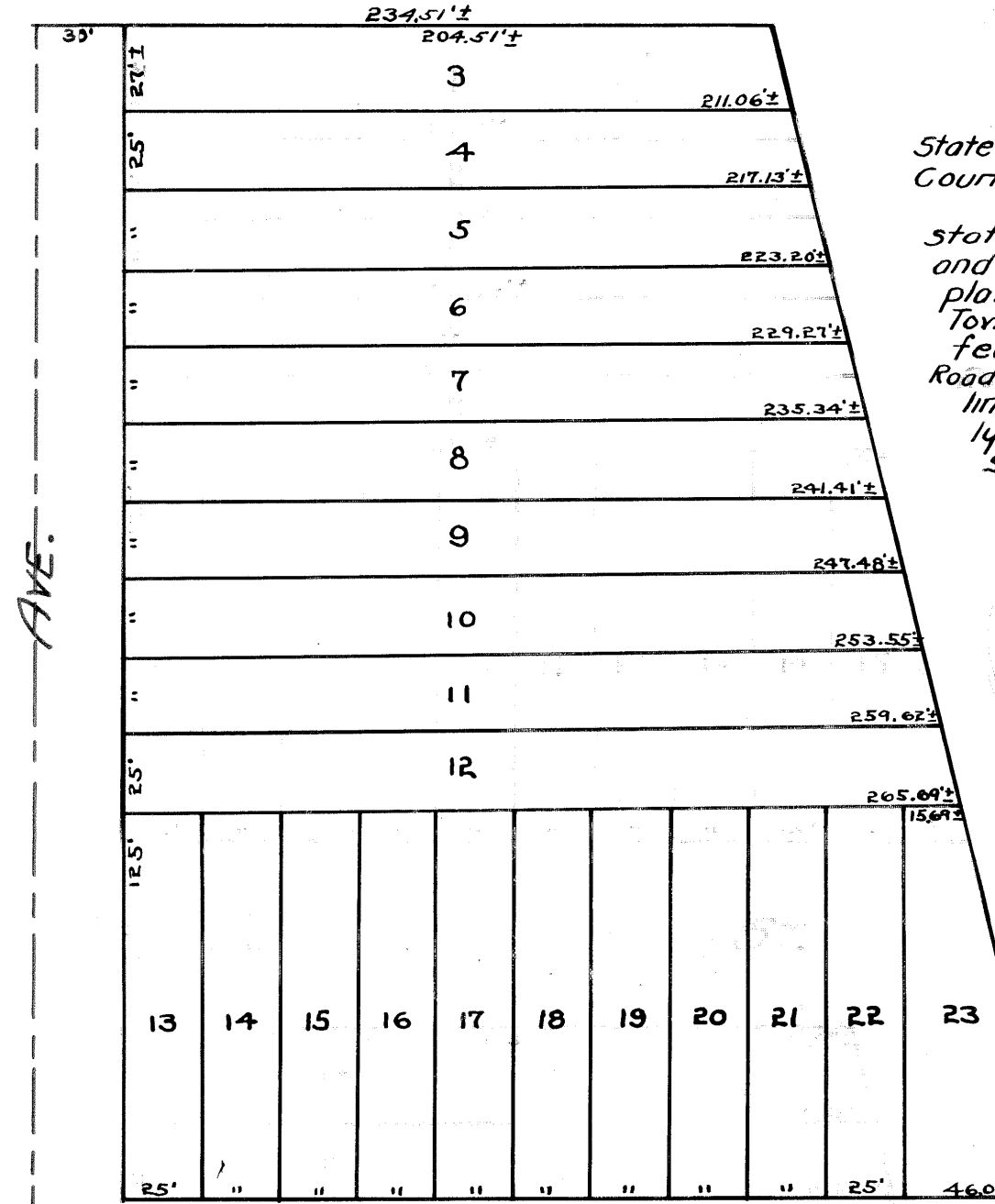
CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER <b>2267 PPS</b>	OCA NUMBER <b>607861</b>	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET <b>3.0</b>

RI-2-3

# RATLIFFE'S ADDITION

TO WICHITA, KANSAS



State of Kansas }  
County of Sedgwick } s.s.  
I, Ransom H. Brown County Surveyor in and for said county and state do hereby certify that I have plotted "Ratliffe's Addition to Wichita, Kansas" and that the accompanying plat is a true and correct exhibit of the property as plotted described as follows: Beginning at the southwest corner of Section 15 Township 27 South Range 1 East of the 6th P.M. thence North on the section line 917 feet to the south line of the Right of Way of the St. Louis and San Francisco Rail Road thence East along the south line of said Right of Way 234.51 feet to the west line of the Right of Way of the Wichita Drainage Canal, thence in a southeasterly direction along the west line of said Drainage Canal to the south line of said section 15, thence west 457.3 feet to the place of beginning.

