



PRIVATE STORM WATER SEWER PLAN FOR  
**COLLEGIATE WELLNESS CENTER**  
WICHITA COLLEGIATE SCHOOL

PRIVATE STORM WATER SEWER

TO SERVE

**COLLEGIATE WELLNESS CENTER**

PROJECT NO. 0157PPD

THE CITY OF WICHITA, KANSAS  
GARY JANZEN, P.E. - CITY ENGINEER

OCA NO. 607861

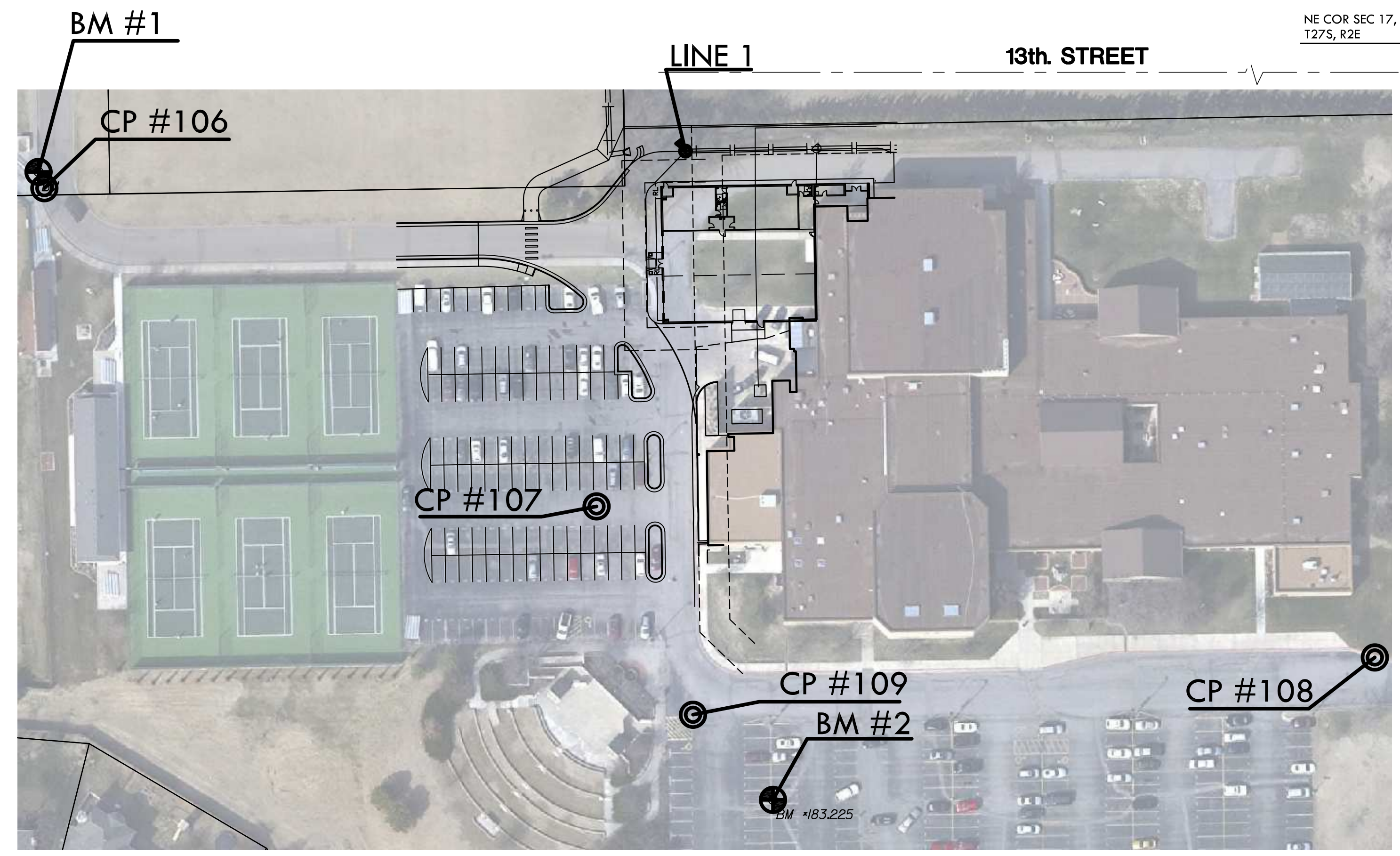
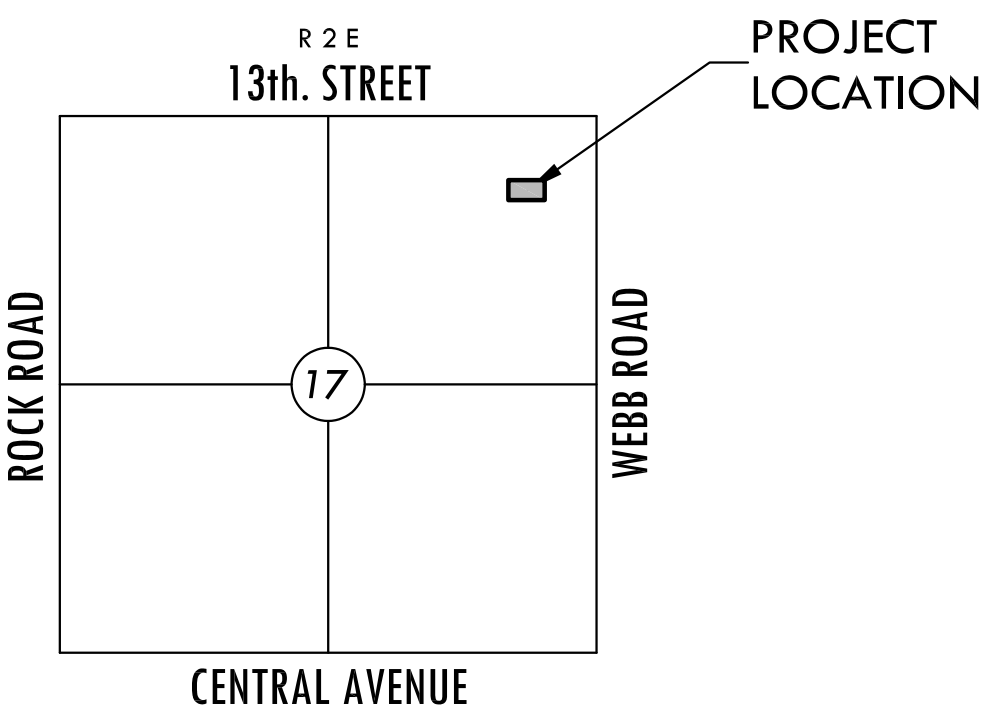
**GENERAL NOTES**

