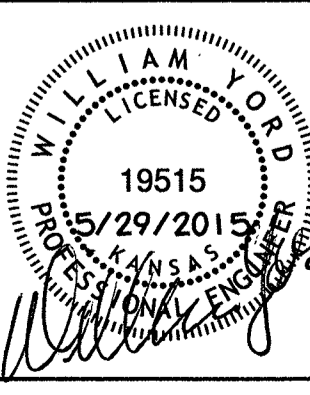


AMENDED SHEETS 6, 14 AND 18. ADDED SHEETS 11A AND 11B	DATE
ADD TO-SIG SIGN, CLARIFY NOTE FOR SIG. 5 & 6 & AMEND SIG. BLOCK	
RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS	
RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS	
REVISED FOR REMOVAL OF ROUNDABOUT	
ORIGINAL SUBMITTAL	
REVISION	

**Renaissance Infrastructure Consulting**  
5015 NW CANAL STREET, SUITE 100  
RIVERSIDE, MO. 64150  
816.800.0950  
WWW.RIC-CONSULT.COM



**PROJECT BENCHMARK:**  
Chiseled square cut, center front face of inlet  
East side of Greenwich Road, 342 feet +/-  
South of East 27<sup>th</sup> Street intersection of  
East 27<sup>th</sup> Street and Greenwich Road  
Project Elevation = 1377.42  
KDOT Elevation = 1378.05  
(Project Elevation is -0.63 feet from KDOT)

# PRIVATE PAVING FOR WICHITA DESTINATION DEVELOPMENT PH. 1 AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS 0242 PPP (607879) CITY OF WICHITA, KANSAS Gary Janzen, P.E., City Engineer

Medical Practice Association Properties, LLC, a Kansas Limited Liability Company  
  
Aaron Ryan, Manager  
  
Wichita Destination Developers, INC., a Kansas corporation  
  
Michael J. Boyd, President

**Utility Service & Installation Contacts**

**Kansas Gas Service**  
Attn: Tim Hamlin  
(316) 832-3121

**Wichita Water & Sewer**  
Attn: Greg Lolley  
(316) 268-4334

**Westar Energy**  
Attn: Becky Thompson  
(316) 261-6320

**AT&T**  
Attn: Jason Edwards  
(316) 268-2008

**Black Hills Energy**  
Attn: Daryl Keller  
(316) 941-1654

**Cox Communications**  
Attn: Mark Henderson  
(316) 260-7745

**Utility Emergency Contacts**

**Kansas One-Call**  
(316) 687-2470

**AT&T**  
1-555-1212

**Cox Communications**  
(316) 262-4270  
(316) 263-2061

**City of Wichita Water Department**  
(316) 268-4908

**City of Wichita Sewer Department**  
(316) 268-4071

**Westar Energy/  
Kansas Gas & Electric Company**  
(800) 482-4950

**Aquila Natural Gas**  
(316) 941-1608  
(800) 303-0357

PREPARED FOR:  
Wichita Destination Developers, Inc.  
Attn: Michael J. Boyd, President  
1707 N. Waterfront Parkway  
Wichita, Kansas 67206

KANSAS ONE-CALL:  
**1-800-DIG-SAFE**  
(1-800-344-7233)

**ONE CALL KANSAS**

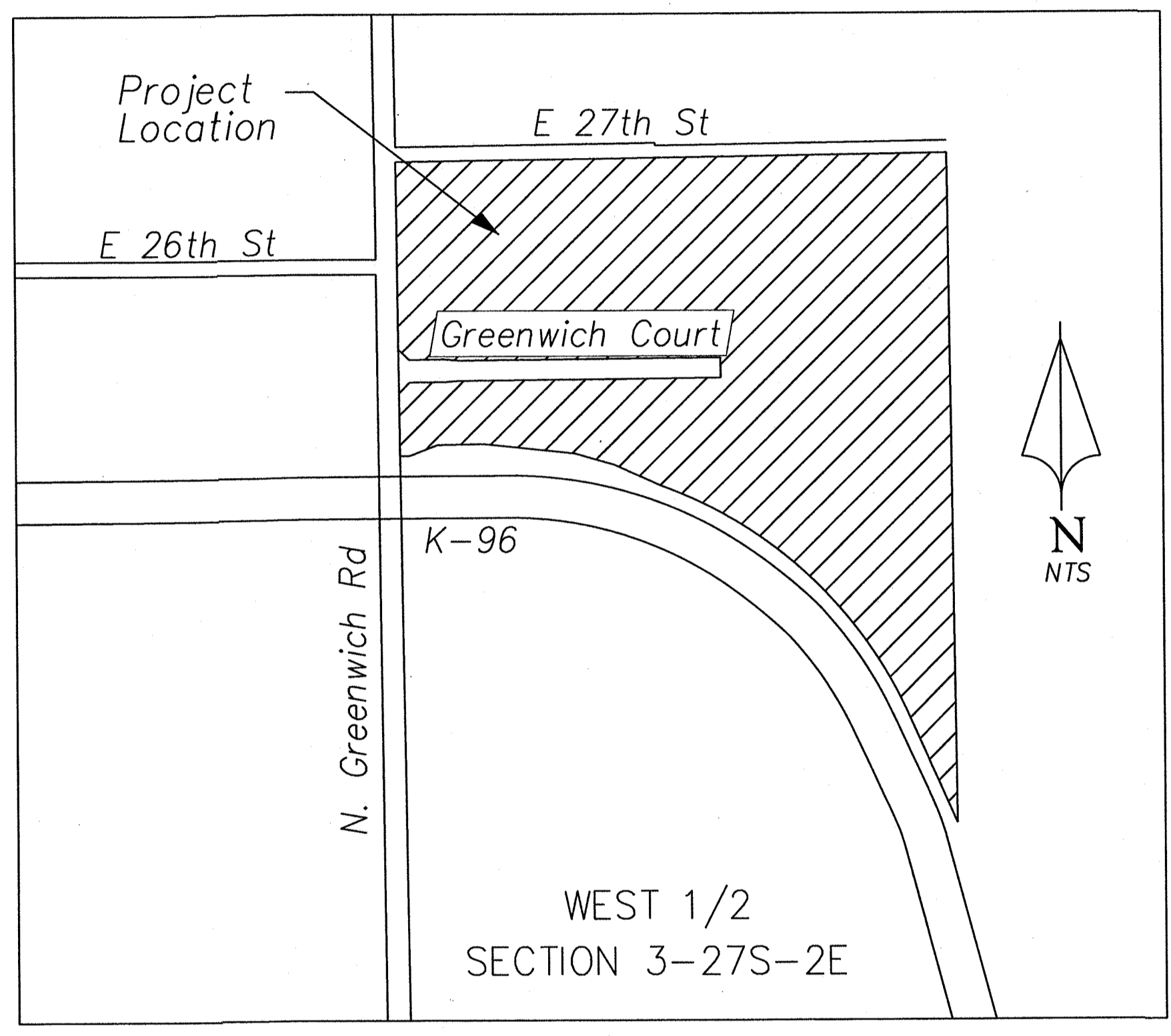
Protect yourselves and your property against underground utility damage and liability.

Find out where the underground utility lines might be buried before you dig.

Anyone digging in Kansas must call before digging. The person who is doing the work is responsible for calling KOC. If the owner contracts with a professional excavator to do the excavation then the professional excavator is responsible for calling KOC.

You (the digger) will need to provide information about the work site when you call. This is a FREE service.

CALL BEFORE YOU DIG  
IT'S THE LAW.



LOCATION MAP

**INDEX OF SHEETS**

1	Title Sheet
Final Plat	Wichita Destination Development Final Plat
2	General Notes and Quantities
3	General Layout
4	Typical Section
5 - 7	Street Plan and Profile
8	Greenwich Court Strip Grades
9	Roundabout Details
10	Roundabout Typical Section
11-14	Roadway Standard Details
15-16	Jointing Plan
17-18	Pavement Marking and Signage Plan
19-20	Pavement Marking Details
21	Erosion and Sediment Control
22-26	Erosion Details

**GRADING AND LAND DISTURBANCE PLANS INDEX OF SHEETS**

00	Title Sheet
01	General Layout
02	Grading Plan Northwest Site
03	Grading Plan Southwest Site
04	Grading Plan Northeast Site
05	Grading Plan Mid-East Site
06	Grading Plan Southeast Site
07	Erosion Control Plan Pre Construction Western Site Area
08	Erosion Control Plan Pre Construction Eastern Site Area
09	Erosion Control Plan Construction Phase One Western Site Area
10	Erosion Control Plan Construction Phase One Eastern Site Area
11	Erosion Control Plan Phase Two Western Site Area
12	Erosion Control Plan Phase Two Eastern Site Area
13	Erosion Control Plan Phase Three Western Site Area
14	Erosion Control Plan Phase Three Eastern Site Area
15	Drainage Area Map
16	Sediment Basin Plan Basins 1-4 Plan
17	Sediment Basin Plan Basin 5 Plan
18	Erosion and Sediment Control Details
19	Erosion and Sediment Control Details
20	Erosion and Sediment Control Details
21	Erosion and Sediment Control Details
22	Erosion and Sediment Control Details
23	Sediment Basin Details
24	Sediment Basin Details

**LEGEND**

— Existing Section Line	⊕ Existing Power Pole
— Existing Right-of-Way Line	⊙ Existing Light Pole
— Existing Lot Line	⊗ Existing Traffic Manhole
— Existing Easement Line	⊘ Existing Water Valve
— Existing Curb & Gutter	⊙ Existing Sign
— Existing Sidewalk	⊙ Existing Gas Line Meter
— Existing Storm Sewer	⊗ Existing Gas Valve
□ Existing Storm Structure	⊗ Existing Traffic Signal Pole
— Existing Waterline	⊙ Existing Bollard
— Existing Gas Main	⊙ Existing Gas Riser
— Existing Underground Cable	⊙ Existing Cable Box
- - - Existing Underground Power	⊙ Existing Fire Hydrant
— Existing Overhead Power	— Proposed Right-of-Way
— Existing Sanitary Sewer	— Proposed Property Line
⊙ Existing Sanitary Manhole	— Proposed Lot Line
— Existing Contour Major	— Proposed Easement
— Existing Contour Minor	— Proposed Curb & Gutter
⊙ Existing Tree	— Proposed Sidewalk
• Existing Bush	— Proposed Contour Major
⊙ Existing Electrical Box	— Proposed Contour Minor

**AS BUILTS**

Contractor: CORNEJO CONSTRUCTION  
Inspector: LARRY GANN  
Date: 3/01/2016

**KEMILLER ENGINEERING PA**  
117 E. Lewis,  
Wichita, KS 67202 (316)264-0242

APPROVED AS NOTED  
BY WICHITA PUBLIC WORKS  
ENGINEERING DIVISION

Engineering *Rebecca Aul* 7/14/2015

**NOTE TO CONTRACTORS**

Inspection and testing for this project 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 Licensed Professional Engineer in the state of Kansas. No work shall be performed by the Contractor without such inspection nor shall any work be commenced without written authorization by City Engineering. All Construction and Materials shall comply with the City of Wichita Specifications and Standards and Special Provisions. (on file and available at Wichita.gov).

An approved copy of these plans signed by the City staff are required on-site.

August 2014

46-156-21

# FINAL PLAT

## WICHITA DESTINATION DEVELOPMENT

### AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

#### A REPLAT OF ALL OF K96 AND GREENWICH NORTH ADDITION

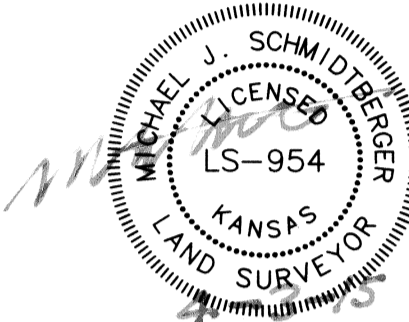
CERTIFICATE OF SURVEY

I, Michael J. Schmidtberger, a registered land surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "WICHITA DESTINATION DEVELOPMENT" an addition to Wichita, Sedgwick County, Kansas, into Lots, Reserves and Streets the same being accurately set forth in the accompanying plat and described herein:

A replat of all of Lots 1 thru 7 inclusive, Block 1, Lots 1 thru 8 inclusive, Block 2, Reserves A, B, C, D, E, F and G, K96 AND GREENWICH NORTH ADDITION, an addition to Wichita, Sedgwick County, Kansas, together with WOODSPRING ST, WOODSPRING CIR., and BOULDER DR. platted rights-of-way.

All lots, blocks, streets, easements, setbacks, and access controls, together with all other public dedications or rights-of-way within the above described property are hereby vacated and replatted by virtue of K.S.A. 12-512b, as amended.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 5<sup>th</sup> day of April, 2015.



Michael Schmidtberger, Kansas LS-954  
Renaissance Infrastructure Consulting  
1138 W. Cambridge Circle Drive  
Kansas City, Kansas 66103

OWNER'S CERTIFICATE

Know all men by these presents that we the undersigned property owner of the land above set forth in the Registered Land Surveyor's Certificate, has caused the same to be surveyed and platted into Lots, Blocks, Reserves, and Streets the same to be known as "WICHITA DESTINATION DEVELOPMENT," a replat K96 AND GREENWICH NORTH ADDITION, an addition to Wichita, Sedgwick County, Kansas.

This plat shall conform to the recitals of CUP DP-333.

Easements for the construction and maintenance of public utilities, drainage and sanitary sewer, as indicated on the accompanying plat are hereby granted to the public.

All streets are hereby dedicated to and for the use of the public.

A drainage plan has been developed for this plat. All drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.

All abutters rights of access to or from Greenwich Road, over and across the west line of "WICHITA DESTINATION DEVELOPMENT", are hereby granted to the appropriate governing body as indicated hereon. All abutters rights of access to or from Kansas Highway 96, over and across the south line of "WICHITA DESTINATION DEVELOPMENT", are hereby granted to the appropriate governing body as indicated hereon. Access controls are dedicated to and for the use of the public.

Lot 1, Block A, is required to adhere to the minimum pad elevation as shown on the "Minimum Pad Elevations" table.

Reserves "A", "B", "C", "D", "E", "F", and "G" are platted for monuments, signs, landscaping, berming, sidewalks, irrigation, open space, pavement, utilities confined by easements, and walls provided that they do not inhibit the conveyance of surface drainage. Reserves "A", "B", "C" are also platted for drainage, drives, and parking. Reserves "D", "E", "F" and "G" shall allow for public access across said reserves, at various locations for driveways, as approved by the City Engineer. The Reserves shall be owned and maintained by the Lot owner's association, provided however, that the undersigned or Lot owner's association as the undersigned successors in interest may, at its discretion deed parcels of said Reserves "A", "B", and "C" to an owner (s) of an adjoining lot subject to the obligation to maintain such deeded parcel in compliance with the provisions hereof and in compliance with the maintenance covenants of any applicable restrictive covenants or regulations.

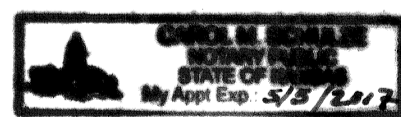
Medical Practice Association Properties, LLC, a Kansas Limited Liability Company

Aaron Ryan  
Aaron Ryan, Manager

STATE OF KANSAS )  
 ) SS  
COUNTY OF SEDGWICK)

This instrument was acknowledged before me on 9<sup>th</sup> day of April, 2015, by Aaron Ryan, Manager, Medical Practice Association Properties, LLC, a Kansas Limited Liability Company.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal; the day and year last above written.



Carol M. Schulze, Notary Public  
Notary Public: Carol M. Schulze  
My Term Expires: May 5, 2017

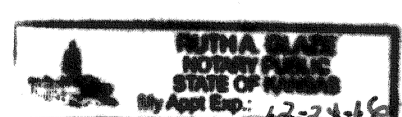
Wichita Destination Developers, Inc., a Kansas Corporation

Michael J. Boyd  
Michael J. Boyd, President

STATE OF KANSAS )  
 ) SS  
COUNTY OF SEDGWICK)

This instrument was acknowledged before me on 8<sup>th</sup> day of APRIL, 2015, by Michael J. Boyd, President, Wichita Destination Developers, Inc., a Kansas Corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal; the day and year last above written.



Ruth A. Glaze, Notary Public  
Notary Public: Ruth A. Glaze  
My Term Expires: 12-24-16

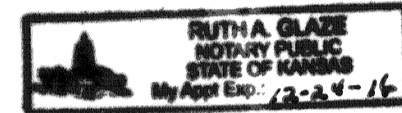
WDDMBB, LLC, a Kansas limited liability company

Michael J. Boyd  
Michael J. Boyd, President

STATE OF KANSAS )  
 ) SS  
COUNTY OF SEDGWICK)

This instrument was acknowledged before me on 8<sup>th</sup> day of April, 2015, by Michael J. Boyd, President, WDDMBB, LLC, a Kansas limited liability company.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.



Ruth A. Glaze, Notary Public  
Notary Public: Ruth A. Glaze  
My Term Expires: 12-24-16

PLANNING COMMISSION CERTIFICATE

STATE OF KANSAS )  
 ) SS  
CITY OF WICHITA )

This plat of "WICHITA DESTINATION DEVELOPMENT" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 24 day of July, 2014

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Don Klausmeyer, Chairman  
John L. Schlegel, Secretary



GOVERNING BODY CERTIFICATE

STATE OF KANSAS )  
 ) SS  
CITY OF WICHITA )

The dedications shown on this plat are hereby accepted and this plat is hereby approved by the governing body of the City of Wichita, Kansas.

Dated this 12 day of May, 2015

At the direction of the City Council;

Jeff Longwell, Mayor  
Karen Sublett, City Clerk

TRANSFER RECORD

Entered on transfer record this 5<sup>th</sup> day of June, 2015

Kelly B. Arnold  
Kelly B. Arnold, County Clerk



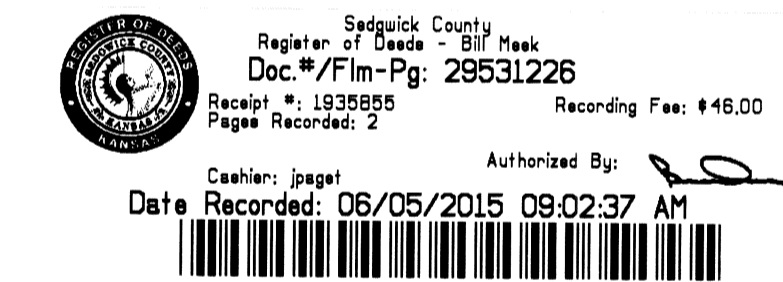
REGISTER OF DEEDS CERTIFICATE

STATE OF KANSAS )  
 ) SS  
COUNTY OF SEDGWICK)

This is to certify that this instrument was filed for record in the Register of Deeds office this 5<sup>th</sup> day of June, 2015, at 9:02:37 o'clock A.M. and is duly recorded.

Bill Meek, Register of Deeds

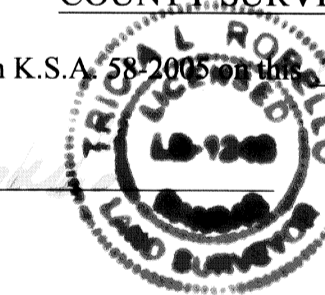
Tonya E. Buckingham, Deputy



COUNTY SURVEYOR

Reviewed in accordance with K.S.A. 28-205 on the \_\_\_\_\_ day of \_\_\_\_\_, 2014.

Tricia L. Robello, LS #1246  
Deputy County Surveyor  
Sedgwick County, Kansas



WICHITA DESTINATION DEVELOPMENT

Prepared For:  
Wichita Destination Developers, Inc.  
1707 N. Waterfront Parkway  
Wichita, KS 67206  
(316) 685-5341

Date of Preparation:  
May 28, 2014



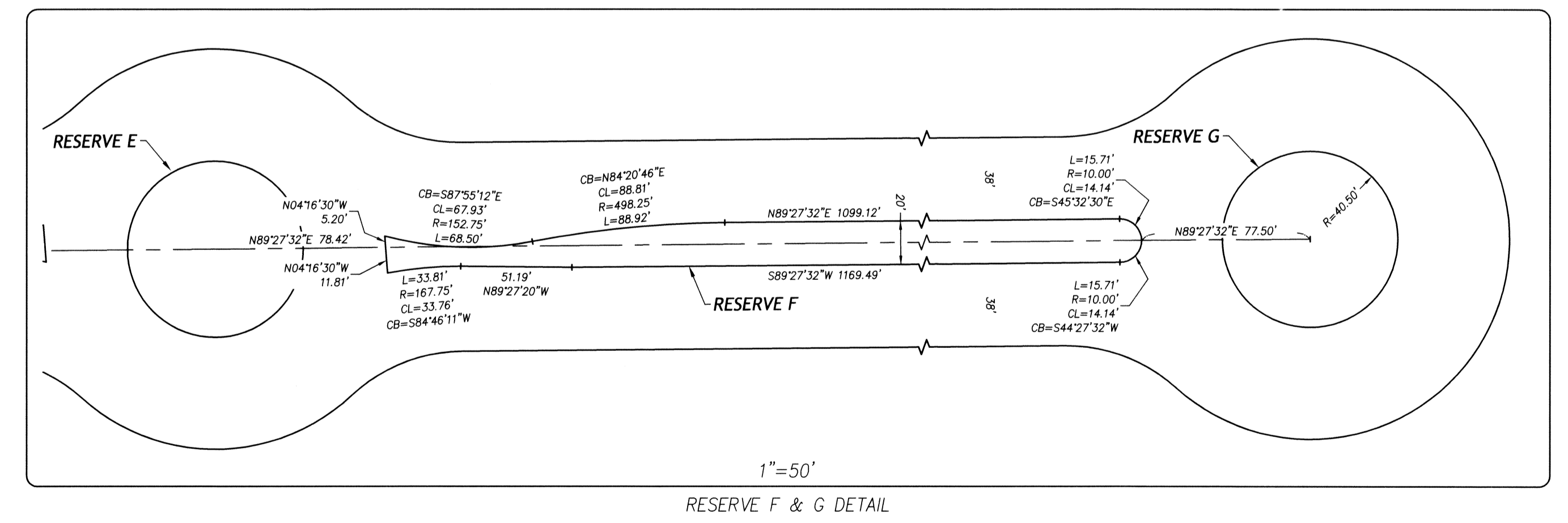
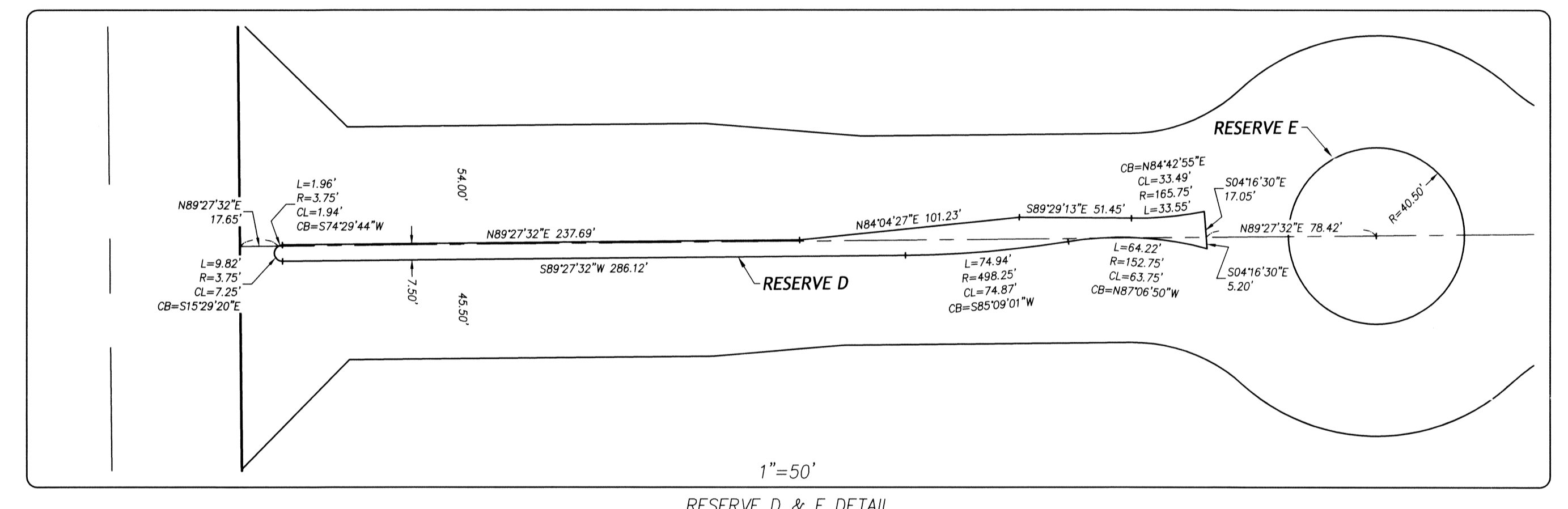
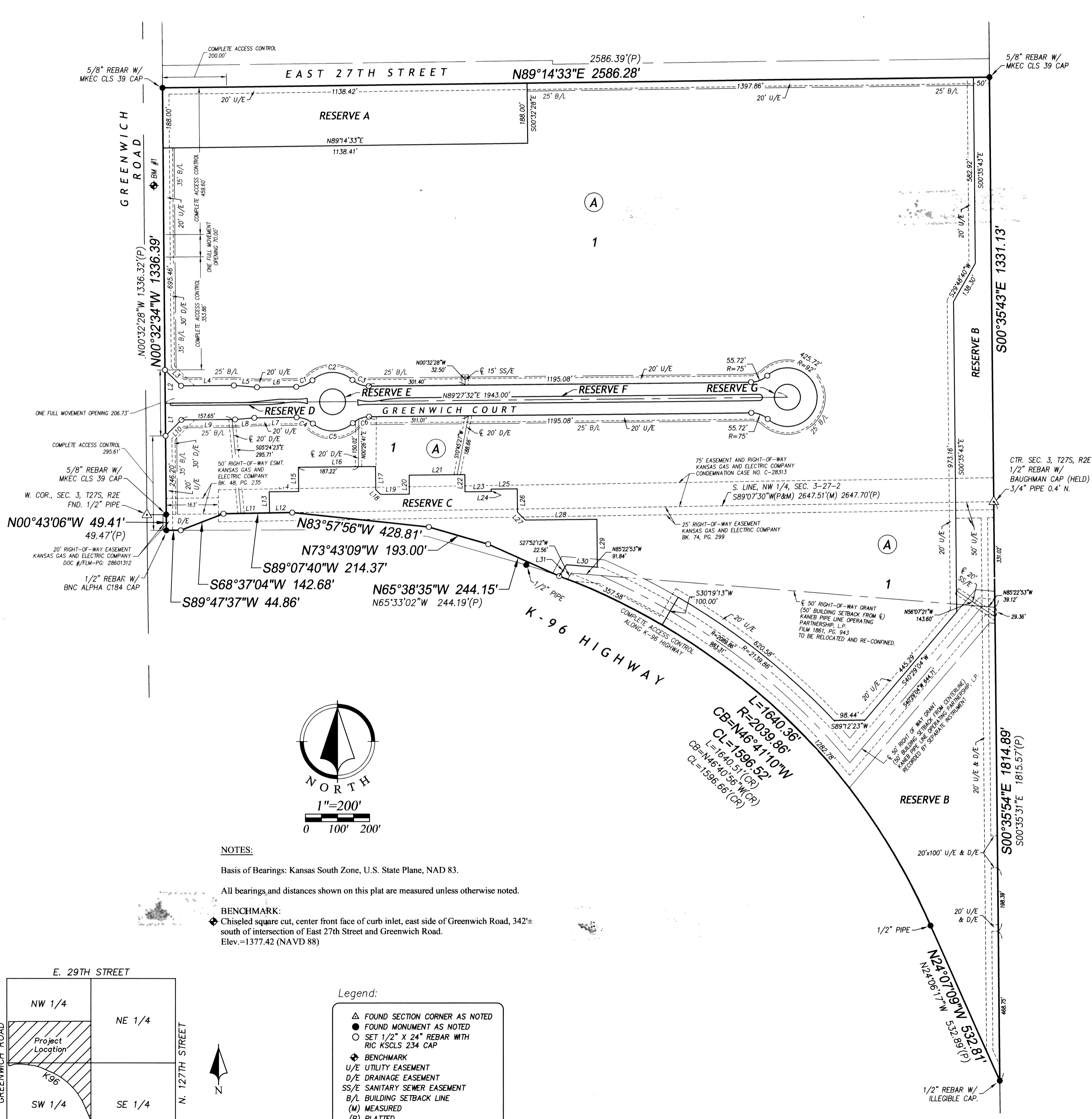
1138 W. CAMBRIDGE CIRCLE DRIVE  
KANSAS CITY, KANSAS 66103  
913.317.9500  
WWW.RIC-CONSULT.COM

# FINAL PLAT

# WICHITA DESTINATION DEVELOPMENT

## AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

### A REPLAT OF ALL OF K96 AND GREENWICH NORTH ADDITION



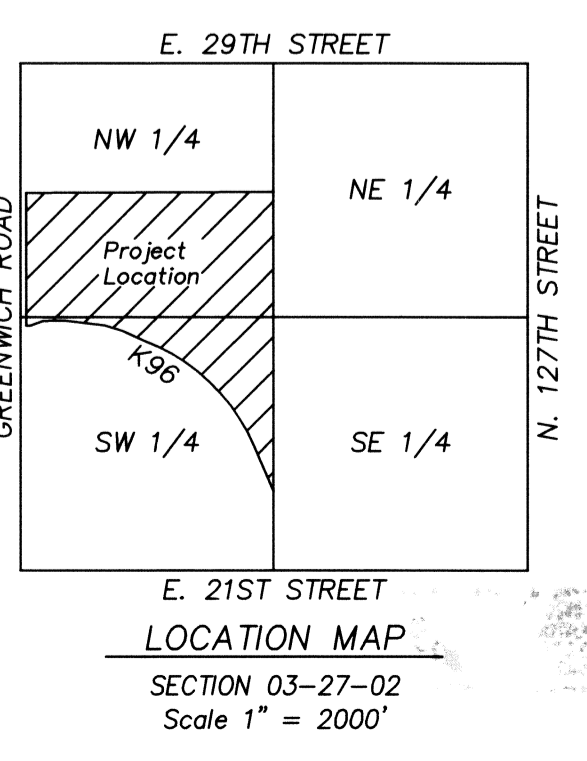
**NOTES:**

Basis of Bearings: Kansas South Zone, U.S. State Plane, NAD 83.

All bearings and distances shown on this plat are measured unless otherwise noted.