Ransom H. Brown County Surveyor

Know all men by these presents that we Mary E. Ratliffe and C.T. Ratliffe her husband have caused the land described in the surveyor's certificate to be plotted into lots, avenues and streets the same to be known as RATLIFFE'S ADDITION to Wichita, Kansas. The streets and avenues are hereby dedicated to and for the use of the public. The City of Wichita is hereby granted an easement on the rear five feet of each and every lot for the construction and maintenance of all public utilities.

Mary E. Ratliffe  
C.T. Ratliffe

State of Kansas }  
County of Sedgwick } s.s.  
Be it remembered that on this 11th day of February 1923 before me a Notary Public in and for said County and State came Mary E. Ratliffe and C.T. Ratliffe her husband to the personally known to be the same persons who executed the foregoing instrument of writing and duly acknowledged the execution of the same to be their voluntary acts and deeds.

My commission expires Jan 18 1924  
C.A. Cartwright Notary Public.

This plat of RATLIFFE'S ADDITION has been submitted to and considered by the City Planning Commission of the City of Wichita, Kansas and is hereby transmitted to the Board of City Commissioners of the City of Wichita, Kansas with the recommendation that said plat be approved as proposed. The City Planning Commission of the City of Wichita, Kansas

Attest: *[Signature]* Secretary *[Signature]* President

Approved by Board of City Commissioners.