- UNLESS SHOWN OR OTHERWISE STATED ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS.
- THE TOPS OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
- ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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.
- TREES TO BE REMOVED ARE MARKED . ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
- CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
- EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF SEVENTY-TWO (72) HOURS TO UTILITY COMPANIES TO STARTING ANY EXCAVATION AS FOLLOWS:  
  

KANSAS ONE-CALL	800-344-7233
OR LOCAL WICHITA	687-2470

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

COX COMMUNICATIONS (CABLE)	262-0661
WESTAR (ELECTRIC)	383-8600
KANSAS GAS SERVICE (GAS)	832-3101
SBC (TELEPHONE)	800-870-8390
CITY OF WICHITA WATER & SEWER	262-6000
- 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 THAT, IN THE OPINION OF THE ENGINEER, 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 WATERS 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 ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
- CONTRACTOR TO COORDINATE WORK WITH OTHER UTILITY AND/OR PAVING CONTRACTORS ON SITE.
- CONTRACTOR SHALL RESEED AND MULCH ALL DISTURBED AREAS. COST SHALL BE CONSIDERED SUBSIDIARY TO SITE RESTORATION. SEE SHEET
- CONTRACTOR TO REFER TO SWPP FILED ON SITE FOR EROSION/SEDIMENT CONTROL.
- WORK DONE UNDER THIS PROJECT IS SUBJECT TO THE CITY OF WICHITA REQUIREMENTS FOR "CONSTRUCTION OF INFRASTRUCTURE IMPROVEMENTS BY PRIVATE CONTRACT." THE CONTRACTOR SHALL BE FAMILIAR AND COMPLY WITH ALL OF THE REQUIREMENTS, INCLUDING BONDING, INSPECTION, TESTING, NOTIFICATION, PROVIDING AS-BUILT DRAWINGS, PAYING FOR ALL NECESSARY CONNECTIONS AND/OR STREET REPAIR FEES AND PROVIDING PIPE MATERIAL AND OTHER CERTIFICATIONS.

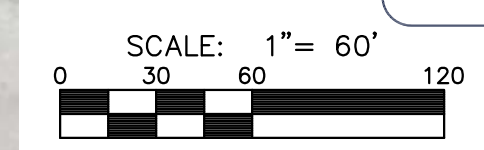


**INDEX TO DRAWINGS**

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STORM SEWER DETAILS
3	STORM SEWER PLAN & PROFILE
4	FINAL PLAT

**AS BUILTS**

Contractor: Ewertz Excavation 12/19/2013	Project Inspector: Tom Jones  <b>KEMILLER</b> ENGINEERING PA 117 E. Lewis, Wichita, KS 67202 (316)264-0242
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**CONTROL POINTS**

