

PLOTTER: Monday, July 07, 2014 9:08:25AM

J:\PROJECTS\2014\14101010076_WSU_AEGD PARKING LOT EXPANSION\CIVIL\CAD\SWS\4076 DT.DWG

PRIVATE STORM WATER SEWER

TO SERVE

AEGD PARKING LOT EXPANSION

PROJECT NO. 0230PPD

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.
- ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
- 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 |
- 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.

DISTURBED AREA=2.1 AC.
NEW IMPERVIOUS=2.0 AC.
EXISTING IMPERVIOUS=0 AC.
DETENTION=0.46 AC.-FT.
WQ_v=0.19 AC.-FT.
CP_v=N/A
THIS OVERALL PROJECT SATISFIES CHAPTER 16.32 OF THE CITY CODE BY THE INSTALLATION OF 2 PROPRIETARY WATER QUALITY TREATMENT DEVICES. NO CHANNEL PROTECTION IS REQUIRED.

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

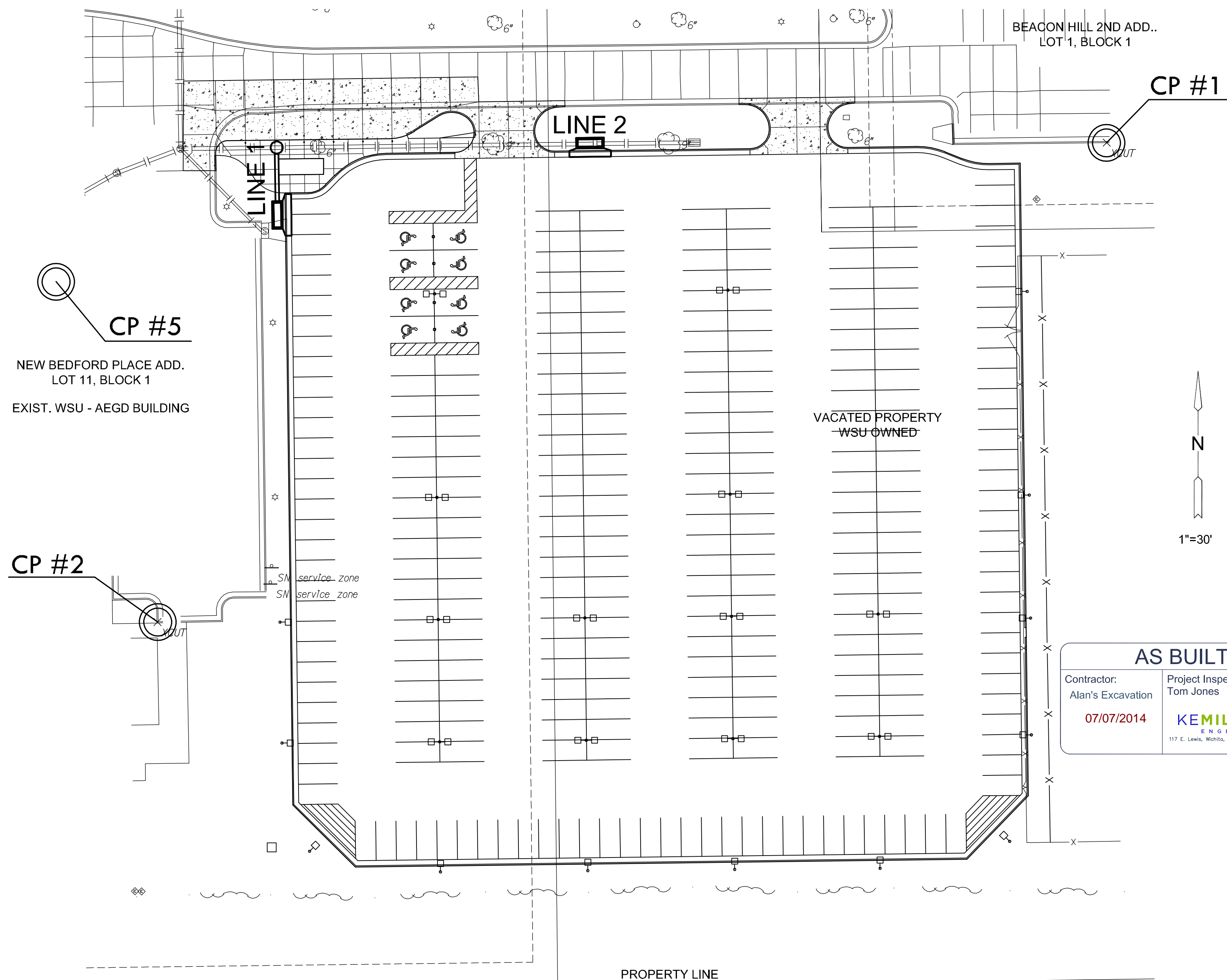
Engineering

Storm Water
(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).



AS BUILTS

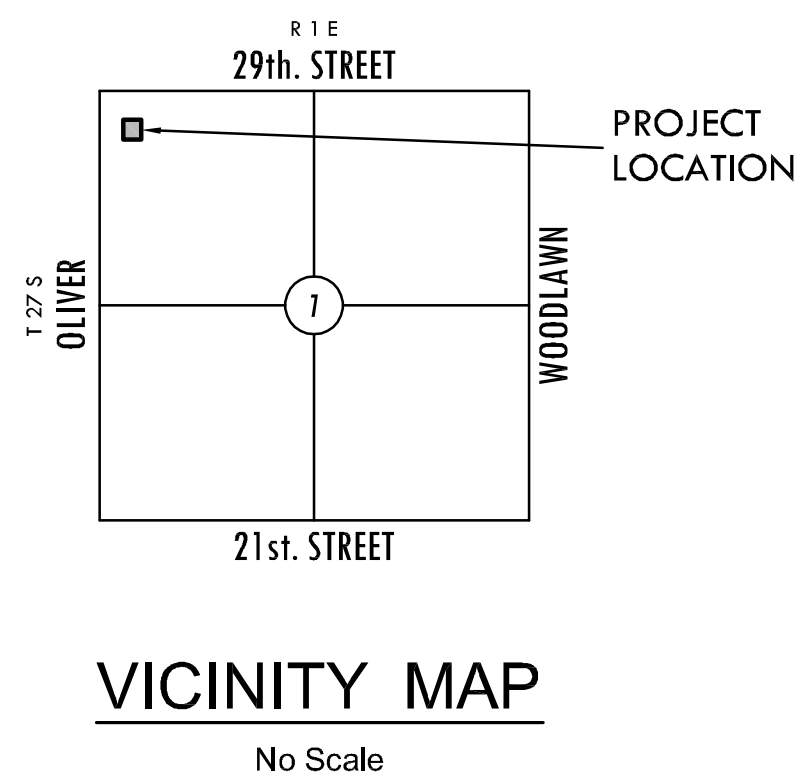
| | |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Contractor: Alan's Excavation 07/07/2014 | Project Inspector: Tom Jones KEMILLER ENGINEERING PC 117 E. LINN, WICHITA, KS 67202 (316)364-0242 |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|

NOTE:

- THE PROJECT HORIZONTAL DATUM IS BASED ON THE NAD83, KANSAS STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, (US SURVEY FEET DEFINITION), WITH A COMBINED ADJUSTMENT FACTOR (CAF) OF 1.0001200144.

ALL COORDINATE AND DIMENSIONS SHOWN ON THESE PLANS ARE MODIFIED TO GROUND VALUES.

THE FOLLOWING EQUATIONS CAN BE USED FOR CONVERSION:
GROUND COORDINATES TO STATE PLANE COORDINATES = GROUND X 1/CAF
STATE PLANE COORDINATES TO GROUND COORDINATES = STATE PLANE X CAF
- THE VERTICAL DATUM USED IS NAVD88.