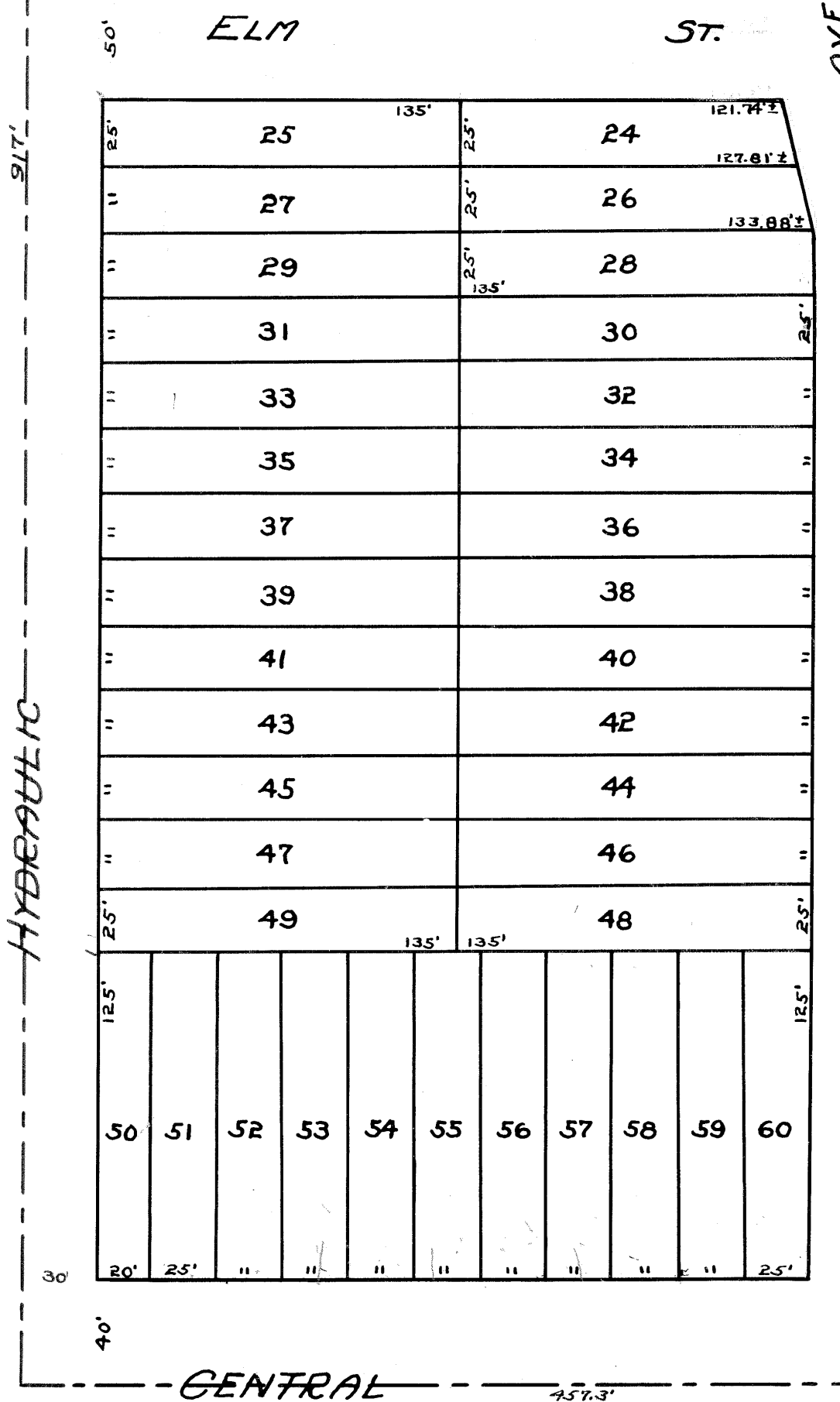
February 11 1923  
City Clerk

Approved 1923 City Engineer.

State of Kansas }  
County of Sedgwick } s.s.  
This is to certify that this instrument was filed for record on the 11th day of February 1923 A.D. at 10:00 A.M. and is duly recorded on page 2000 in book 112.

Joseph B. Brown Register of Deeds.