<b>#106</b>	<b>#108</b>
1. PK NAIL	1. PK NAIL
2. N = 1693435.53 E = 1679811.59	2. N = 1693124.09 E = 1680694.79
3. ELEV. = 1373.30 NGVD 29	3. ELEV. = 1370.21 NGVD 29
4. 10' SOUTH OF NORTH PC OF CURB OF DRIVE, SOUTHWEST OF FOOTBALL FIELD.	4. IN ASPHALT ON NORTH SIDE OF DRIVE GOING TO WEBB ROAD, AT PC OF CURVE, SOUTH OF SOUTHWEST CORNER OF HIGH SCHOOL.
<b>#107</b>	<b>#109</b>
1. PK NAIL	1. PK NAIL
2. N = 1693224.32 E = 1680178.17	2. N = 1693086.06 E = 1680242.16
3. ELEV. = 1370.87 NGVD 29	IN ASPHALT EAST OF AMPHITHEATER
4. IN ASPHALT PARKING LOT WEST OF HIGH SCHOOL	

**BENCHMARKS**

<b>BM#1</b>	CHISELED SQUARE ON TOP OF WEST CURB OF DRIVE, AT NORTH PC OF CURVE, SOUTHWEST OF FOOTBALL FIELD. ELEV. = 1373.85 (NGVD 29)
<b>BM#2</b>	CHISELED SQUARE ON TOP OF CONCRETE LIGHT POLE BASE, THE MOST SOUTHWEST LIGHT POLE IN THE PARKING LOT, SOUTHWEST OF HIGH SCHOOL. ELEV. = 1370.63 (NGVD 29)

NEW IMPERVIOUS=0.22 AC.  
REDEVELOPED IMPERVIOUS=0.41 AC.  
REDEVELOPED PERVIOUS=0.09 AC.  
WQ<sub>v</sub>=0.03 AC.-FT.  
CP<sub>v</sub>=0.05 AC.-FT.  
NO WATER QUALITY IS NEEDED AT THIS TIME

**APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA,  
BY STORMWATER DEPARTMENT**

**Engineering** 3-7-13

**Storm Water** 3-7-13  
(Public Works)

**NOTE TO CONTRACTORS**

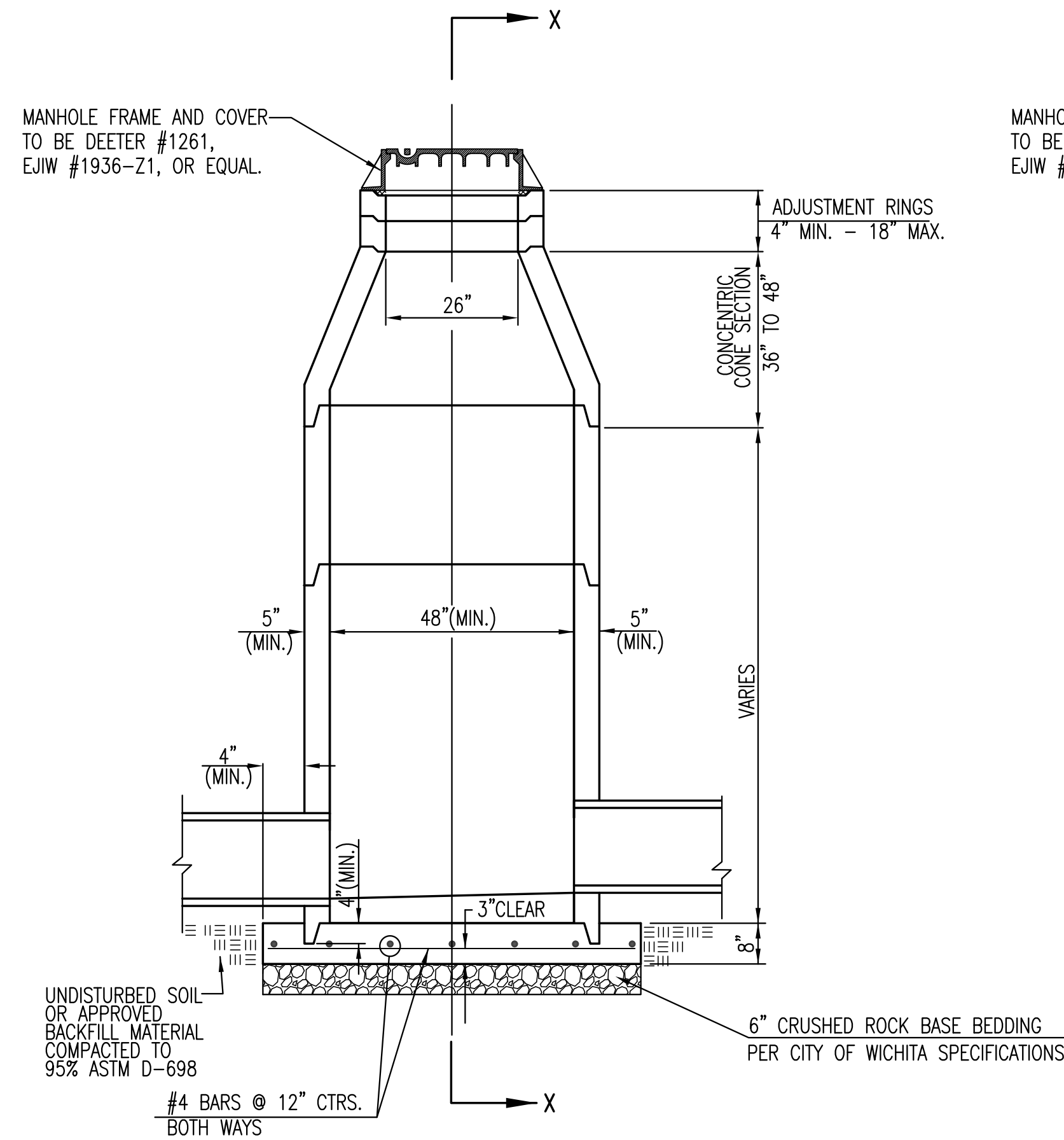
**Public Property:**  
Inspection and testing for the storm water sewer is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita Standard Construction Engineering Practices and certified by a Professional Engineer licensed in the state of Kansas. No work shall be performed in dedicated easements or public rights-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer. All construction and materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