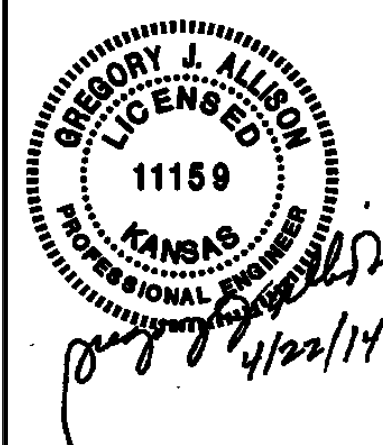


INDEX TO DRAWINGS

| SHEET NO. | DESCRIPTION |
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| 9 | SWS TITLE SHEET |
| 10-11 | SWS DETAILS |
| 12 | SWS LINES 1 & 2 PLAN & PROFILE |
| 13 | SWS DETENTION PLAN |
| 4 | EROSION CONTROL PLAN |
| 6 | GRADING PLAN |

CONTROL POINTS

- CP #1
- CHISELED "*" ON TOP OF SOUTH CURB OF HUGHES METROPLEX PARKING LOT
 - 63' EAST OF THE SOUTHWEST CORNER OF THE PARKING LOT
 - LINE OF LIGHT POLES TO NORTH
 - N = 1704001.396 E = 1665830.393 ELEV. = 1354.73 NAVD 88
- CP #2
- CHISELED "*" ON TOP OF CURB AT SOUTHWEST CORNER OF TURNAROUND AREA ON SOUTH END OF EAST PARKING LOT FOR AEGD BUILDING
 - N = 1703805.150 E = 1665442.070 ELEV. = 1355.355 NAVD 88
- CP #5
- PK NAIL AND MKEC WASHER IN ASPHALT PARKING LOT ON NORTH SIDE OF AEGD BUILDING, 2.5' WEST OF STRIPE BETWEEN 2ND AND 3RD HANDICAP PARKING STALLS WEST OF THE ENTRANCE INTO THE AEGD BUILDING
 - N = 1703940.671 E = 1665301.892 ELEV. = 1353.75 NAVD 88



Department of Administration
Office of Facilities & Procurement
Management
Design, Construction & Compliance
800 SW Jackson, Suite 700
Topeka, Kansas 66612-1216
Phone 785-296-8899

WICHITA STATE UNIVERSITY
AEGD PARKING EXPANSION
WICHITA, KANSAS
DATE: 04/22/2014
DRAWN BY: SPE
CHECKED BY: GJA

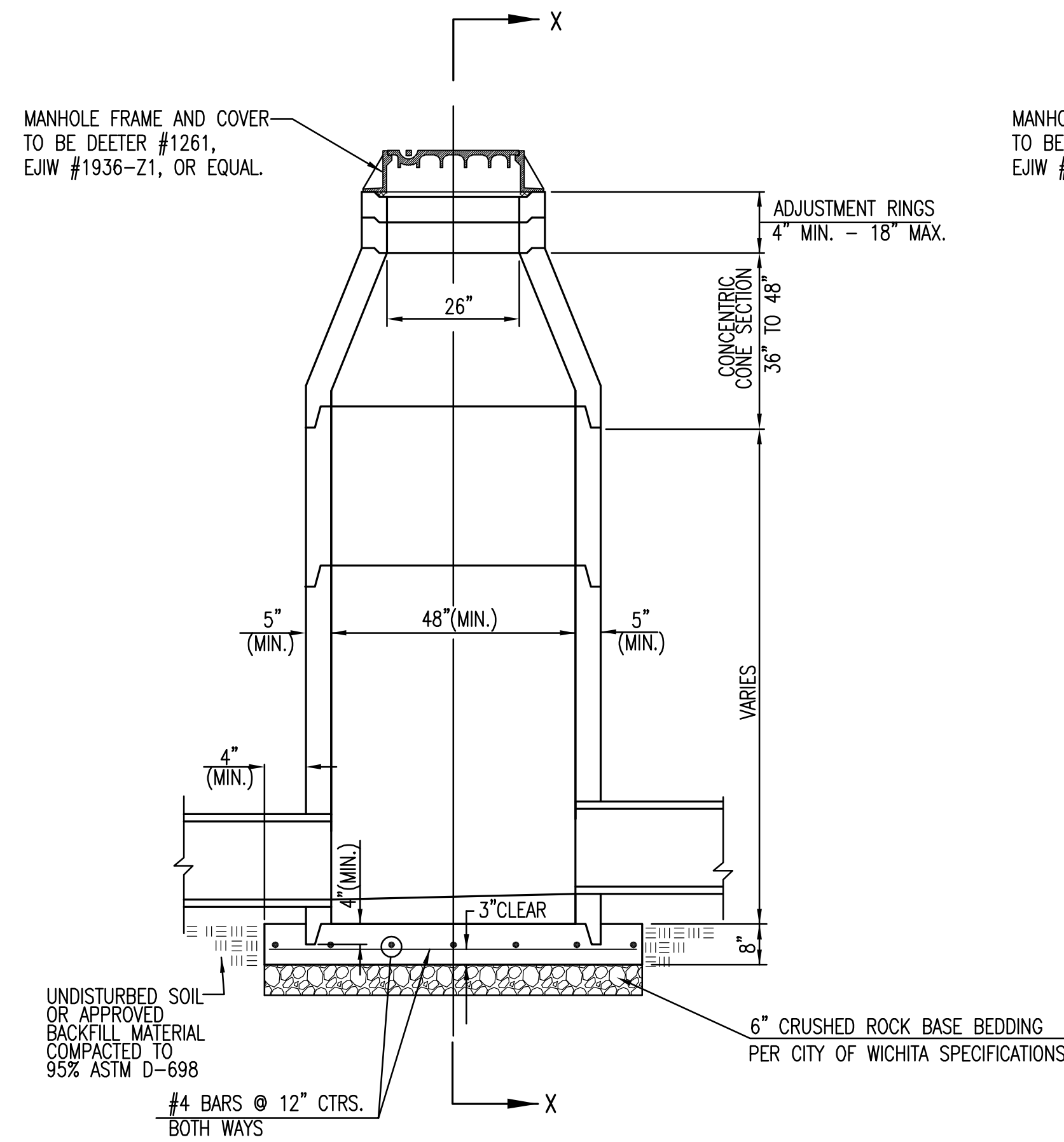
SWS TITLE SHEET

A-012496

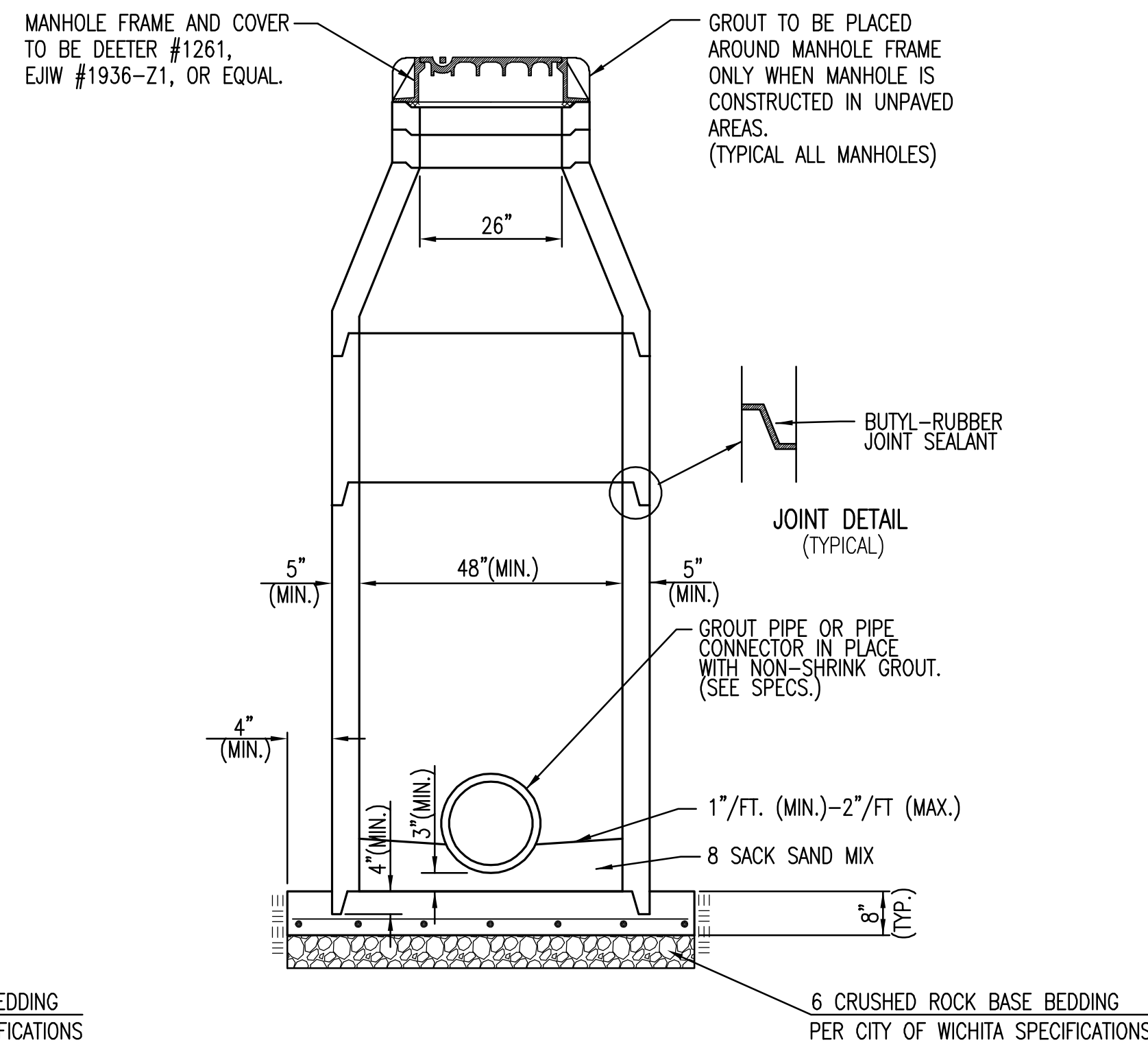
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ORIGINAL CONTRACT DOCUMENTS

