

| | | | | |
|--------|--------------|------|-----------|--------------|
| STATE | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
| KANSAS | 87 N-0349-01 | 2009 | 1 | 133 |

STATE OF KANSAS

DEPARTMENT OF TRANSPORTATION



PLAN AND PROFILE OF PROPOSED

17TH STREET
FROM GROVE TO HILLSIDE

FEDERAL AID PROJECT

WICHITA, SEDGWICK COUNTY, KANSAS

POPULATION = 335,562

CITY OF WICHITA PAVING PROJECT NO. 472-84766 (OCA# 706966)

CITY OF WICHITA SANITARY SEWER PROJECT NO. 468-84596 (OCA# 620543)

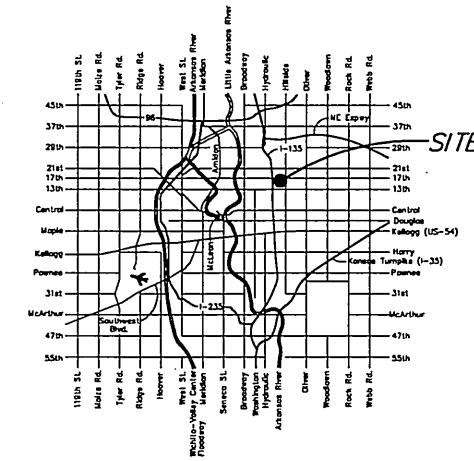
CITY OF WICHITA WATER PROJECT NO. 448-90432 (OCA# 636216)

INDEX OF SHEETS

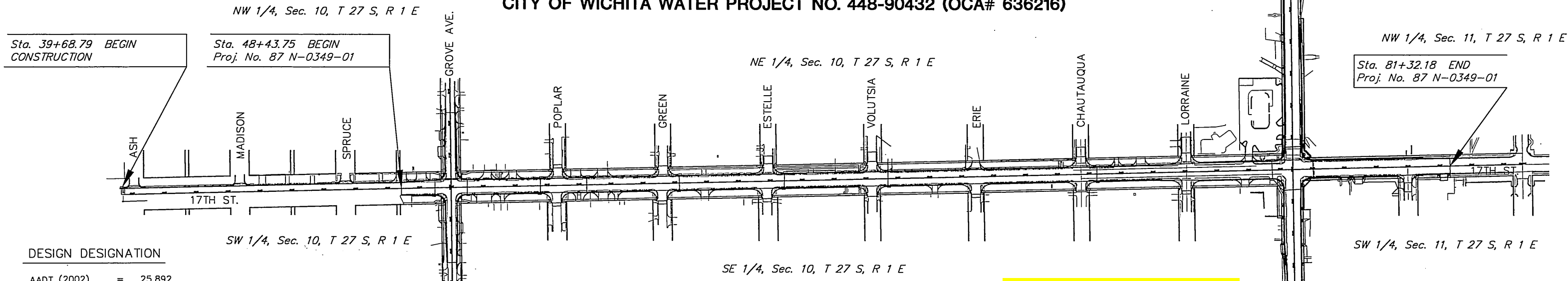
| SHEET NO | DESCRIPTION |
|----------|--|
| 1 | TITLE SHEET |
| 2 | GENERAL NOTES |
| 3-4 | TYPICAL SECTIONS |
| 5-13 | PAVING PLAN AND PROFILES |
| 14-17 | PAVING BUBBLE MAPS |
| 18-27 | STORM SEWER PLAN AND PROFILE SHEETS |
| 28-30 | STORM SEWER BUBBLE MAPS |
| 31-44 | PAVING DETAILS |
| 45-52 | STORM SEWER DETAILS |
| 53-54 | RETAINING WALL DETAILS |
| 55 | MISCELLANEOUS DETAILS |
| 56-59 | WATER PLAN AND PROFILE SHEETS |
| 60' | WATER BUBBLE MAPS |
| 61-63 | WATER DETAILS |
| 64-66 | SANITARY SEWER PLAN AND PROFILE SHEETS |
| 67-68 | SUMMARY OF QUANTITIES |
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GRADING AND SURFACING
STORM SEWER
PAVEMENT MARKING
SEEDING

SCALE: 1" = 150'



LOCATION MAP



DESIGN DESIGNATION

| | | |
|-------------------|---|-----------|
| AADT (2002) | = | 25,892 |
| AADT (2030) | = | 31,000 |
| DHV | = | 10 % |
| D | = | 60 % |
| T | = | 3 % |
| V | = | 35 M.P.H. |
| Control of Access | = | NONE |
| Clear Zone | = | 6 FT. |