**TITLE SHEET**  
SHEET TITLE  
**0157PPD**  
PROJECT NUMBER

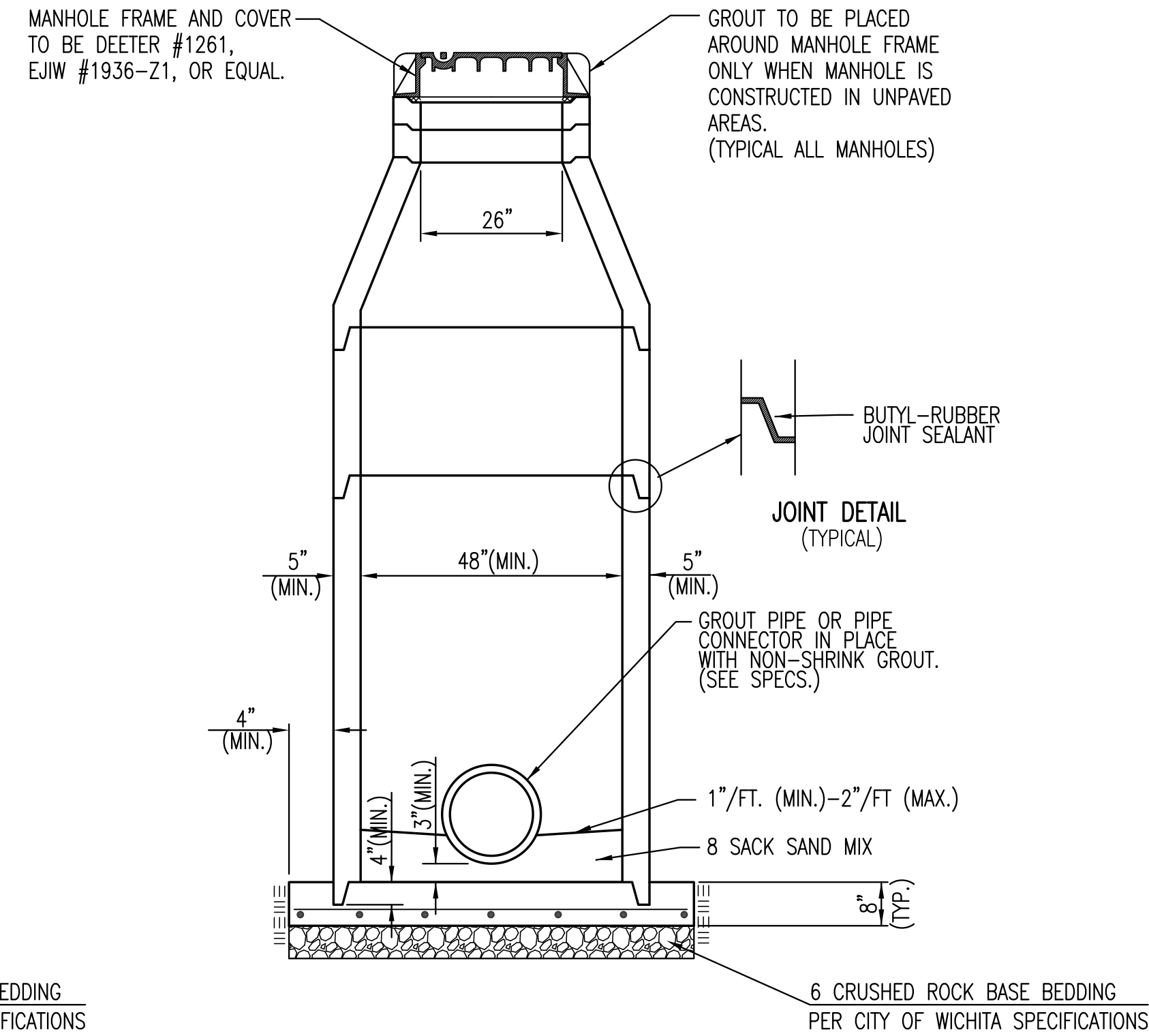
**SPE / SPE / GJA**  
DESIGNED DRAWN CHECKED