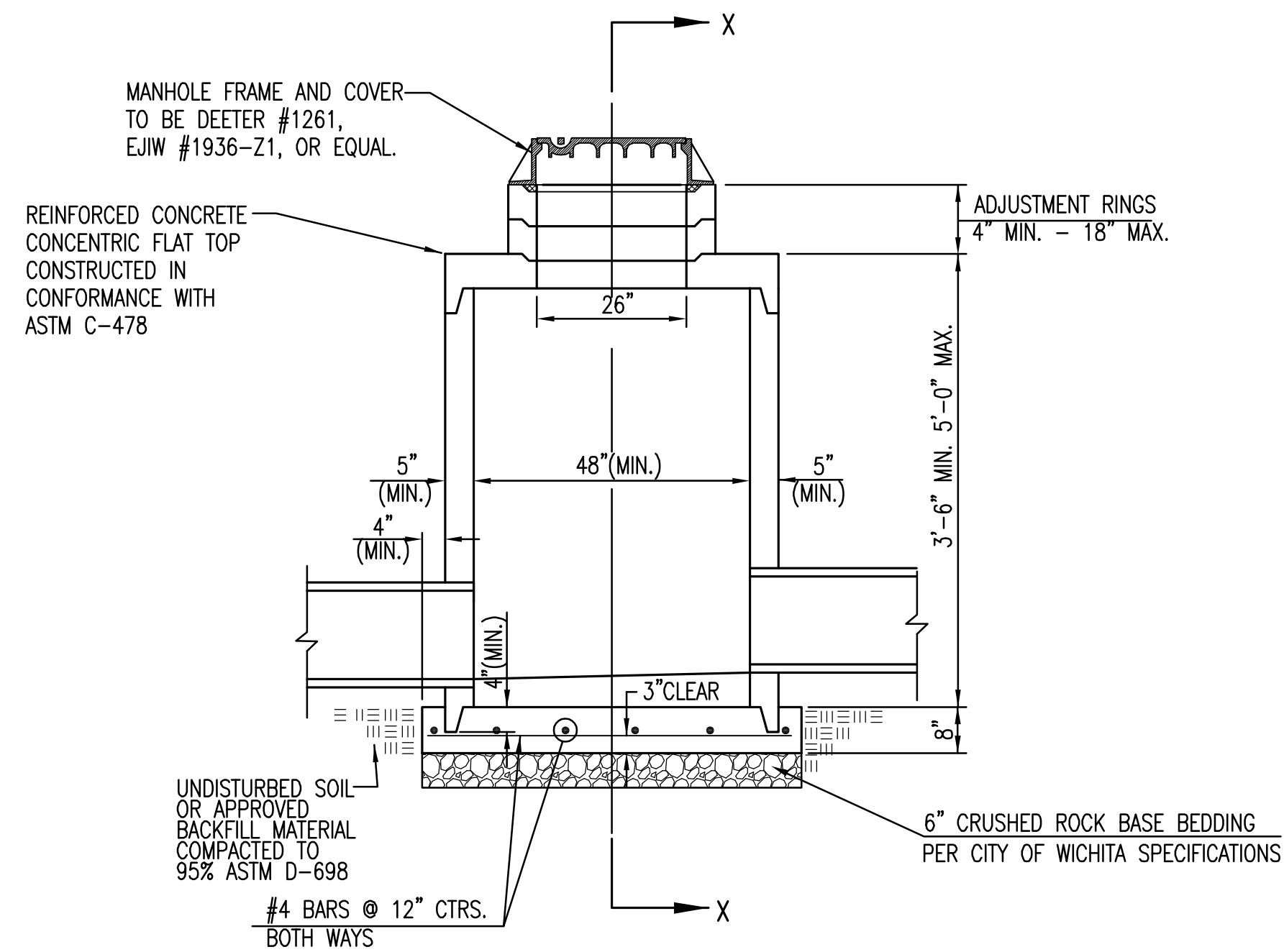
PLOTTED: Tuesday, April 22, 2014 10:13AM



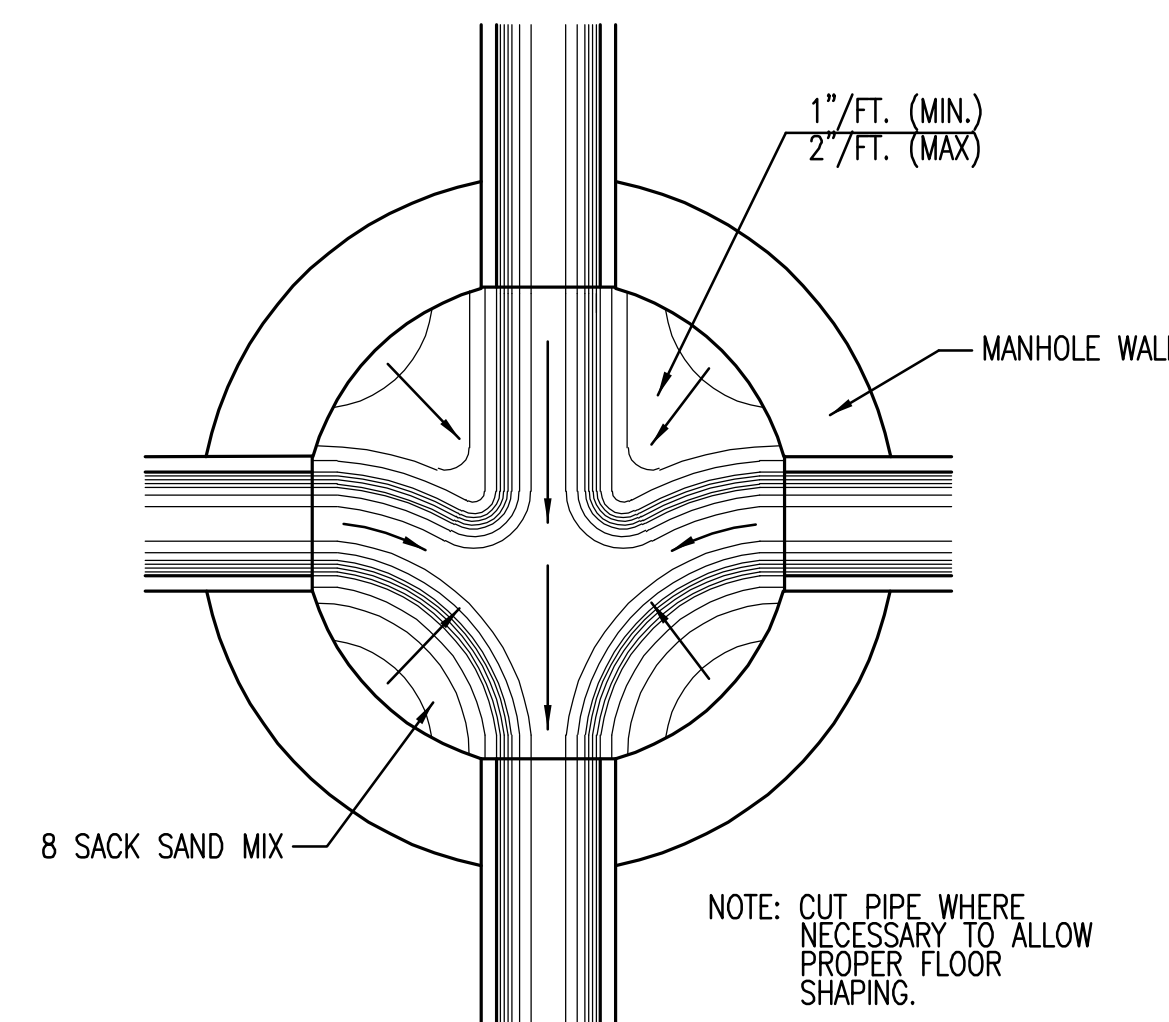
PRECAST STANDARD MANHOLE TYPE "A"