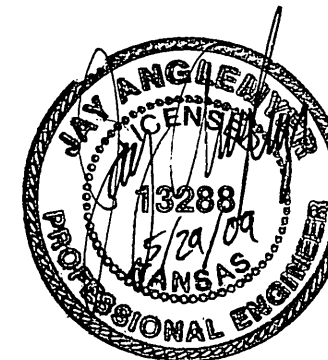
CONVENTIONAL SIGNS

| | | | |
|---------------------------------|-------|--------------------------|-------|
| COUNTY LINE | --- | CENTER LINE OF PROJECT | --- |
| CITY LIMITS | ---- | TERRACE | ----- |
| STATE OR NATIONAL LINE | ----- | CULVERTS | ----- |
| TOWNSHIP, SECTION or GRANT LINE | ----- | DROP INLET & STORM SEWER | ----- |
| PROPERTY LINE | ----- | ACCESS CONTROL | ----- |
| HIGHWAY FENCE | ----- | POWER POLE | ----- |
| EXISTING FENCE | ----- | TELEPHONE POLE | ----- |
| GUARD FENCE | ----- | MARSH | ----- |
| CONSTRUCTION LIMITS | ----- | HEDGE | ----- |
| RIGHT OF WAY LINE | ----- | TREES | ----- |
| TRAVELED WAY | ----- | PROFILE ELEVATION | ----- |
| RAILROADS | ----- | STREAM or CREEK | ----- |

| | | |
|-------------------------|--------------|------------|
| GROSS LENGTH OF PROJECT | 5,137.73 FT. | |
| EXCEPTIONS | | |
| ADDITIONS | | |
| NET LENGTH OF PROJECT | 5,137.73 FT. | 0.97 MILES |
| NET LENGTH OF BRIDGES | 76.86 FT. | 0.01 MILES |
| NET LENGTH OF ROAD | 5,060.87 FT. | 0.96 MILES |

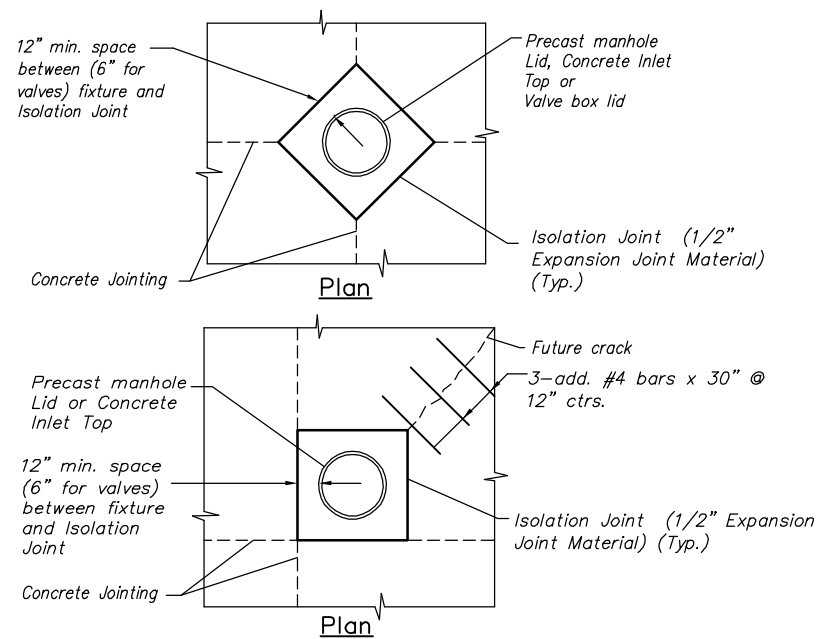
CORNEJO & SONS/W B CARTER - CONTRACTOR
J. WAGNER - FIELD PROJECT ENGINEER, CITY OF WICHITA
J. JASO & J. SMITH - INSPECTORS, CITY OF WICHITA
AS-BUILT
RELEASE DATE:
:PDF APRosas 3/25/2011

NOTE:
TWO WAY TRAFFIC TO BE CARRIED
THROUGH CONSTRUCTION. LOCAL
TRAFFIC WILL BE PERMITTED TO
ADJACENT PROPERTIES.