ISSUED  
**February 2013**  
REVISED

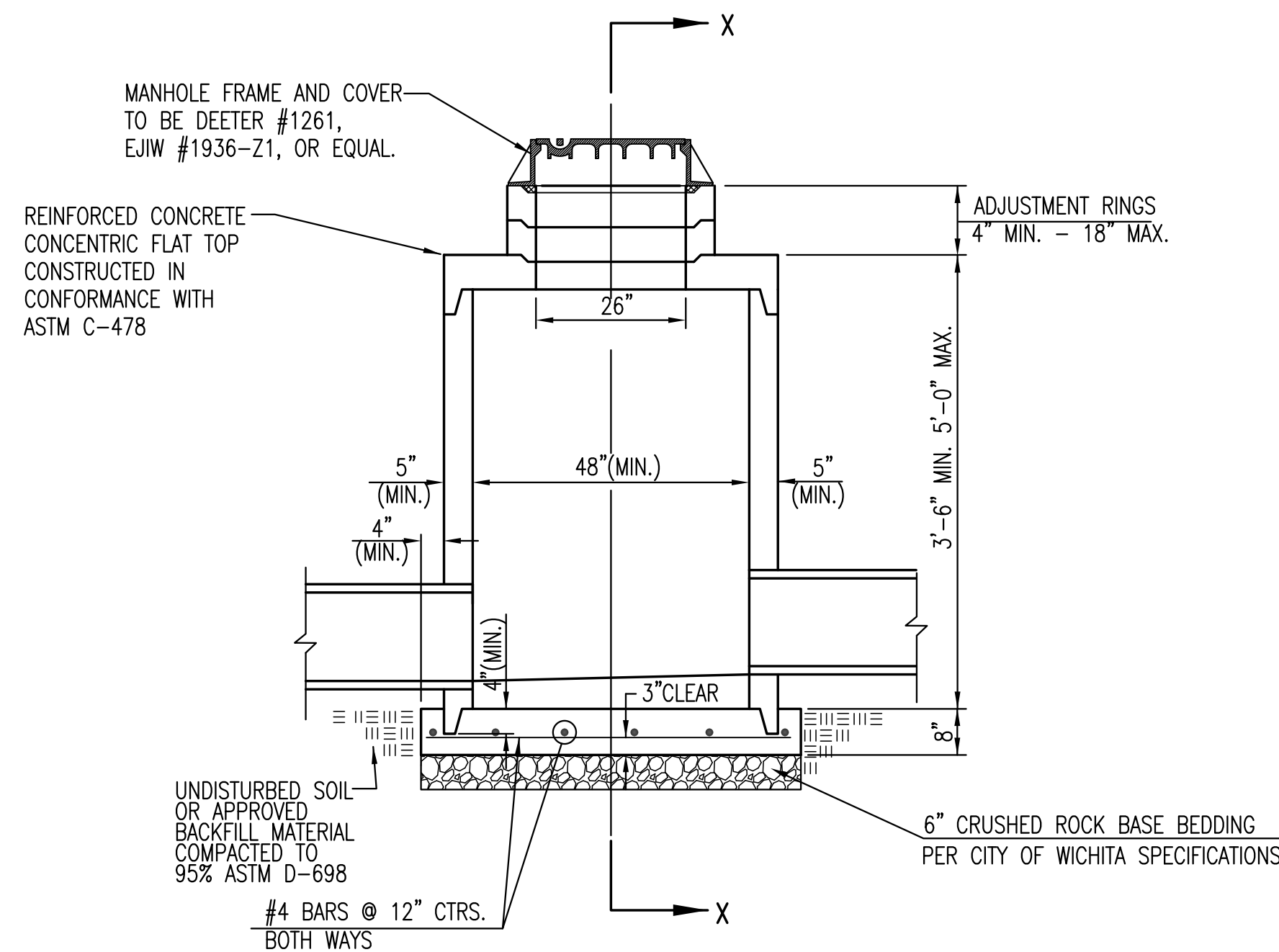
SHEET NO.  
**1 of 4**