SECTION X-X (TYPICAL)



PRECAST SHALLOW MANHOLE

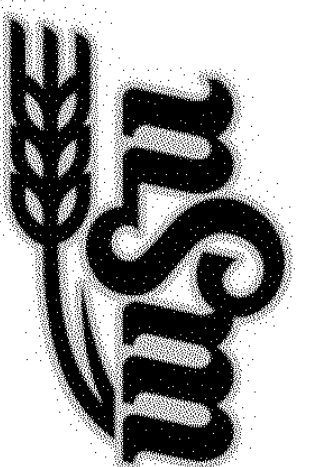
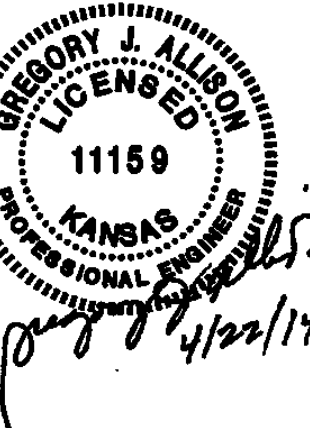


TYPICAL MANHOLE FLOOR SHAPING

ALL MANHOLE COVERS TO BE PLAIN. NO REFERENCE TO CITY OF WICHITA.

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 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.



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WICHITA STATE UNIVERSITY
AEGD PARKING EXPANSION
WICHITA, KANSAS
DATE: 04/22/2014 DRAWN BY: SPE CHECKED BY: GJA

PRECAST MH DETAILS

A-012496

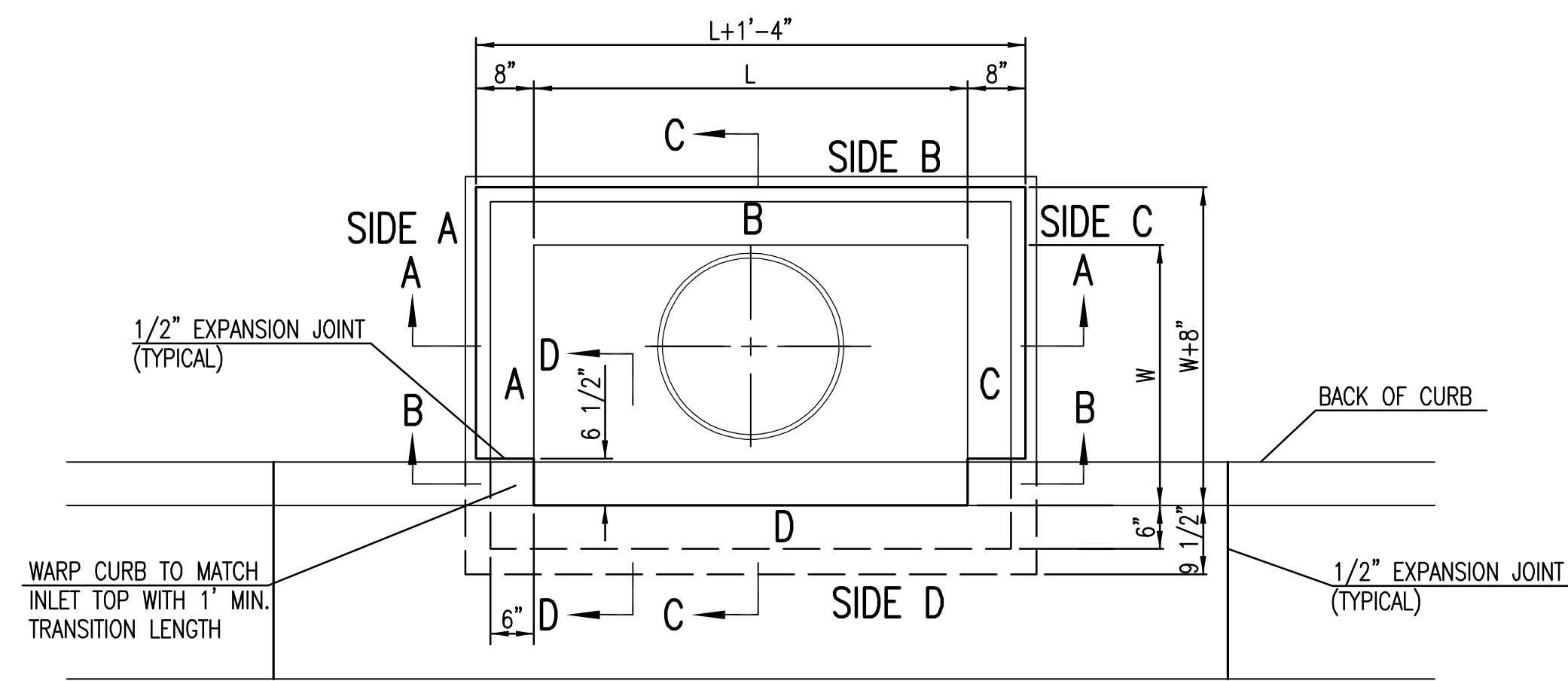
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ORIGINAL CONTRACT DOCUMENTS

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PLOTTER: Tuesday, April 22, 2014 10:13AM