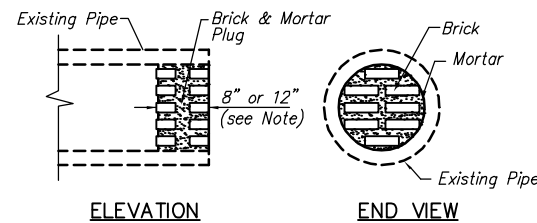
PREPARED & SUBMITTED BY
MKEC ENGINEERING CONSULTANTS, INC.
WICHITA, KANSAS

APPROVED - DATE
JIM ARMOUR, P.E.
CITY ENGINEER



TYPICAL UTILITY BOX-OUT DETAILS

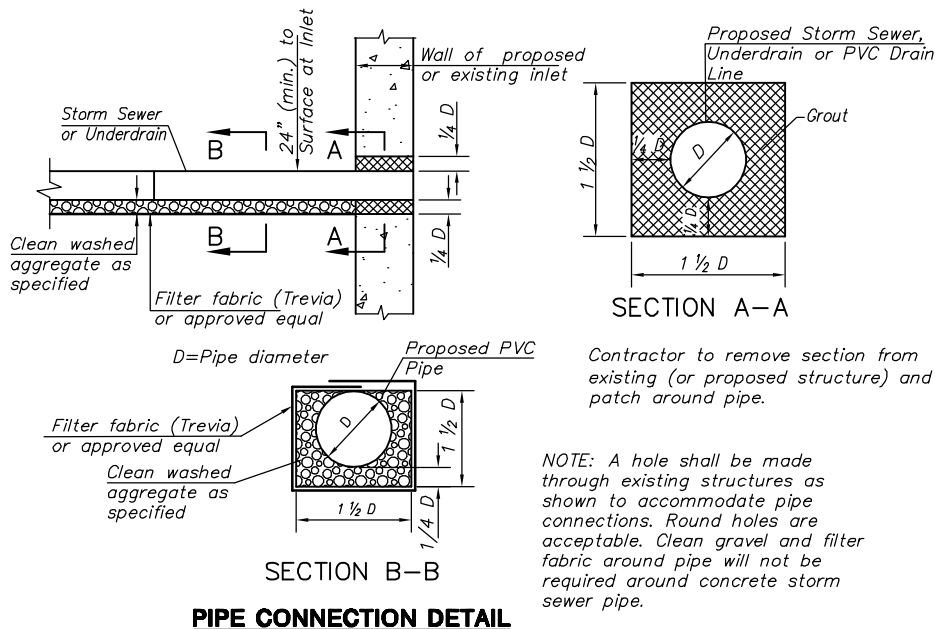
Note: Contractor shall construct box-outs around all surface utility fixtures, as shown, when fixtures fall on or near concrete joints, or as directed by the Engineer. All other fixtures shall have an isolation joint or bond breaker between them and concrete pavement. Cost shall be subsidiary.



PIPE PLUGGING DETAIL

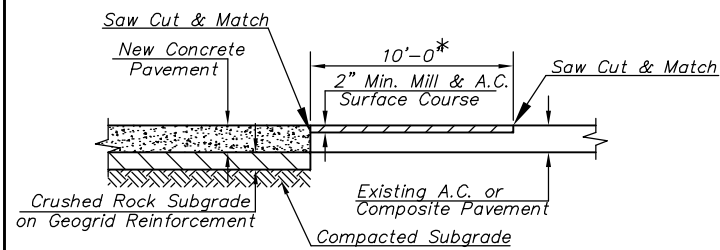
Note: Pipe Plugs Shall Be Constructed Of Brick Masonry, With Construction Requirements And Materials Conforming To The Same Requirements As Specified For A Masonry Construction In The Std. Specs. Pipes Having Diameters Of 18" Or Smaller Shall Be Plugged With 8" Thick Plug. Pipes Having Diameters Larger Than 18" Shall Be Plugged With 12" Thick Plug. The Construction Of Pipe Plugs Shall Not Be Paid For Directly, But Shall Be Considered Subsidiary To Pipe Installation.

The Contractor May Use Other Methods To Plug Existing Pipe If Approved By The Project Engineer.

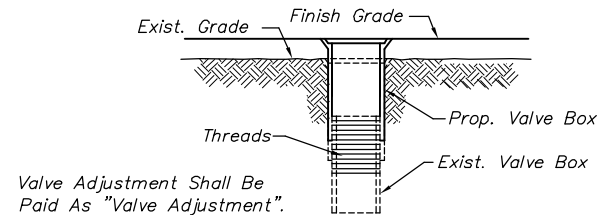


Contractor to remove section from existing (or proposed structure) and patch around pipe.

NOTE: A hole shall be made through existing structures as shown to accommodate pipe connections. Round holes are acceptable. Clean gravel and filter fabric around pipe will not be required around concrete storm sewer pipe.