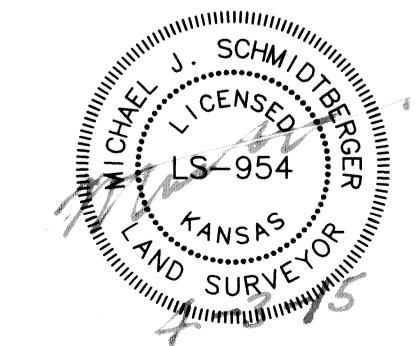
**BENCHMARK:**

Chiseled square cut, center front face of curb inlet, east side of Greenwich Road, 342± south of intersection of East 27th Street and Greenwich Road. Elev.=1377.42 (NAVD 88)



**Legend:**

- ▲ FOUND SECTION CORNER AS NOTED
- FOUND MONUMENT AS NOTED
- SET 1/2" X 24" REBAR WITH RIC KSCLS 234 CAP
- ◆ BENCHMARK
- U/E UTILITY EASEMENT
- D/E DRAINAGE EASEMENT
- SS/E SANITARY SEWER EASEMENT
- B/L BUILDING SETBACK LINE
- (M) MEASURED
- (P) PLATED
- L LENGTH OF CURVE
- R RADIUS OF CURVE
- CL CHORD LENGTH
- CB CHORD BEARING



**WICHITA DESTINATION DEVELOPMENT**

14-0112

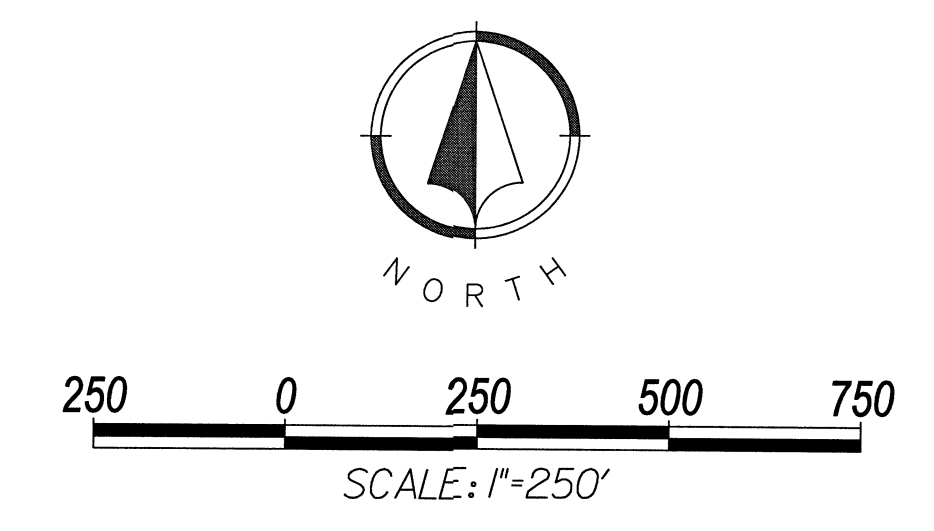
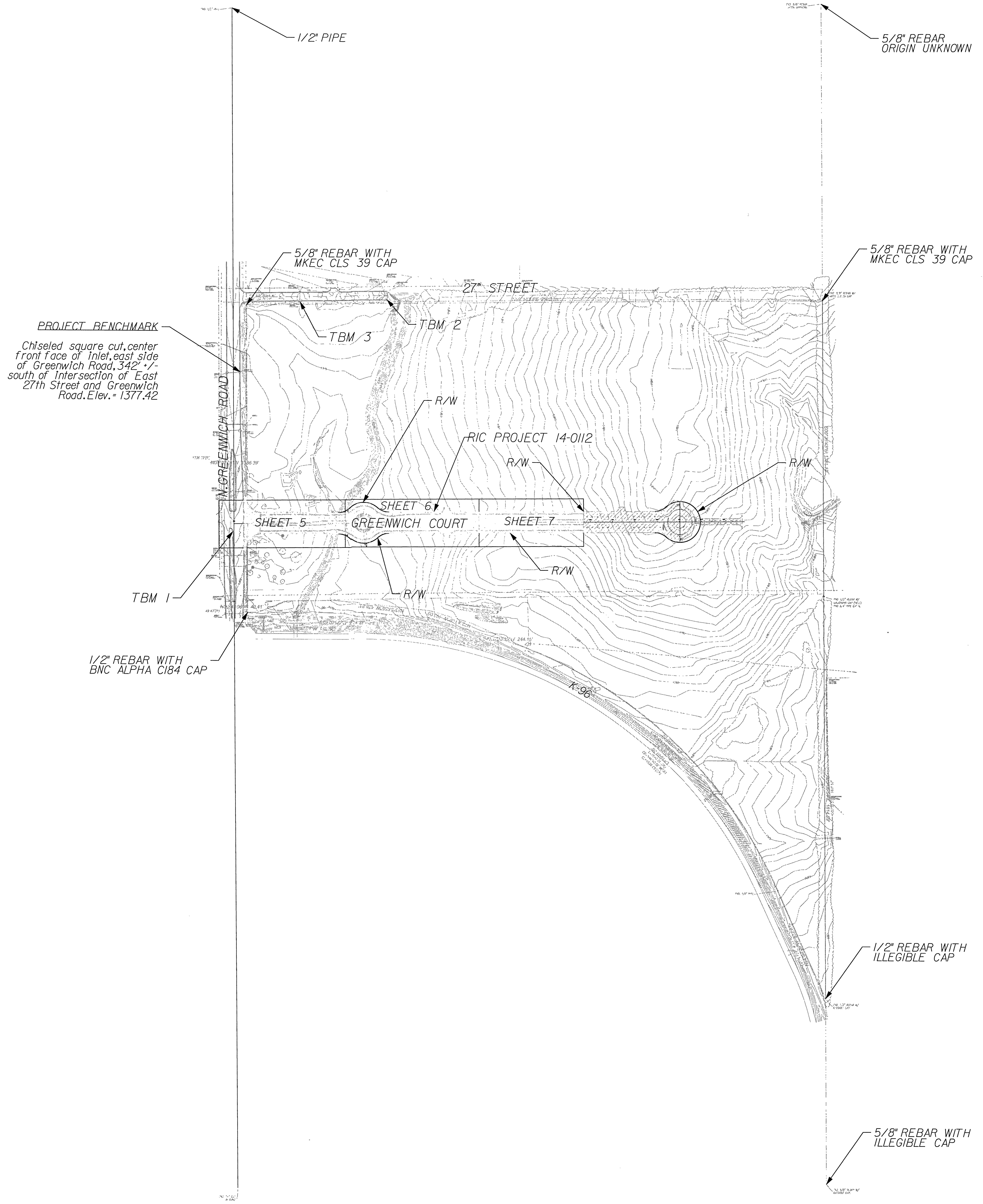
Prepared For:  
Wichita Destination Developers, Inc.  
1707 N. Waterfront Parkway  
Wichita, KS 67206  
(316) 685-5341

Date of Preparation:  
May 28, 2014

**Renaissance Infrastructure Consulting**

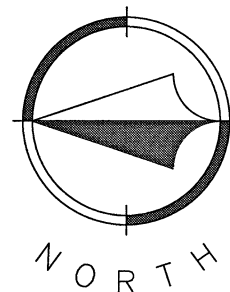
1138 W. CAMBRIDGE CIRCLE DRIVE  
KANSAS CITY, KANSAS 66103  
913.317.9500  
WWW.RIC-CONSULT.COM





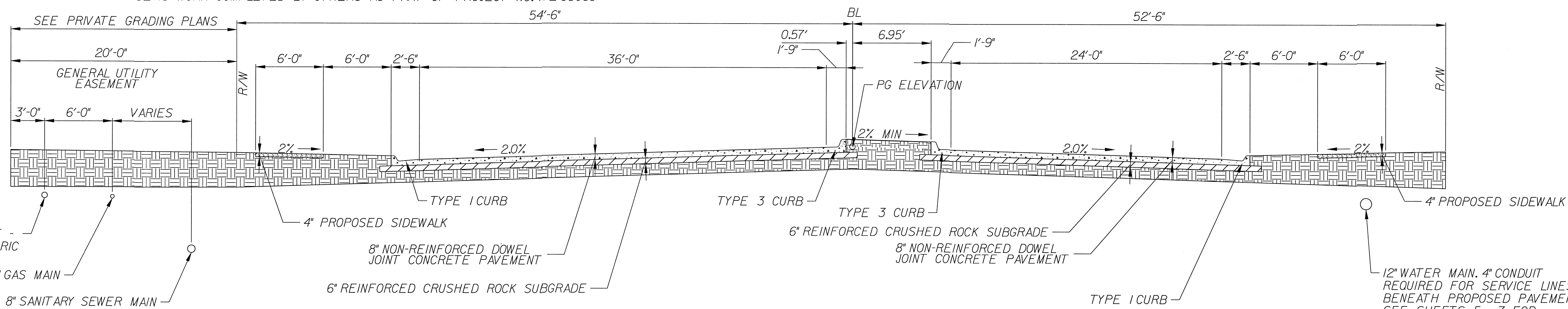
NO.	BY	DATE	REVISION
	VZ	7/2/14	ORIGINAL SUBMITTAL
	NO		

**Renaissance Infrastructure Consulting**  
 5015 NW Canal Street, Suite 100  
 Riverside MO, 64150  
 816.800.0850  
 www.ri-consult.com



NOTES:

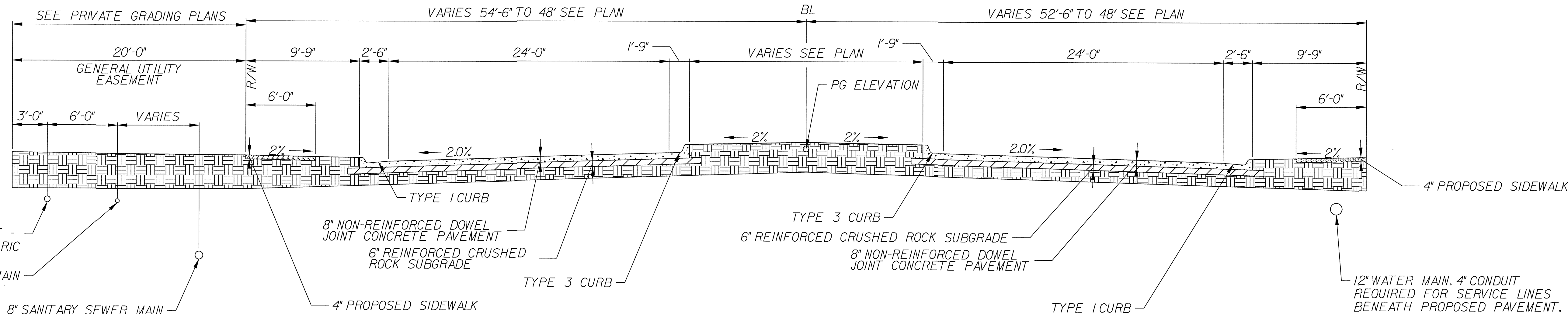
- 1) SEE DRAINAGE PLANS FOR UNDERDRAIN DETAIL AND LOCATION
- 2) SEE GENERAL NOTES, SHEET 2, FOR COMPACTION REQUIREMENTS
- 3) SUBJECT TO CITY AND ENGINEER'S APPROVAL 6" CRUSHED CONCRETE SUBGRADE MAY BE USED IN LIEU OF 6" CRUSHED ROCK SUBGRADE.
- 4) SECTION 10+00 THROUGH 10+82 IS WORK COMPLETED BY OTHERS AS PART OF PROJECT NO. 472-85066



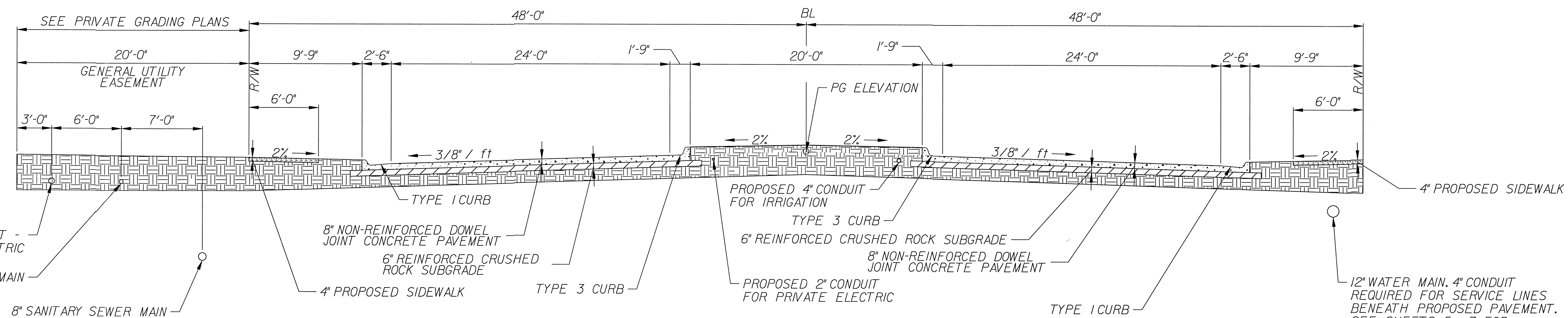
TYPICAL SECTION - GREENWICH COURT - STA. 10+82 TO STA. 13+18  
N.T.S.

NOTE:

STA. 13+18 TO STA. 14+18 WESTBOUND (LEFT) TRAVELED WAY WIDTH TRANSITIONS FROM 36' TO 24'.  
STA. 17+75 TO STA. 18+16 CROSS SLOPE TRANSITIONS FROM 2% TO 3/8"/FT.



TYPICAL SECTION - GREENWICH COURT - STA. 13+18 TO STA. 15+00  
TYPICAL SECTION - GREENWICH COURT - STA. 16+61 TO STA. 18+16  
N.T.S.

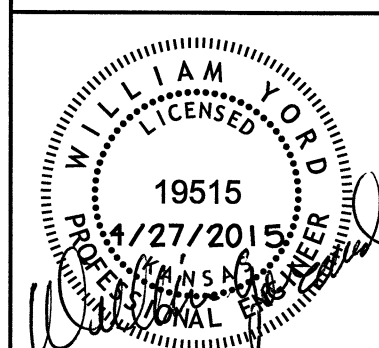


TYPICAL SECTION - GREENWICH COURT - STA. 18+16 TO STA. 25+70  
N.T.S.

Typical Section

NO.	BY	OD	DATE
1.	VZ	BY	11/18/2014
2.	VZ	BY	11/18/2014
3.	VZ	BY	10/12/2015

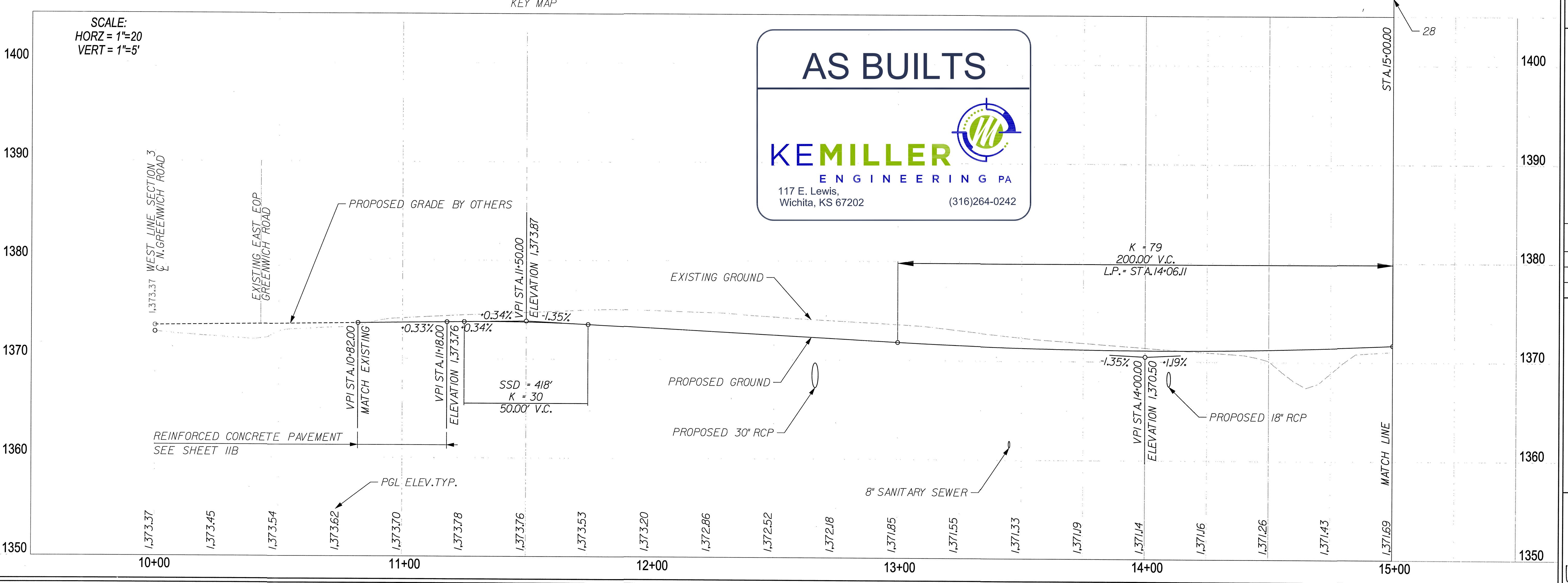
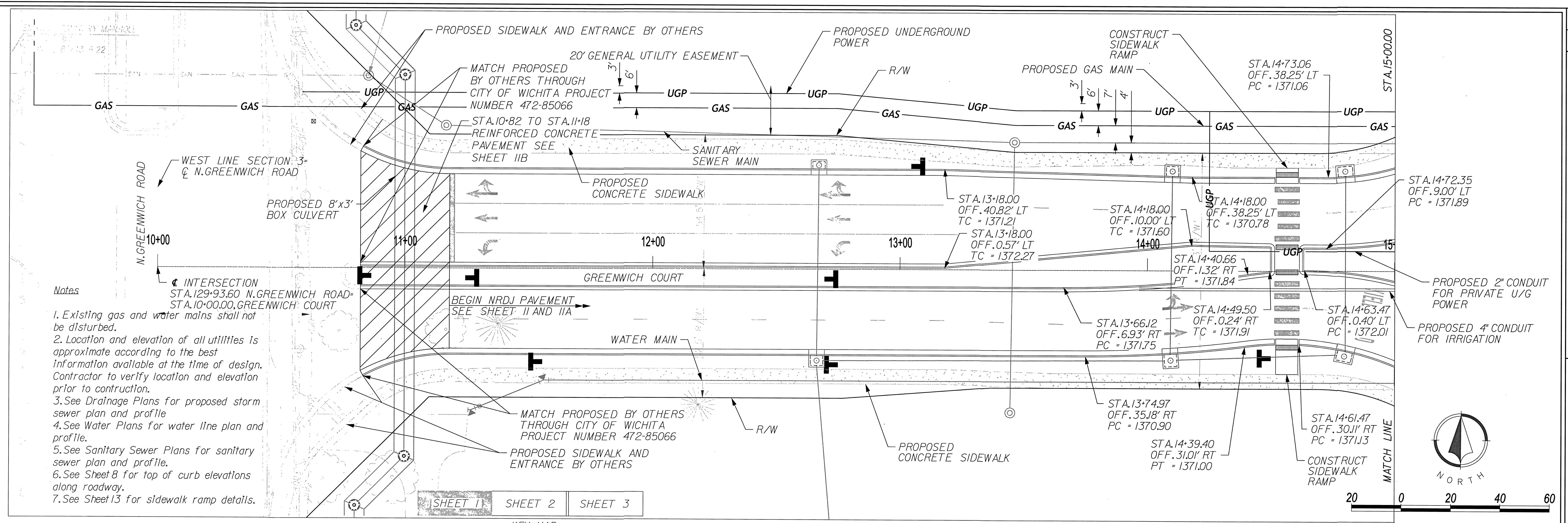
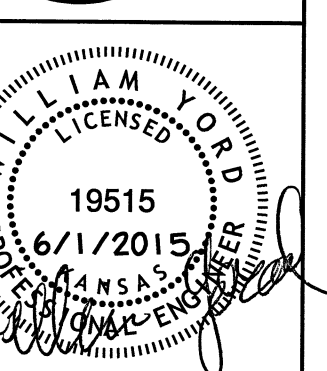
**Renaissance Infrastructure Consulting**  
5015 NW Canal Street, Suite 100  
Riverside, MO, 64150  
816.800.0950  
www.ri-consult.com



4/27/2015  
Z:\RIC Design\2014\14-0112 Wichita K96 Destination.dwg\Sheet14-0112 Typical Section.dgn

NO.	DATE	BY	REVISION
3.	6/20/2015	VZ	ADDED DELINEATION BETWEEN NRJ AND REINFORCED CONCRETE
2.	6/17/2015	VZ	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	6/11/2015	VZ	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS REVISED FOR REMOVAL OF ROUNDABOUT
			ORIGINAL SUBMITTAL

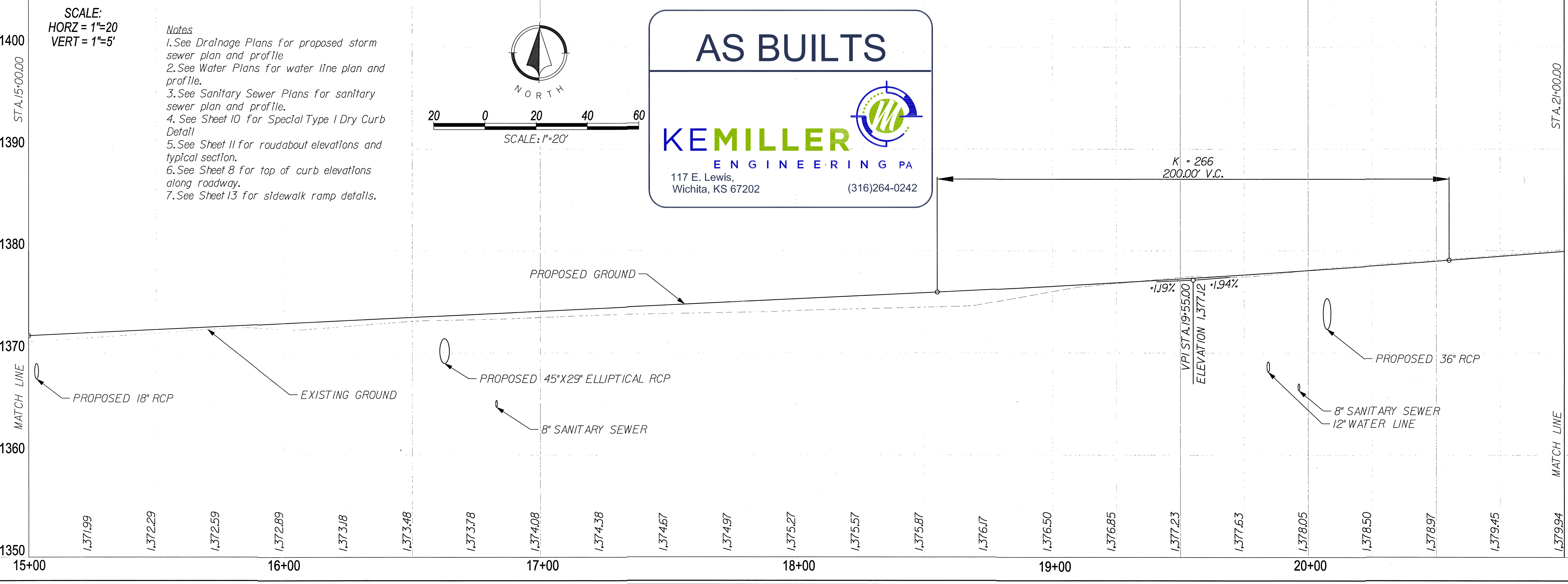
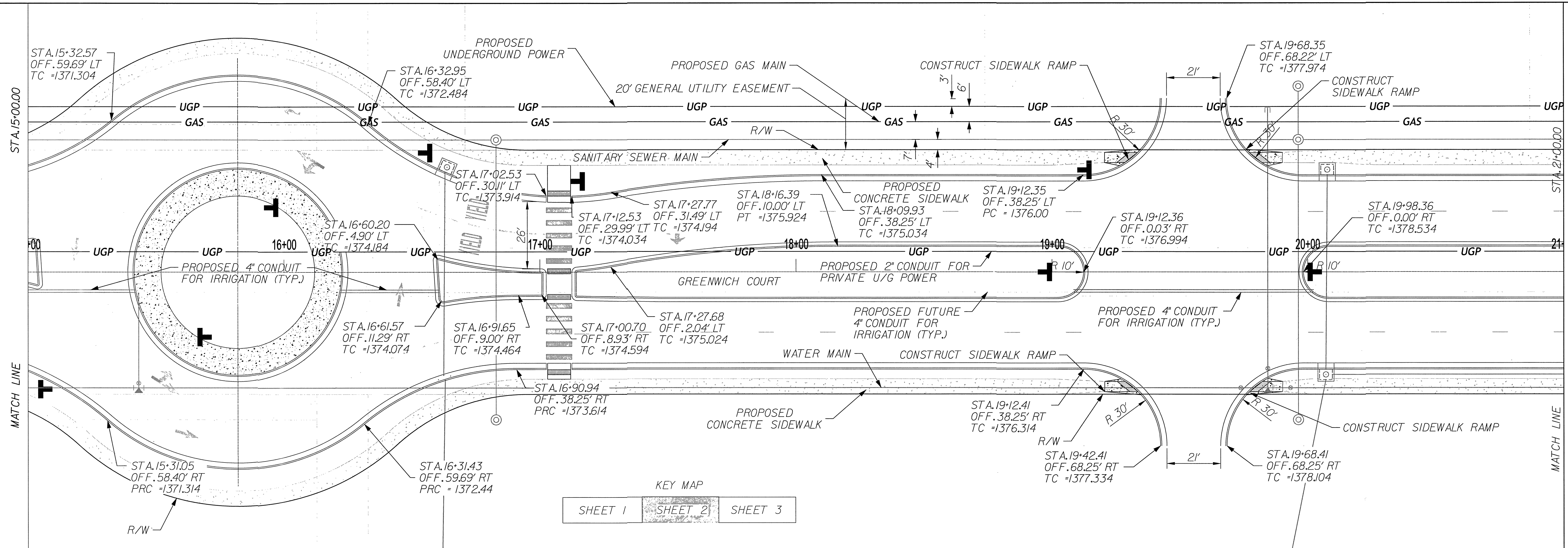
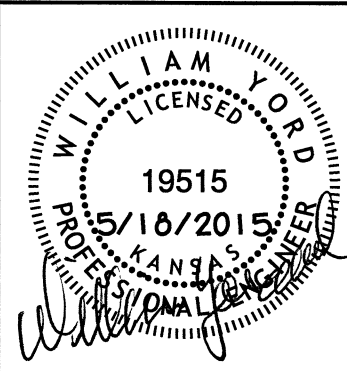
**Renaissance Infrastructure Consulting**  
5015 NW CANAL STREET, SUITE 100  
RIVERSIDE MD, 21150  
816.800.0950  
WWW.RIC-CONSULT.COM



6/1/2015 Z:\RIC Design\2014\14-0112 Wichita K96 Destination\dwg\Sheet\14-0112 Greenwich PL\_PP01.dgn

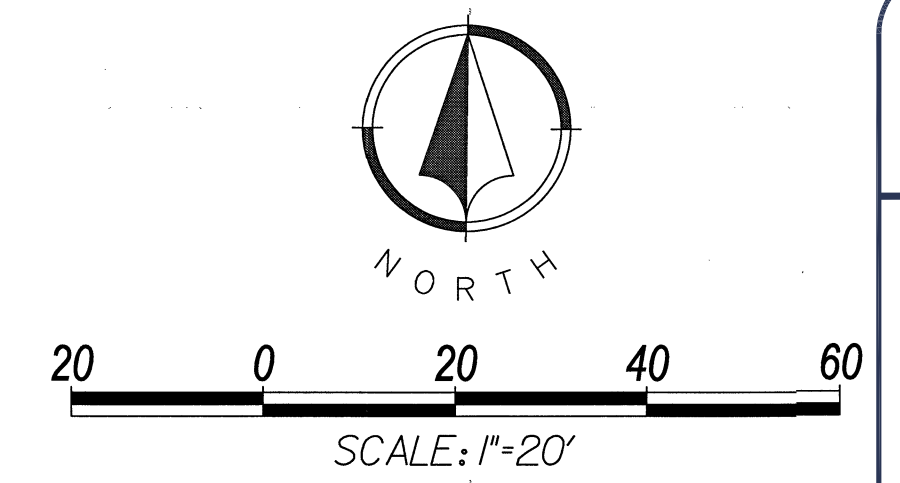
NO.	BY	DATE	REVISION
1	VE	11/18/2014	REVISION FOR REMOVAL OF ROUNDABOUT
2	VZ	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
3	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
4	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
5	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
6	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
7	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
8	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
9	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
10	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
11	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
12	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
13	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
14	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
15	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
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100	VE	11/18/2014	REVISION FOLLOWING RESPONSE TO CITY COMMENTS

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5015 NW CANAL STREET, SUITE 100  
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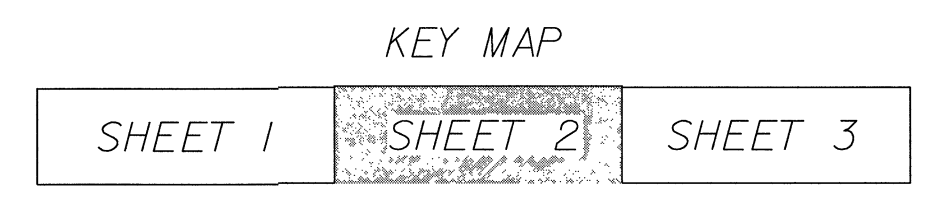
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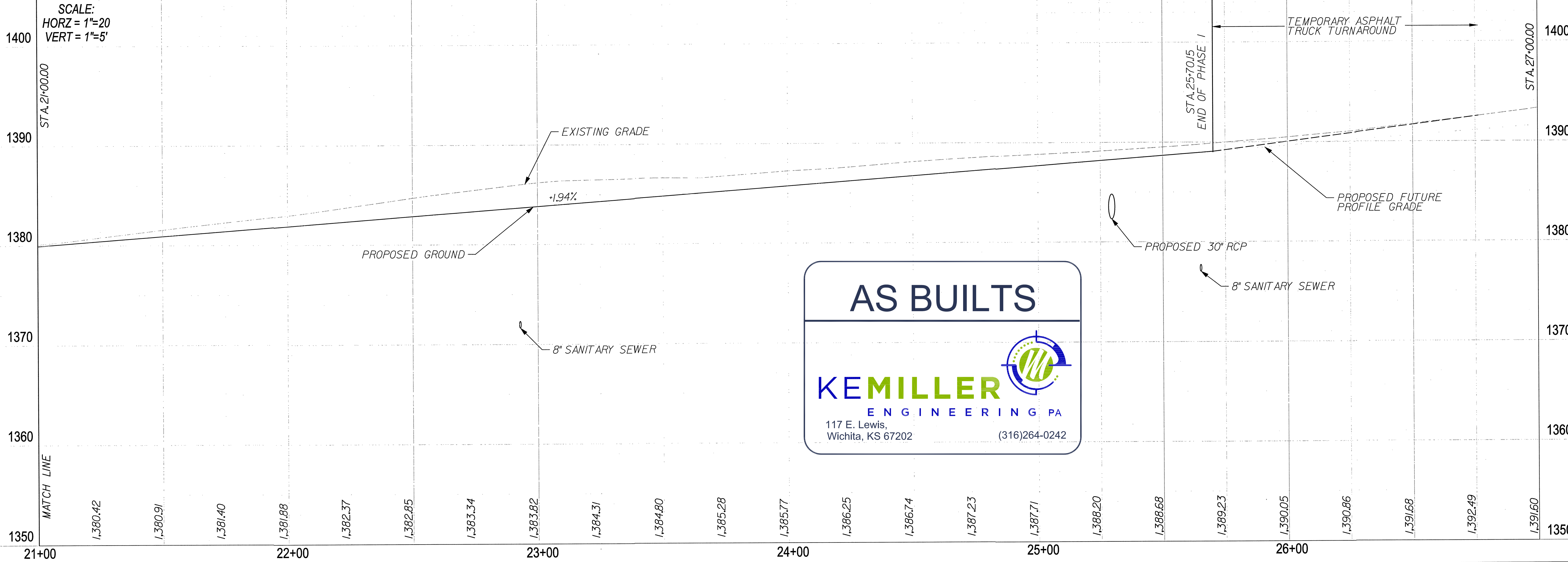
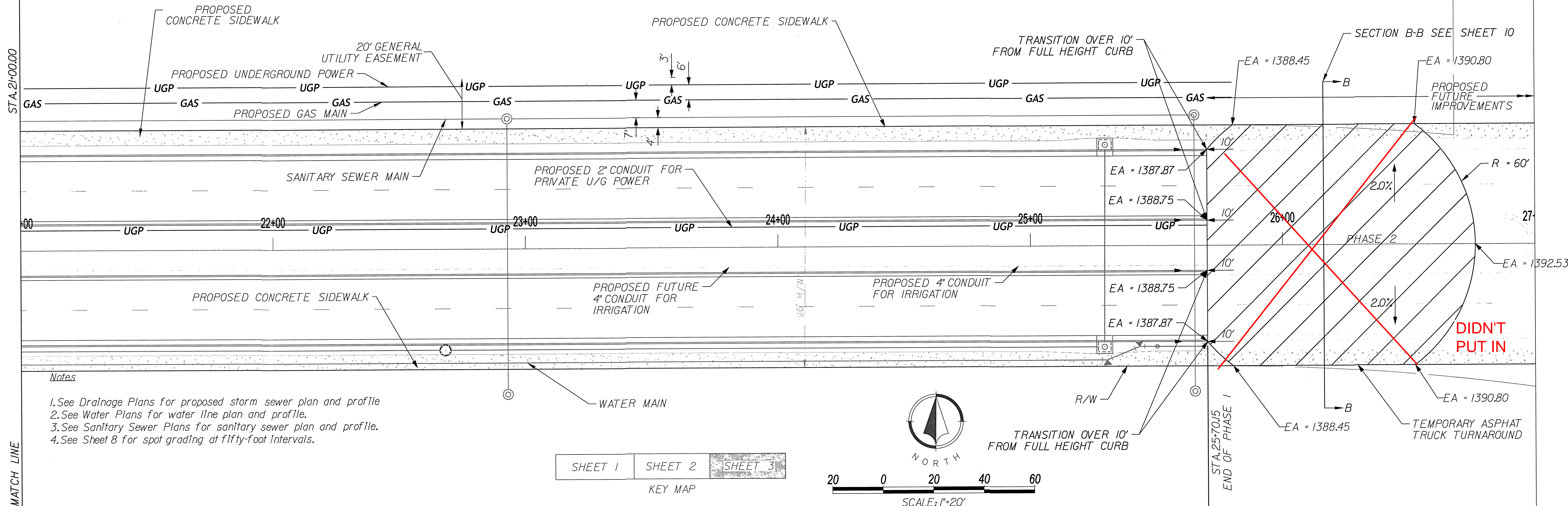
- Notes**
1. See Drainage Plans for proposed storm sewer plan and profile.
  2. See Water Plans for water line plan and profile.
  3. See Sanitary Sewer Plans for sanitary sewer plan and profile.
  4. See Sheet 10 for Special Type I Dry Curb Detail.
  5. See Sheet 11 for roundabout elevations and typical section.
  6. See Sheet 8 for top of curb elevations along roadway.
  7. See Sheet 13 for sidewalk ramp details.