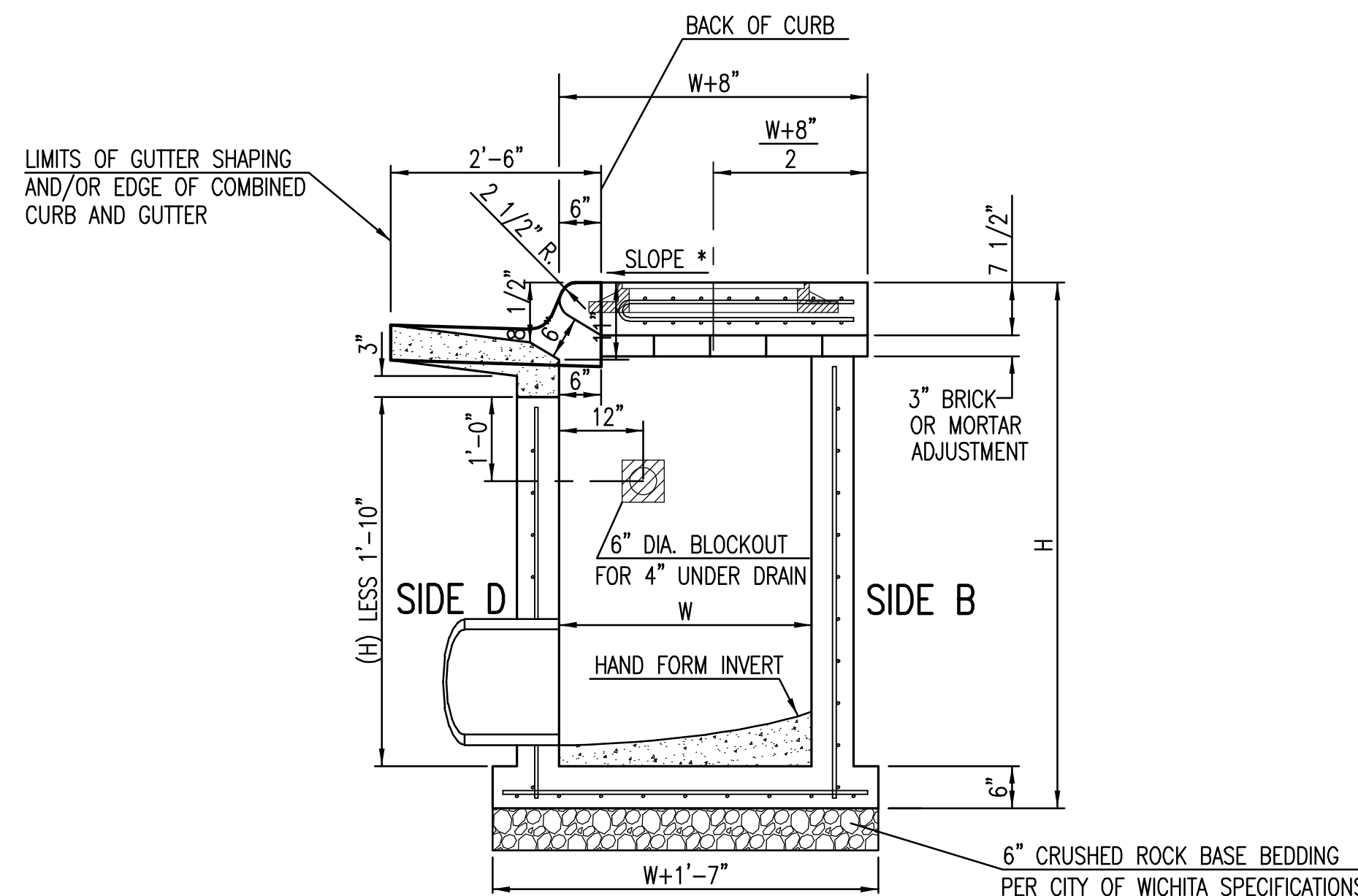
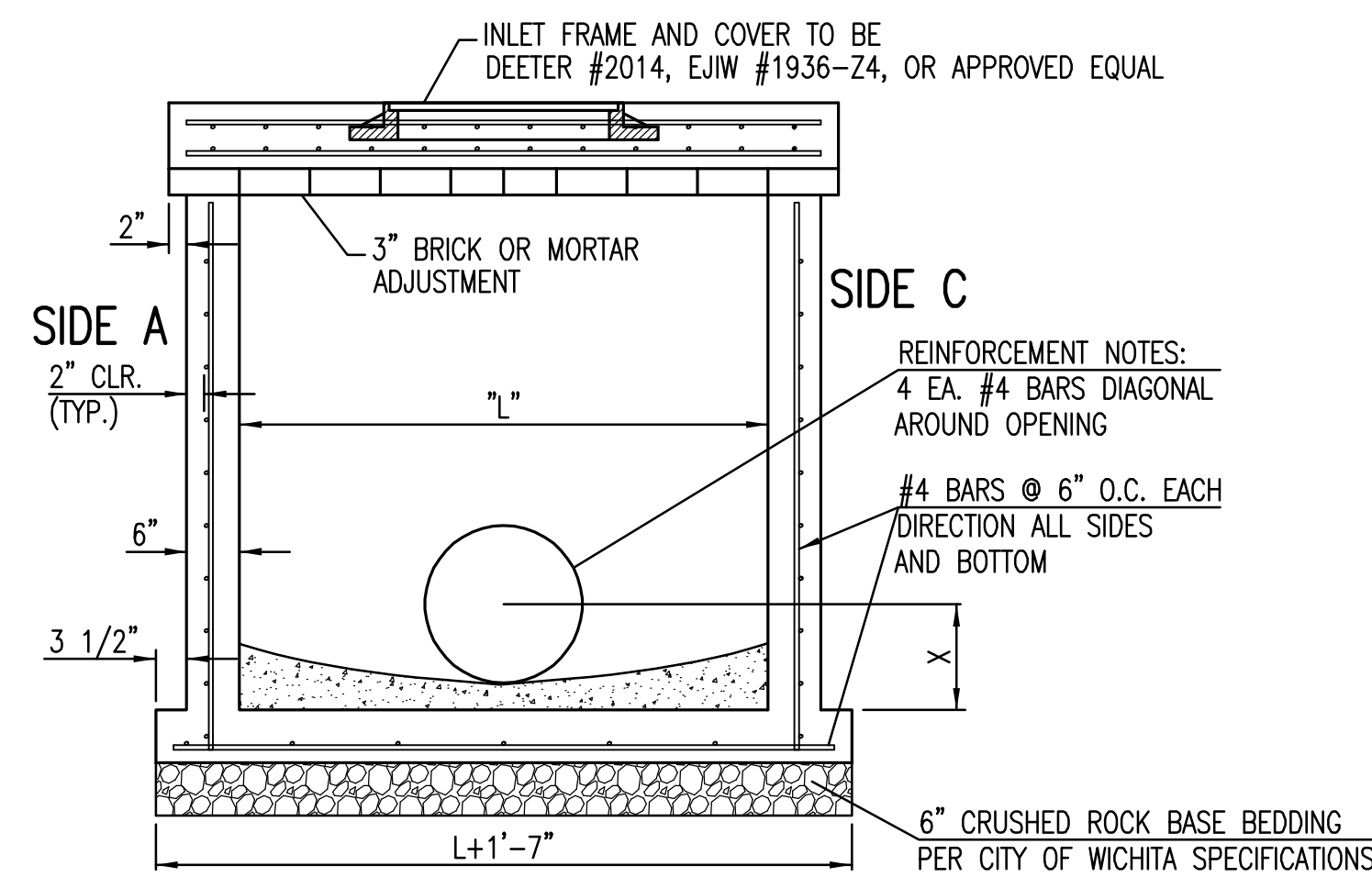
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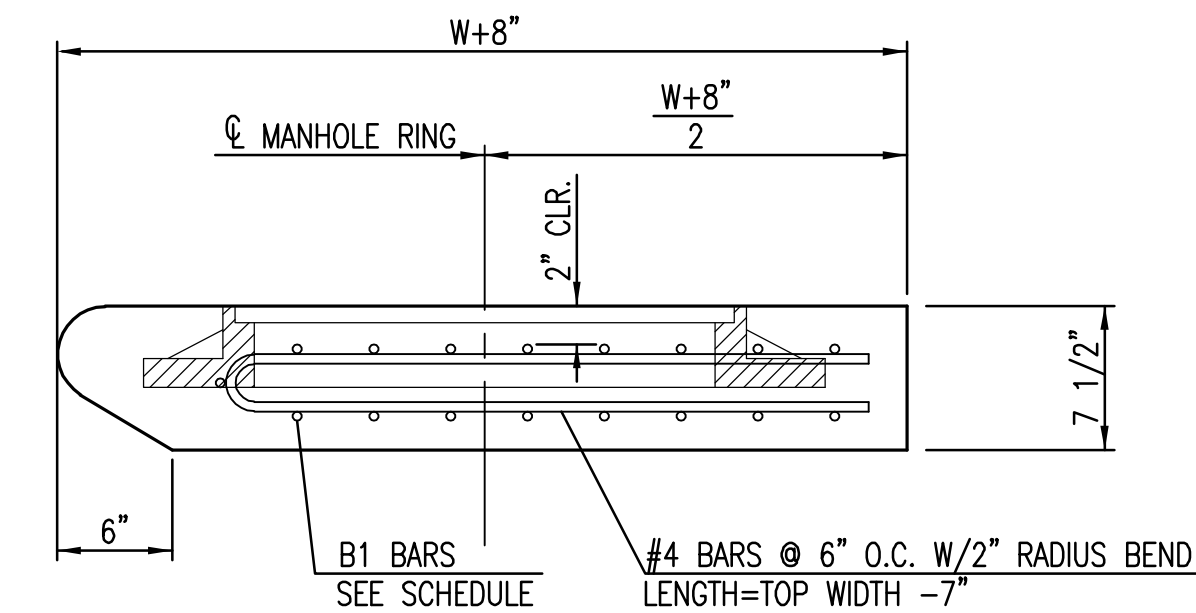
| BAR SCHEDULE | | |
|---------------|---------|---------|
| INLET OPENING | B1 BARS | SPACING |
| 5'-0" | #4 | 4" |
| 10'-0" | #6 | 3.5" |

| W | PRE-CAST TOP SIZE | | | PIPE DIA.** |
|-------|-------------------|---------|--------|---------------|
| | WIDTH | LENGTH | TOP | |
| 3'-0" | W+8" | L+1'-4" | 7 1/2" | 21" & SMALLER |
| 4'-0" | W+8" | L+1'-4" | 7 1/2" | 24" & 30" |
| 5'-0" | W+8" | L+1'-4" | 7 1/2" | 36" & 42" |
| 6'-0" | W+8" | L+1'-4" | 7 1/2" | 48" & 54" |
| 7'-0" | W+8" | L+1'-4" | 7 1/2" | 60" & 66" |