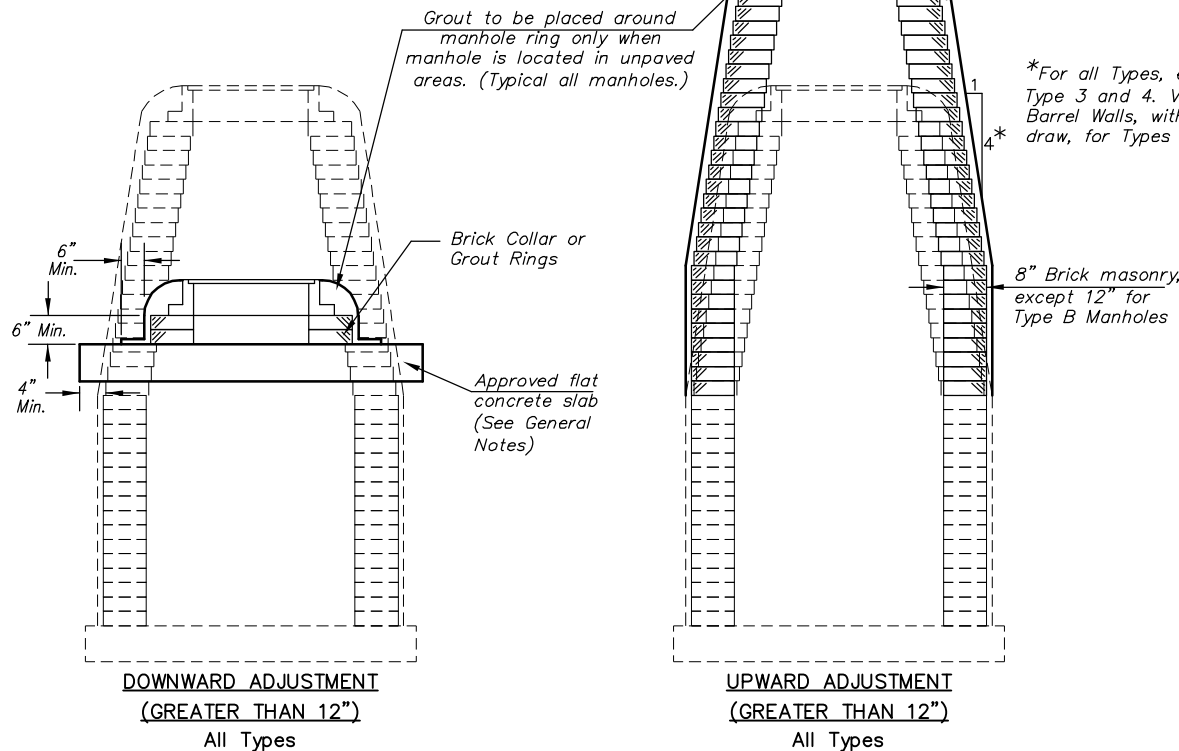


*Holyoke varies, See plan



WATER VALVE BOX ADJUSTMENT DETAIL

NOTES:
1. Adjustments Less Than 12" Shall Be Achieved By Adding Or Removing The Required Thicknesses Of Brick And/or Grout Rings.
2. Brick Masonry Stacks May Be Substituted With Pre-Cast Barrel Sections and Concentric Cones Conforming to the Requirements of Pre-Cast Manholes.

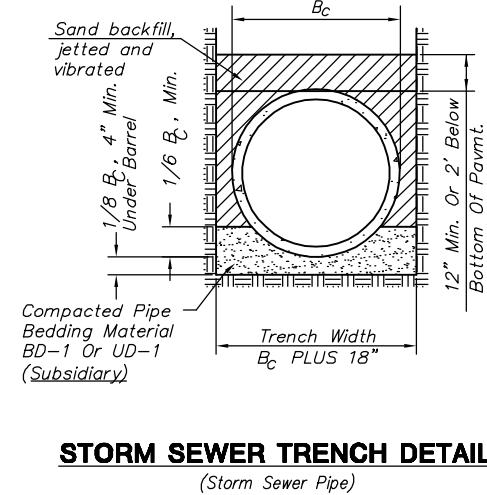


The appropriate portions of the draw and barrel of Type A, B, C, D, 1 and 2 manholes shall be removed. A flat concrete slab shall be placed and the ring and cover reset. All work and materials shall conform to the details shown and the General Notes.

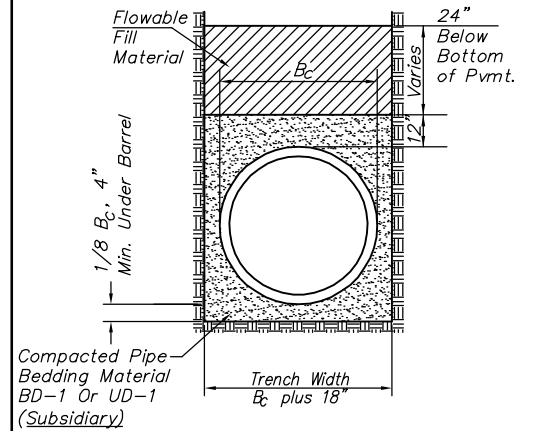
Courses of brick barrel supporting the wide flange ring for Type 4 Manholes and flat concrete slab for Type 3 Manholes shall be removed as necessary prior to re-setting the wide flange ring or flat concrete slab and ring. All work and materials shall conform to the details shown and the General Notes.

The entire draw of Types A, B, C, D, 1 and 2 Manholes shall be removed, the manhole barrel raised the appropriate amount, a new draw constructed, and the ring and cover reset. The upper portion of Type 3 Manholes shall be removed to the bottom of the flat concrete slab, the brick masonry barrel supporting the slab shall be raised the appropriate amount, and the slab and ring and cover reset. The wide flange ring and cover of Type 4 Manholes shall be removed, the brick masonry barrel supporting the ring shall be raised the appropriate amount and the ring and cover reset. All work required for a greater than twelve inch (12") upward adjustment of any manhole shall be accomplished with brick masonry in accordance with the details shown and the General Notes.

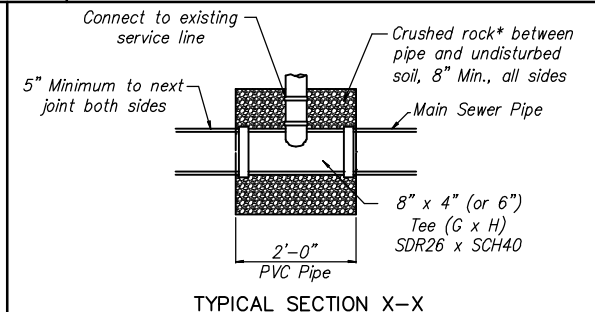
MANHOLE ADJUSTMENTS



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SANITARY SEWER TRENCH DETAIL



*Crushed rock used for encasement and bedding shall conform to ASTM C-33, Gradation No. 67, and shall meet all requirements for portland cement concrete pavement coarse aggregate, Section 406.2, City of Wichita Standard Specifications. All crushed rock for bedding and encasement shall extend to the limits of the manhole excavation.