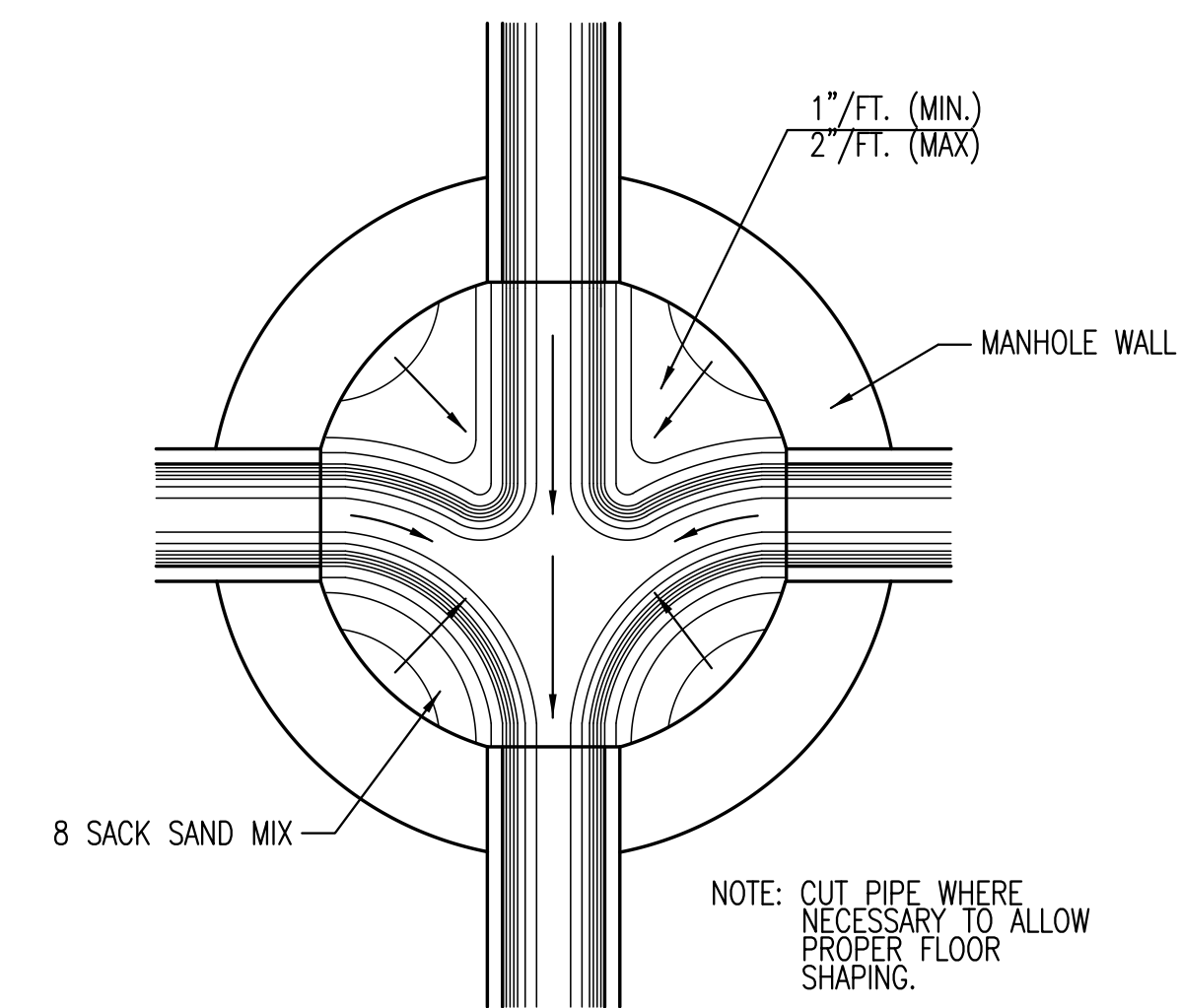
PRECAST STANDARD MANHOLE TYPE "A"



SECTION X-X (TYPICAL)



PRECAST SHALLOW MANHOLE TYPE "B"