** FOR PIPES PERPENDICULAR TO INLET WALL



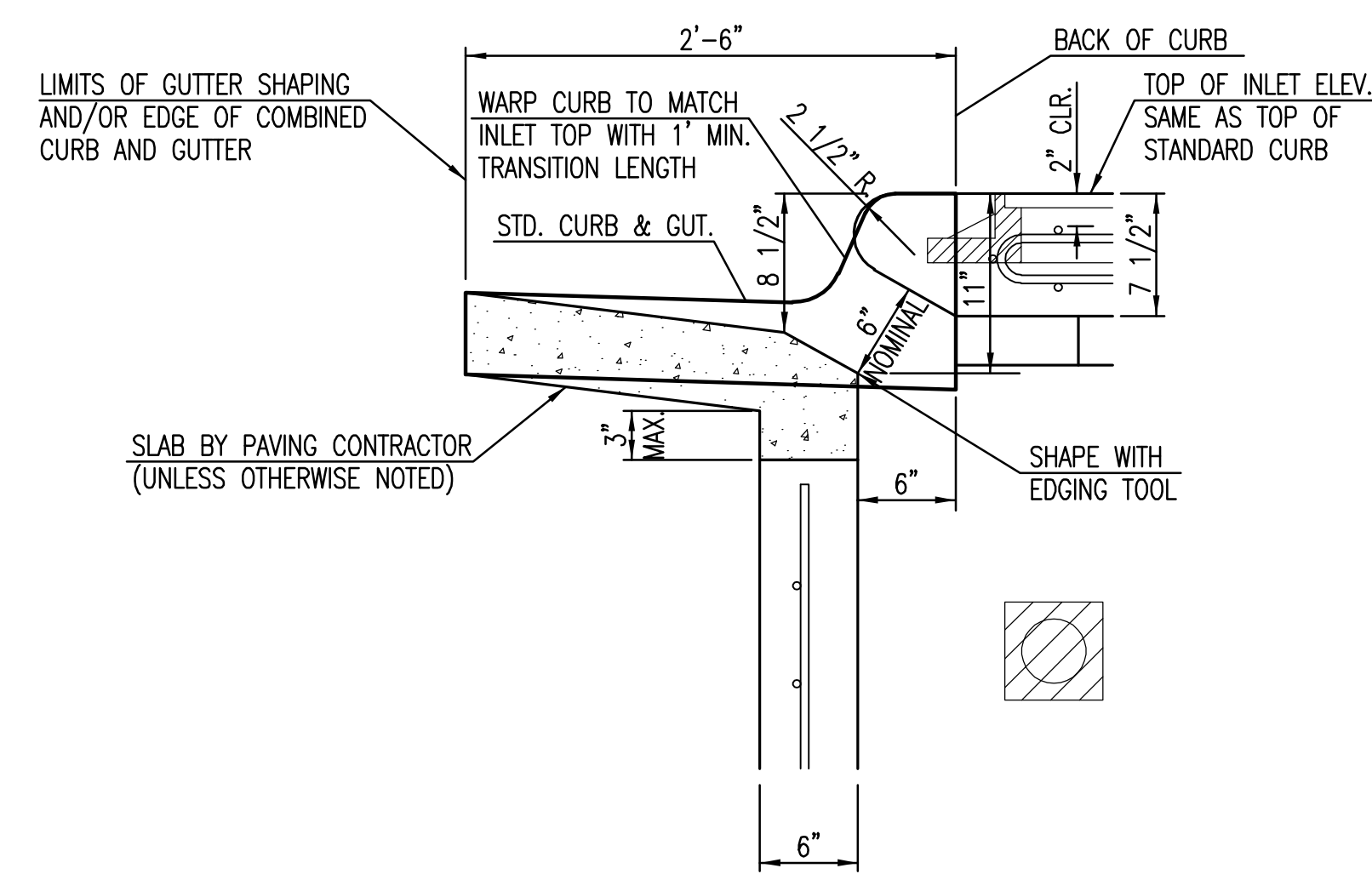
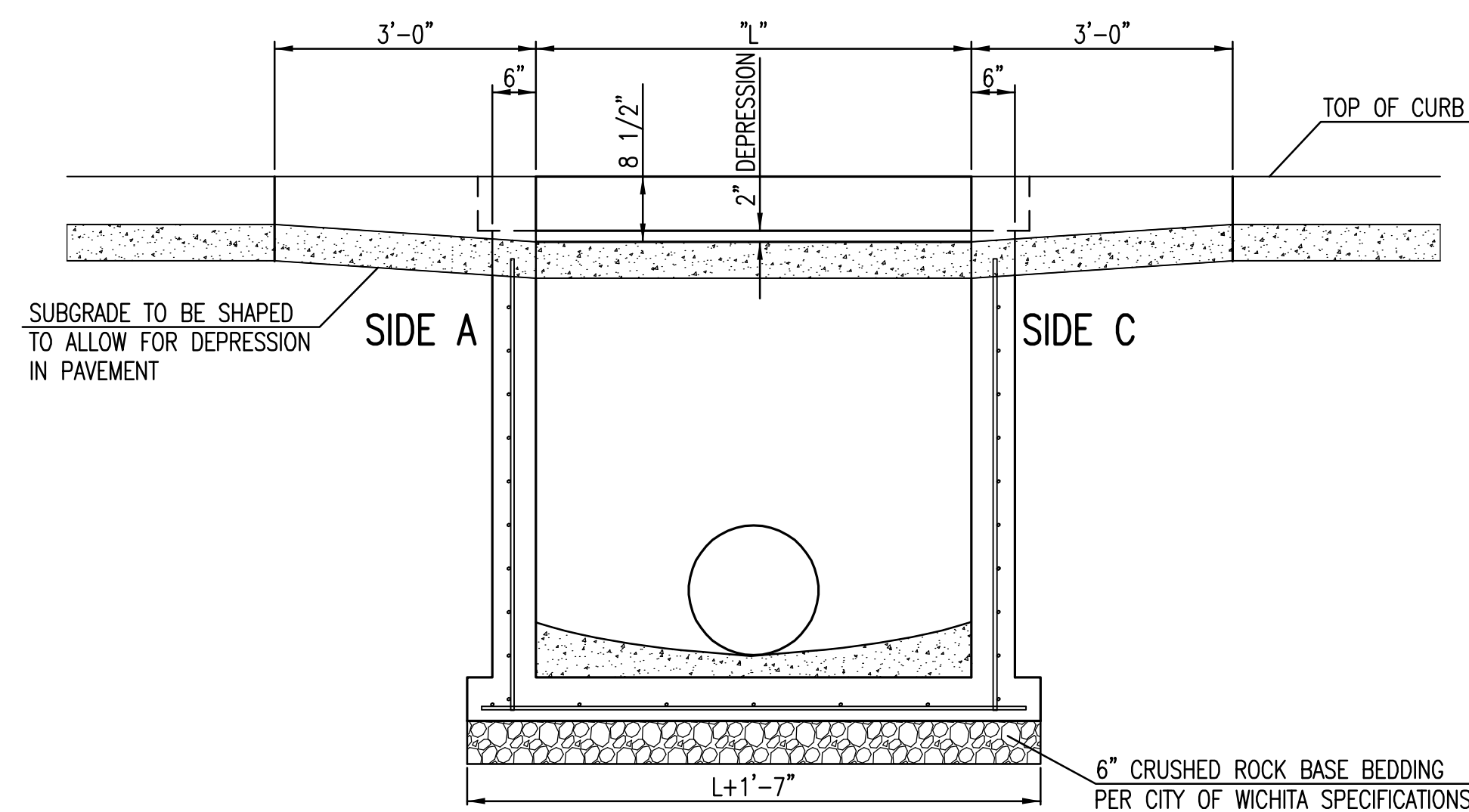
NOTES:
* SLOPE OF INLET TOP TO MATCH SIDEWALK OR PARKING SLOPES WITHIN LIMITS INDICATED.



ALL MANHOLE COVERS TO BE PLAIN. NO REFERENCE TO CITY OF WICHITA.