**AS BUILTS**

**KEMILLER ENGINEERING PA**  
117 E. Lewis,  
Wichita, KS 67202 (316)264-0242





**AS BUILTS**

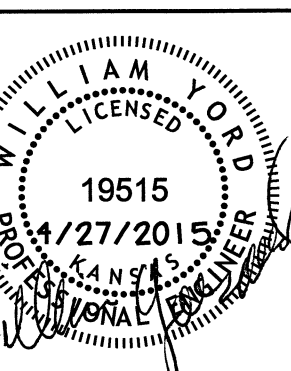
**KEMILLER**  
ENGINEERING PA

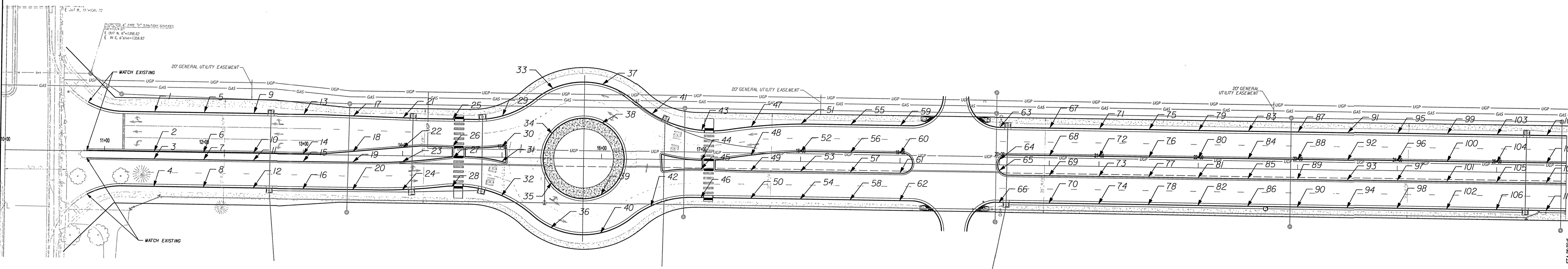
117 E. Lewis,  
Wichita, KS 67202 (316)264-0242

NO.	BY	DATE	REVISION
3.	VZ	BY 5/1/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ	BY 1/6/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ	BY 11/10/2014	REVISED FOR REMOVAL OF ROUNDABOUT
	VZ	BY 7/8/14	ORIGINAL SUBMITTAL

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www.ri-consult.com





Plan and Profile Sheet 1

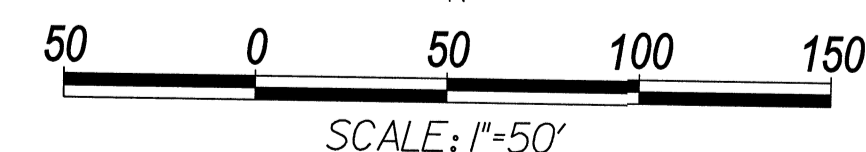
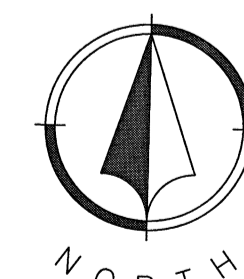
Label	Sta.	Off.	TC
1	11+50.00	40.82' LT	1373.57
2	11+50.00	0.57' LT	1374.41
3	11+50.00	6.93' RT	1374.28
4	11+50.00	35.18' RT	1373.54
5	12+00.00	40.82' LT	1372.78
6	12+00.00	0.57' LT	1373.84
7	12+00.00	6.93' RT	1373.71
8	12+00.00	35.18' RT	1372.90
9	12+50.00	40.82' LT	1372.11
10	12+50.00	0.57' LT	1373.17
11	12+50.00	6.93' RT	1373.04
12	12+50.00	35.18' RT	1372.22
13	13+00.00	40.82' LT	1371.44
14	13+00.00	0.57' LT	1372.49
15	13+00.00	6.93' RT	1372.37
16	13+00.00	35.18' RT	1371.55
17	13+50.00	40.00' LT	1370.94
18	13+50.00	3.59' LT	1371.92
19	13+50.00	6.93' RT	1371.85
20	13+50.00	35.18' RT	1371.03
21	14+00.00	38.71' LT	1370.77
22	14+00.00	8.30' LT	1371.63
23	14+00.00	5.77' RT	1371.68
24	14+00.00	34.55' RT	1370.85
25	14+50.00	38.25' LT	1370.89
26	14+49.65	9.35' LT	1371.75
27	14+49.66	0.16' RT	1371.93
28	14+50.00	30.05' RT	1371.06
29	15+00.00	42.22' LT	1371.26
30	15+00.00	11.29' LT	1372.12
31	15+00.00	4.02' RT	1372.27
32	15+00.00	39.01' RT	1371.32

Plan and Profile Sheet 2

Label	Sta.	Off.	TC
33	15+50.00	70.59' LT	1371.29
34	15+50.00	24.83' LT	1372.66
35	15+50.00	24.83' RT	1372.66
36	15+50.00	70.59' RT	1371.29
37	16+00.00	75.38' LT	1370.78
38	16+00.00	36.28' LT	1372.66
39	16+00.00	36.28' RT	1372.66
40	16+00.00	75.38' RT	1371.78
41	16+50.00	46.07' LT	1372.94
42	16+50.00	47.71' RT	1372.91
43	17+00.00	30.27' LT	1373.87
44	17+00.00	0.40' LT	1374.74
45	17+00.00	9.00' RT	1374.56
46	17+00.00	38.25' RT	1373.72
47	17+50.00	34.66' LT	1374.39
48	17+50.00	5.56' LT	1375.22
49	17+50.00	10.00' RT	1375.13
50	17+50.00	38.25' RT	1374.31
51	18+00.00	38.25' LT	1374.92
52	18+00.00	9.73' LT	1375.73
53	18+00.00	10.00' RT	1375.73
54	18+00.00	38.25' RT	1374.91
55	18+50.00	38.25' LT	1375.51
56	18+50.00	10.00' LT	1376.32
57	18+50.00	10.00' RT	1376.32
58	18+50.00	38.25' RT	1375.51
59	19+00.00	38.25' LT	1376.14
60	19+00.00	10.00' LT	1376.96
61	19+00.00	10.00' RT	1376.96
62	19+00.00	38.25' RT	1376.14
63	20+00.00	38.25' LT	1377.38
64	20+00.00	5.50' LT	1378.53
65	20+00.00	5.50' RT	1378.53
66	20+00.00	38.25' RT	1377.69
67	20+50.00	38.25' LT	1378.38
68	20+50.00	10.00' LT	1379.34
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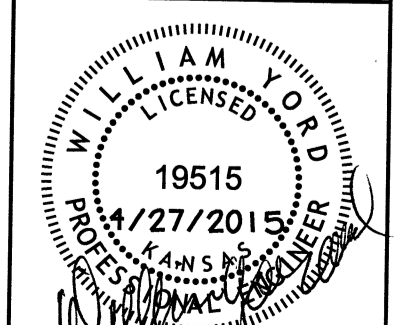
Plan and Profile Sheet 3

Label	Sta.	Off.	TC
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72	21+00.00	10.00' LT	1380.32
73	21+00.00	10.00' RT	1380.33
74	21+00.00	38.25' RT	1379.58
75	21+50.00	38.25' LT	1380.38
76	21+50.00	10.00' LT	1381.30
77	21+50.00	10.00' RT	1381.30
78	21+50.00	38.25' RT	1380.55
79	22+00.00	38.25' LT	1381.38
80	22+00.00	10.00' LT	1382.28
81	22+00.00	10.00' RT	1382.28
82	22+00.00	38.25' RT	1381.52
83	22+50.00	38.25' LT	1382.38
84	22+50.00	10.00' LT	1383.26
85	22+50.00	10.00' RT	1383.26
86	22+50.00	38.25' RT	1382.49
87	23+00.00	38.25' LT	1383.38
88	23+00.00	10.00' LT	1384.23
89	23+00.00	10.00' RT	1384.24
90	23+00.00	38.25' RT	1383.46
91	23+50.00	38.25' LT	1384.38
92	23+50.00	10.00' LT	1385.21
93	23+50.00	10.00' RT	1385.21
94	23+50.00	38.25' RT	1384.44
95	24+00.00	38.25' LT	1385.38
96	24+00.00	10.00' LT	1386.19
97	24+00.00	10.00' RT	1386.19
98	24+00.00	38.25' RT	1385.41
99	24+50.00	38.25' LT	1386.38
100	24+50.00	10.00' LT	1387.17
101	24+50.00	10.00' RT	1387.17
102	24+50.00	38.25' RT	1386.38
103	25+00.00	38.25' LT	1387.35
104	25+00.00	10.00' LT	1388.14
105	25+00.00	10.00' RT	1388.14
106	25+00.00	38.25' RT	1387.35
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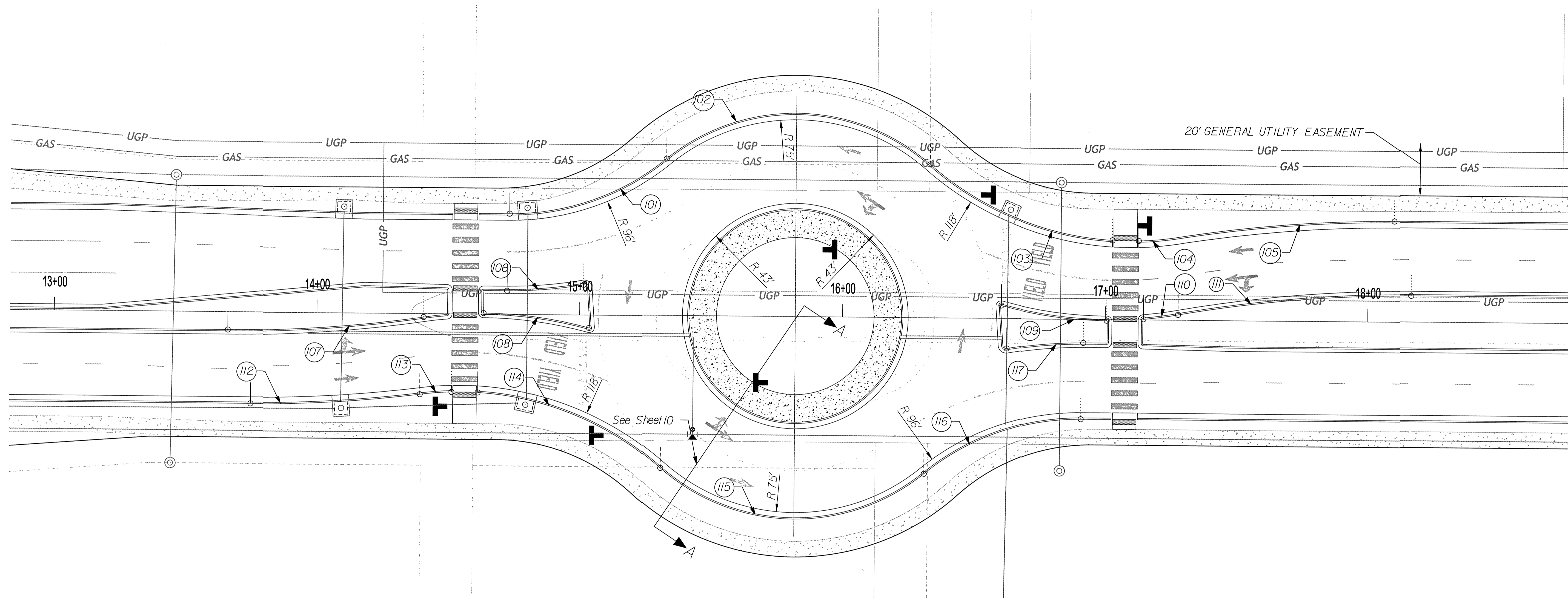


NO.	BY	DATE	REVISION
3	VZ	3/31/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2	VZ	1/6/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1	VZ	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL

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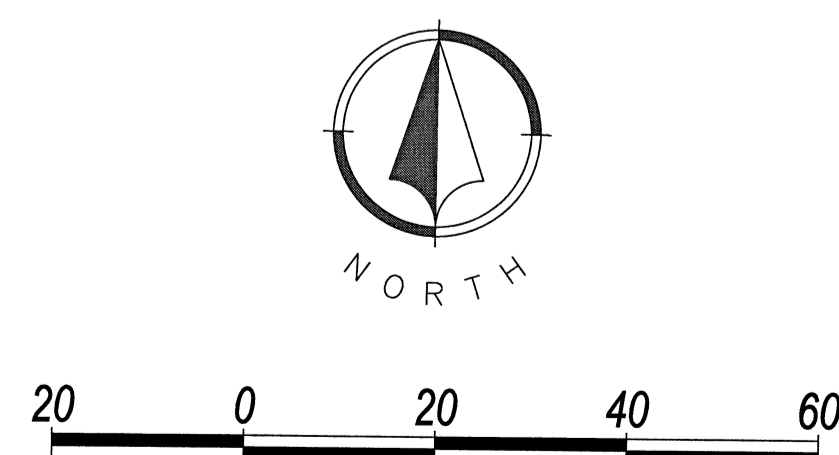
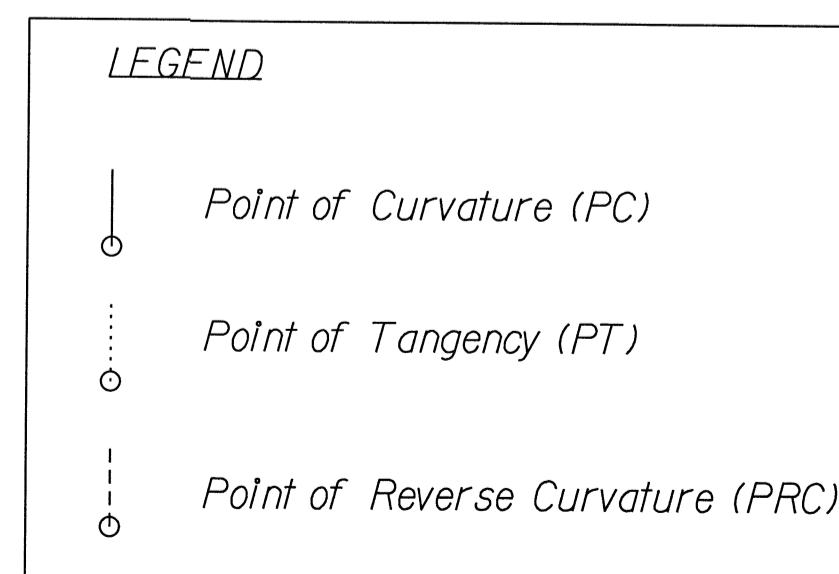


Roundabout Details



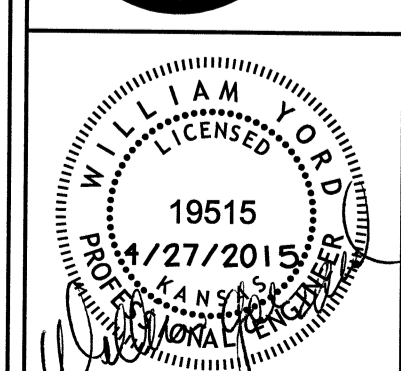
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102	15+32.57	59.69' LT	1371.3	16+32.95	58.40' LT	1372.48	77.50	80.73°	109.20
103	16+32.95	58.40' LT	1372.48	17+02.53	30.11' LT	1373.91	115.50	37.95°	76.50
104	17+12.53	29.99' LT	1374.03	17+27.77	31.49' LT	1374.19	115.50	7.60°	15.32
105	17+27.77	31.49' LT	1374.19	18+09.93	38.25' LT	1375.03	502.50	9.41°	82.54
106	14+72.35	9.00' LT	1371.89	15+01.44	11.54' LT	1372.13	167.75	9.99°	29.24
107	13+66.12	8.68' RT	1371.06	14+40.93	3.05' RT	1371.15	500.00	8.6°	75.08
108	14+63.47	0.40' LT	1372.01	15+03.58	4.95' RT	1372.29	152.75	15.22°	40.58
109	16+60.42	4.95' LT	1374.17	17+00.53	0.40' RT	1374.75	152.75	15.22°	40.58
110	17+14.50	0.24' LT	1374.90	17+27.68	2.04' LT	1375.02	152.75	4.99°	13.30
111	17+27.68	2.04' LT	1375.02	18+16.39	10.00' LT	1375.92	498.25	10.26°	89.18
112	13+74.97	35.18' RT	1370.90	14+39.40	31.01' RT	1371.00	500.00	7.40°	64.61
113	14+39.40	31.01' RT	1371	14+51.47	29.99' RT	1371.07	115.5	6.01°	12.12
114	14+61.47	30.11' RT	1371.13	15+31.05	58.40' RT	1371.31	115.50	37.95°	76.50
115	15+31.05	58.40' RT	1371.31	16+31.43	59.69' RT	1372.44	77.50	80.73°	109.2
116	16+31.43	59.69' RT	1372.44	16+90.94	38.25' RT	1373.61	93.32	39.63°	64.54
117	16+62.56	11.54' RT	1374.06	16+91.65	9.00' RT	1374.46	167.75	9.99°	29.24

NOTE:  
DEGREES ARE GIVEN IN DECIMALS OF DEGREES.  
ALL STATIONS, OFFSETS, AND DIMENSIONS ARE  
GIVEN TO THE BACK OF CURB.

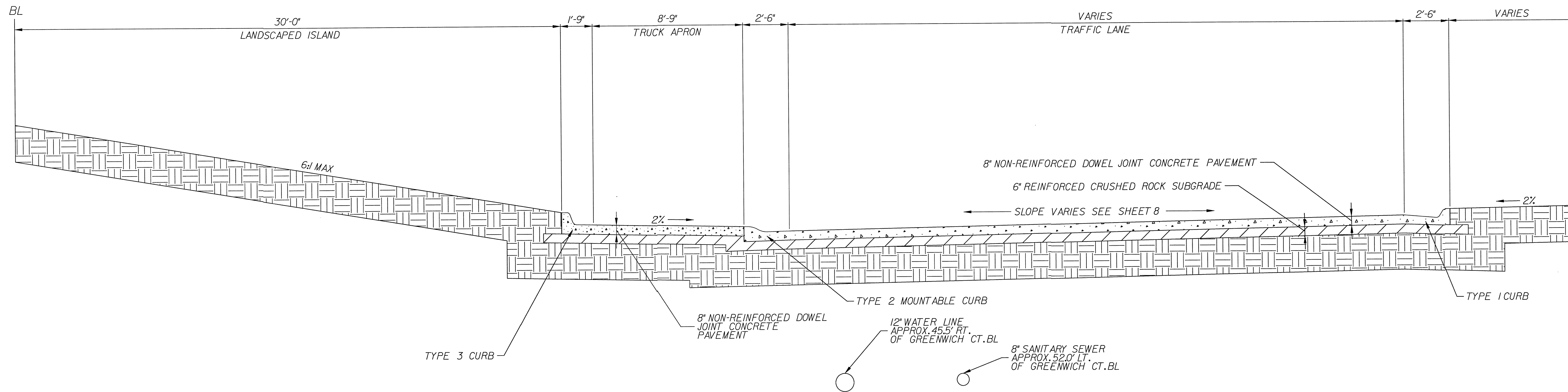


NO.	BY	DATE	REVISION
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2.	VZ	1/8/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
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	VZ	7/3/14	
	GD		

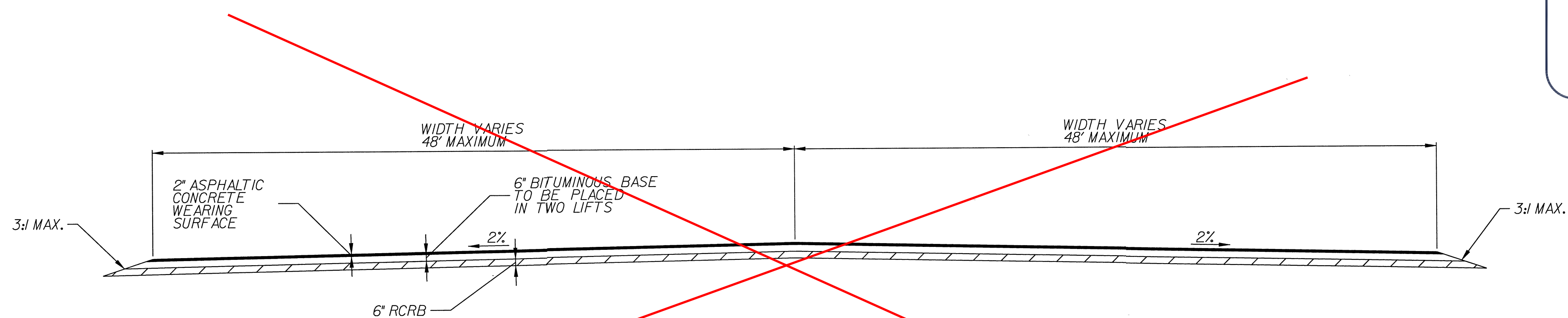
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5015 NW Canal Street, Suite 100  
Overland Park, MO 66150  
816.800.0950  
www.ric-consult.com



- NOTES:  
1) SEE GENERAL NOTES, SHEET 2, FOR COMPACTION REQUIREMENTS  
2) SUBJECT TO CITY AND ENGINEER'S APPROVAL 6" CRUSHED CONCRETE SUBGRADE MAY BE USED IN LIEU OF 6" CRUSHED ROCK SUBGRADE.



SECTION A-A - GREENWICH COURT ROUNDABOUT  
N.T.S.



SECTION B-B - TEMPORARY ASPHALT TRUCK TURNAROUND  
N.T.S.

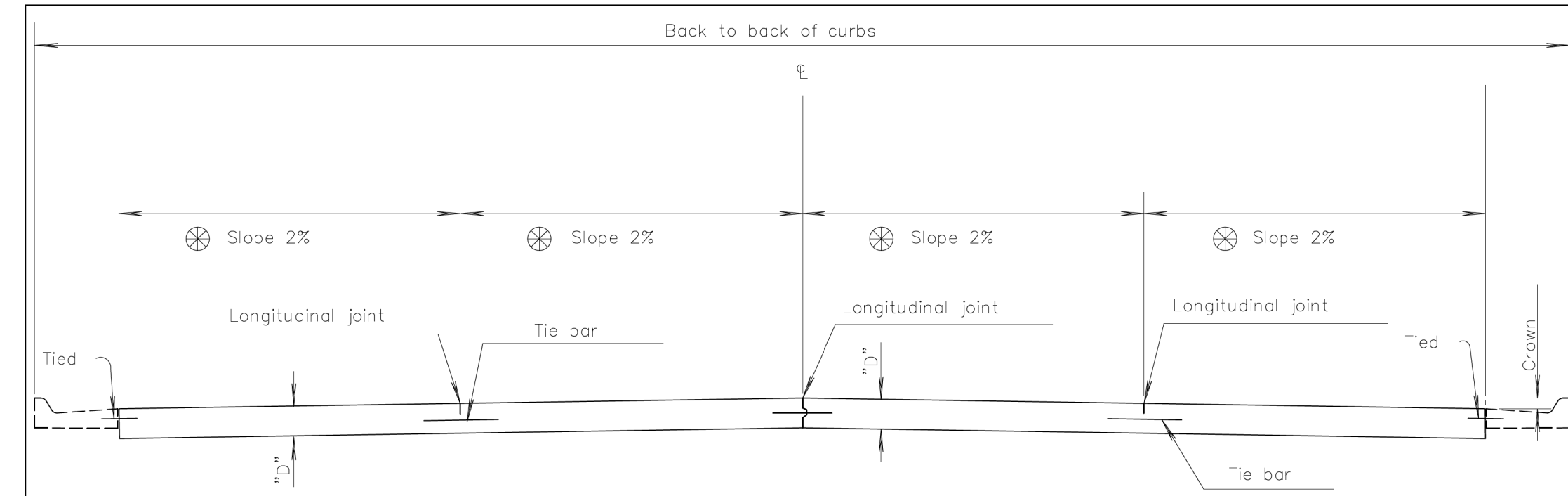
DIDN'T  
PUT IN

**AS BUILTS**

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Wichita, KS 67202 (316)264-0242

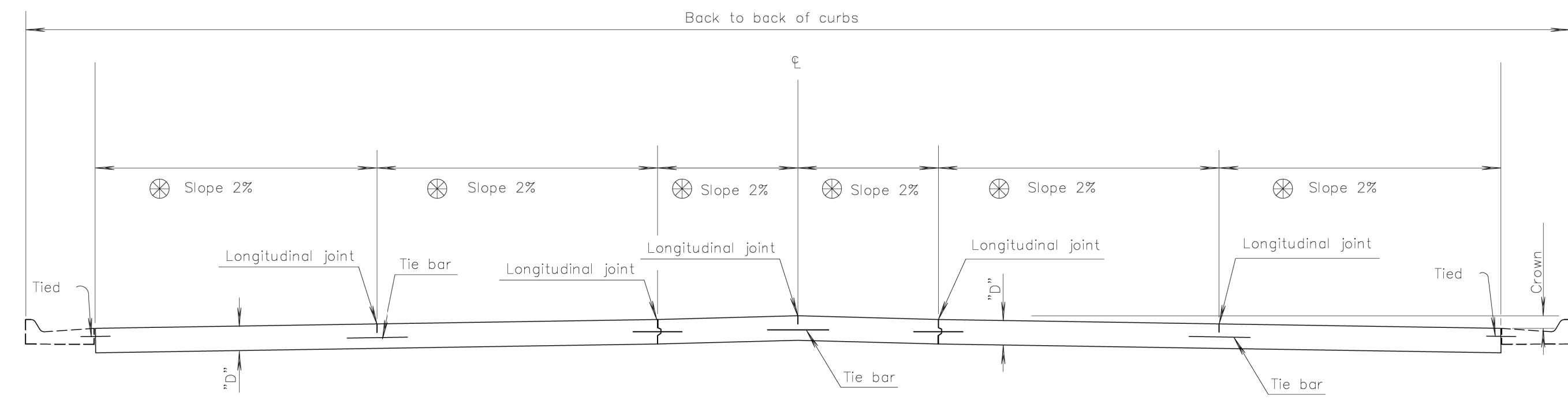
NO.	BY	DATE	REVISION
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2.	VZ	11/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL
	VZ	7/2/14	REVISION

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Riverside MO, 64150



TRANSVERSE SECTION  
(4 - LANE WITH CURB & GUTTER)

For Curb & Gutter details  
See Standard Drawing PV-101.

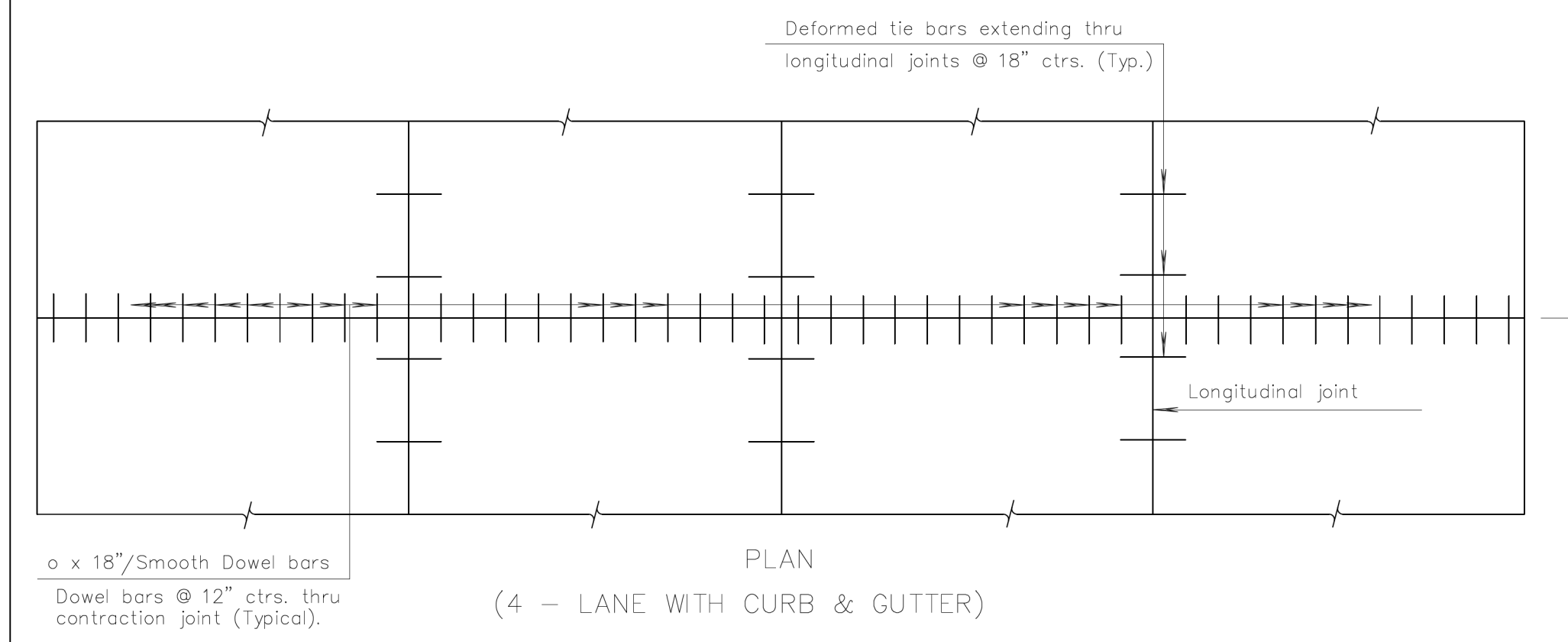


TRANSVERSE SECTION  
(5 - LANE WITH CURB & GUTTER)

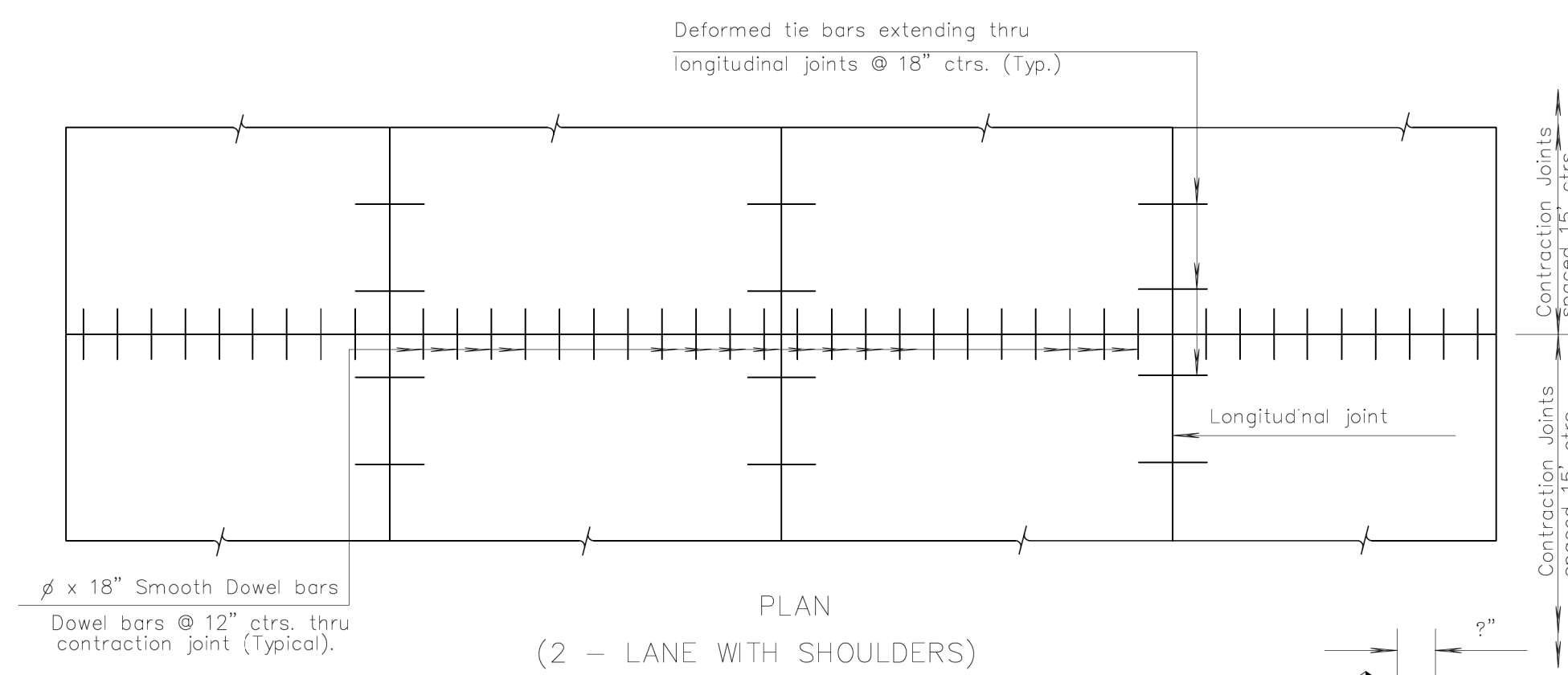
⊗ Normal cross slopes. See Typical Section or  
Cross Sections for variations.

GENERAL NOTE

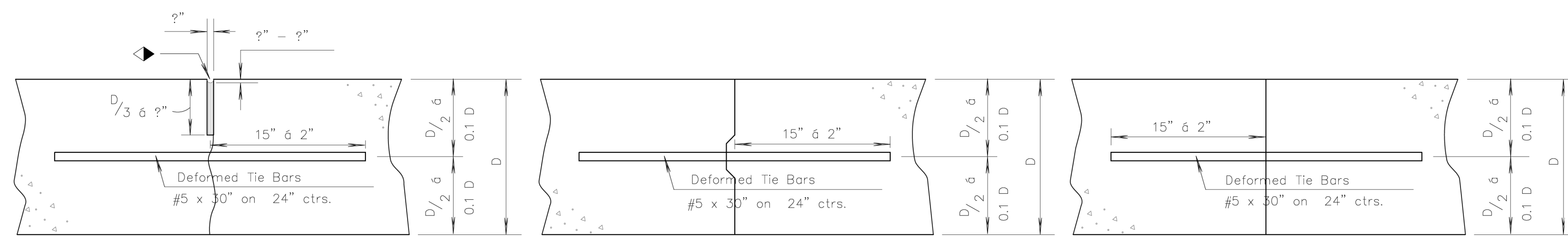
Epoxy coat all deformed tie bars. Patch any damage to the epoxy coating in accordance with the Standard Specifications. Use billet steel Grade 40 reinforcing for deformed tie bars THAT require bending, may or may not be epoxy coated. Place pressure relief joint at the end of the bridge approach pavement slab (no bars through joint). For details of pressure relief joint see KDOT Standard Drawing RD712. Use load transfer devices as shown in details at all construction joints on mainline pavement unless otherwise noted. Fill all sawed joints on the project in accordance with the Standard Specifications. Shape all keyed joints similar to section of recessed form leg as shown on this sheet. Evenly space tie bars along the length of slab with no tie bar within 12" of contraction joint. All longitudinal joints are tied.



PLAN  
(4 - LANE WITH CURB & GUTTER)

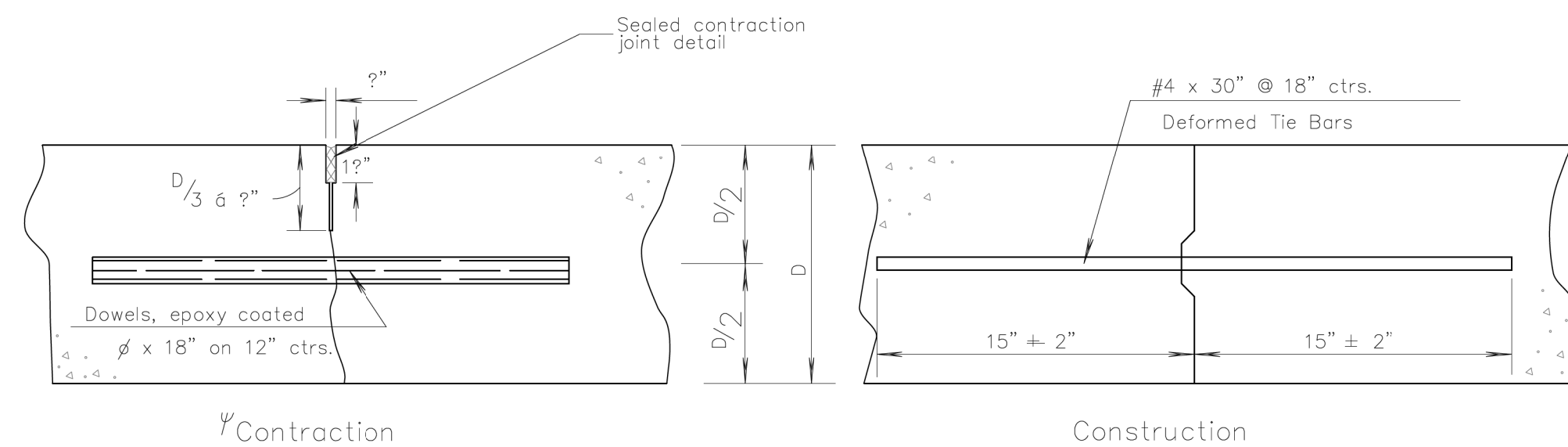


PLAN  
(2 - LANE WITH SHOULDERS)



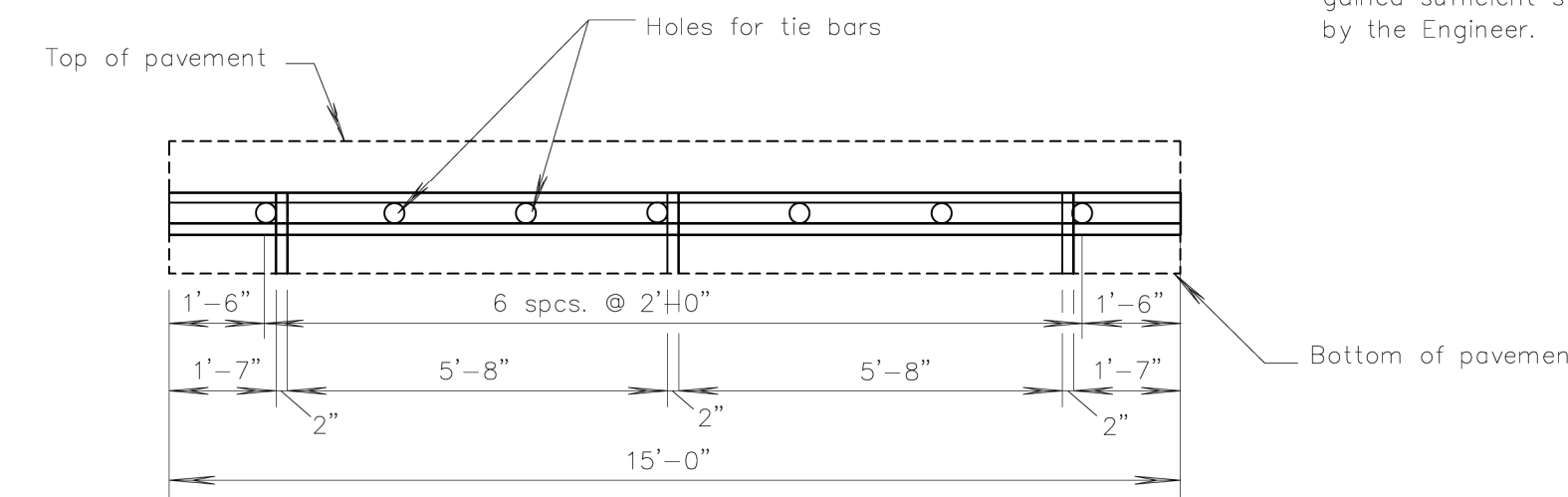
Note: For longitudinal construction joints the contractor has the option of using either the keyed or butt type. Place deformed tie bars mid-depth of the shoulder.