SANITARY SEWER SERVICE BACKFILL

| SEWER SERVICE TABLE | | | | |
|---------------------|------------------------|-------------------|----------|-------------------|
| NO. | TYPE | LOCATION | | |
| | | ADDRESS | LINE NO. | STATION/DIRECTION |
| 1 | TEE SERVICE CONNECTION | 1801 N Estelle | 1 | 10+65.5/RT. |
| 2 | TEE SERVICE CONNECTION | 1808 N Green | 1 | 11+16.8/LT. |
| 3 | TEE SERVICE CONNECTION | 1807 N Estelle | 1 | 11+20.7/RT. |
| 4 | TEE SERVICE CONNECTION | 1812 N Green | 1 | 11+69.1/LT. |
| 5 | TEE SERVICE CONNECTION | 1811 N Estelle | 1 | 11+72.0/RT. |
| 6 | TEE SERVICE CONNECTION | 1818 N Green | 1 | 12+23.9/LT. |
| 7 | TEE SERVICE CONNECTION | 1817 N Estelle | 1 | 12+27.1/RT. |
| 8 | TEE SERVICE CONNECTION | 1822 N Green | 1 | 12+79.4/LT. |
| 9 | TEE SERVICE CONNECTION | 1823 N Estelle | 1 | 12+82.4/RT. |
| 10 | TEE SERVICE CONNECTION | 3014 E 17th St N | 3 | 11+19.6/LT. |
| 11 | TEE SERVICE CONNECTION | 1801 N Lorraine | 3 | 11+21.0/RT. |
| 12 | TEE SERVICE CONNECTION | 1808 N Chautauqua | 3 | 11+75.5/LT. |
| 13 | TEE SERVICE CONNECTION | 1805 N Lorraine | 3 | 11+76.5/RT. |
| 14 | TEE SERVICE CONNECTION | 1812 N Chautauqua | 3 | 12+24.1/LT. |
| 15 | TEE SERVICE CONNECTION | 1815 N Lorraine | 3 | 12+53.6/RT. |
| 16 | TEE SERVICE CONNECTION | 1818 N Chautauqua | 3 | 12+75.3/LT. |
| 17 | TEE SERVICE CONNECTION | 1817 N Lorraine | 3 | 12+78.1/RT. |

SANITARY SEWER SERVICE SCHEDULE

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

17th STREET
FROM GROVE TO HILLSIDE

MISC. DETAILS
SHEET TITLE
87 N-0349-01
PROJECT NUMBER

JRA
DESIGN BY
JSB
DRAWN BY
JRA
CHECKED BY

ISSUED
May 28, 2009

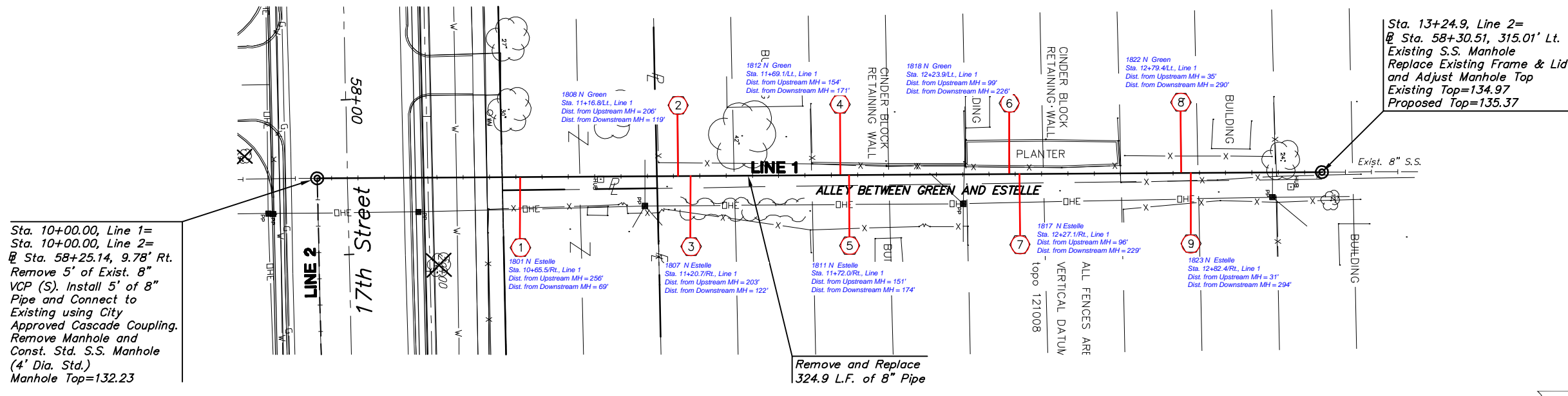
SHEET NO.
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MKEC
ENGINEERING
CONSULTANTS, INC.

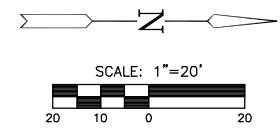
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

④ Service location. See Sht. 55 for Station and direction.