GENERAL NOTES

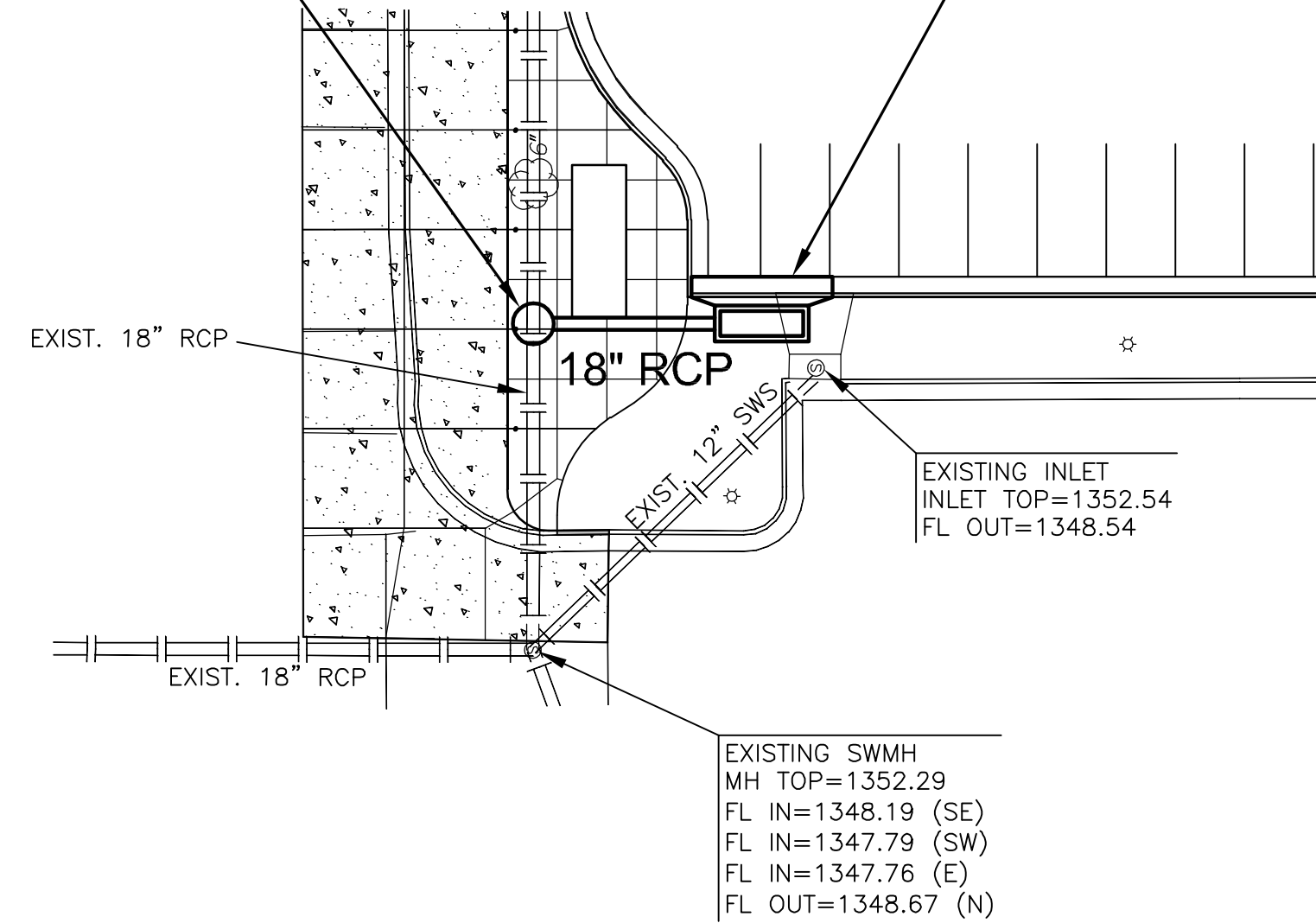
- CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL CONFORM TO CITY OF WICHITA SPECIFICATIONS FOR CONCRETE PAVEMENT MIX.
- CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP OF THIS INLET WHEN W=5'-0" AND H=7'-0" OR LESS.
- INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
- THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.
- INLET FRAME AND COVER TO BE DEETER #2014, EJIW #1936 Z4, OR APPROVED EQUAL, SEE SW-303.
- CONTRACTOR SHALL REMOVE LIFTING HOOKS AFTER INSTALLATION. RECESSES IN INLET WALL SHALL BE GROUTED FLUSH TO THE INLET WALL WITH HYDRAULIC CEMENT AFTER THE INLET IS IN PLACE. LIFTING HOLES THRU THE INLET WALL WILL NOT BE ACCEPTED.



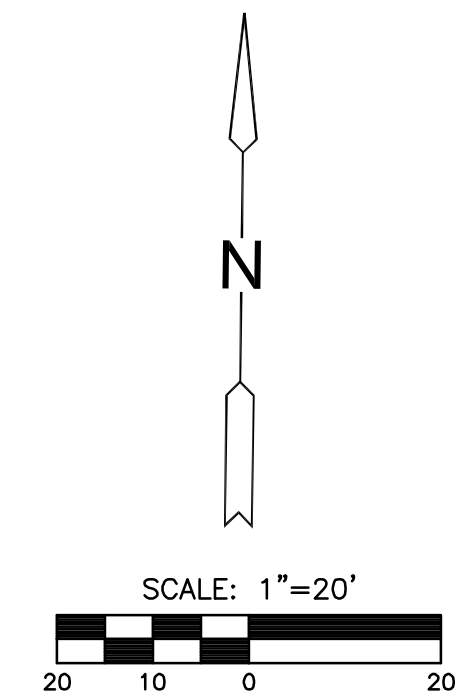
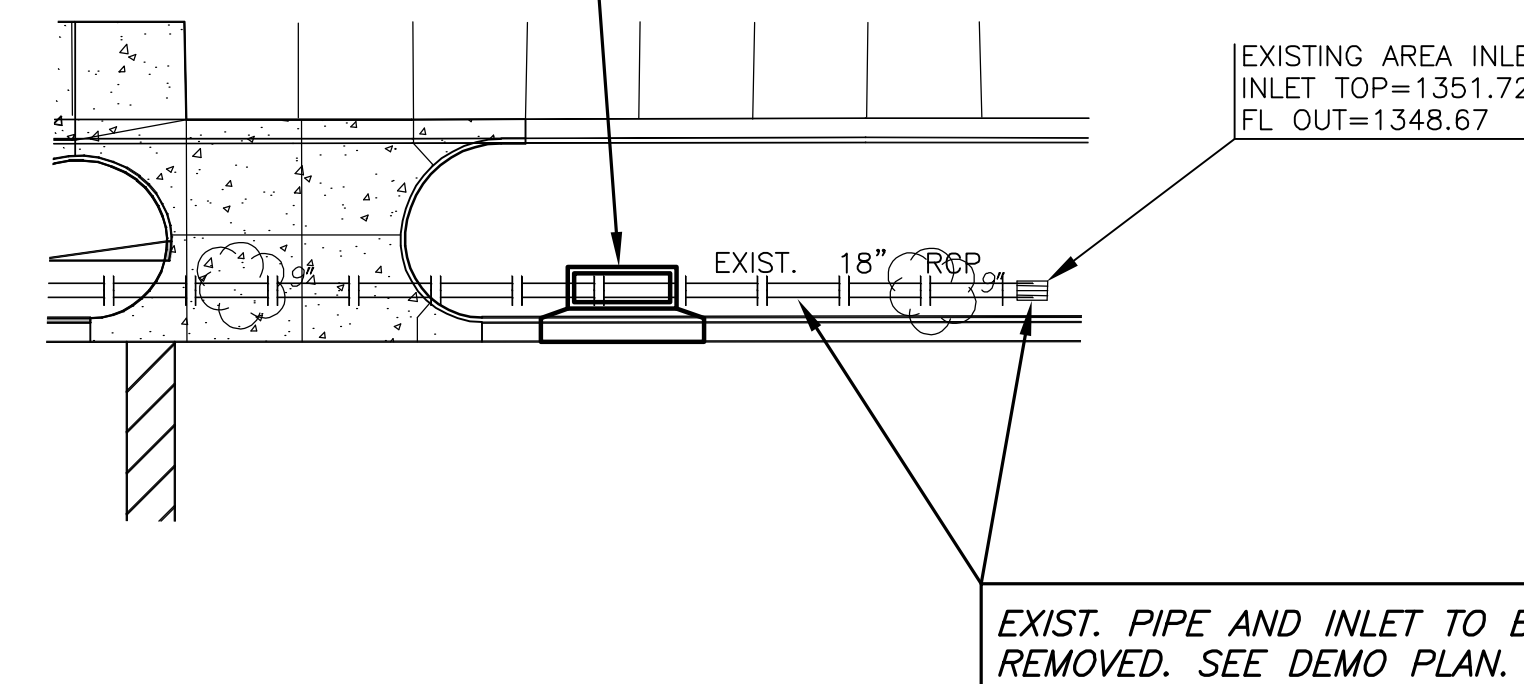
PLOTTED: Tuesday, April 22, 2014 @ 10:14AM

STA. 10+00.0, LINE 1
 CONST. 5' DIA. MANHOLE
 INSTALL 24R SNOUT STRUCTURE
 OVER DOWNSTRIPE PIPE
 MH TOP=1352.4
 N=170399.39, E=1665490.77
 PROVIDE SEDIMENT BARRIER

STA. 10+27.6, LINE 1
 CONST. TYPE 1A CURB
 INLET (10'X3')
 INSTALL 24F SNOUT STRUCTURE
 OVER DOWNSTREAM PIPE
 INLET TOP=1352.0
 N=1703971.81, E=1665491.12
 PROVIDE SEDIMENT BARRIER



STA. 10+00.0, LINE 2
 CONST. TYPE 1A CURB
 INLET (10'X3')
 INSTALL 24F SNOUT STRUCTURE
 OVER DOWNSTREAM PIPE
 INLET TOP=1352.6
 N=1704001.27, E=1665619.01
 PROVIDE SEDIMENT BARRIER