LONGITUDINAL JOINTS



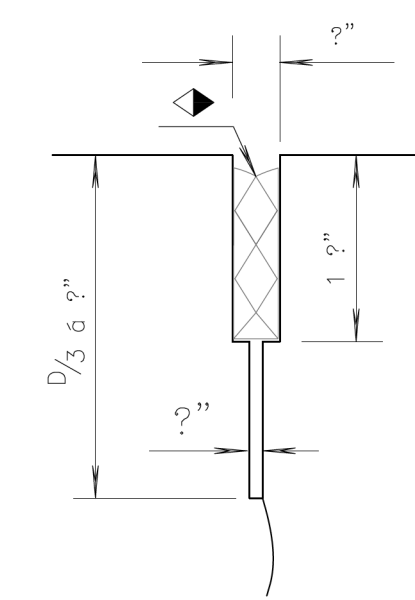
TRANSVERSE JOINTS

Note: Construct contraction joints at plan locations or at the Engineer's direction. When necessary to interrupt continuous placement for a substantial length of time or at the end of a day's paving, the Contractor has the option of ending placement at a contraction joint or with a construction joint located a minimum of five (5) feet from a contraction joint. Construct either joint type by placing a header at the end of the pour or by paving past the joint location. After the concrete has hardened, saw joint and drill holes for tie bars or dowels.



METAL STRIP FOR  
LONGITUDINAL CONSTRUCTION JOINT

To be used only against forms, do not extend through contraction joints. For automated placement tie bars are spaced at uniform 24" centers. Use snap-in leg or other approved design in lieu of welded leg.



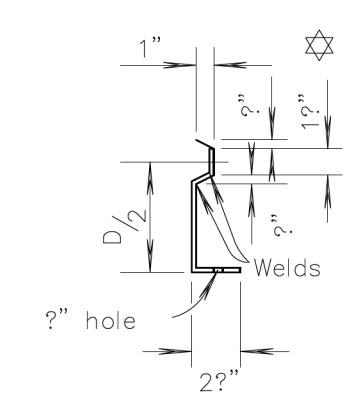
DETAIL OF SEALED CONTRACTION  
JOINT SAWCUT

Make an initial 1/2 inch saw cut (1/3 x 6 inch depth); the second 1/2 inch saw cut is a separate operation done after concrete has gained sufficient strength to avoid spalling as determined by the Engineer.

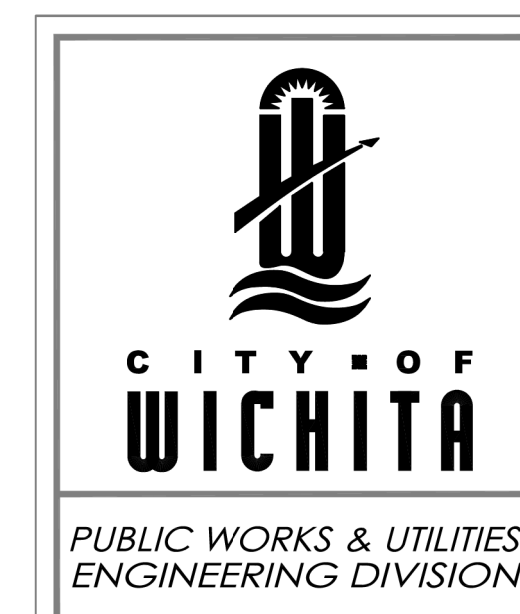
DOWEL SIZE	
D (in.)	Diameter
6 < D < 9	1"
9 ≤ D < 11	1 1/2"
D ≥ 11	1 3/4"

PAVEMENT DEPTH

D = \_



SECTION OF RECESSED  
FORM LEG



CONCRETE PAVEMENT  
DOWEL JOINTED  
NON-REINFORCED

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

PROJECT NUMBER    OCA NUMBER    DATE

CITY ENGINEER'S OFFICE  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

SHEET

**Renaissance Infrastructure Consulting**

5015 NW CANAL STREET, SUITE 100  
RIVERSIDE MO, 64150

816.800.0950  
WWW.RIC-CONSULT.COM

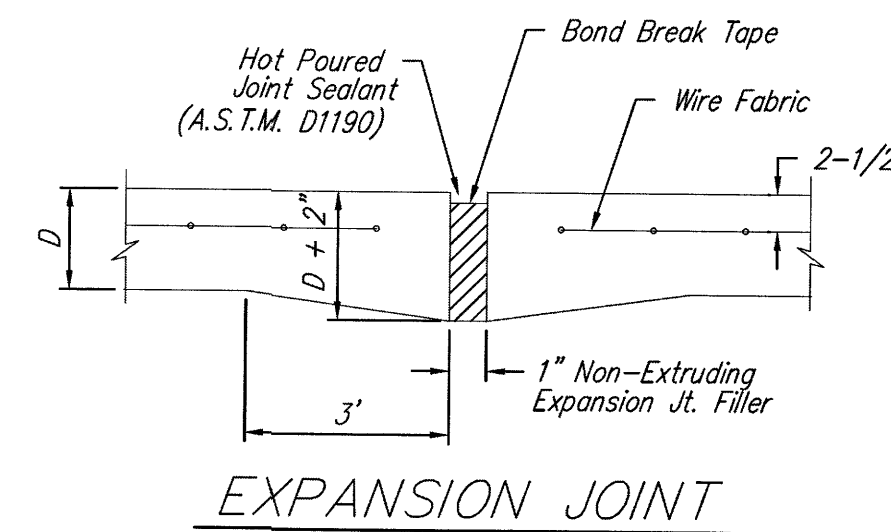
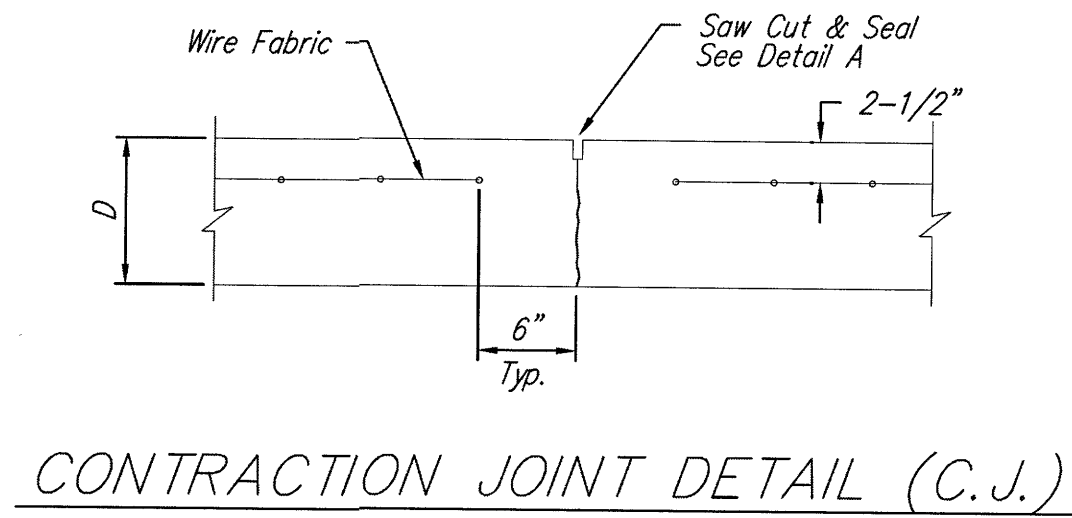


**NOTE:**

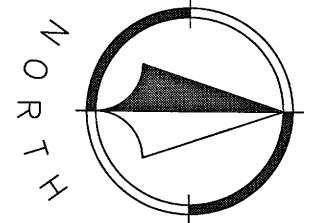
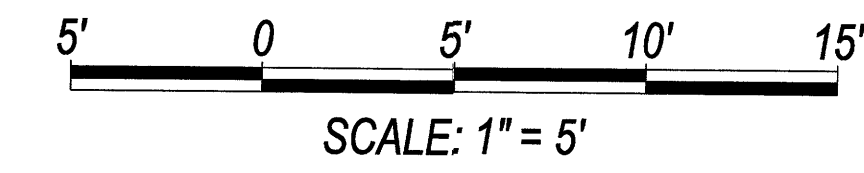
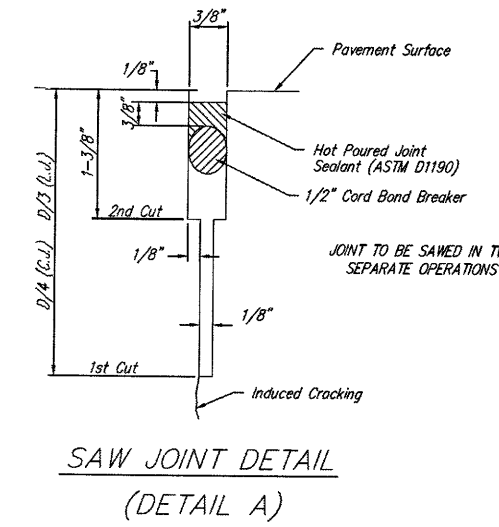
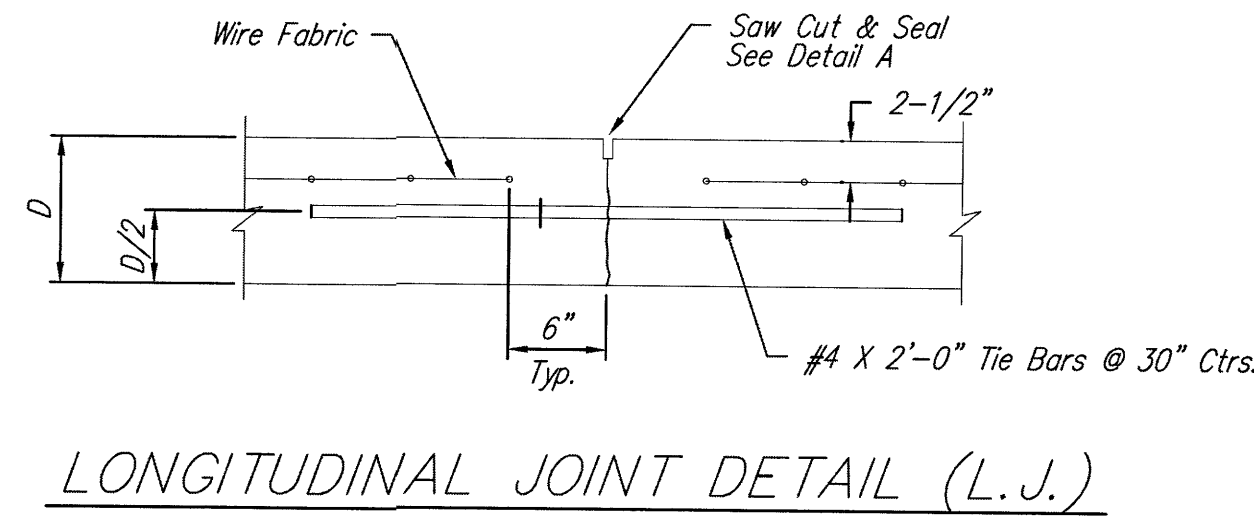
- 1) ALL STATIONS AND ELEVATIONS SHOWN ACCORDING TO CITY OF WICHITA PROJECT NO. 472-85066
- 2) ALL CONCRETE PAVEMENT SHOWN SHALL BE 9" REINFORCED CONCRETE (6'x12", W4xW4) WITH 6" GEOGRID REINFORCED CRUSHED ROCK BASE

**LEGEND**

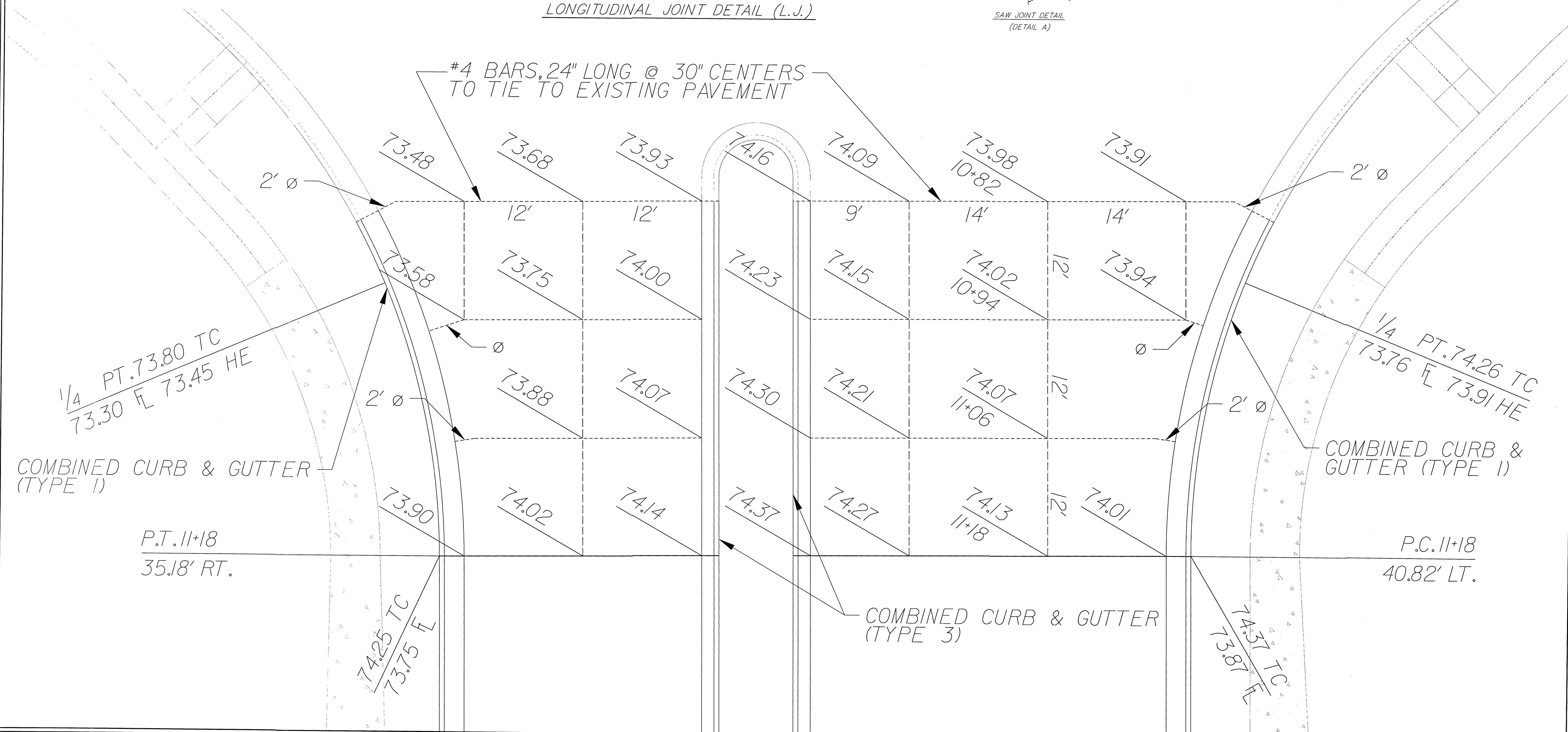
- DOWELED CONTRACTION JOINT
- LONGITUDINAL JOINT
- EXPANSION JOINT
- ∅ OMIT DOWEL OR TIE BARS



NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement

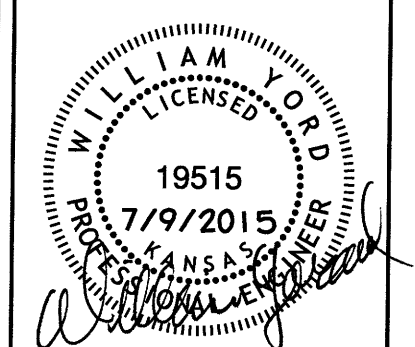


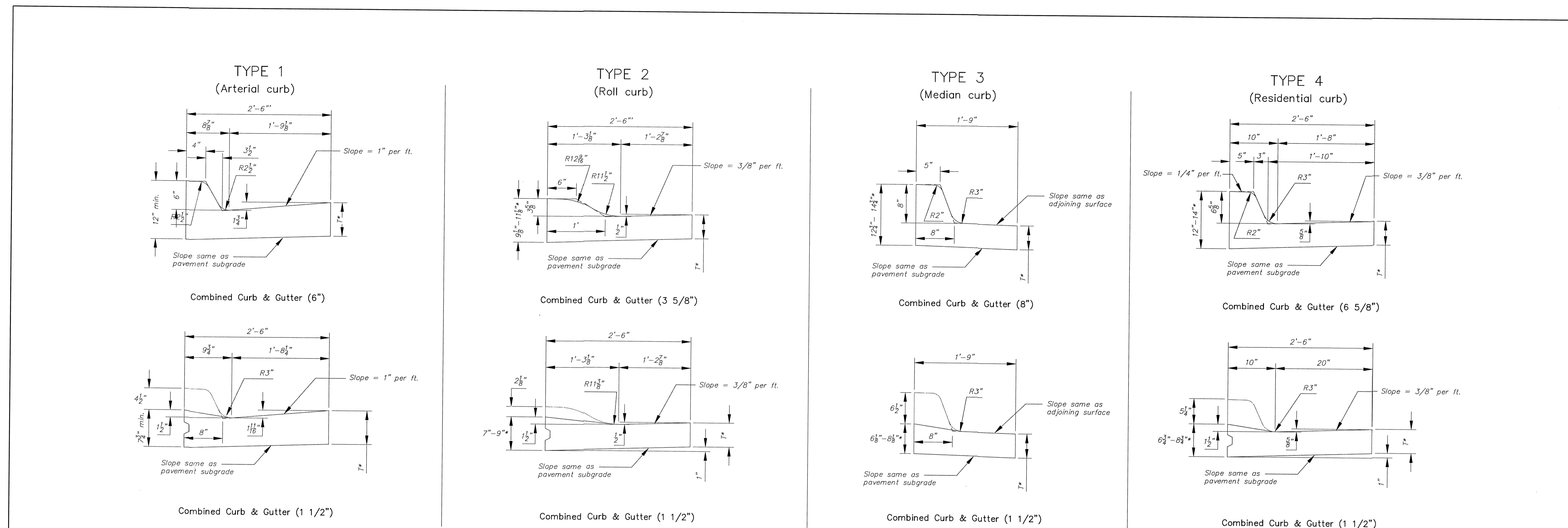
NO.	BY	DATE	REVISION
1.	VZ	7/8/2015	REPLACE SHEET 11B ACCORDING TO CITY COMMENTS
2.	VZ	10/12/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
3.	VZ	1/6/2016	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
4.	VZ	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT
			ORIGINAL SUBMITTAL



7/9/2015 Z:\INC Design\2014\14-0112 Wichita K96 Destination\dwg\dm\Sheets\14-0112 Roadway\14-0112 Roadway Details-1B.dgn

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5015 NW CANAL STREET, SUITE 100  
RIVERSIDE MO, 64150  
816.800.0950  
WWW.RIC-CONSULT.COM

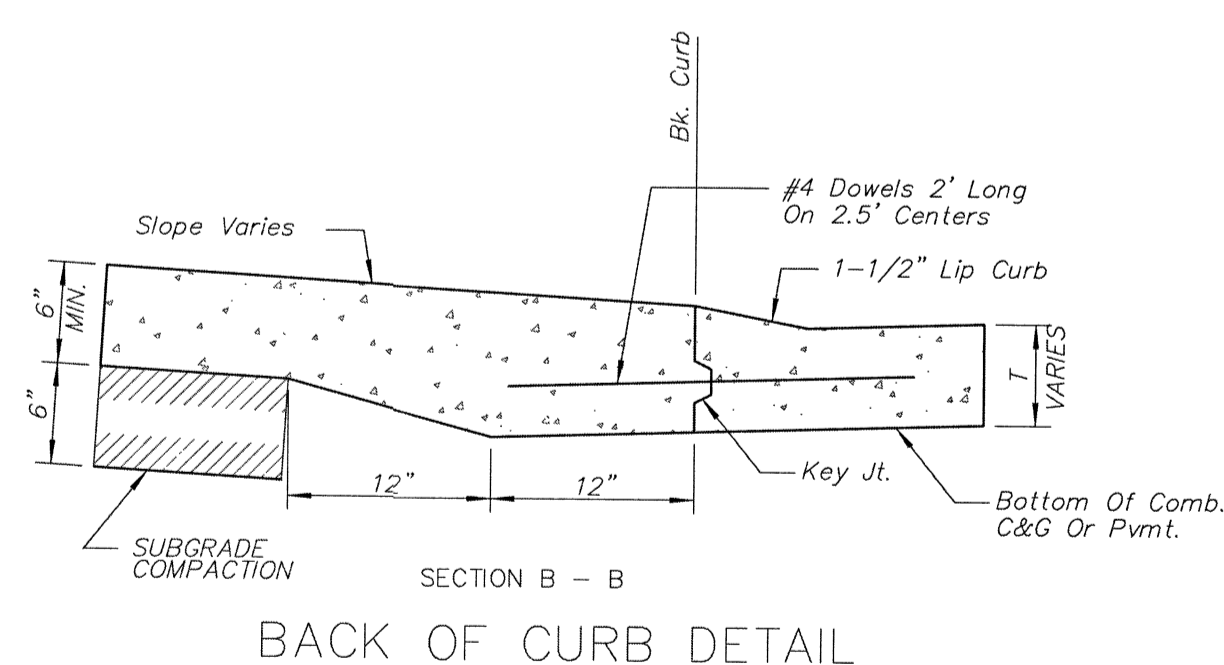




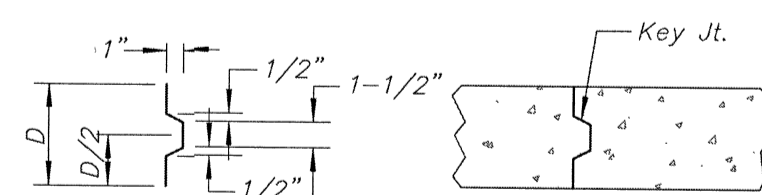
T\* = Thickness of curb to adjust with pavement thickness

GENERAL NOTES

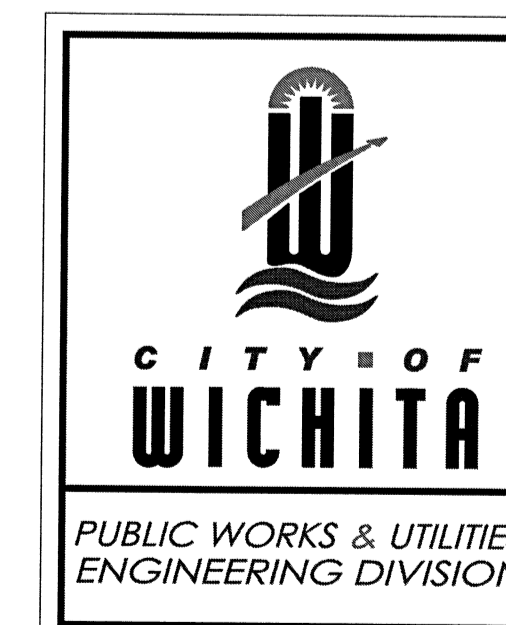
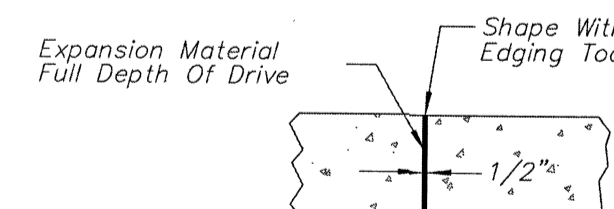
- Expansion (isolation) joints shall be constructed a maximum of 300' apart and at all PIs, PCs, cul-de-sac quadrants, and ends of returns.
- Contraction joints shall be constructed a minimum of 12' apart.
- Joint sealer shall be required at all joints on arterial and industrial streets and at intersections on residential streets.



ALT. LONGITUDINAL CONSTRUCTION JOINT



EXPANSION JOINT (E.J.)