Sta. 13+24.9, Line 2=
@ Sta. 58+30.51, 315.01' Lt.
Existing S.S. Manhole
Replace Existing Frame & Lid
and Adjust Manhole Top
Existing Top=134.97
Proposed Top=135.37

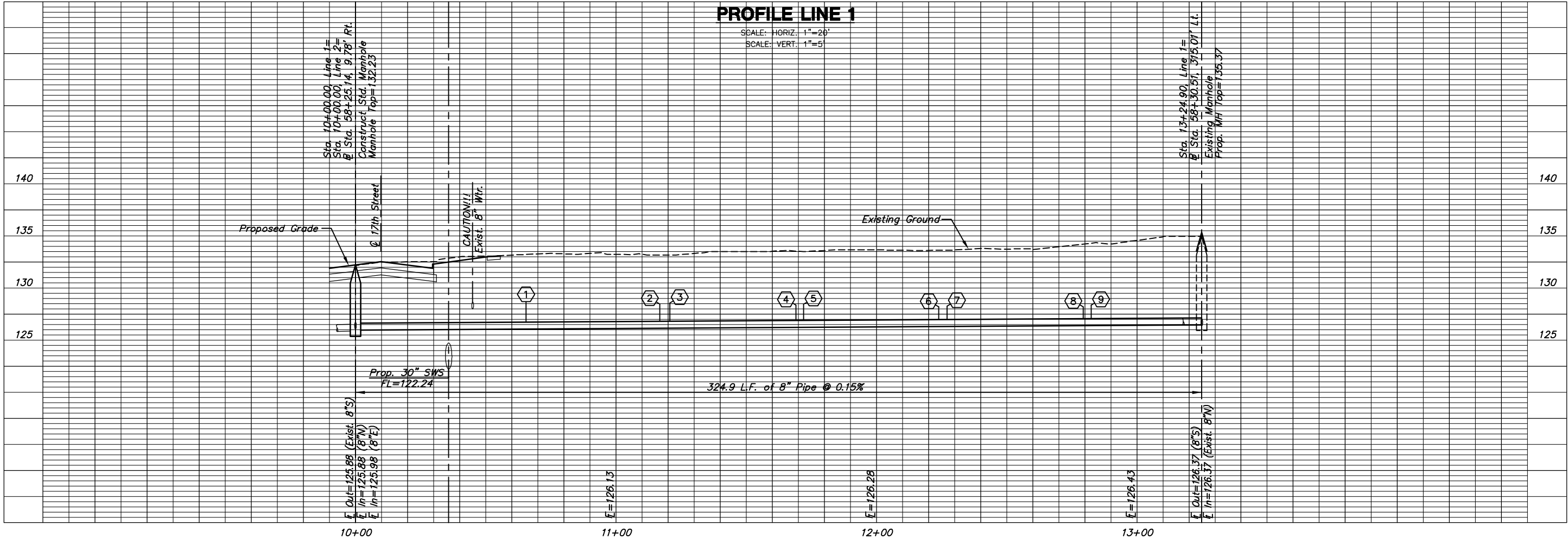
Built per plan



PLAN LINE 1

PROFILE LINE 1

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



**17th STREET
FROM GROVE TO HILLSIDE**

**Sanitary Sewer
Line 1**
SHEET TITLE
87 N-0349-01
PROJECT NUMBER

DESIGN BY: JRA
DRAWN BY: DMU
CHECKED BY: JRA

ISSUED: May 28, 2009
REVISED:

SHEET NO.
64 of 133

PL0178D, Thursday, May 28, 2009 @ 02:30PM

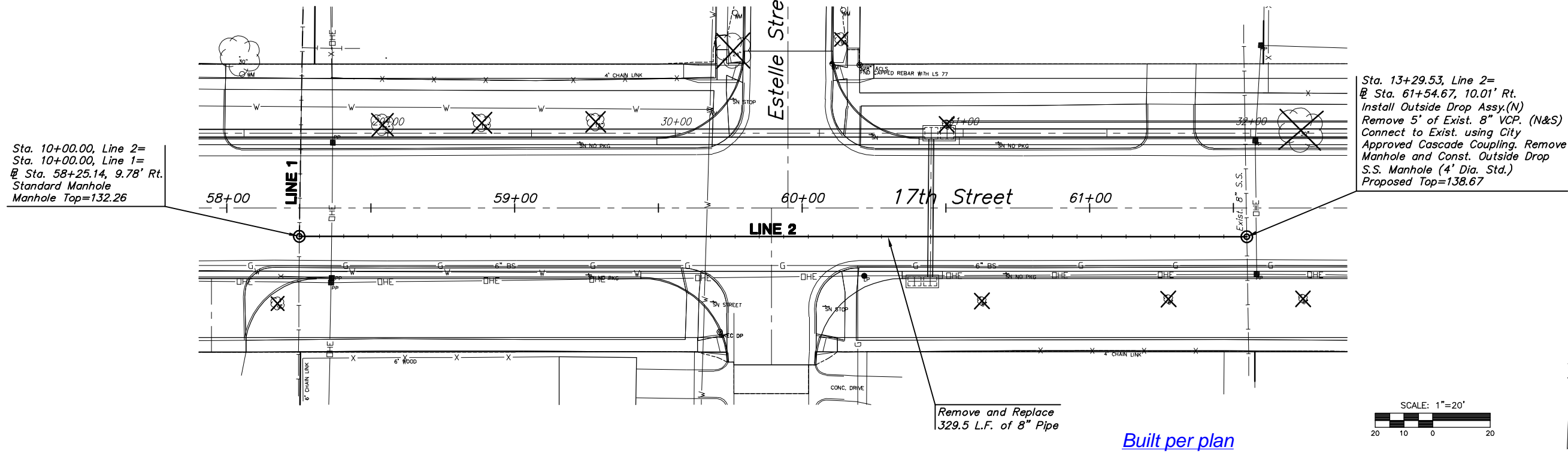
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|--------|--------------|------|-----------|--------|
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MKEC
ENGINEERING
CONSULTANTS, INC.