PLAN LINE 1
 PROFILE LINE 1

| Station | Profile Line 1 | Station |
|---------|----------------|---------|
| 1375 | | 1375 |
| 1370 | | 1370 |
| 1365 | | 1365 |
| 1360 | | 1360 |
| 1355 | | 1355 |
| 1350 | | 1350 |
| 1345 | | 1345 |
| 1340 | | 1340 |
| 1335 | | 1335 |
| 1330 | | 1330 |
| 1325 | | 1325 |

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

STA. 10+00.0, LINE 1
 INSTALL 5' DIA. MANHOLE
 TOP=1352.4

STA. 10+27.6, LINE 1
 INSTALL TYPE 1A CURB
 INLET (10'X3')
 TOP=1352.0

PROP. GROUND

EXISTING GROUND

27.6' of 18" RCP @ 0.36%

FL OUT=1347.92 (18")
 FL IN=1348.02
 FL IN=1347.92

FL OUT=1348.12

10

PLAN LINE 2
 PROFILE LINE 2

| Station | Profile Line 2 | Station |
|---------|----------------|---------|
| 1375 | | 1375 |
| 1370 | | 1370 |
| 1365 | | 1365 |
| 1360 | | 1360 |
| 1355 | | 1355 |
| 1350 | | 1350 |
| 1345 | | 1345 |
| 1340 | | 1340 |
| 1335 | | 1335 |
| 1330 | | 1330 |
| 1325 | | 1325 |

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

STA. 10+00.0, LINE 2
 INSTALL TYPE 1A CURB
 INLET (10'X3')
 TOP=1352.6

EXISTING GROUND

PROP. GROUND

FL OUT=1348.43 (18")

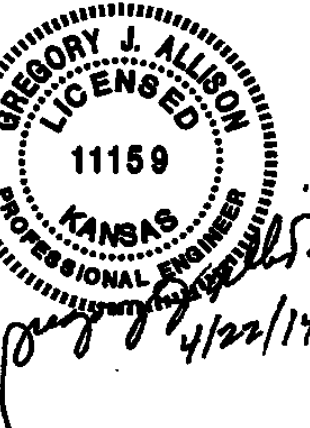
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AS BUILTS

KEMILLER ENGINEERING PA

117 E. Lewis,
 Wichita, KS 67202

(316)264-0242



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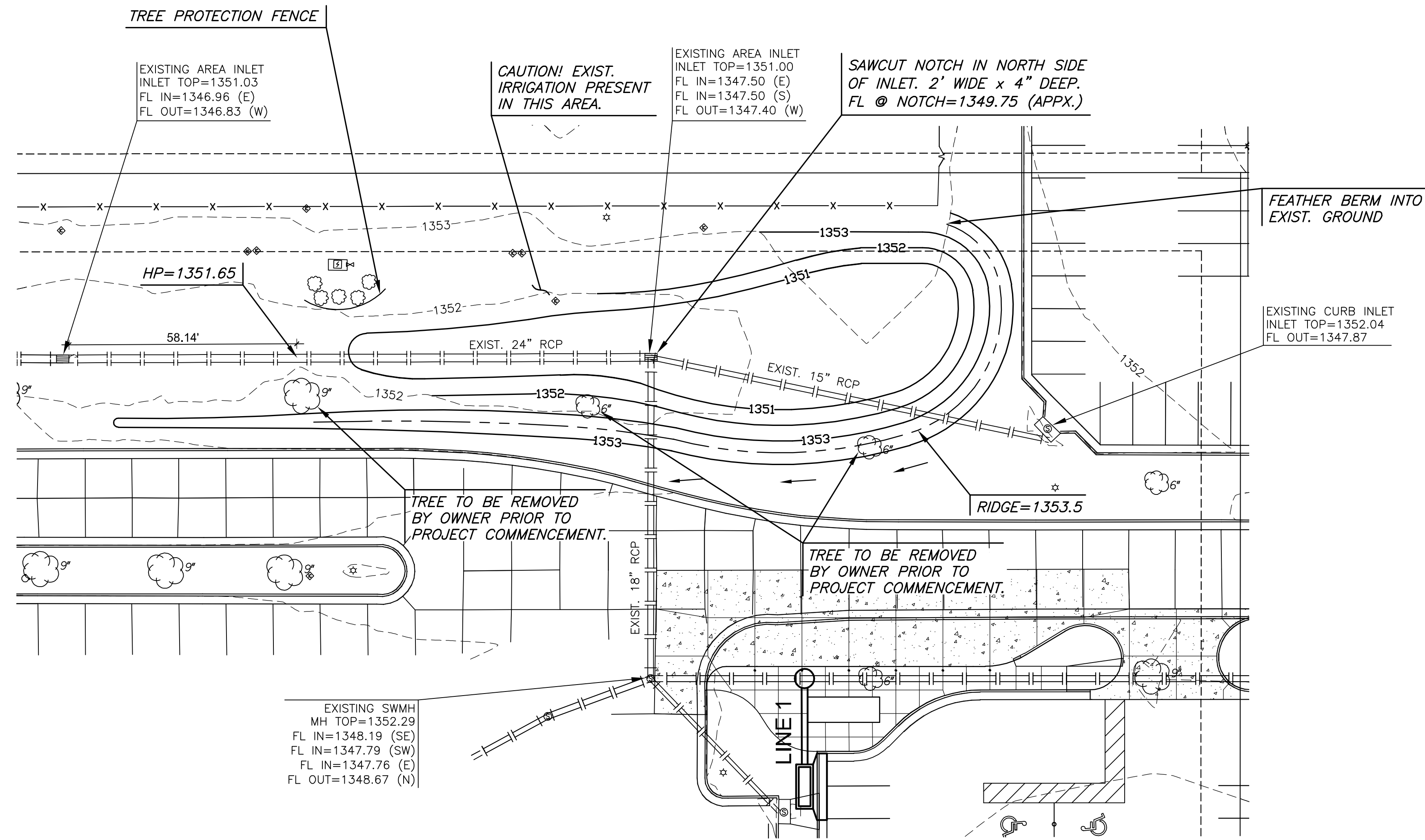
SWS LINES 1 & 2 PLAN
 & PROFILE

A-012496

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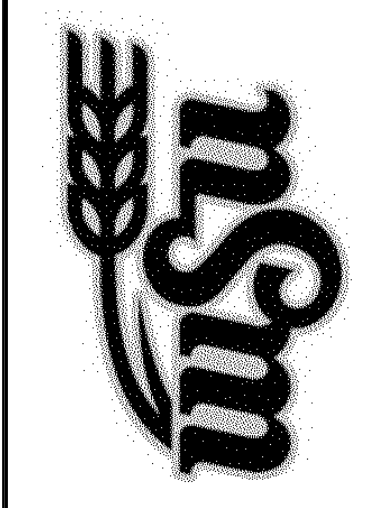
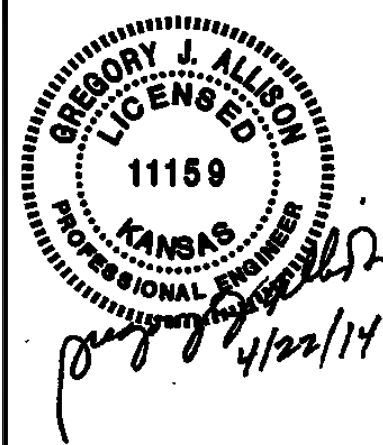
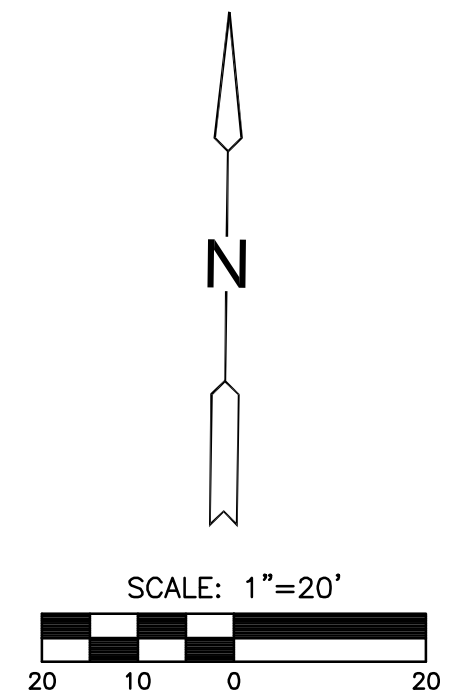
ORIGINAL CONTRACT
 DOCUMENTS

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



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AEGD PARKING EXPANSION
WICHITA, KANSAS
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SWS DETENTION PLAN
A-012496
13 OF 16
ORIGINAL CONTRACT DOCUMENTS