**CURB & GUTTER DETAILS**

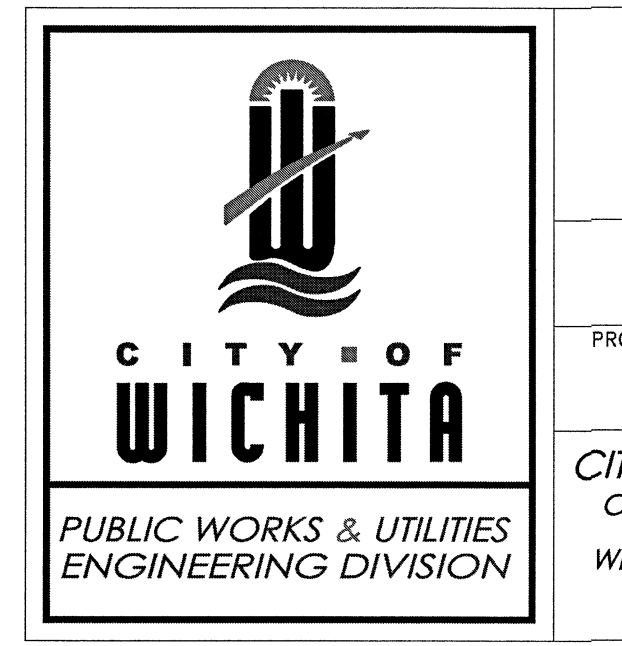
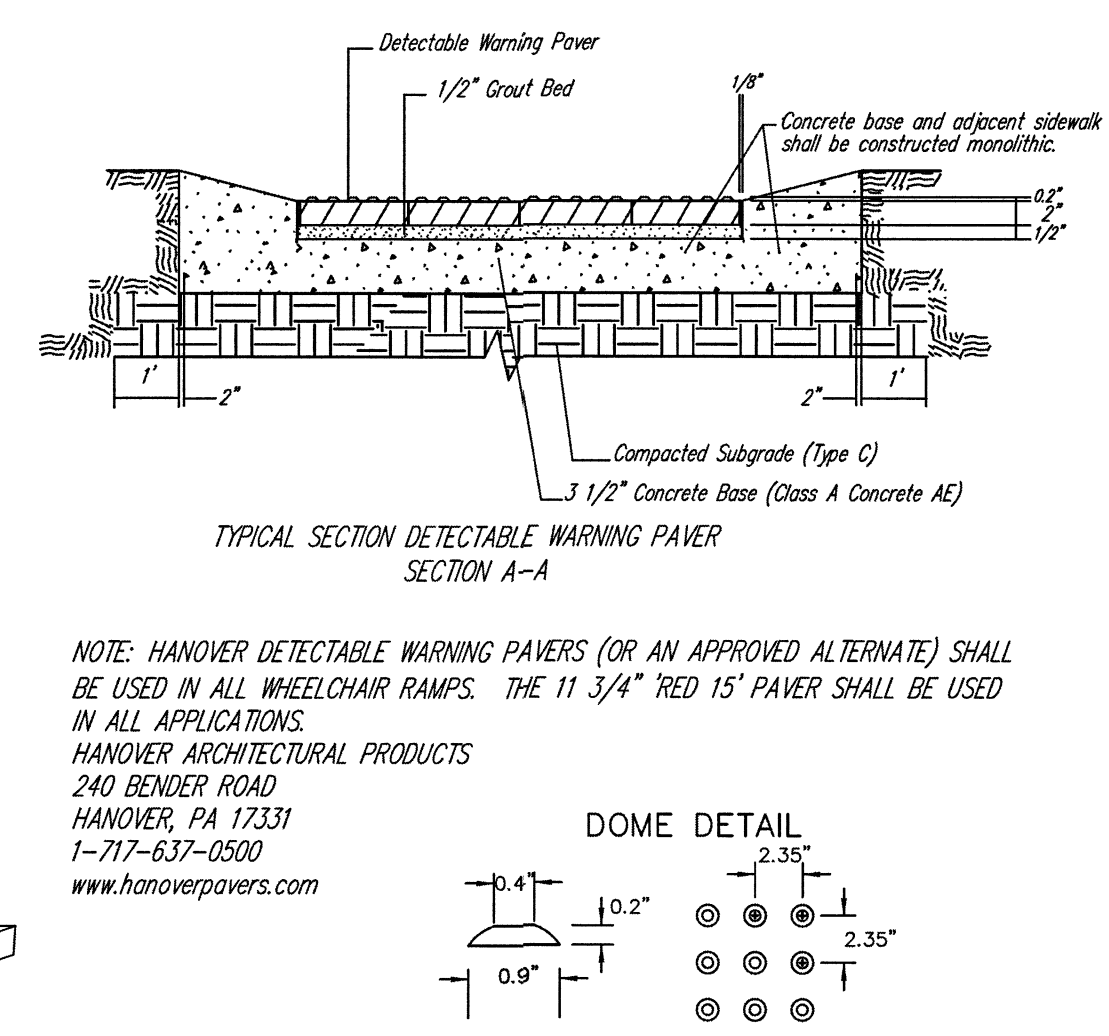
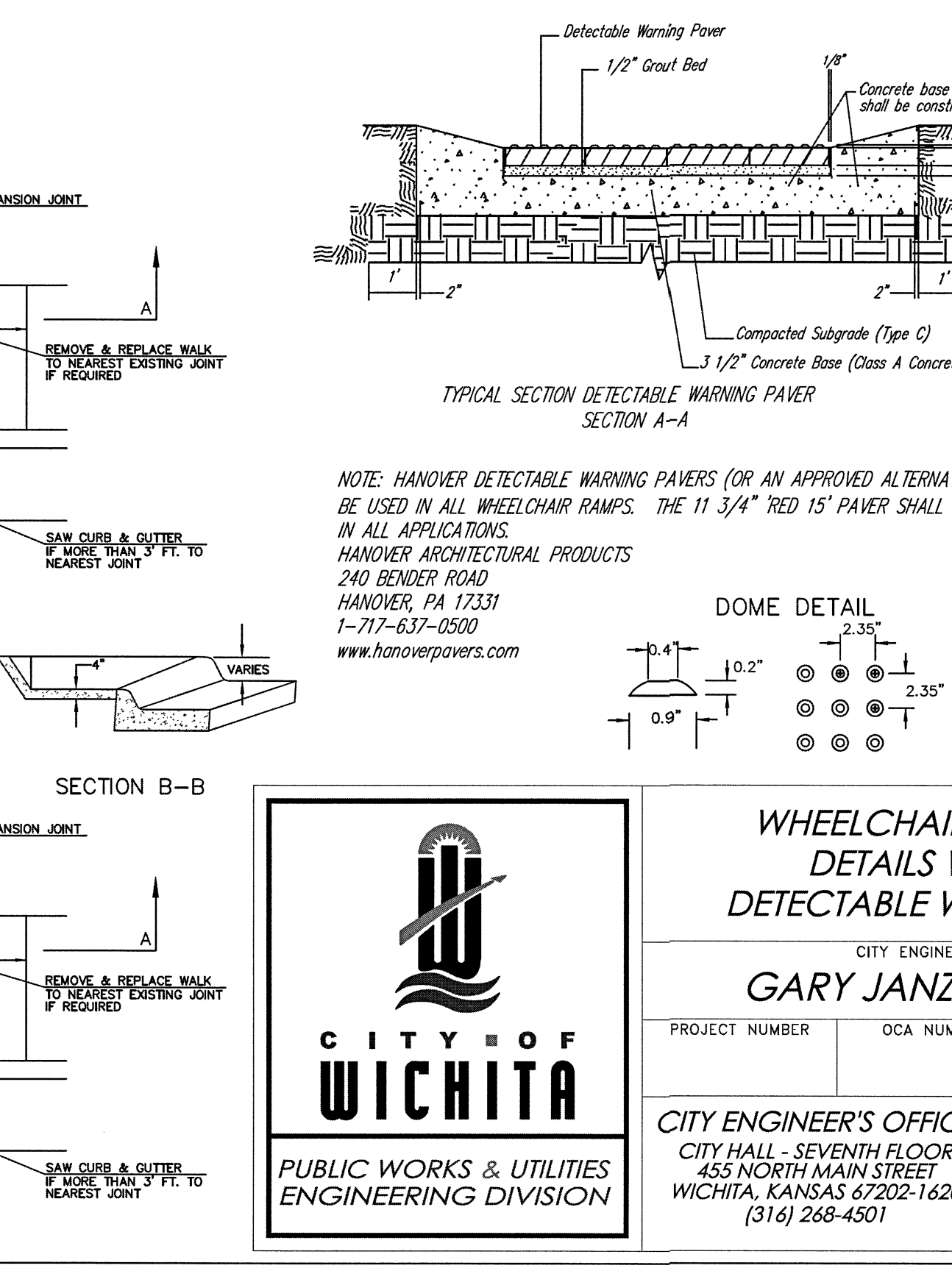
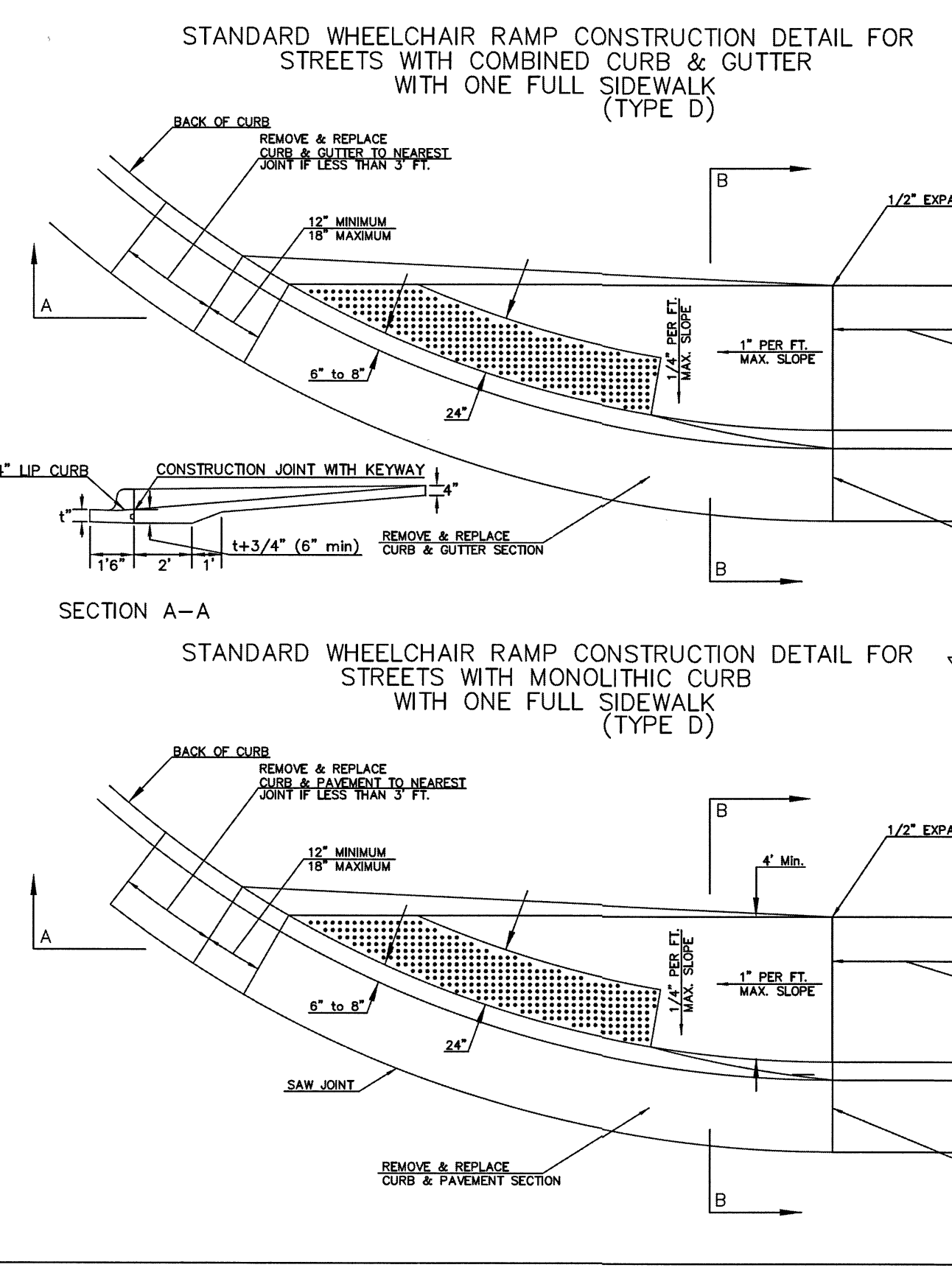
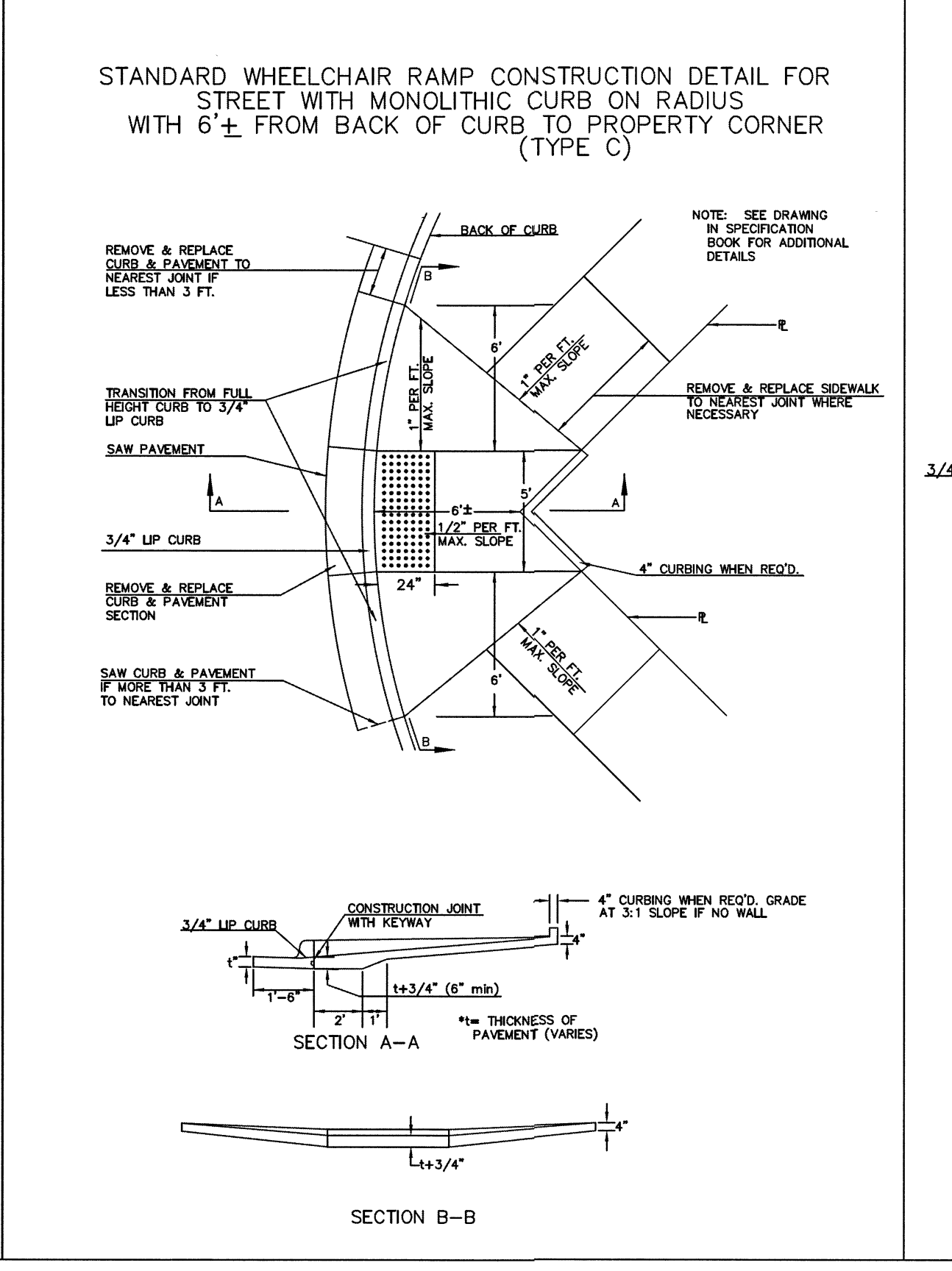
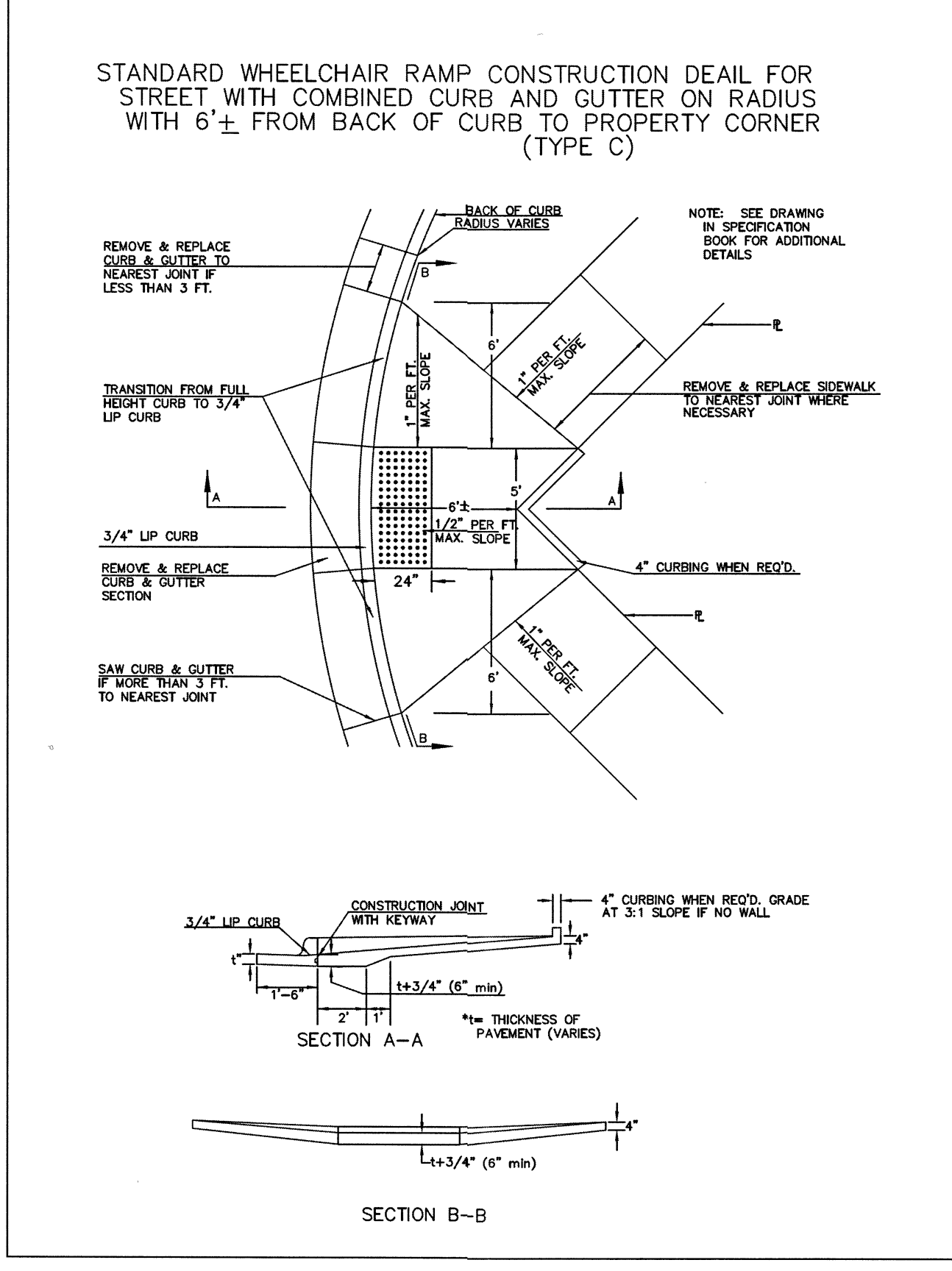
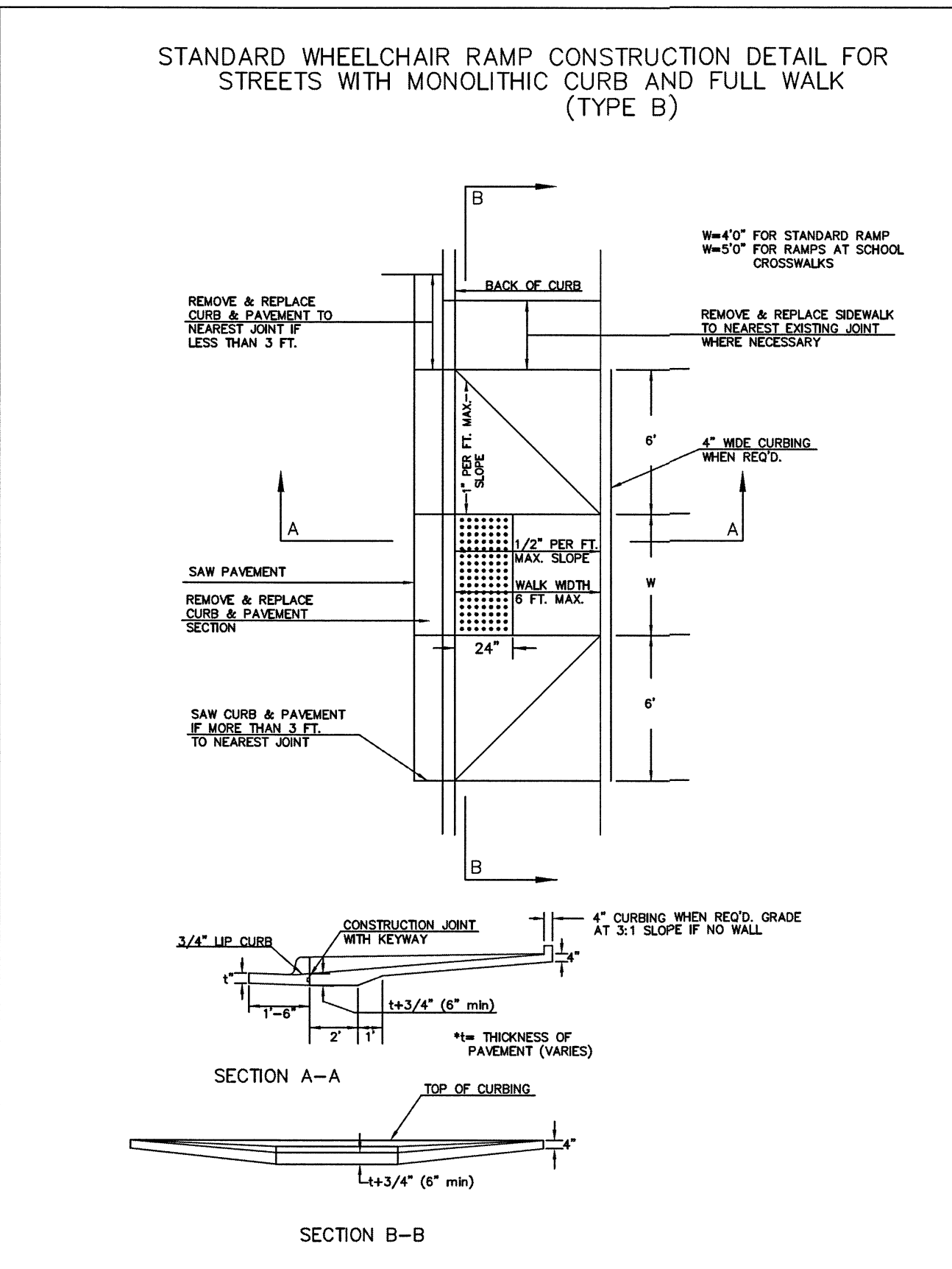
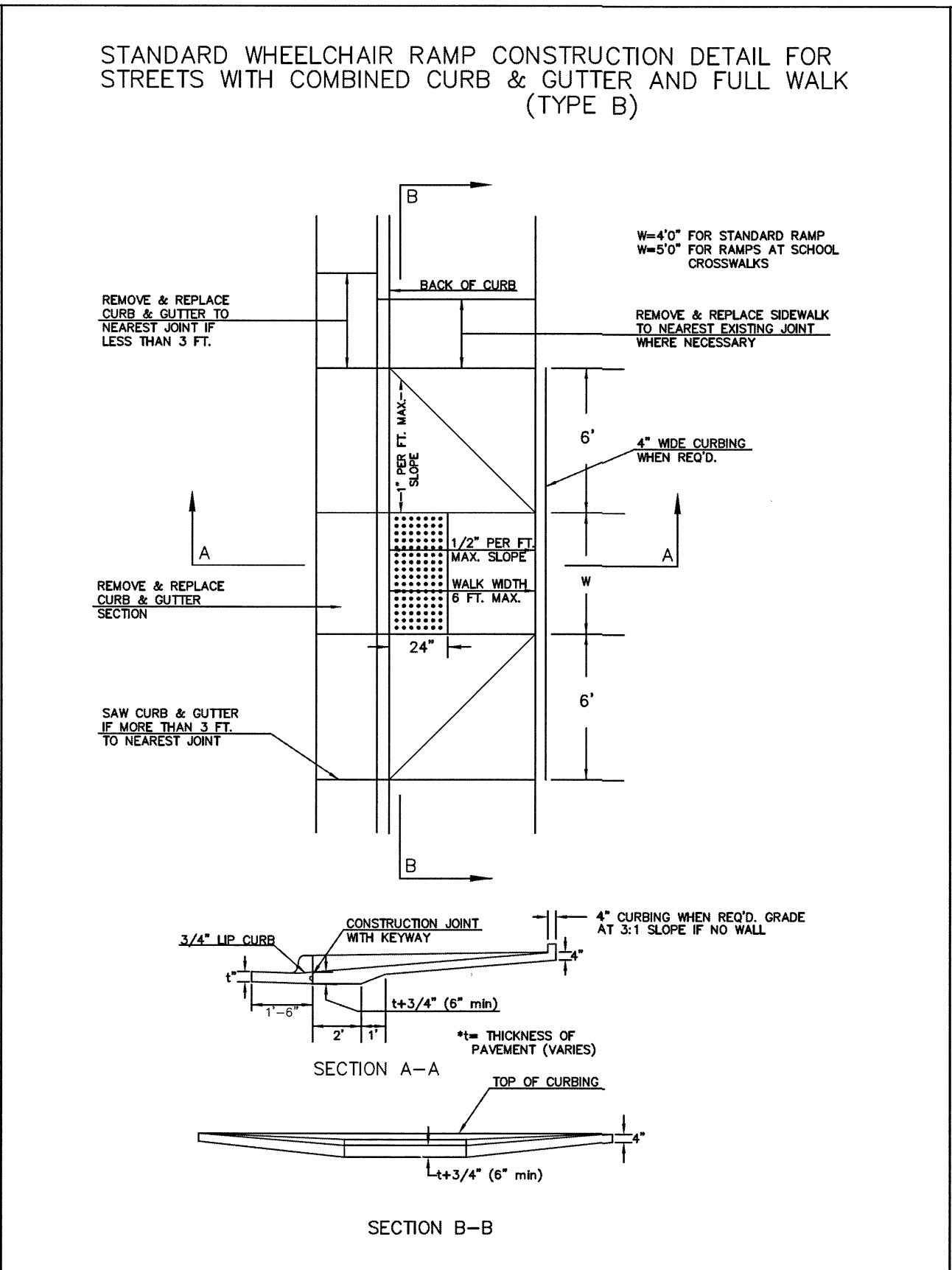
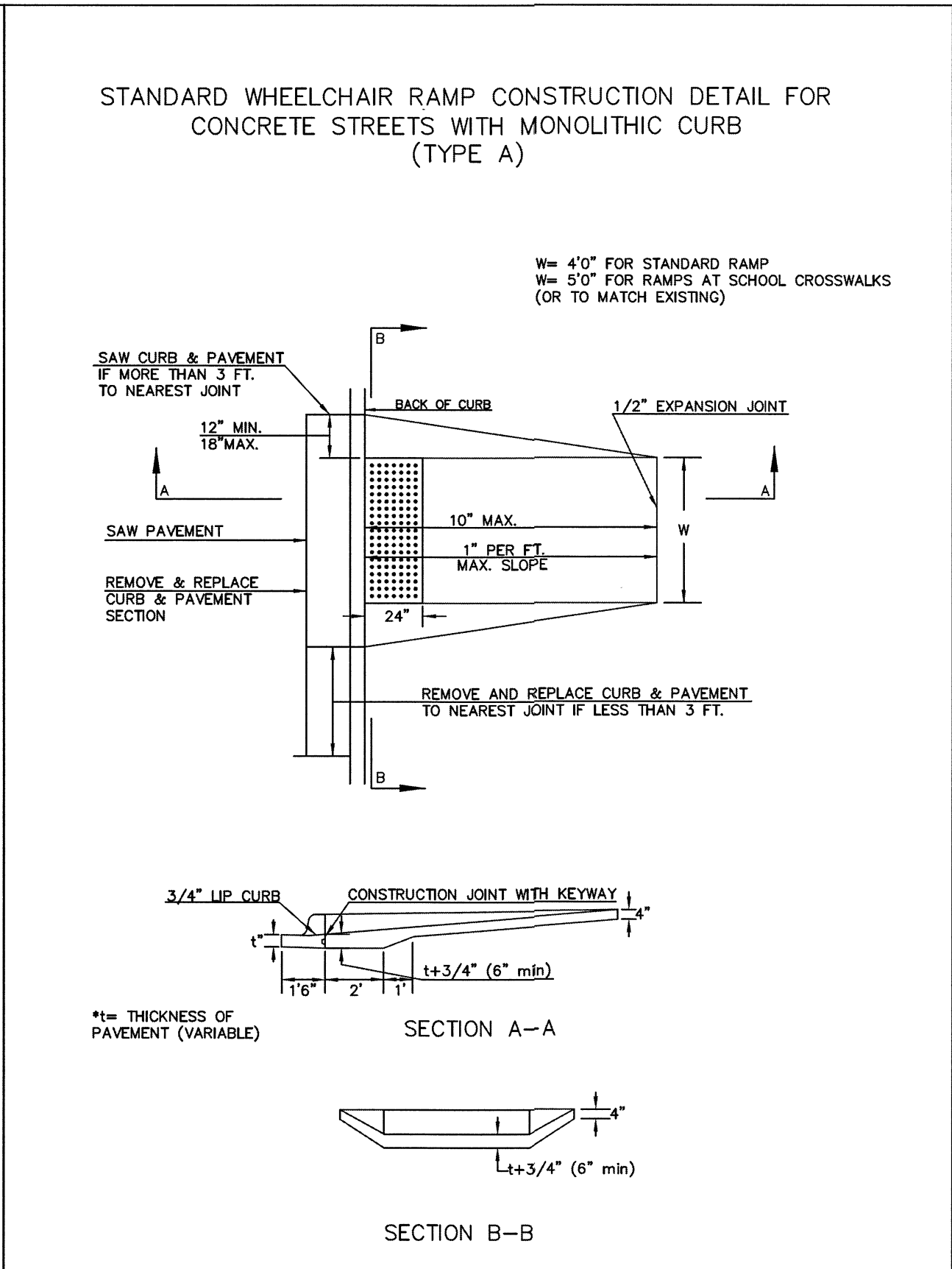
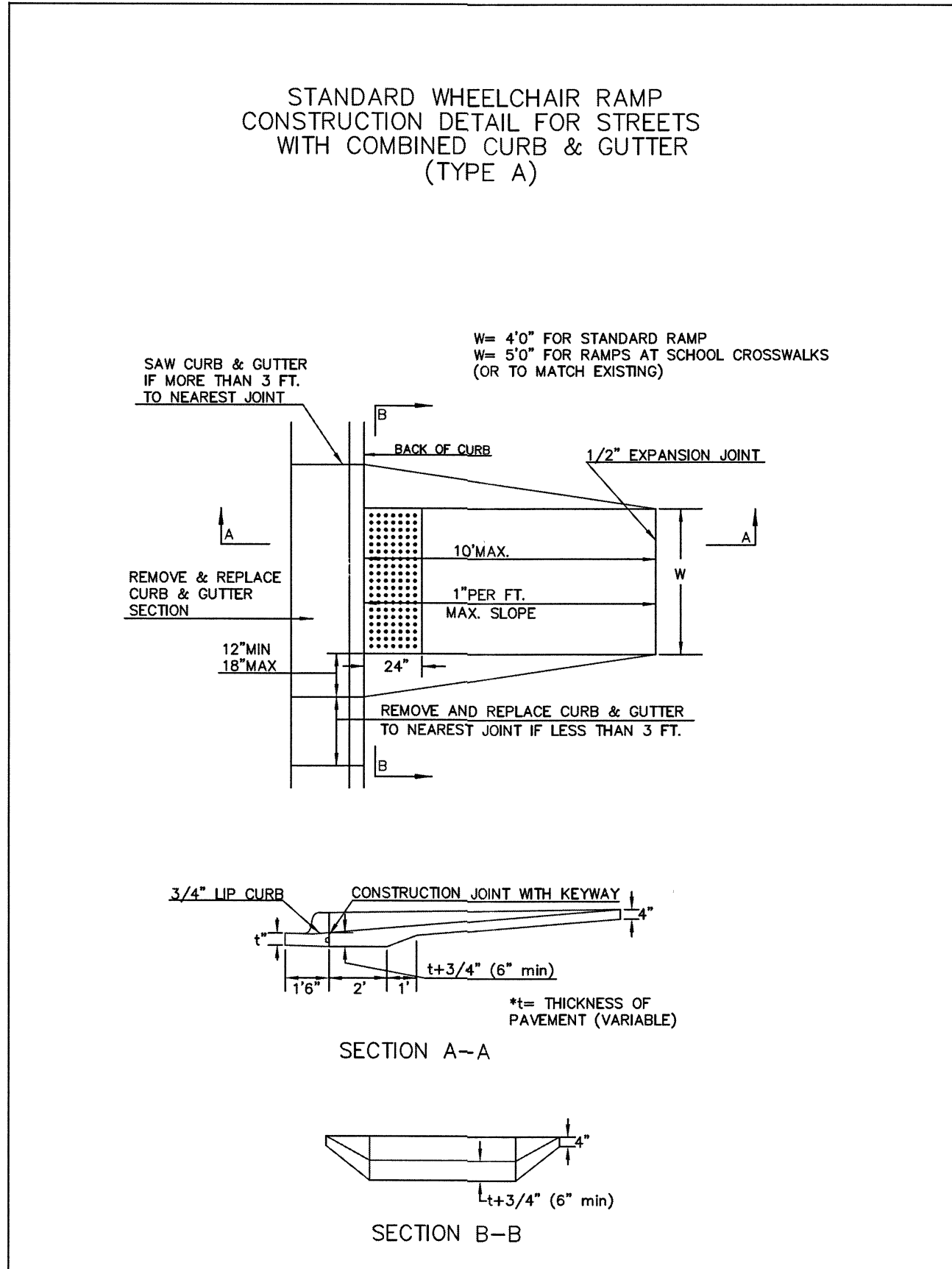
CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER	OCA NUMBER	DATE
		12/2010
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET

NO.	BY	DATE	REVISION
3.	VZ	3/31/2015	REUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ	1/8/2015	REUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT
	VZ	7/9/14	ORIGINAL SUBMITTAL
	GD		REVISION

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816.900.0950  
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**WHEELCHAIR RAMP DETAILS WITH DETECTABLE WARNING**

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

PROJECT NUMBER: OCA NUMBER: DATE: 08/2013

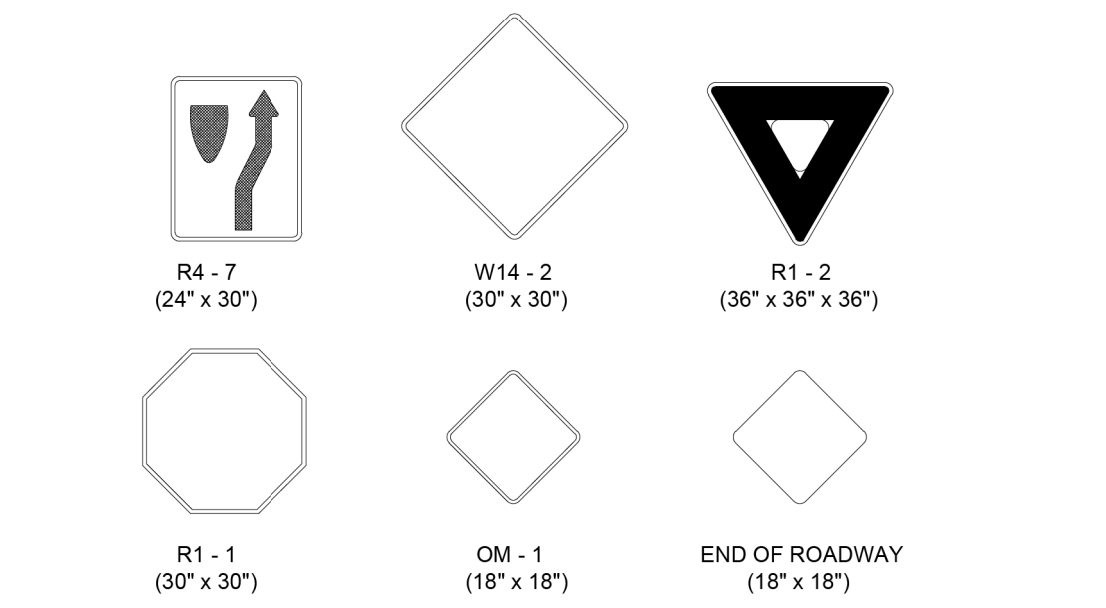
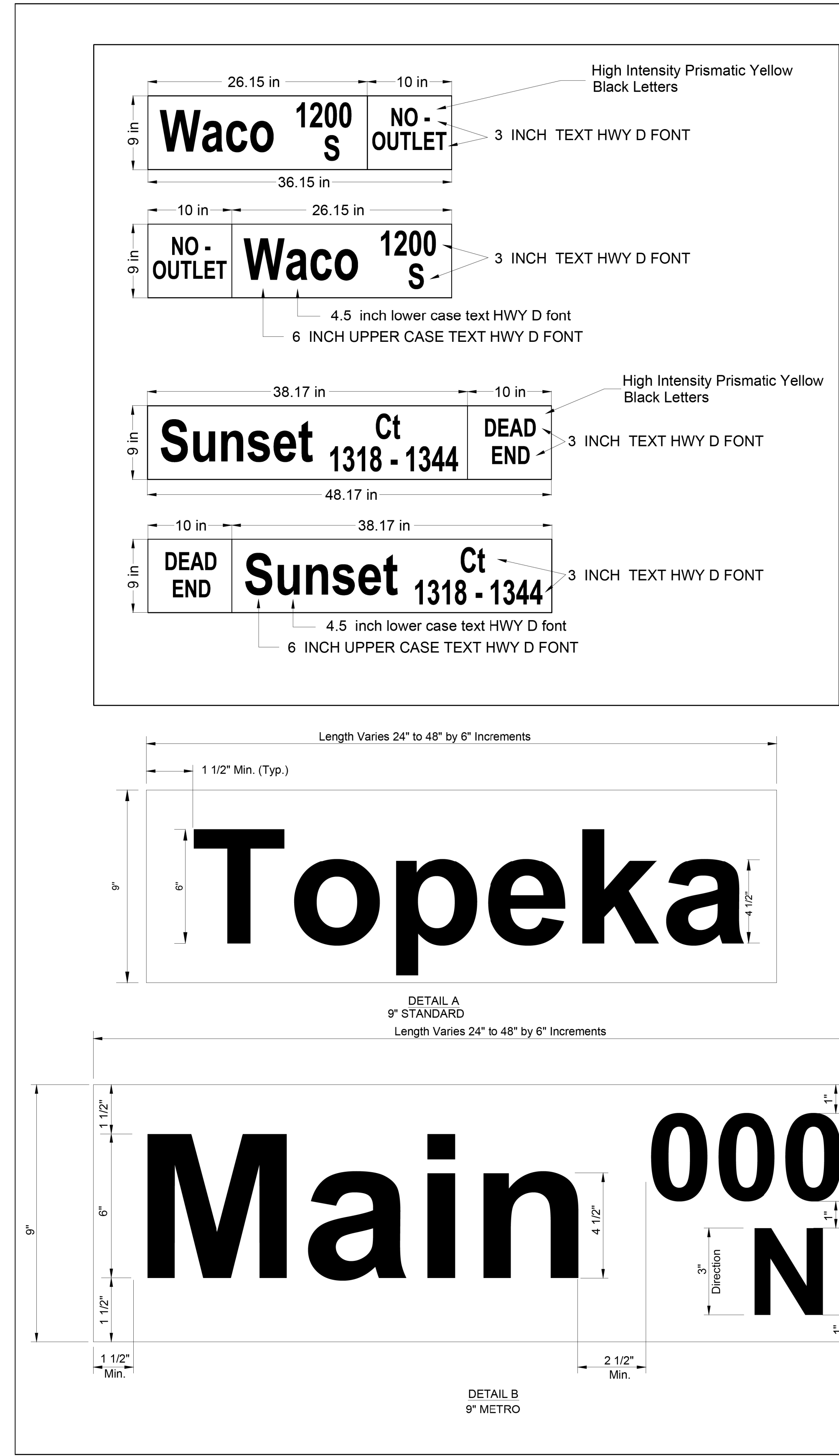
CITY ENGINEER'S OFFICE  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