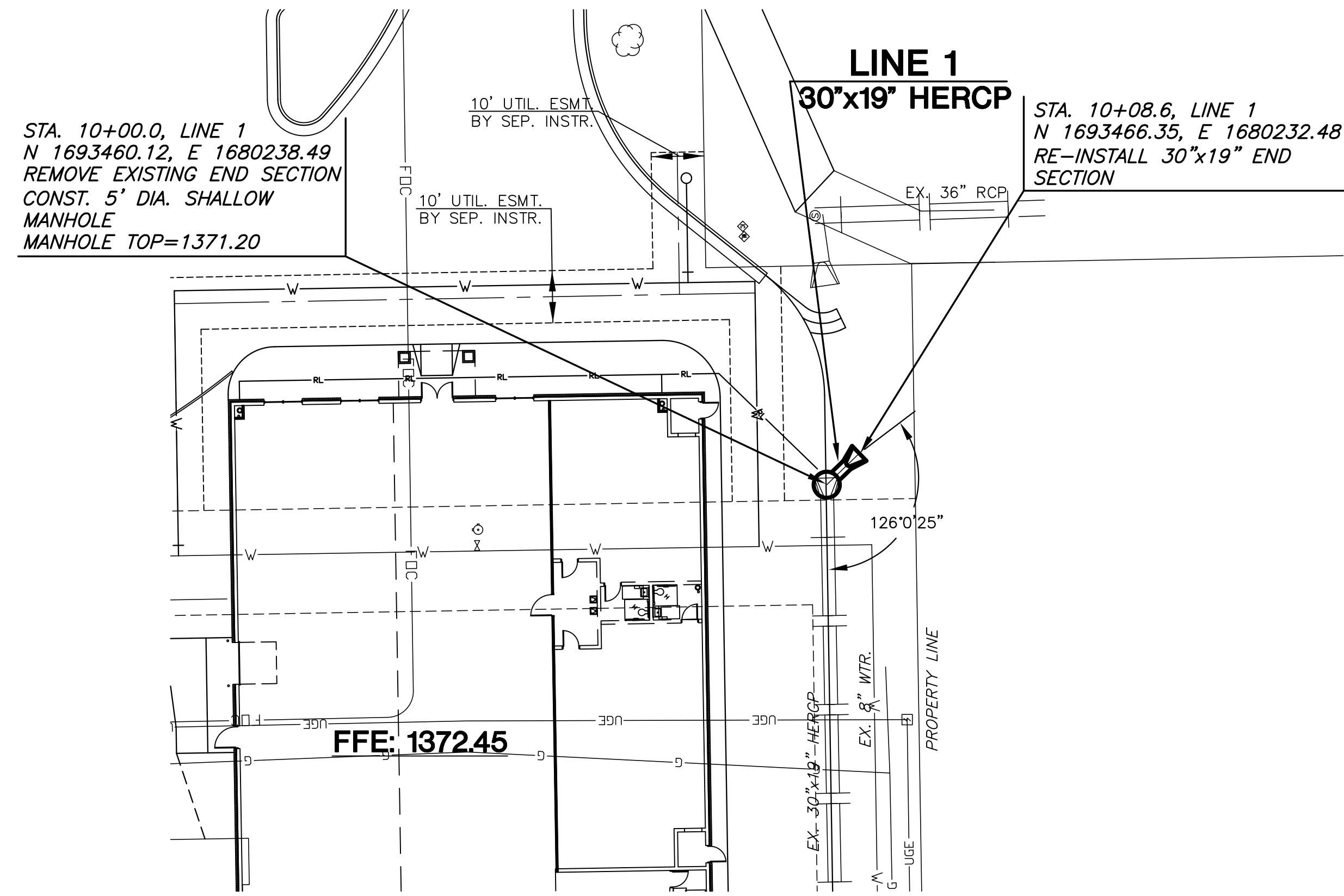
TYPICAL MANHOLE FLOOR SHAPING

GENERAL NOTES

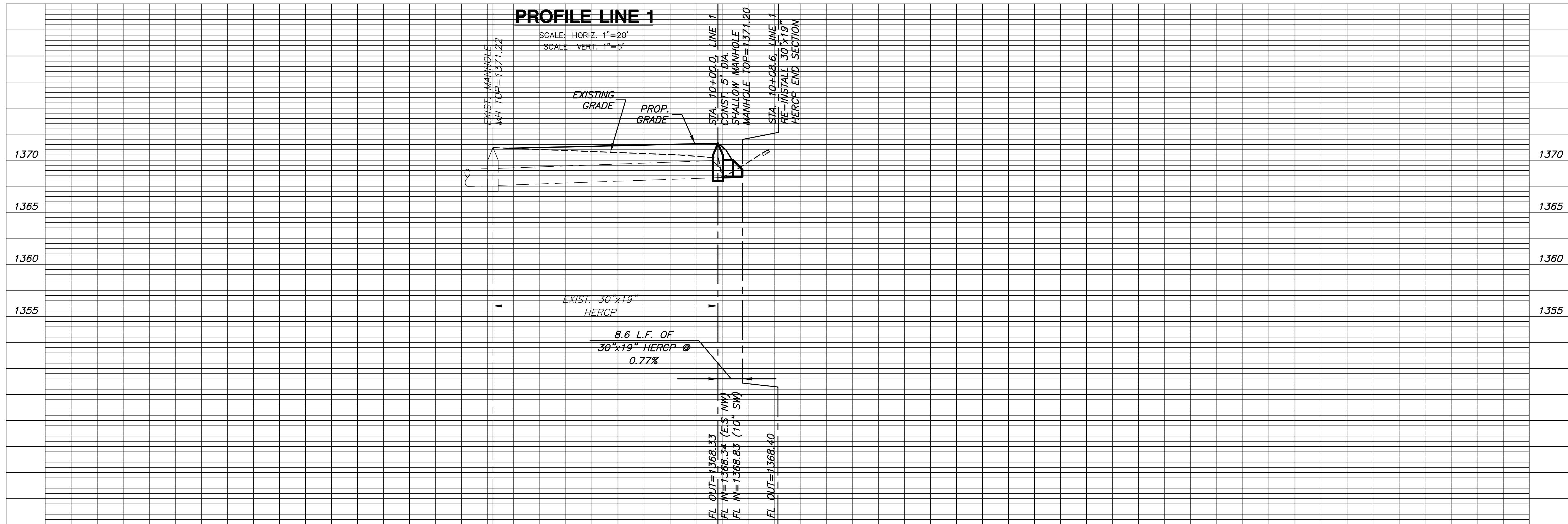
- IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
- STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
- ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
- 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.
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478 AS MODIFIED BY THE SPECIFICATIONS.
- CONCRETE USED FOR MANHOLE CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO MANHOLE BASE.
- MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5 FOOT INSIDE DIAMETER (MIN.)
- MANHOLES WITH PRECAST BASES MAY BE USED AT THE CONTRACTORS OPTION. THESE MANHOLES SHALL HAVE AN 8" MINIMUM BASE THICKNESS AND SHALL BE PLACED ON AN 8" MIN. CRUSHED ROCK BASE. PIPES SHALL BE ENCASED WITH CRUSHED ROCK TO AT LEAST 3 FEET FROM THE MANHOLE WALL.
- CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN MANHOLE WALL SHALL BE GROUTED FLUSH TO THE MANHOLE WALL WITH HYDRAULIC CEMENT AFTER THE MANHOLE IS IN PLACE. LIFTING HOLES THRU THE MANHOLE WALL WILL NOT BE ACCEPTED.
- THE ENDS OF ALL PIPES IN MANHOLES SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE MANHOLE WALL.
- MANHOLE INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE MANHOLE WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
- MANHOLE FRAME AND COVER TO BE DEETER #1261, EJIW #1936-Z1, OR APPROVED EQUAL, SEE SW-303.