Entered on Transfer Record  
Feb 11 1924  
County Clerk

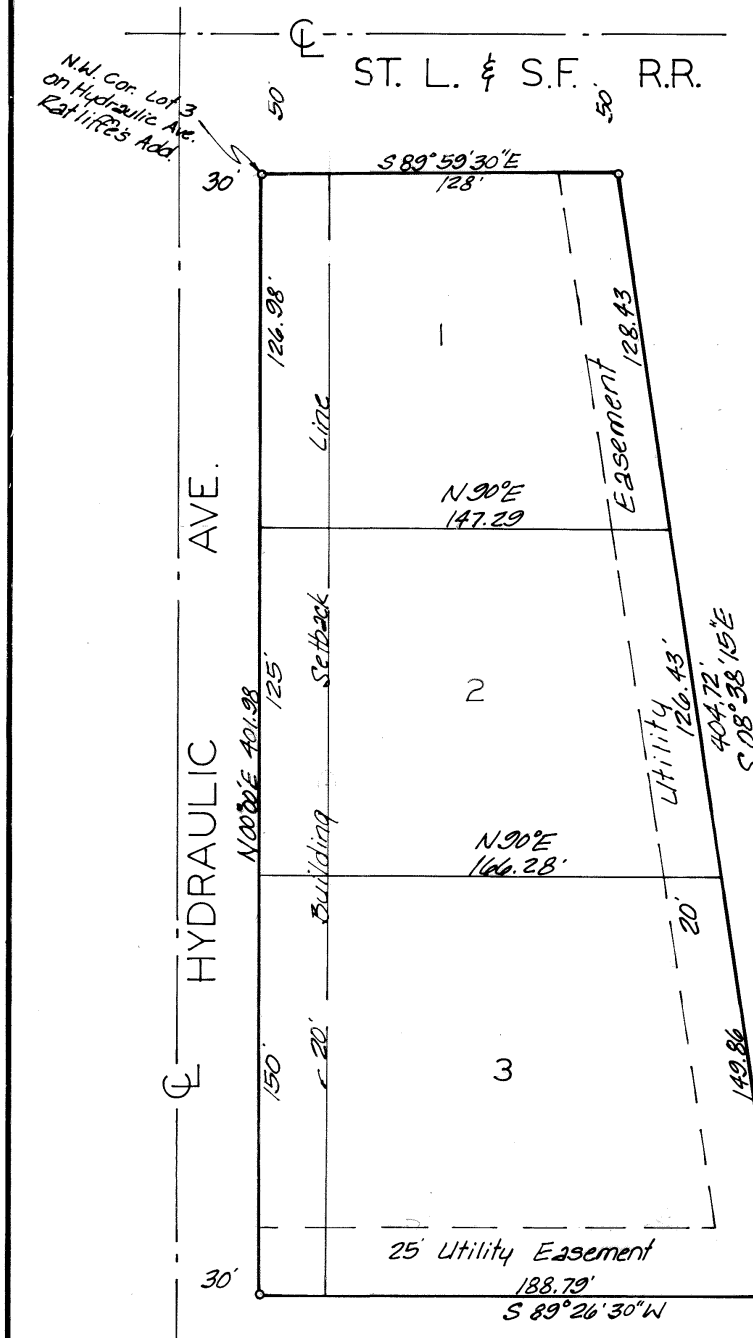


Wichita Drainage Canal

RI-2-3

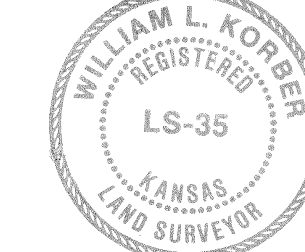
# MC GINTY ADDITION

WICHITA, KANSAS



State of Kansas }  
Sedgwick County } s.s. Ne. Baughman Company  
RA., Surveyors in aforesaid county and state do hereby certify that we have surveyed and platted "MCGINTY ADDITION," Wichita, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as and being a replat of part of Lots 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, on Hydraulic Avenue, and all of Lots 13, 14, 15, 16, 17, and 18, and part of Lots 19 and 20, on Elm Street in Ratliffe's Addition to Wichita, Sedgwick County, Kansas, and that part of the north 1/2 of Elm St adjacent thereto on the south, more particularly described as follows: Beginning at a point on the east line of Hydraulic Avenue and at the N.W. corner of said Lot 3; thence east along the north line of said Lot 3, 128 feet; thence southeasterly to a point on the south line of said Lot 20, said point being 15 feet west of the S.E. corner of said Lot 20; thence continuing along the last described line extended to the centerline of vacated Elm St.; thence west along said centerline, 183.79 feet to the intersection of the extended east line of Hydraulic Avenue; thence north along said extended east line of Hydraulic Avenue and continuing along the east line of Hydraulic Avenue to the place of beginning, the street being vacated by virtue of K.S.A. 1920 Supp. 12-512 (b). Being situated in the S.W. 1/4 of Sec. 15, Twp. 27 S., R. 1 E.

4/27/22 Date



Baughman Company, R.A.  
*[Signature]* Surveyor

This plat of "MCGINTY ADDITION," Wichita, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas, dated this 28th day of January 1923.

Wichita-Sedgwick County Metropolitan Area Planning Commission



*[Signature]* Chairman  
*[Signature]* Secretary  
Robert A. Lakin

This plat approved and all dedications shown hereon accepted by the Board of Commissioners of the City of Wichita, Kansas, this 26th day of July 1923.

*[Signature]* Mayor  
*[Signature]* City Clerk  
Board of City

This plat approved and all dedications shown hereon accepted by the Board of Commissioners of Sedgwick County, Kansas, this 11th day of August 1923.

*[Signature]* Chairman  
*[Signature]* Commissioner  
*[Signature]* Commissioner  
*[Signature]* County Clerk  
County Clerk

Entered on transfer record this 11 day of August 1923.

*[Signature]* County Clerk  
County Clerk

Know all men by these presents that we the undersigned, have caused the land described in the surveyor's certificate to be plotted into lots to be known as "MCGINTY ADDITION," Wichita, Kansas. The easements are hereby granted as indicated for the construction and maintenance of all public utilities.

*[Signature]* Leonard E. McGinty  
*[Signature]* Betty McGinty

United Machine Company, Inc.  
*[Signature]* Leonard E. McGinty President

State of Kansas }  
Sedgwick County } s.s. The foregoing instrument was acknowledged before me this 23rd day of June 1923, by Leonard E. McGinty and Betty McGinty, his wife and by Leonard E. McGinty, President of United Machine Company, Inc. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

My Comm. Exp. 12 May 1924  
*[Signature]* Notary Public

State of Kansas }  
Sedgwick County } s.s. This is to certify that this plat has been filed for record in the office of the Register of Deeds this 12th day of August 1923, at 1 o'clock P.M. and is duly recorded.

*[Signature]* Register of Deeds  
*[Signature]* Ed Resa Deputy

S-2 4-30

S-2 4-30