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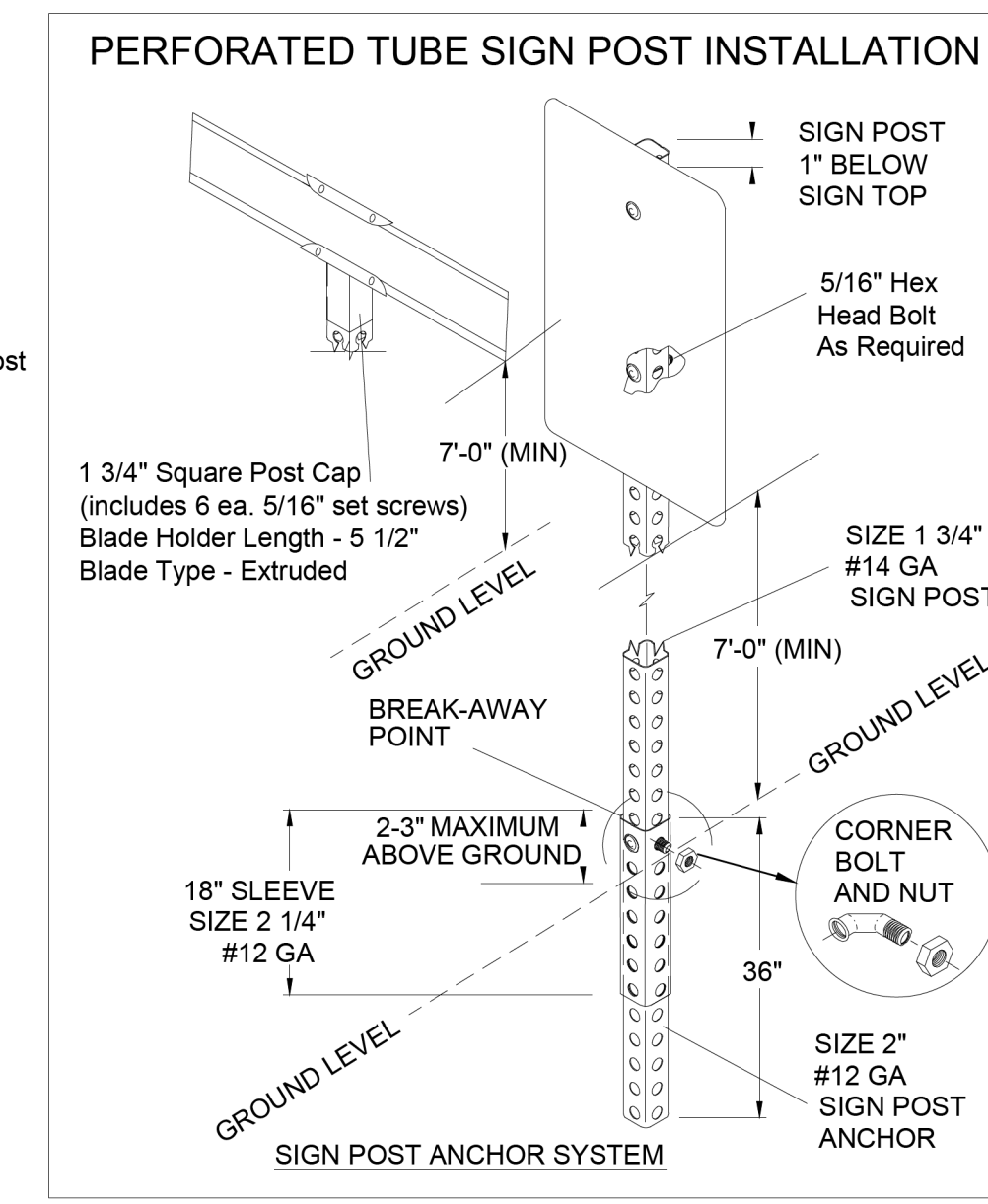
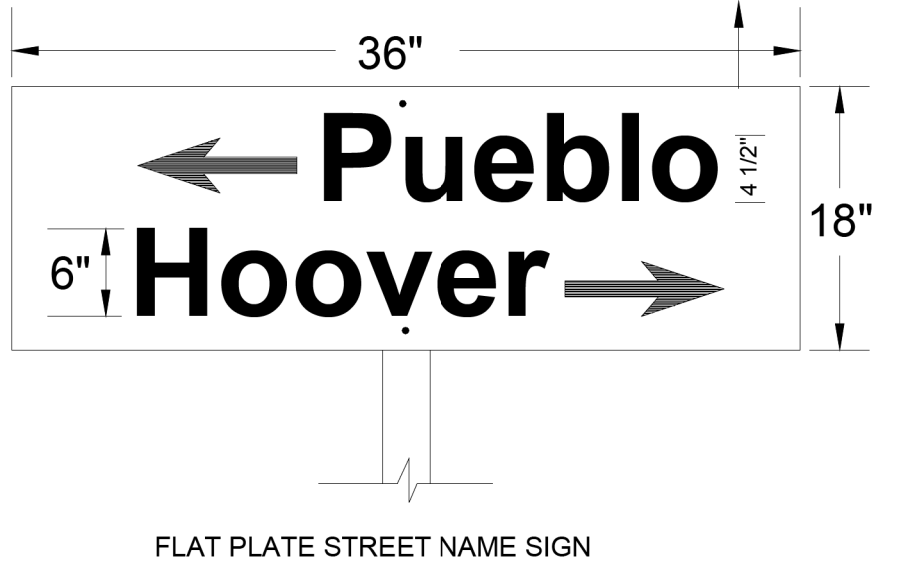
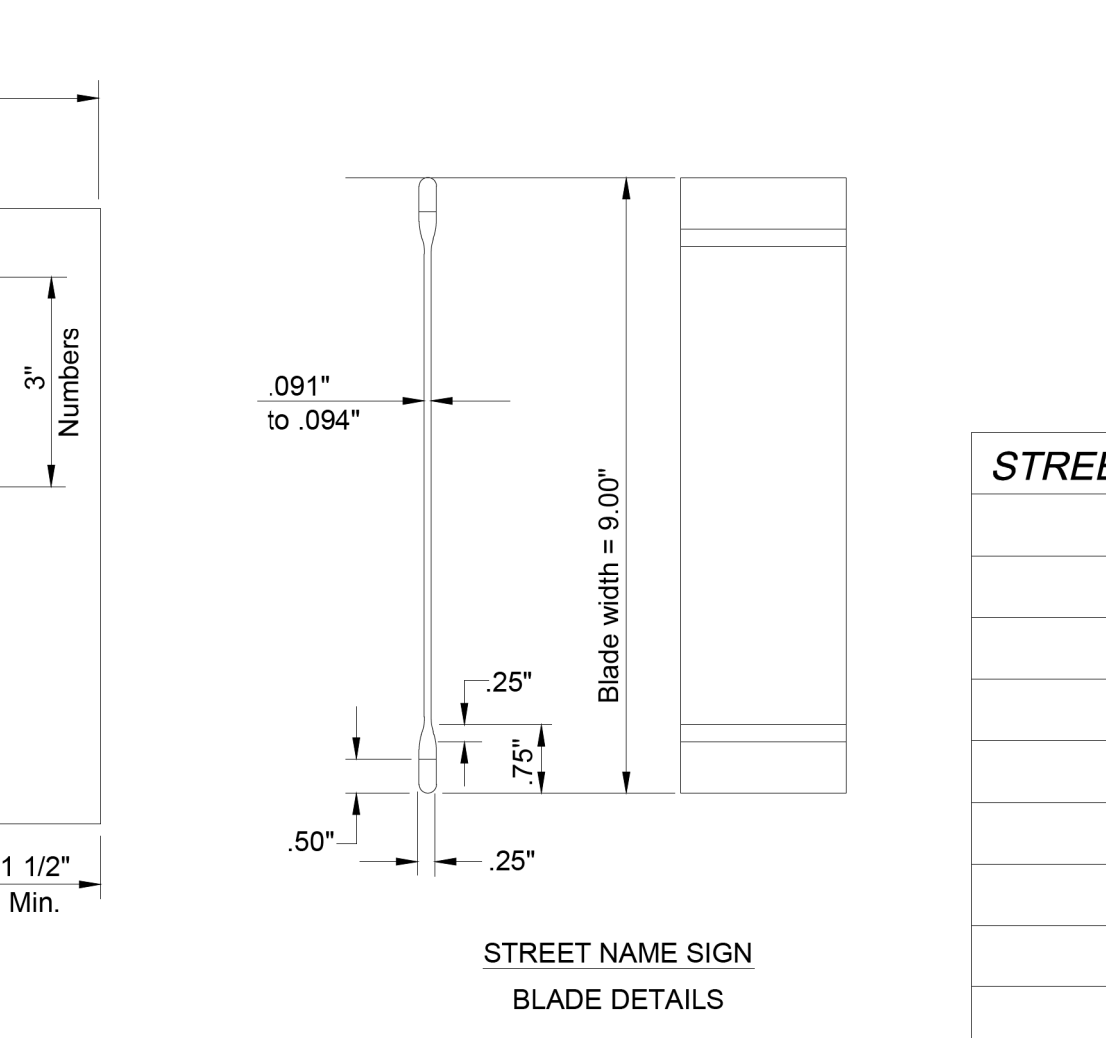
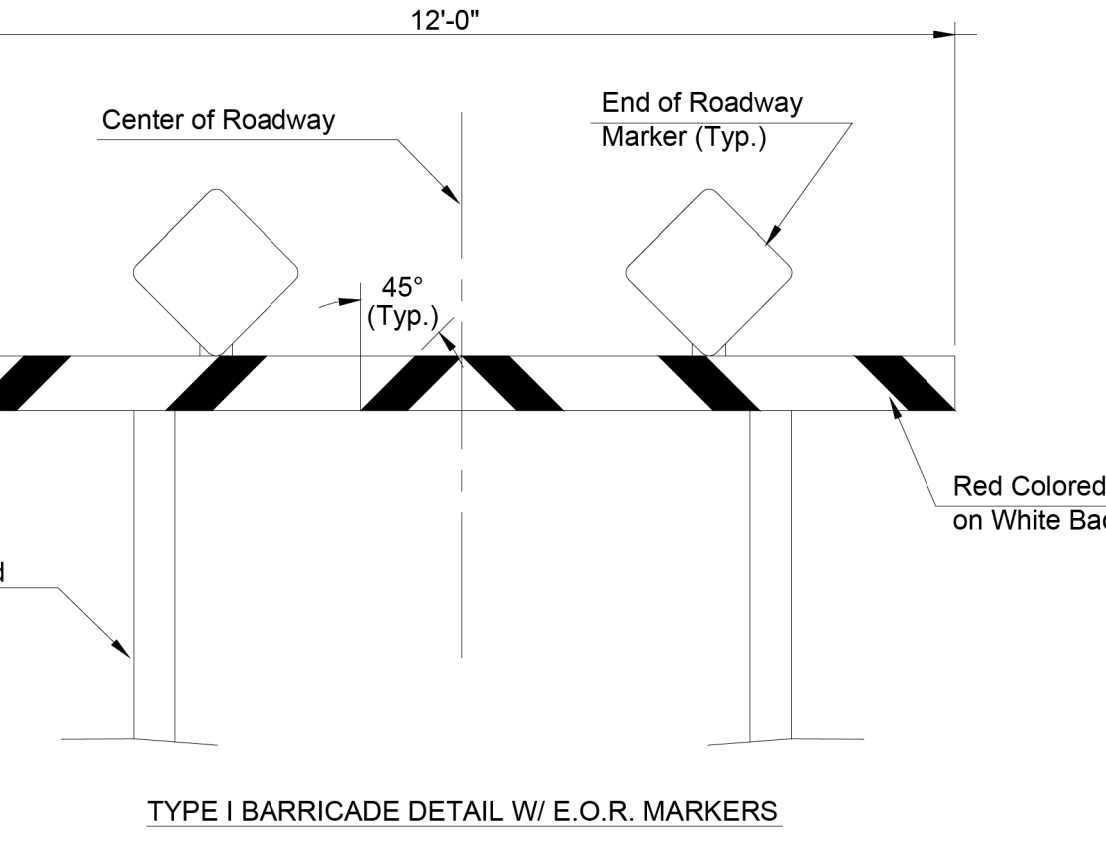
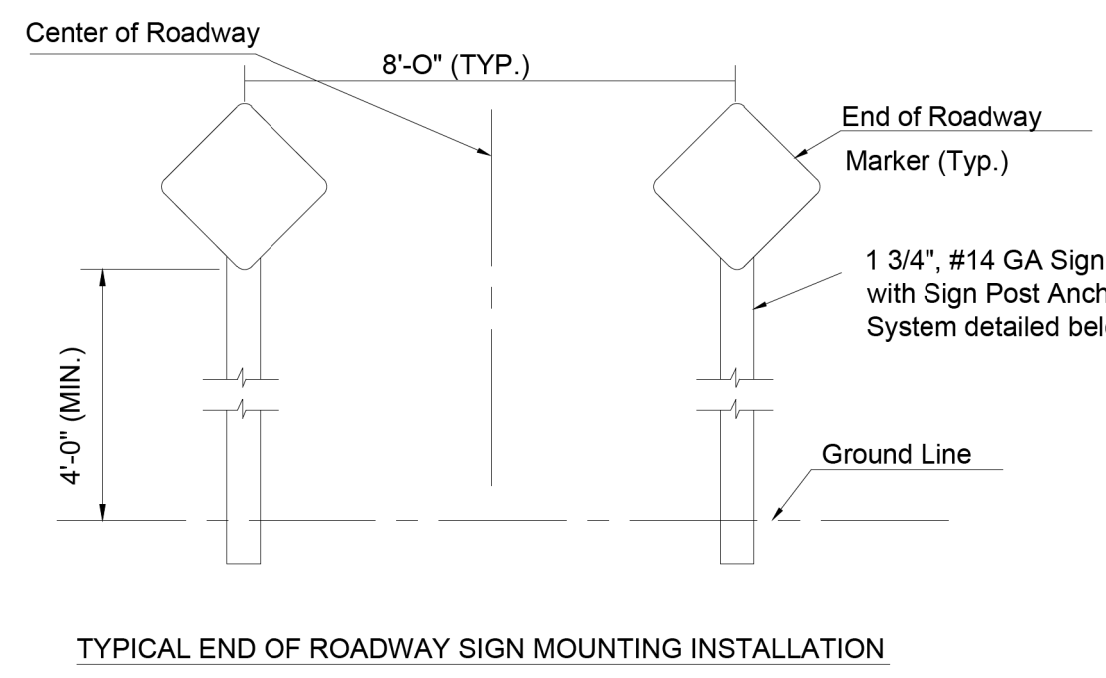
NO.	BY	DATE	REVISION
1.	VZ	11/16/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL
2.	VZ	1/6/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
3.	VZ	3/31/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS

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Overland Park, MO 64150  
816.800.0950  
www.ri-consult.com



\* IN NO CASE SHALL THE SPECIFICATIONS BE LESS THAN REQUIRED BY THE CURRENT MUTCD.



**SIGN ASSEMBLY TABLE**

STATION	OFFSET	SIGN	QUANTITY*
10+80.77	3.2' RT	R4-7	1
11+30.00	4.00' RT	R3-7L	1
11+50.00	38.00' RT	R2-1	1
12+69.41	38.85' RT	W2-6	1
12+75.00	4.00' RT	R3-7L	1
13+10.00	42.50' LT	R3-8a	1
14+44.39	35.53' RT	W11-2 WITH W16-7P	1
14-99.81	42.93' RT	R1-2	1
14-99.81	0.00' RT	R1-2	1
15+66.22	22.51' RT	R6-4	1
15+97.78	25.51' LT	R6-4	1
16+63.72	43.13' LT	R1-2	1
16+63.72	0.00' LT	R1-2	1
17+17.59	35.72' LT	W11-2 WITH W16-7P	1
19+00.00	0.00'	OM-1	1
19+15.49	40.12' LT	W2-6	1
20+00.00	0.00'	OM-1	1
24+00.00	40.00' LT	R2-1	1
TOTAL			

**STREET NAME**

STREET NAME	NO. BLADES REQ'D	
	9" STD.	9" METRO

- NOTE: REFERENCES BELOW TO "STANDARD SPECIFICATIONS" DENOTE "STANDARD SPECIFICATION FOR STATE ROAD AND BRIDGE CONSTRUCTION EDITION 1990" BY THE KANSAS DEPARTMENT OF TRANSPORTATION.
- FABRICATION AND INSTALLATION OF ALL SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE MUTCD.
    - POST ANCHORS: POSTS SHALL BE ANCHORED WITH A YIELDING BASE POST SUPPORT AS DETAILED.
    - POSTS FOR TRAFFIC CONTROL SIGNS: POSTS SHALL BE GALVANIZED AND CONFORM TO THE REQUIREMENTS OF SUBSECTION 1620 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT ALL POSTS SHALL WEIGH 3 LBS./FT. MINIMUM.
    - POSTS FOR STREET NAME SIGNS (SNS): POSTS SHALL BE 9 FEET LONG, CONSTRUCTED FROM #14 GALVANIZED STEEL PIPE AND SHALL BE 1 3/4" SQUARE WEIGHING A MINIMUM OF 3 LBS./FT. POSTS SHALL BE POSITIONED SO THAT THE BOTTOM BLADE IS 7 FEET ABOVE GRADE.
    - POSTS FOR END OF ROADWAY SIGN TO BE 8' LONG AND INSTALLED A MINIMUM OF 4' FROM ROADWAY TO BOTTOM OF SIGN.
    - SIGN BLANKS FOR TRAFFIC CONTROL SIGNS: SIGN BLANKS SHALL BE FABRICATED FROM 0.080" ALUMINUM ALLOY 6063-T6 CONFORMING TO THE REQUIREMENTS OF SUBSECTION 1626 OF THE STANDARD SPECIFICATIONS.
    - SIGN BLADES FOR STREET NAME SIGNS: EXTRUDED ALUMINUM BLADES SHALL BE ALUMINUM ALLOY CONFORMING TO 6063-T6 OR 5052-H38 (ASTM SPECIFICATION B221, LATEST ISSUE). BLADES SHALL HAVE AN ALODINE OR PHOSPHATE ETCHED FINISH. BLADES SHALL HAVE SQUARE CORNERS AND NO HOLES.  
  
MINIMUM BLADE LENGTH SHALL BE 24". MAXIMUM BLADE LENGTH SHALL BE 48". LENGTH VARIES BY INCREMENTS OF 6".  
  
BLADES BEARING THE STREET NAMES SHALL BE FIRMLY ATTACHED TO THE MOUNTING BRACKETS USING ALLEN-TYPE CONICAL SET SCREWS. THE BLADES SHALL BE ORIENTED PARALLEL TO THE STREET.
    - MOUNTING BRACKETS FOR SIGNS: DIE-CAST ALUMINUM BRACKETS SHALL BE ALUMINUM ALLOY 360 HAVING A TENSILE STRENGTH OF 44,000 PSI. THE BRACKETS SHALL BE SMOOTHLY FINISHED FREE OF PITS, BURRS, AND FLAWS. EACH BRACKET SHALL BE TAPPED AND DRILLED FOR 5/16" ZINC-PLATED ALLEN-TYPE SET SCREWS HAVING SELF-LOCKING SAW-TOOTH ENDS.
    - FASTENERS: ALL STEEL FASTENERS FOR TRAFFIC CONTROL SIGNS SHALL BE GALVANIZED AND SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 1614 OF THE STANDARD SPECIFICATIONS.
    - REFLECTIVE SHEETING: REFLECTIVE SHEETING SHALL BE A MINIMUM OF HIGH INTENSITY PRISMATIC.
    - PROCESS INK: ALL PROCESS INK SHALL CONFORM TO THE REQUIREMENTS OF SUBSECTION 2202 OF THE STANDARD SPECIFICATIONS.
    - DETAILS - SNS: THE REFLECTIVE SHEETING FOR THE 9" STANDARD SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGROUND WITH SILVER-WHITE #2 COPY WITH 6" UPPER CASE AND 4 1/2" LOWER CASE PRIMARY COPY AND SUFFIX COPY. BOTH SERIES "C". THE REFLECTIVE SHEETING FOR THE 9" METRO SIZE SNS IS TO BE THE HIGHWAY GREEN BACKGROUND WITH SILVERWHITE #2 COPY WITH 6" UPPER CASE AND 4 1/2" LOWER CASE PRIMARY COPY AND SUFFIX COPY. BOTH SERIES "C". THE CARDINAL DIRECTION CENTERED DIRECTLY BELOW THE BLOCK NUMBER SHALL BE AN UPPER CASE, 3" SERIES "C" LETTER. FACES TO TRIM TO A 8 1/2" WIDTH. (SEE DETAIL B.)
- FOR CUL-DE-SAC STREETS, A 9" METRO SIZE BLADE SHALL BE USED WITH THE BLOCK NUMBERS DISPLAYED BENEATH THE STREET NAME.
- IF BLOCK NUMBERS ARE NOT SHOWN ON THE PLANS THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEER AT 268-4501 PRIOR TO MANUFACTURING THE SIGN.
- SHOP DRAWINGS OF LAYOUT FOR SNS SHALL BE SUBMITTED TO THE TRAFFIC ENGINEERING DIVISION OF THE CITY OF WICHITA FOR APPROVAL PRIOR TO FABRICATION. THE FINISHED SIGNS AS SUPPLIED SHALL BE OF GOOD APPEARANCE, FREE FROM RAGGED EDGES, CRACKS, SCALES OR BLISTERS AND SHALL BE CLEAN-CUT. SIGNS SHALL BE PACKED IN SUCH MANNER AS TO PREVENT DAMAGE OR DEFAACEMENT DURING SHIPMENT OR STORAGE.
- PERMANENT TRAFFIC CONTROL AND SNS: PERMANENT TRAFFIC CONTROL AND SNS SHALL BE MEASURED AND PAID FOR AT THE LUMP SUM PRICE FOR SIGNING. THE PAYMENT AS SET FORTH ABOVE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL EXCAVATION, BACKFILLING, POSTS, ANCHORS, FASTENERS, MATERIALS, LABOR, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK.



REVISED NOVEMBER 2014

**SIGN DETAILS**

TRAFFIC ENGINEER  
**Brian A. Coon P.E.**

PROJECT NUMBER    OCA NUMBER    DATE

CITY ENGINEER'S OFFICE  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

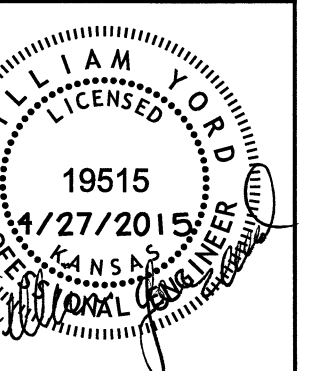
SHEET

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RIVERSIDE MO, 64150  
816.800.0950  
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NO.	BY	DATE	REVISION
3.	VZ BY 3/21/2015		RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ BY 1/29/2015		RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ BY 11/18/2014		REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL

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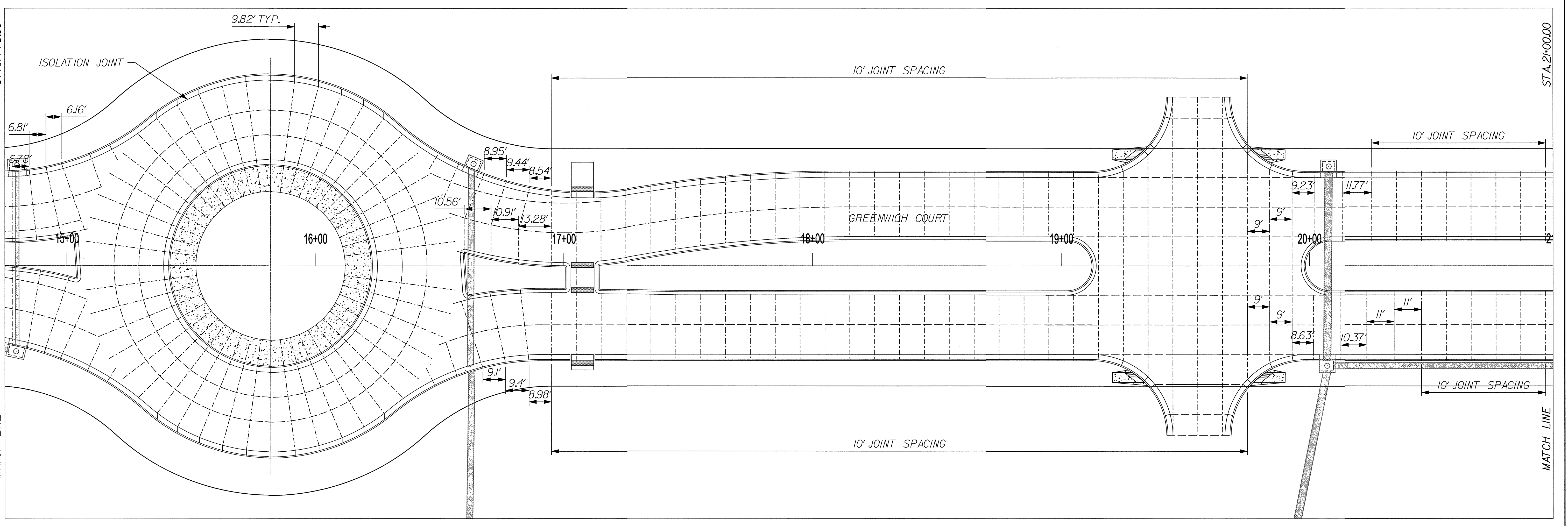
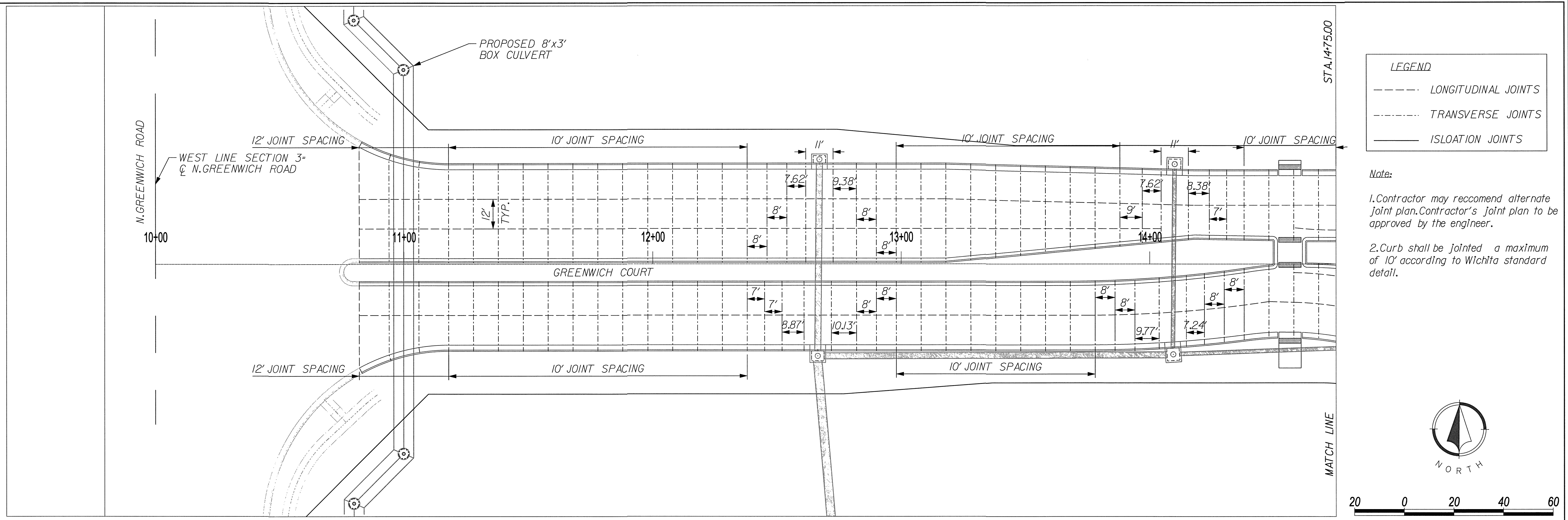
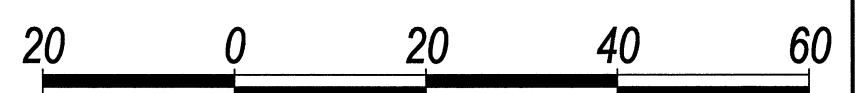


**LEGEND**

- LONGITUDINAL JOINTS
- - - - - TRANSVERSE JOINTS
- ISLOATION JOINTS

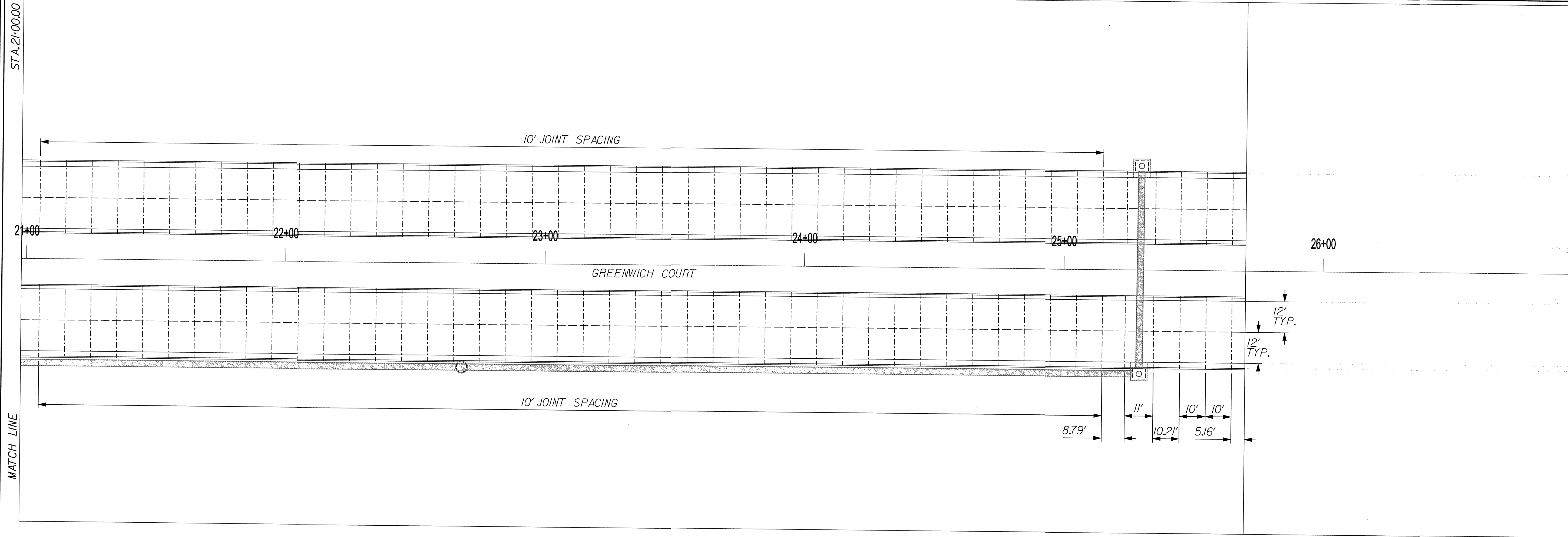
**Note:**

- Contractor may recommend alternate joint plan. Contractor's joint plan to be approved by the engineer.
- Curb shall be jointed a maximum of 10' according to Wichita standard detail.



4/27/2015 Z:\RIC Design\2014\14-0112 Wichita K96 Destination\dwg\gn\Sheets\14-0112\_Roadway\14-0112\_Greenwich\_Joint\_PP01.dgn

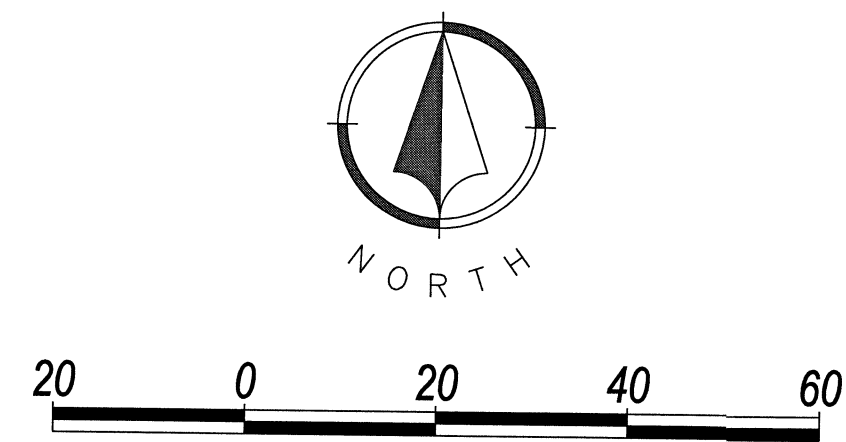
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**LEGEND**

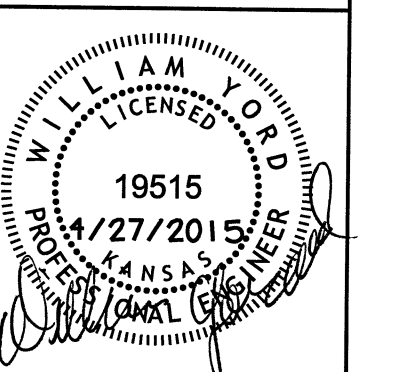
---	LONGITUDINAL JOINTS
- - - - -	TRANSVERSE JOINTS
—	ISLOATION JOINTS

*Note:*  
Contractor may recommend alternate joint plan. Contractor's joint plan to be approved by the engineer.

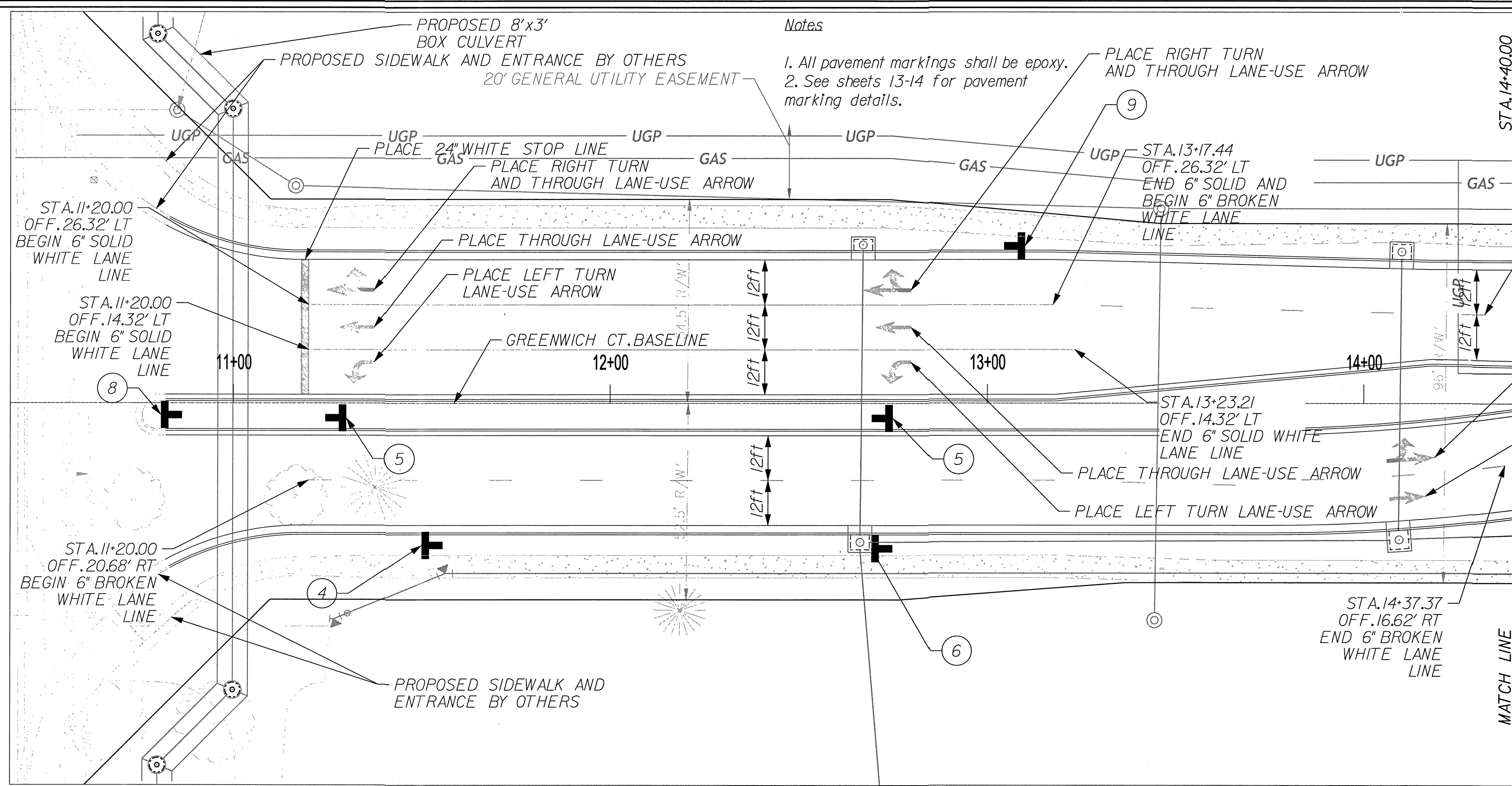


NO.	BY	DATE	REVISION
3.	VZ BY	3/31/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ BY	1/8/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ BY	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT
	VZ BY	7/24/14	ORIGINAL SUBMITTAL

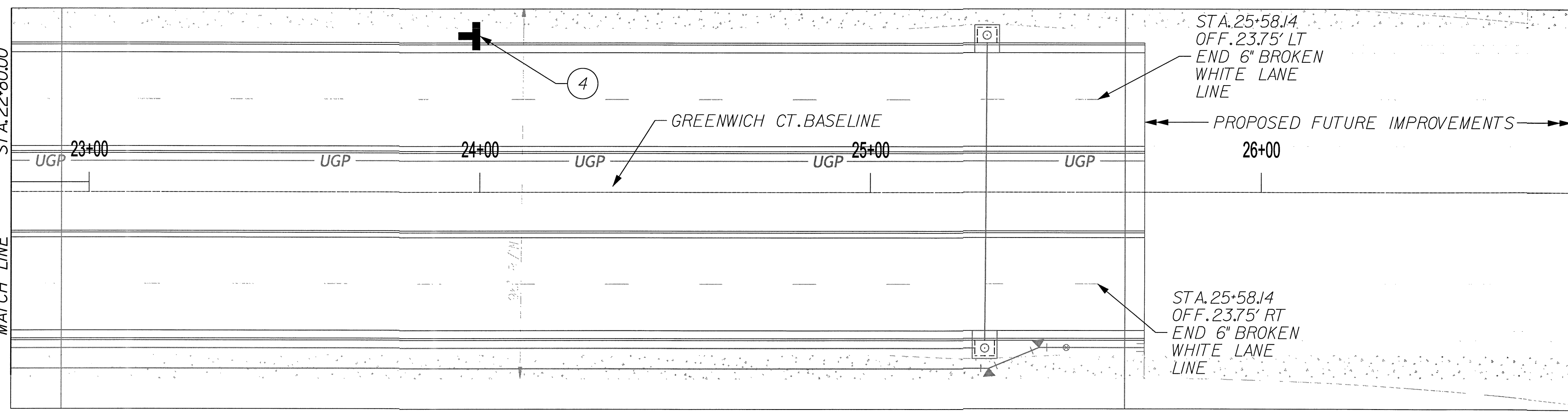
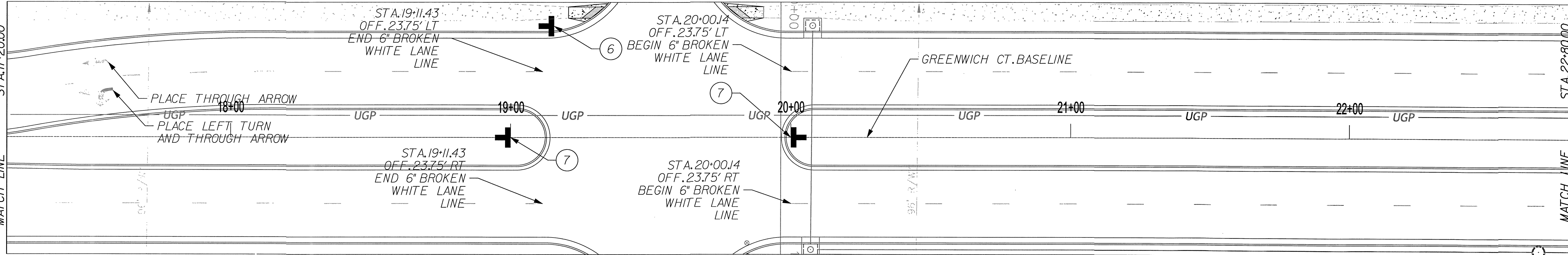
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816.800.0950  
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5/18/2015  
 Z:\RIC Design\2014\14-0112 Wichita K96 Destination.dwg\p14-0112 Roadway\14-0112 Pavement Marking and Signage Plan.dgn



NUMBER	MUTCD DESIGNATION	SIGN DEPICTION	QUANTITY
1	R1-2		0
2	R6-1R		0
3	W11-2 with W16-7P		0
4	R2-1		2
5	R3-7L		2
6	W2-6		2
7	OMI-1		2
8	R4-7		1
9	R3-8a		1

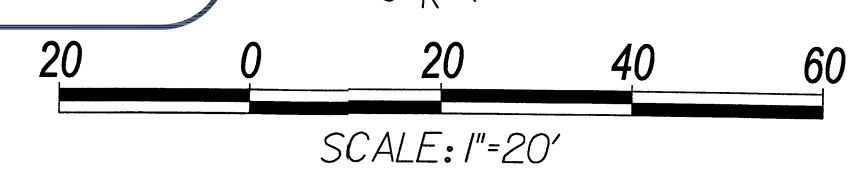


**AS BUILTS**

**KEMILLER**  
 ENGINEERING PA

117 E. Lewis,  
 Wichita, KS 67202

(316)264-0242



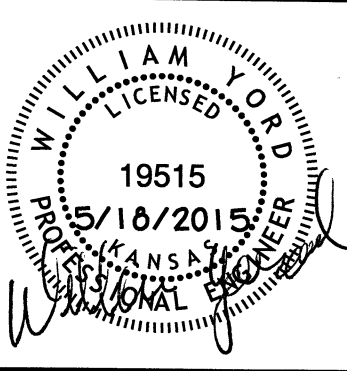
SEE SHEET 18  
 FOR ROUNDABOUT MARKING AND SIGNAGE.