- FOR FLAT GRATED INLET APPLICATION, GRATE TO BE DEETER #1933, EJIW #1205 MDI, OR APPROVED EQUAL.
- FOR BEEHIVE GRATE APPLICATION, GRATE TO BE DEETER #4495, EJIW #120545, OR APPROVED EQUAL.

**CITY OF WICHITA**  
PUBLIC WORKS & UTILITIES  
ENGINEERING DIVISION

<b>PRECAST CONCRETE MANHOLE (STORM SEWER)</b>		
CITY ENGINEER <b>GARY L. JANZEN, P.E.</b>		
PROJECT NUMBER 0157PPD	OCA NUMBER 607861	DATE 02/2013
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DESIGN DRAWN SHEET <b>2 of 4</b>



**PLAN LINE 1**



**PROFILE LINE 1**

SCALE: HORIZ. 1" = 20'  
SCALE: VERT. 1" = 5'

PLOTED: Tuesday, March 05, 2013 9:04:49AM

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-684-9600



PRIVATE STORM WATER SEWER PLAN FOR  
**COLLEGIATE WELLNESS CENTER**  
WICHITA COLLEGIATE SCHOOL

**SWS PLAN**  
SHEET TITLE  
0157PPD  
PROJECT NUMBER

SPE / SPE / GJA  
DESIGNED / DRAWN / CHECKED

ISSUED  
February 2013

REVISED

SHEET NO.  
**3 of 4**

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**MKEC**  
ENGINEERING  
CONSULTANTS, INC.

411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-684-9600

**PRIVATE STORM WATER SEWER PLAN FOR  
COLLEGIATE WELLNESS CENTER  
WICHITA COLLEGAITE SCHOOL**

**FINAL  
PLAT**

SHEET TITLE  
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**SPE / GJA / SPE**  
DESIGNED DRAWN CHECKED

ISSUED  
**February 2013**

REVISED

SHEET NO.  
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