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

④ Service location. See Sht. 55 for Station and direction.

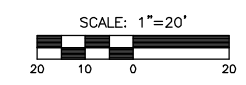


Sta. 13+29.53, Line 2=
@ Sta. 61+54.67, 10.01' Rt.
Install Outside Drop Assy.(N)
Remove 5' of Exist. 8" VCP. (N&S)
Connect to Exist. using City
Approved Cascade Coupling. Remove
Manhole and Const. Outside Drop
S.S. Manhole (4' Dia. Std.)
Proposed Top=138.67

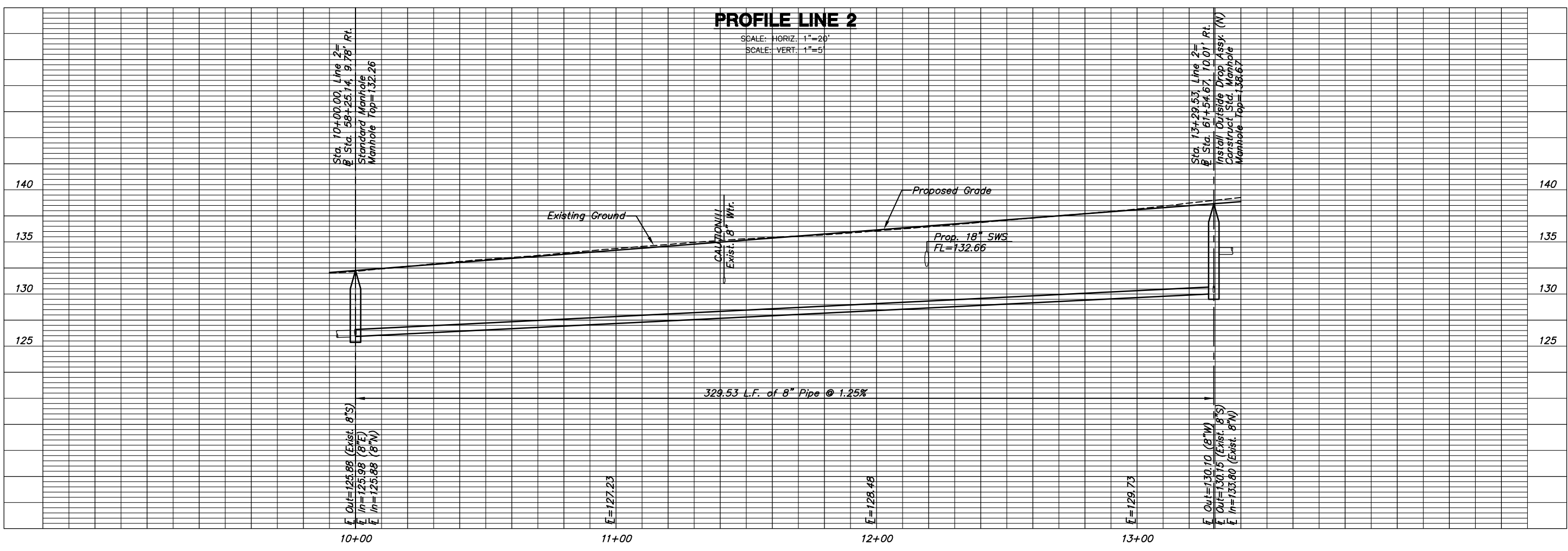
Sta. 10+00.00, Line 2=
Sta. 10+00.00, Line 1=
@ Sta. 58+25.14, 9.78' Rt.
Standard Manhole
Manhole Top=132.26

Remove and Replace
329.5 L.F. of 8" Pipe

Built per plan



PLAN LINE 2



PROFILE LINE 2

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

**17th STREET
FROM GROVE TO HILLSIDE**

**Sanitary Sewer
Line 2**
SHEET TITLE
87 N-0349-01
PROJECT NUMBER

DESIGN BY: JRA
DRAWN BY: JWC
CHECKED BY: JRA

ISSUED: May 28, 2009
REVISED:

SHEET NO.
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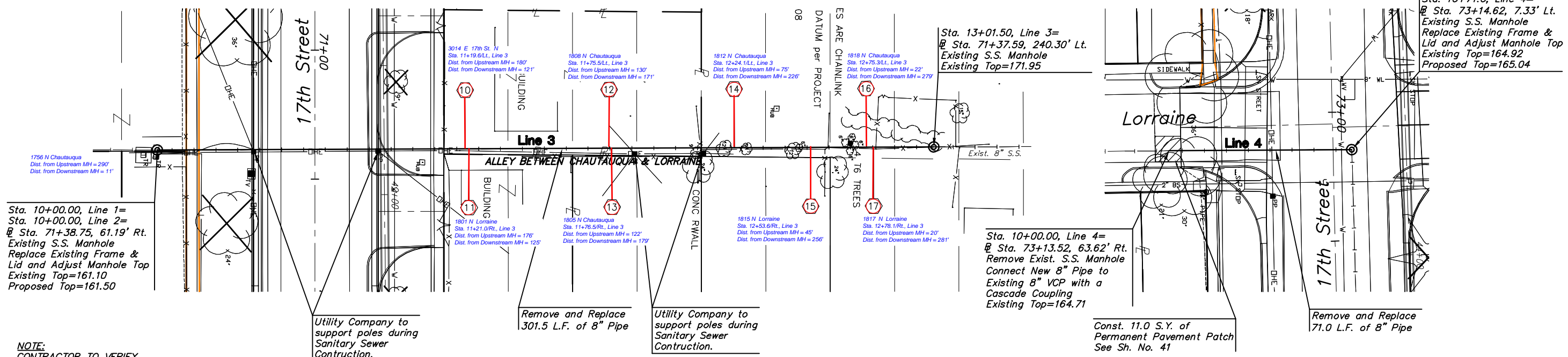
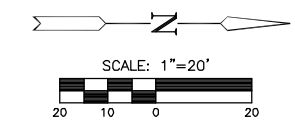
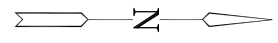
PLOT170: Thursday, May 28, 2009 10:02:30AM

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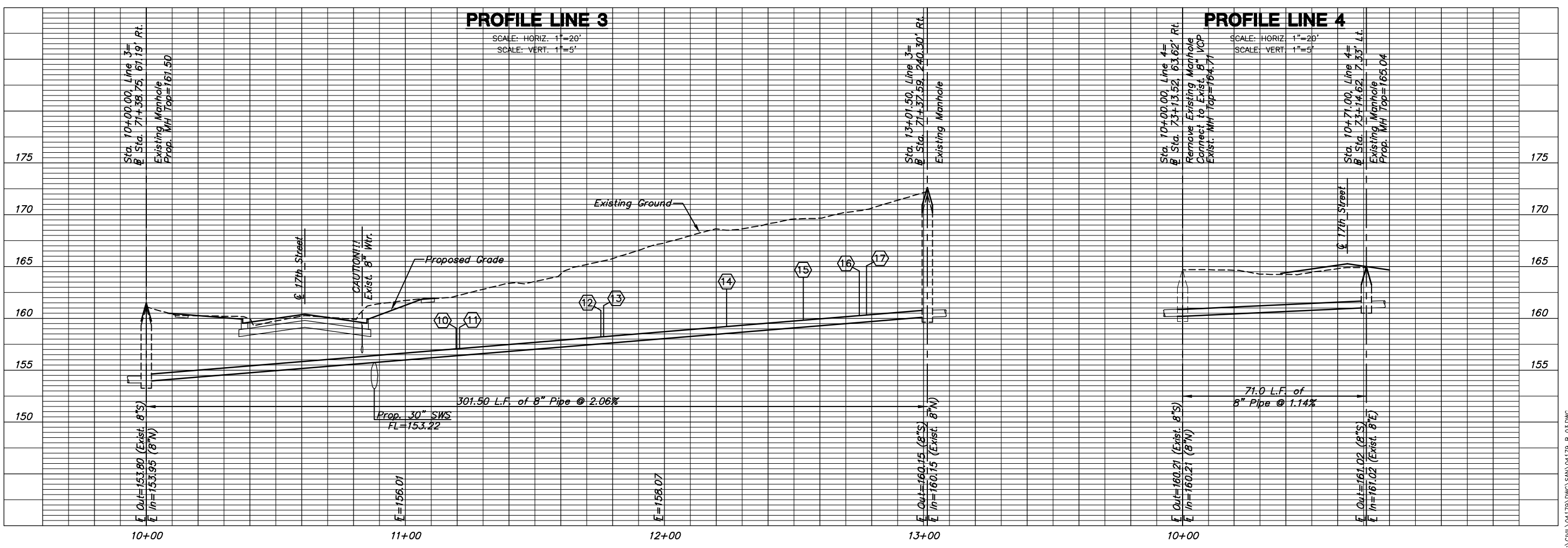
MKEC
ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

④ Service location. See Sht. 55 for Station and direction.



PLAN LINE 3

PLAN LINE 4



PROFILE LINE 3

PROFILE LINE 4

**17th STREET
FROM GROVE TO HILLSIDE**

**Sanitary Sewer
Lines 3 and 4**
SHEET TITLE
87 N-0349-01
PROJECT NUMBER

DESIGN BY JRA
DRAWN BY JWC
CHECKED BY JRA

ISSUED
May 28, 2009
REVISED

SHEET NO.
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PLOT170: Thursday, May 28, 2009 8:02:39PM

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