NO.	BY	DATE	REVISION
1.	VZ	11/19/2014	ORIGINAL SUBMITTAL
2.	VZ	11/19/2014	REVISED FOR REMOVAL OF ROUNDABOUT
3.	VZ	11/19/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
4.	VZ	03/12/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS

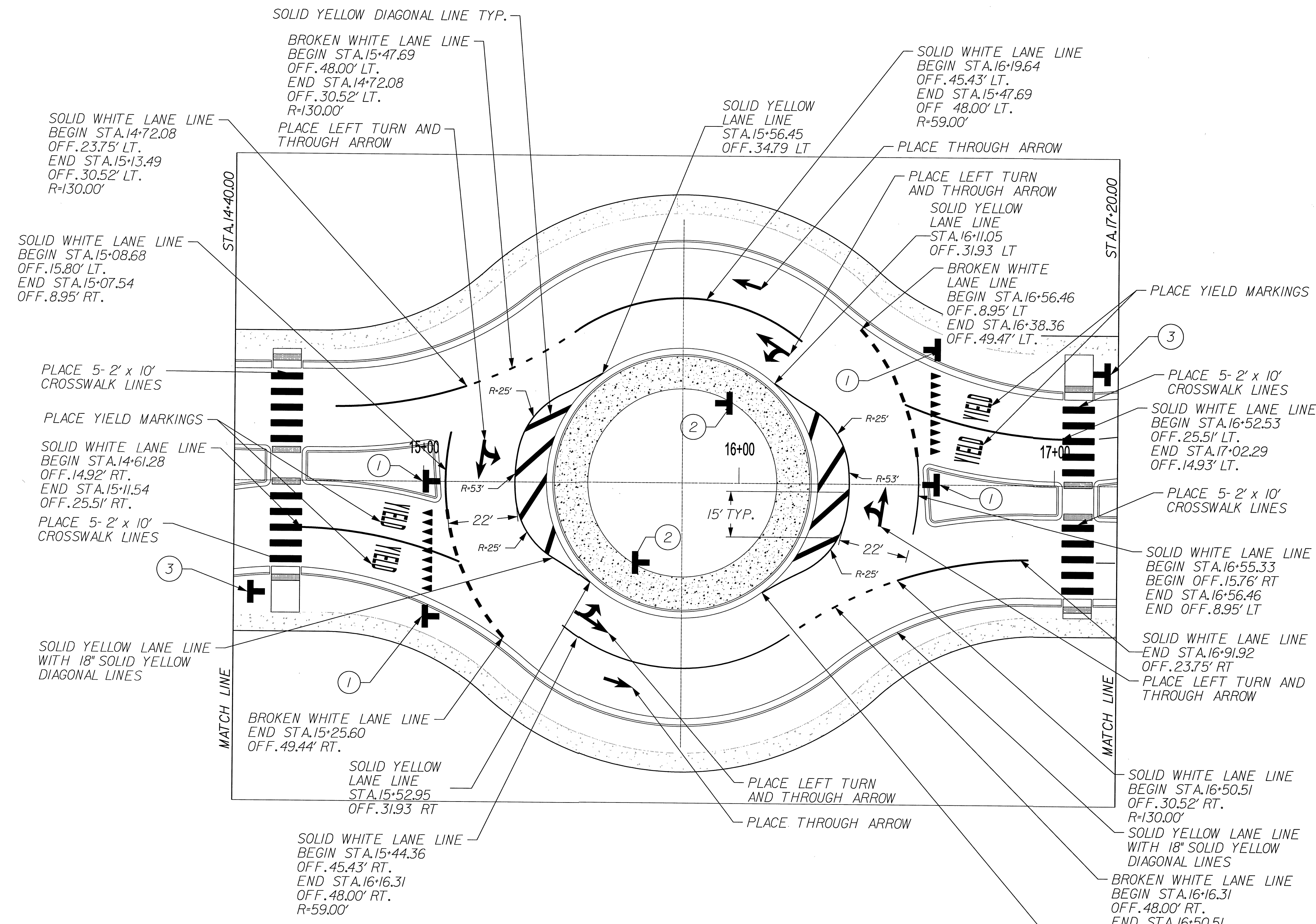
**Renaissance Infrastructure Consulting**

5015 NW CANAL STREET, SUITE 100  
 RIVERSIDE MO, 64150

816.800.0950  
 WWW.RIC-CONSULT.COM



NO.	BY	DATE	REVISION
1.	VZ	03/12/15	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ	10/02/15	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
3.	VZ	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL



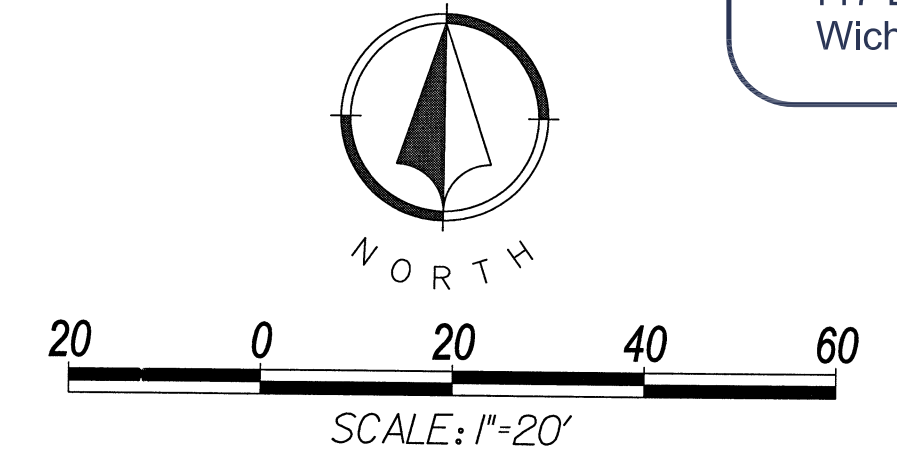
NUMBER	MUTCD DESIGNATION	SIGN DEPICTION	QUANTITY
①	R1-2		4
②	R6-4		2
③	W11-2 with W16-7P		2
④	R2-1		0
⑤	R3-7L		0
⑥	W2-6		0

AS BUILTS

**KEMILLER**  
ENGINEERING PA

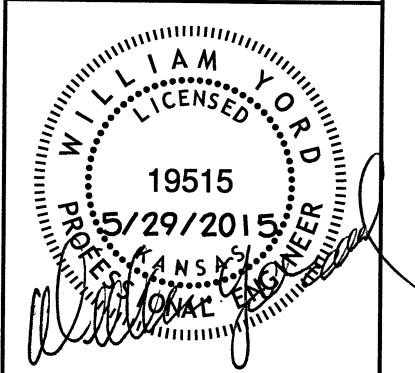
117 E. Lewis,  
Wichita, KS 67202

(316)264-0242



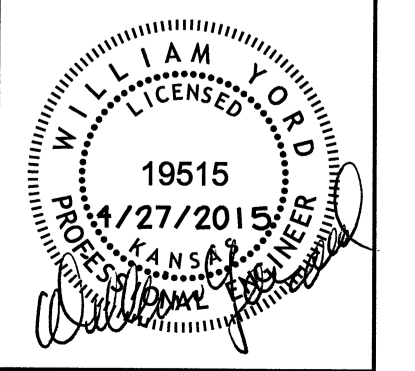
*Notes*

1. All pavement markings shall be epoxy.
2. See sheets 13-14 for pavement marking details.

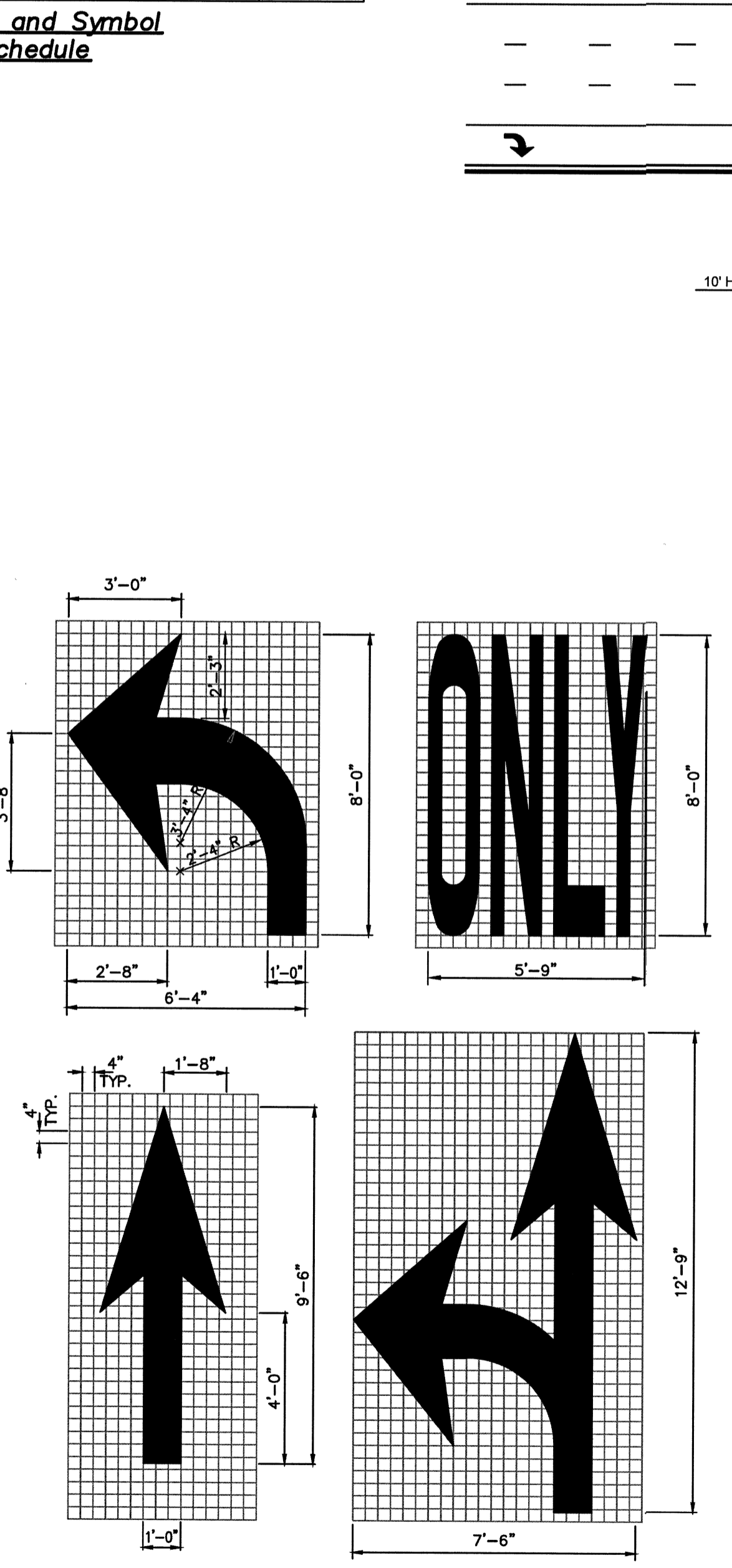
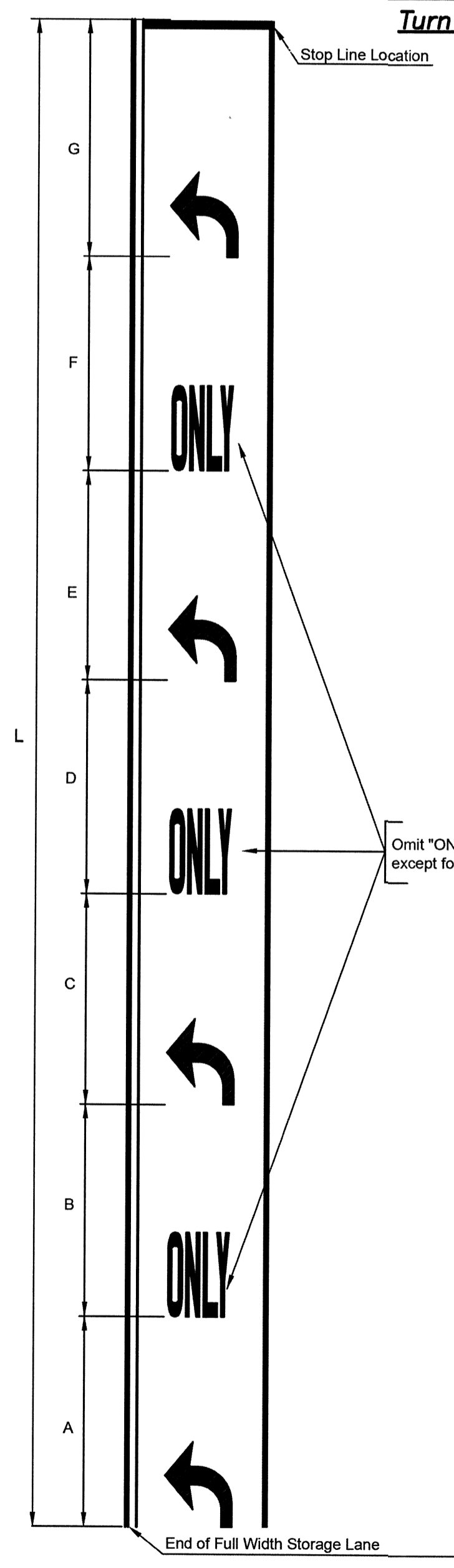


NO.	BY	DATE	REVISION
3.	VZ	03/12/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ	18/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL

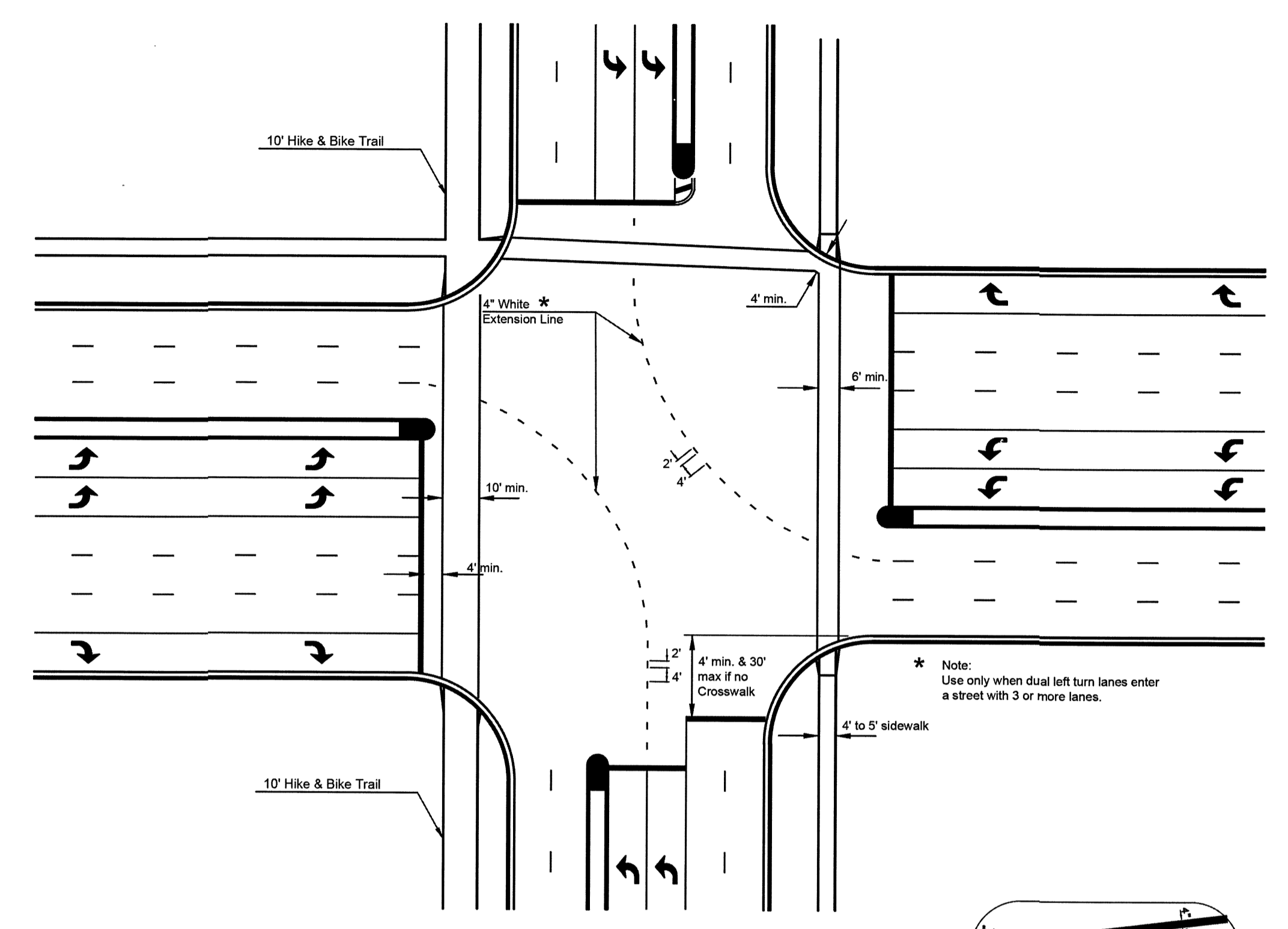
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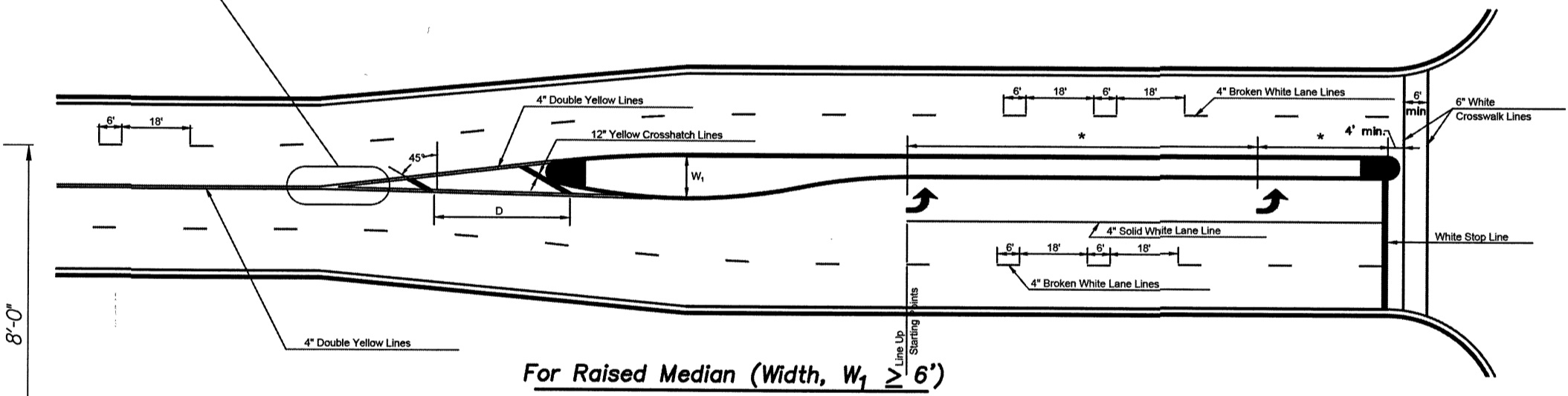
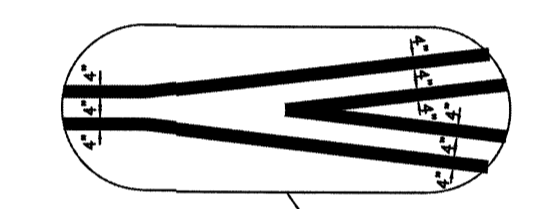
L	A	B	C	D	E	F	G
<80'	One Arrow						
81'-100'	30'	30'	21'-40'				
101'-120'	40'	40'	21'-40'				
121'-140'	45'	45'	31'-50'				
141'-160'	55'	55'	31'-50'				
161'-180'	65'	65'	31'-50'				
181'-200'	75'	75'	31'-50'				
201'-220'	80'	80'	41'-60'				
221'-240'	45'	45'	45'	41'-60'			
241'-260'	50'	50'	50'	41'-60'			
261'-280'	55'	55'	55'	41'-60'			
281'-300'	60'	60'	60'	41'-60'			
301'-320'	65'	65'	65'	41'-60'			
321'-340'	70'	70'	70'	41'-60'			
341'-360'	75'	75'	75'	41'-60'			
361'-380'	80'	80'	80'	41'-60'			
381'-400'	55'	55'	55'	55'	51'-70'		
401'-420'	60'	60'	60'	60'	41'-60'		
421'-440'	65'	65'	65'	65'	31'-50'		
441'-460'	65'	65'	65'	65'	51'-70'		
461'-480'	70'	70'	70'	70'	41'-60'		
481'-500'	75'	75'	75'	75'	31'-50'		



Notes:  
1) Word & symbol markings shall be white.  
2) Right Turn and Combination Right Turn/Straight arrows are reverse of arrows shown.

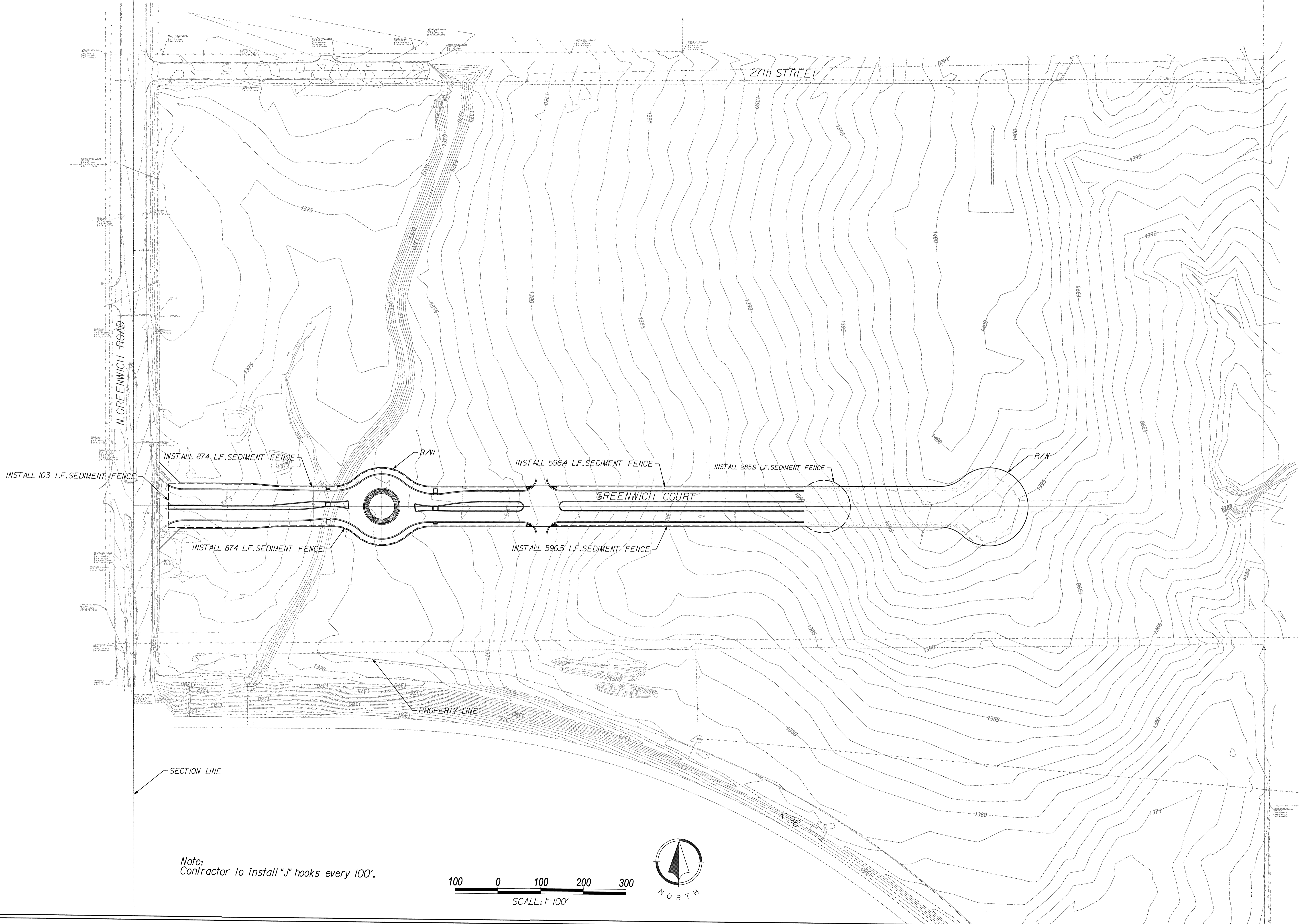


Typical Crosswalk and Left Turn  
Extension Line Markings

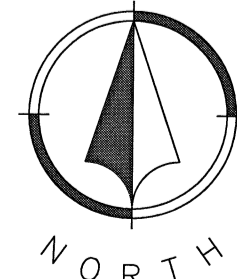
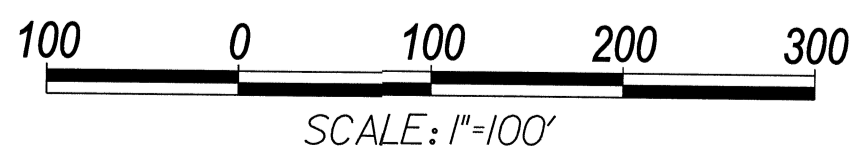


- Pavement Marking General Notes**
- All permanent pavement markings shall be provided and installed by the contractor as indicated in the plans or as directed by the City Inspector.
  - Pavement markings on concrete shall be per the specifications, unless otherwise indicated on the plans or directed by the City Inspector. See the Pavement Marking Material Matrix.
  - Crosswalk lines shall be installed such that the minimum distance between the inside edge of the line to be inside edge of line is 6 feet.
  - Stop lines shall be installed such that the minimum distance between the outside edge of the back crosswalk line and the trailing edge of the stop line is 4 feet.
  - Skip lines shall not extend past the stop bar or into the crosswalk.
  - White broken lane lines shall be carried through intersections with private streets unless there is a left turn bay into the private street. Then a gap should be left in the broken white lane lines for the left turn movement to pass through.
  - The proposed permanent markings shall be laid out by the contractor in advance of the marking installation. Markings shall not be applied until the layout and conditions of the surface have been approved by the City Inspector.
  - All pavement markings shall be epoxy.





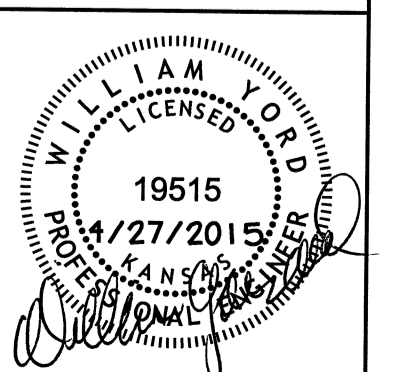
Note:  
 Contractor to install "J" hooks every 100'.

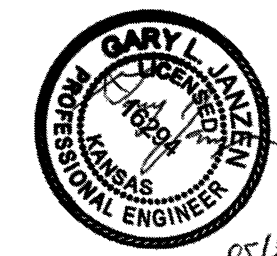
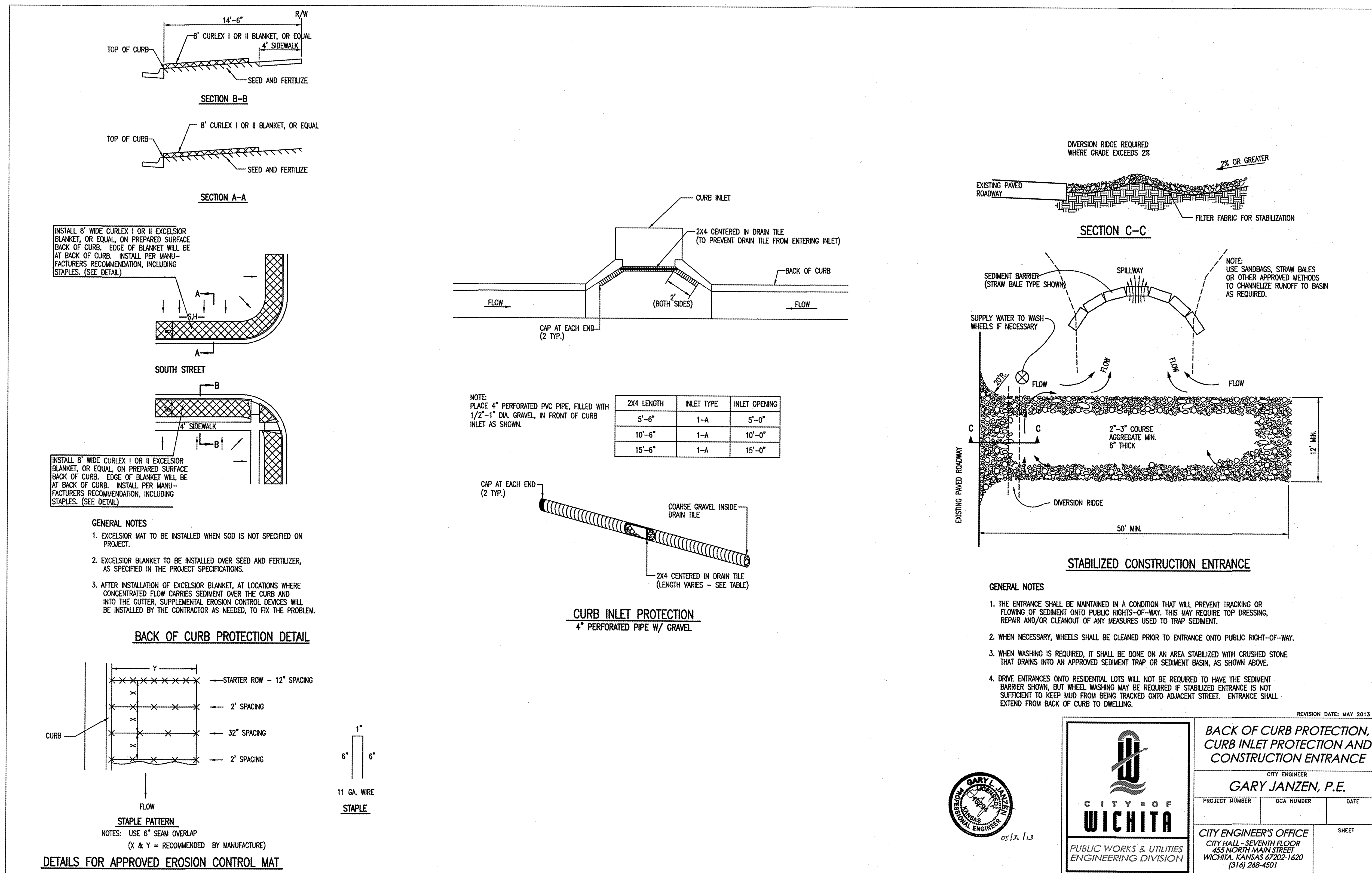


Roadway Erosion Control

NO.	BY	CD	DATE	REVISION
3.	VZ	BY	3/27/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ	BY	1/20/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ	BY	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL
	NO	BY	CD	DATE

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 Overland Park, MO 66150  
 816.800.0950  
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REVISION DATE: MAY 2013

**BACK OF CURB PROTECTION, CURB INLET PROTECTION AND CONSTRUCTION ENTRANCE**

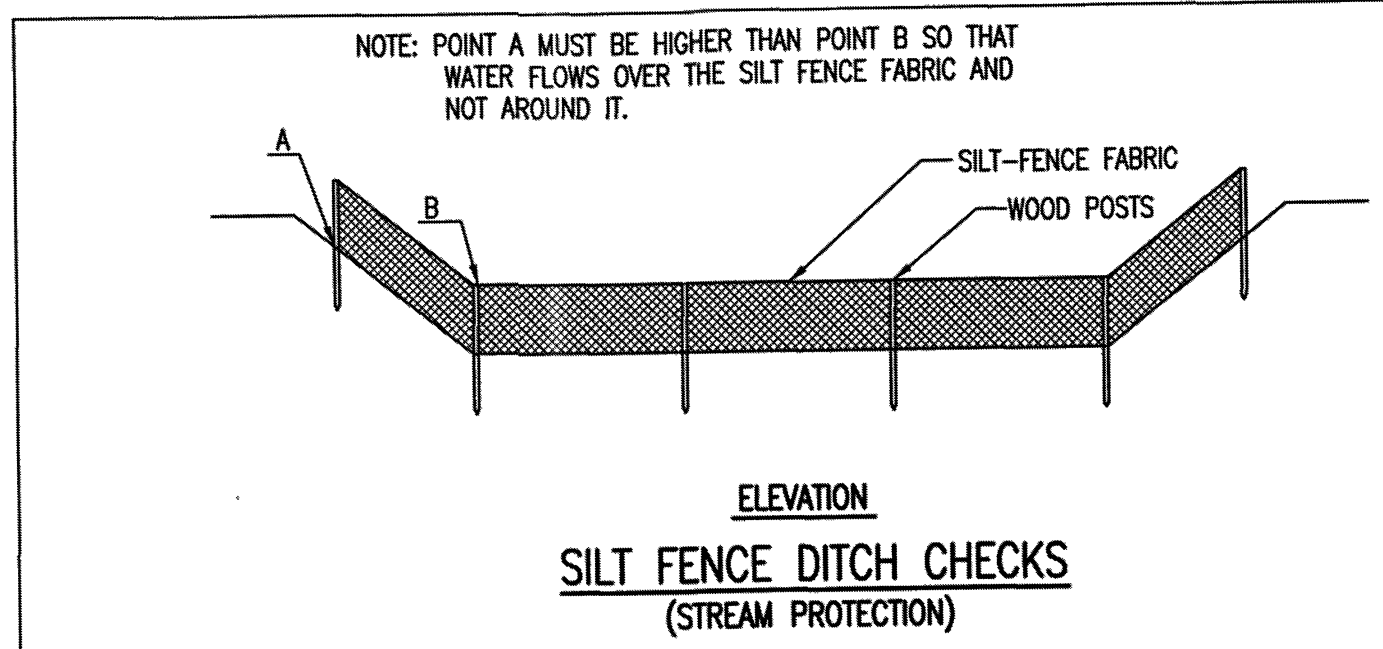
CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER    OCA NUMBER    DATE

CITY ENGINEER'S OFFICE    SHEET  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

4/27/2015 Z:\RIC Design\2014\14-0112 Wichita K96 Destination\dwg\erocn\Sheets\14-0112\_Roadway\14-0112\_Road Erosion Details-2.dgn

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Riverside MO, 64150  
816.800.0950  
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**MATERIAL SPECIFICATION:**  
SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

**PLACEMENT:**  
PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

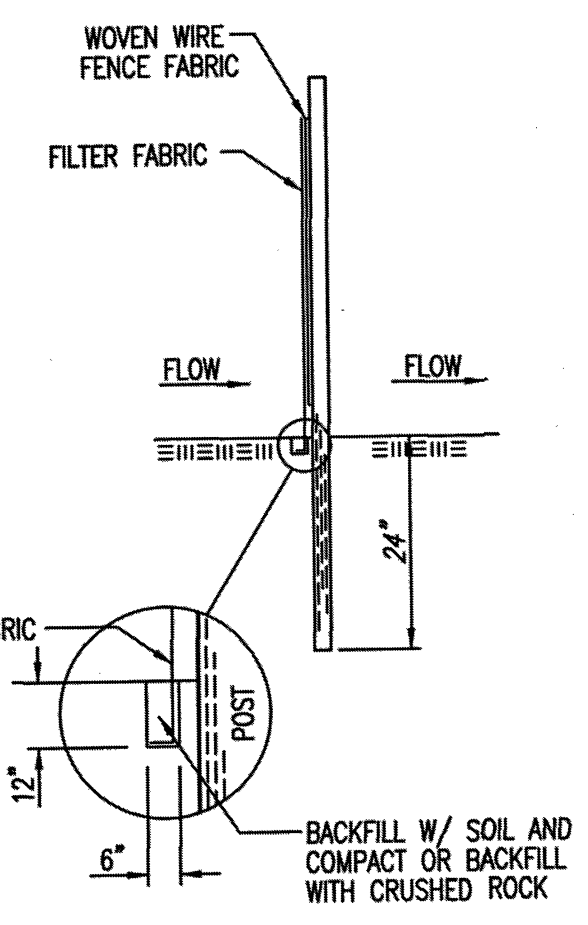
THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH GRADE (%)	SPACING CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

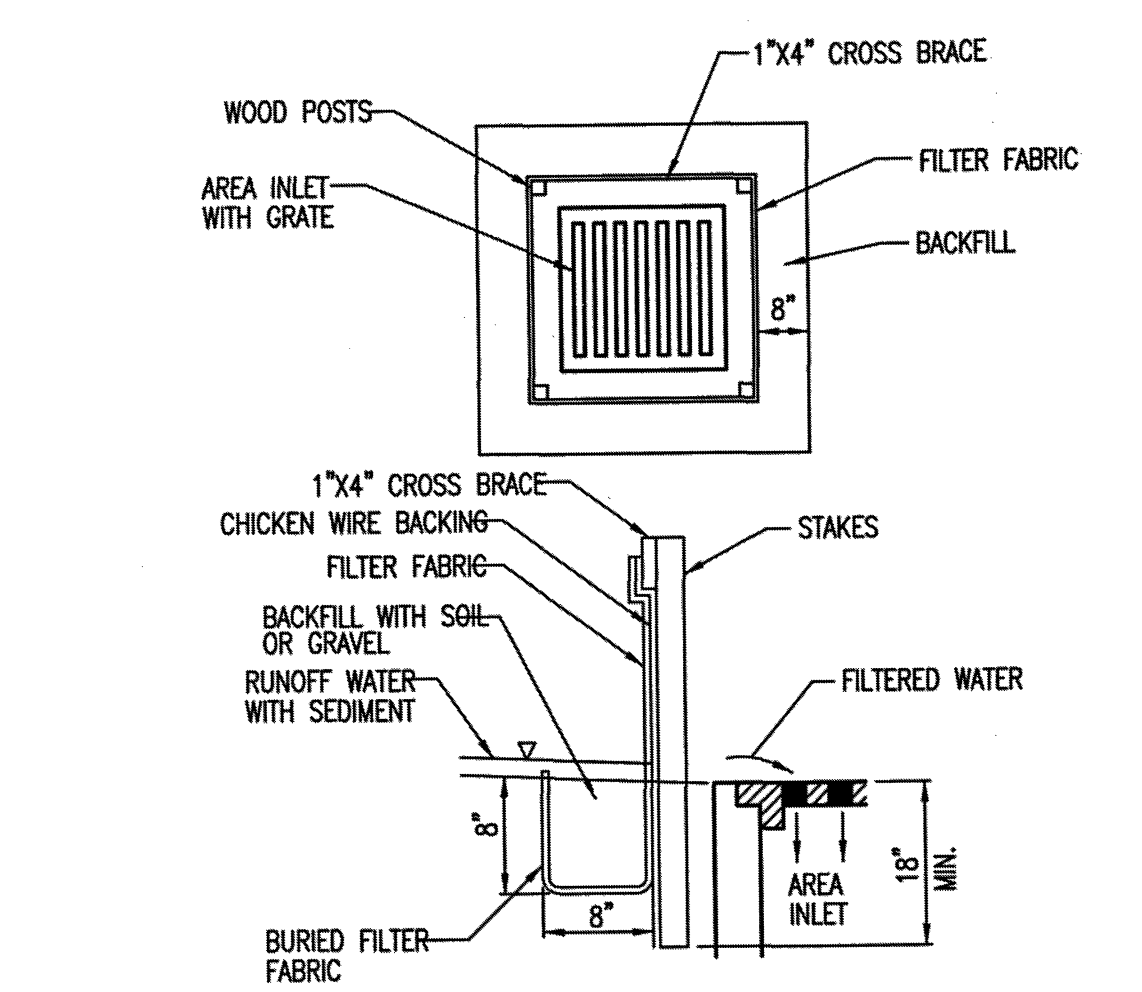
**PROPER INSTALLATION METHOD:**  
EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSTREAM SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSTREAM EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE ON THE UPSTREAM SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSTREAM OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

**LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:**  
WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK—NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM. DO NOT PLACE SILT FENCE POSTS ON THE UPSTREAM SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

**INSPECTION AND MAINTENANCE:**  
SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:  
DOES WATER FLOW AROUND THE DITCH CHECK?  
DOES WATER FLOW UNDER THE DITCH CHECK?  
DOES THE SILT FENCE SAG EXCESSIVELY?  
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?  
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS (INLET PROTECTION)

**MATERIAL SPECIFICATION:**  
SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS. SILT FENCE FABRIC AND SUPPORT BACKING SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

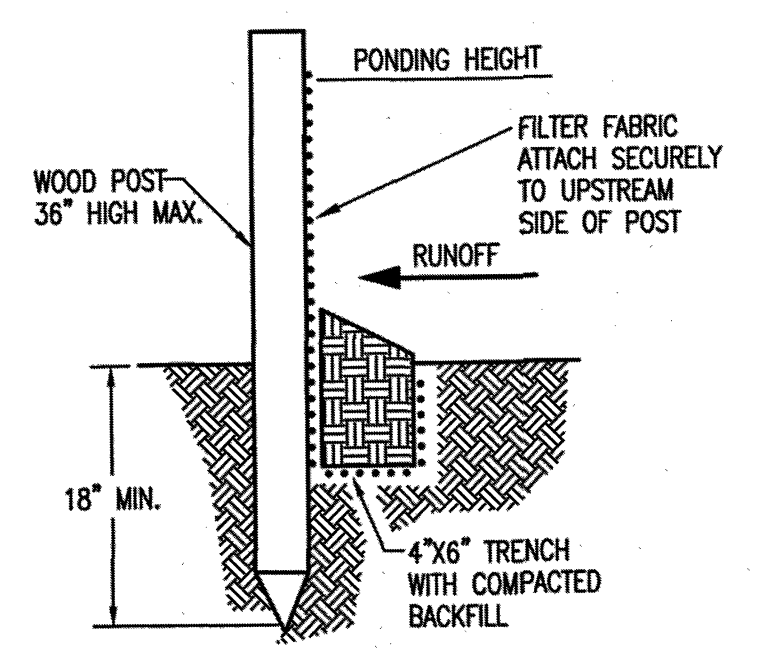
**PLACEMENT:**  
PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME. WHEN A SILT FENCE BARRIER FOR AREA INLETS IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

**PROPER INSTALLATION METHOD:**  
EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING. ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

**NOTE:** WHEN A SILT FENCE BARRIER FOR AREA INLET IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

**LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:**  
WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET—NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT FRAMING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

**INSPECTION AND MAINTENANCE:**  
SILT FENCE BARRIER FOR AREA INLETS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:  
DOES WATER FLOW UNDER THE SILT FENCE?  
DOES THE SILT FENCE SAG EXCESSIVELY?  
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?  
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



SILT FENCE BARRIERS

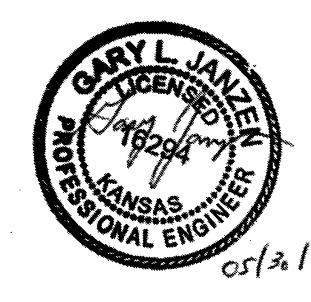
**MATERIAL SPECIFICATION:**  
SILT FENCE FABRIC SHOULD CONFORM TO THE AASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.


**PLACEMENT:**  
A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, SILT FENCE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. SILT FENCE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

**PROPER INSTALLATION METHOD:**  
EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 6" DEEP BY 4" WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT-FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE UPSLOPE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

**LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:**  
WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES, IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES. DO NOT PLACE SILT-FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE SILT FENCE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT SUFFICIENTLY ANCHORED, IT WILL WASH OUT. SILT FENCE SLOPE BARRIERS MUST BE DUG INTO THE GROUND—SILT FENCE AT GROUND LEVEL DOES NOT WORK BECAUSE WATER WILL FLOW UNDERNEATH.

**INSPECTION AND MAINTENANCE:**  
SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:  
ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?  
DOES WATER FLOW UNDER THE SLOPE BARRIER?  
DO THE SILT FENCES SAG EXCESSIVELY?  
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?  
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?





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

**SILT FENCE DITCH CHECK AND BARRIER DETAILS**

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

PROJECT NUMBER    OCA NUMBER    DATE

CITY ENGINEER'S OFFICE  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1820  
(316) 268-4301

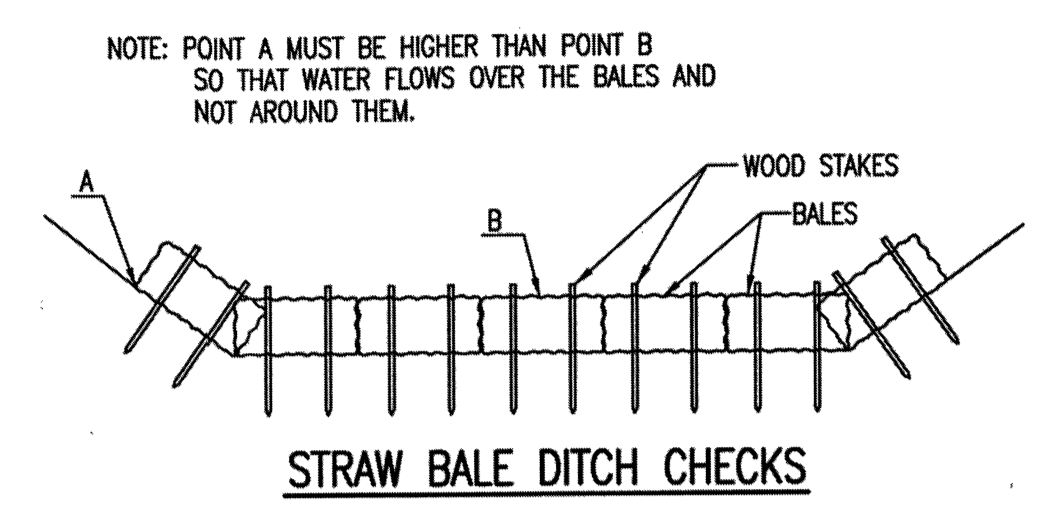
REVISION DATE: MAY 2013

SW-502

**Renaissance Infrastructure Consulting**

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www.ri-consult.com





**MATERIAL SPECIFICATION:**  
BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.  
OPTIONAL: THE DOWNSTREAM SCOUR APRON SHOULD BE CONSTRUCTED OF A DOUBLE-NETTED STRAW EROSION-CONTROL BLANKET AT LEAST 6' WIDE.  
OPTIONAL: THE METAL LANDSCAPE STAPLES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 8" LONG.

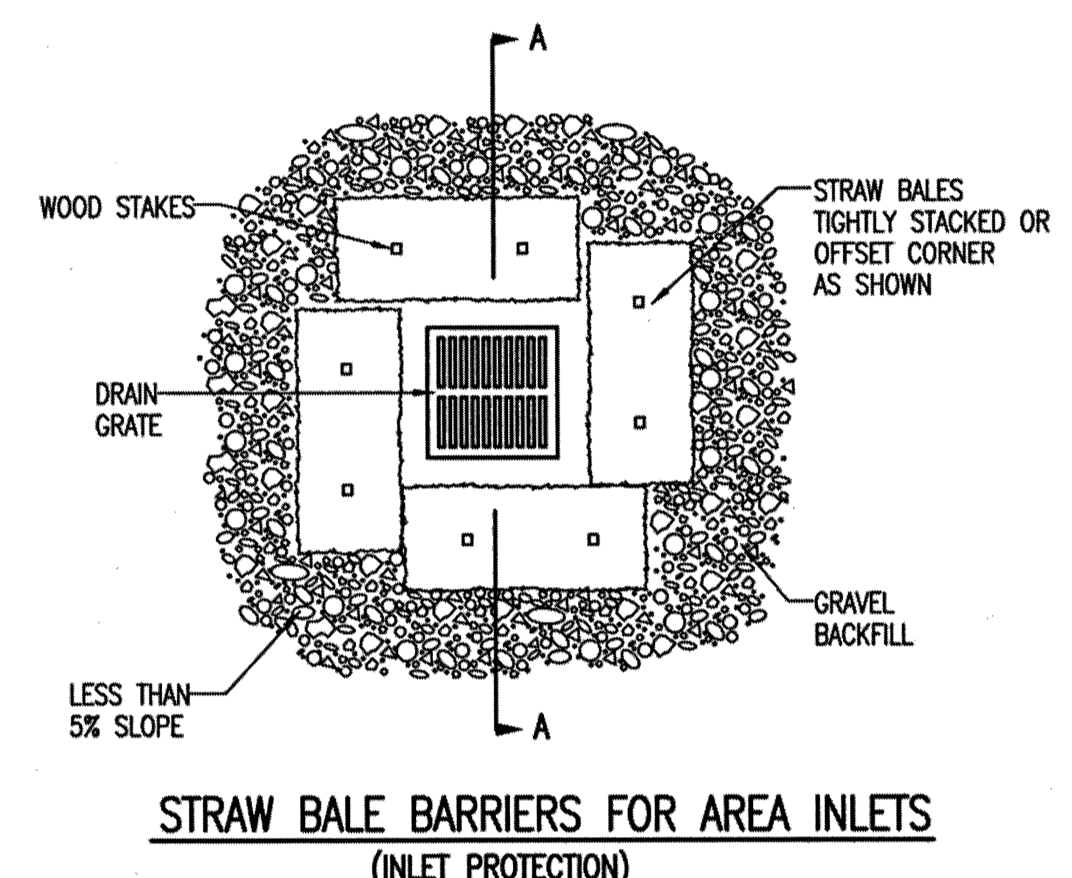
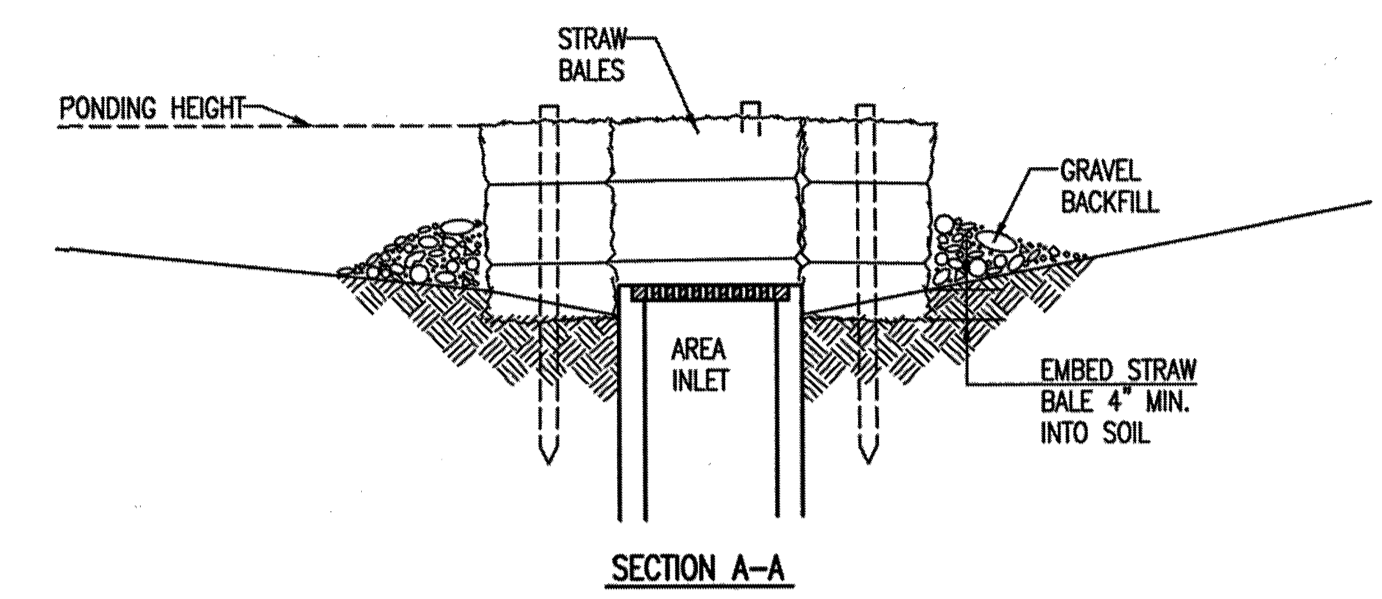
**PLACEMENT:**  
BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE DITCH CHECK SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK.  
STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD.  
BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.  
THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK SPACING (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

**PROPER INSTALLATION METHOD:**  
EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH—IT WILL BE USED LATER.  
OPTIONAL: ON THE DOWNSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE TRENCH. THE EROSION CONTROL BLANKET SHOULD BE ANCHORED IN THE TRENCH WITH ONE ROW OF 8" LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. THE REMAINDER OF THE BLANKET SHOULD BE ANCHORED USING TWO EVENLY SPACED ROWS OF 8" LANDSCAPE STAPLES ON 18" CENTERS PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH.  
PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.  
ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSTREAM SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP AND EXTEND UPSTREAM NO MORE THAN 24".

**LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:**  
DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW.  
DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW.  
FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS.  
DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE.  
DO NOT PLACE BALE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.  
BALE DITCH CHECKS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

**INSPECTION AND MAINTENANCE:**  
BALE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:  
DOES WATER FLOW AROUND THE DITCH CHECK?  
DOES WATER FLOW UNDER THE DITCH CHECK?  
DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?  
ARE ANY BALES AND/OR SCOUR APRONS (OPTIONAL) DISLODGED?  
ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?  
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



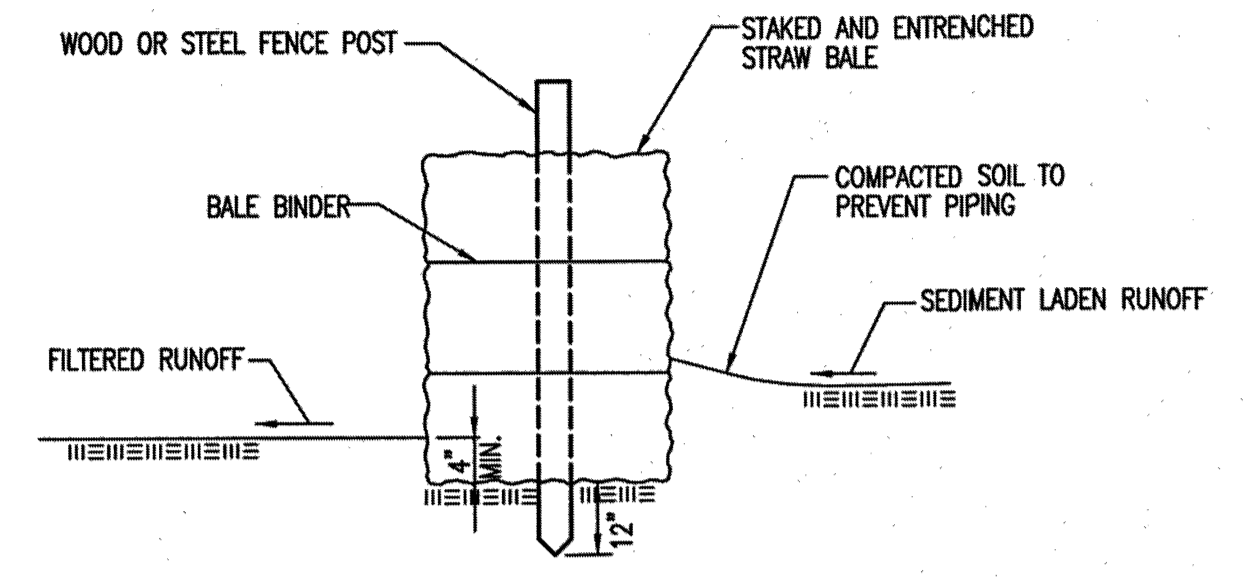
**MATERIAL SPECIFICATION:**  
BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.  
TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

**PLACEMENT:**  
BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DROP INLET. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

**PROPER INSTALLATION METHOD:**  
EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH WIDE.  
PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS.  
STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.  
ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.  
NOTE: WHEN A BALE AREA INLET BARRIER IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

**LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:**  
BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR.  
BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

**INSPECTION AND MAINTENANCE:**  
BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:  
DOES WATER FLOW UNDER THE AREA INLET BARRIER?  
DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?  
ARE ANY BALES DISLODGED?  
ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?  
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



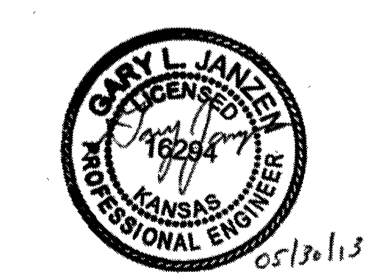
**MATERIAL SPECIFICATION:**  
BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG.  
TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

**PLACEMENT:**  
A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT.  
WHEN PRACTICABLE, BALE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW.  
BALE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

**PROPER INSTALLATION METHOD:**  
EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE.  
PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND.  
ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSLOPE SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

**LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:**  
WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER FAILS.  
DO NOT PLACE BALE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.  
BALE SLOPE BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

**INSPECTION AND MAINTENANCE:**  
BALE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:  
ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?  
DOES WATER FLOW UNDER THE SLOPE BARRIER?  
DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?  
ARE ANY BALES DISLODGED?  
ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?  
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?



REVISION DATE: MAY 2013

**STRAW BALE DITCH CHECK AND BARRIER DETAILS**

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

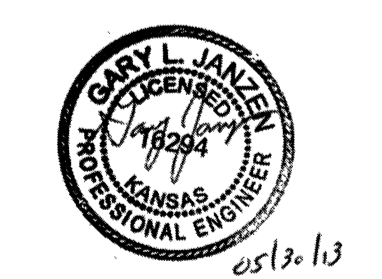
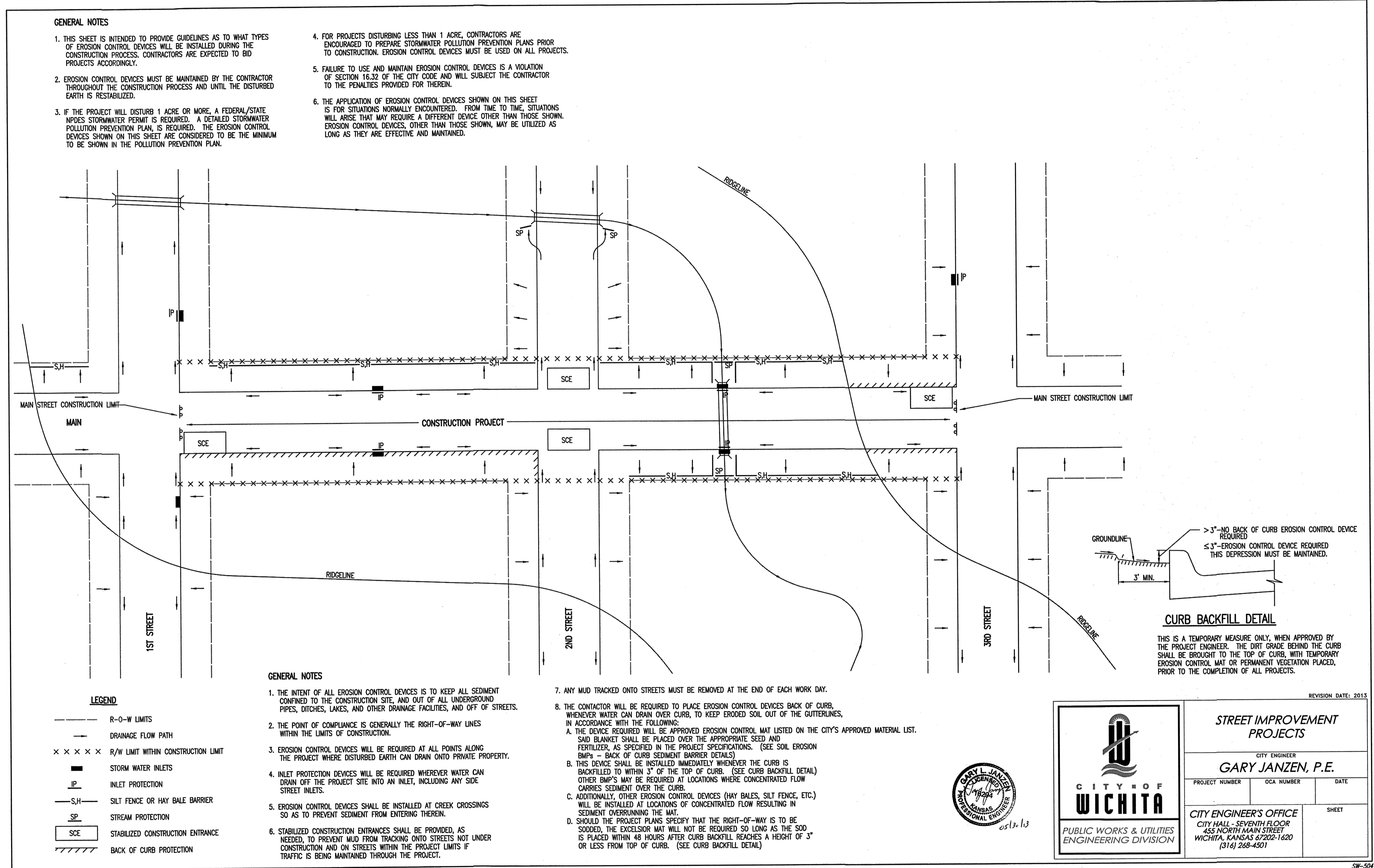
PROJECT NUMBER: OCA NUMBER: DATE:

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SHEET

NO.	BY	DATE	REVISION
3.	VZ	03/12/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ	1/8/2015	RESUBMISSION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL

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

**STREET IMPROVEMENT PROJECTS**  
CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER: \_\_\_\_\_ OCA NUMBER: \_\_\_\_\_ DATE: \_\_\_\_\_

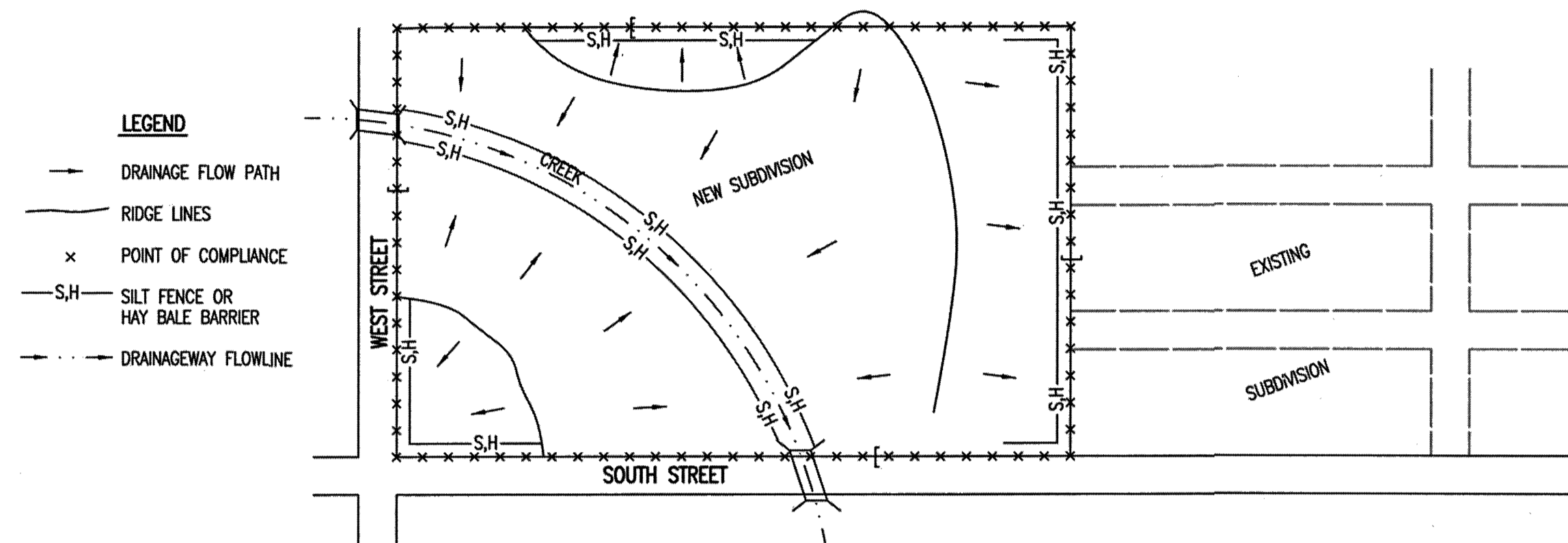
CITY ENGINEER'S OFFICE  
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435 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

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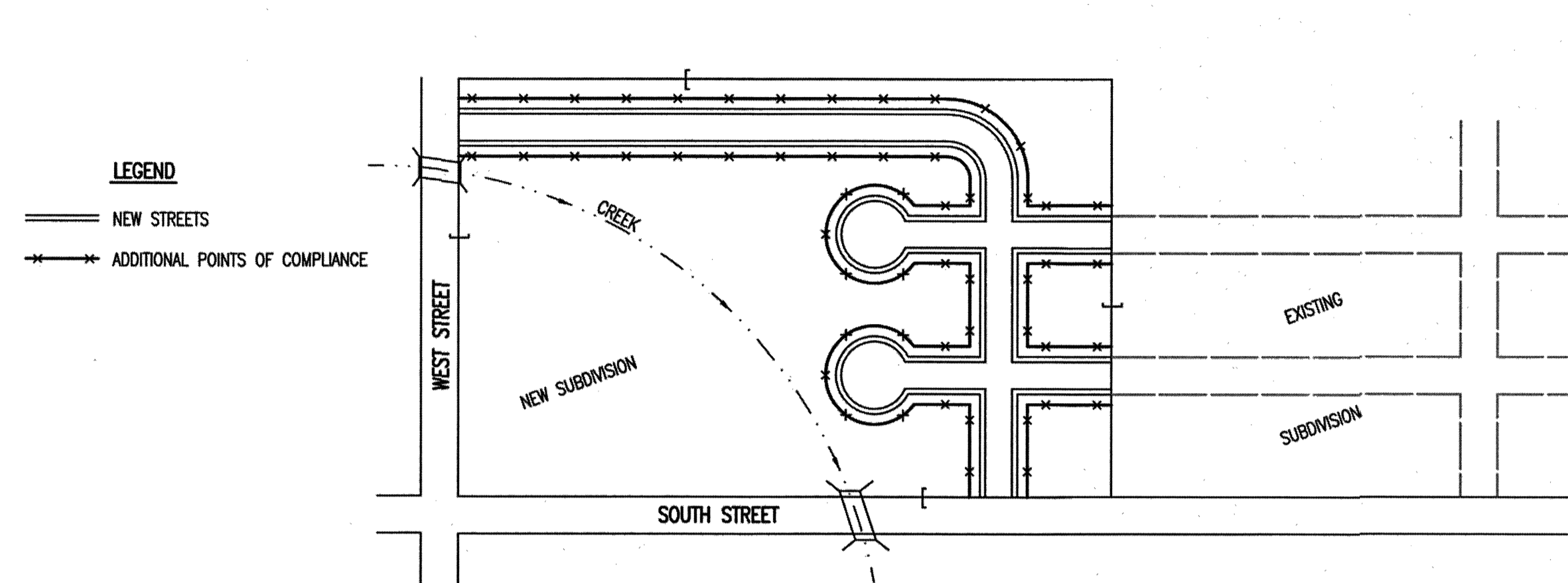
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**PHASE 1 - INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)**



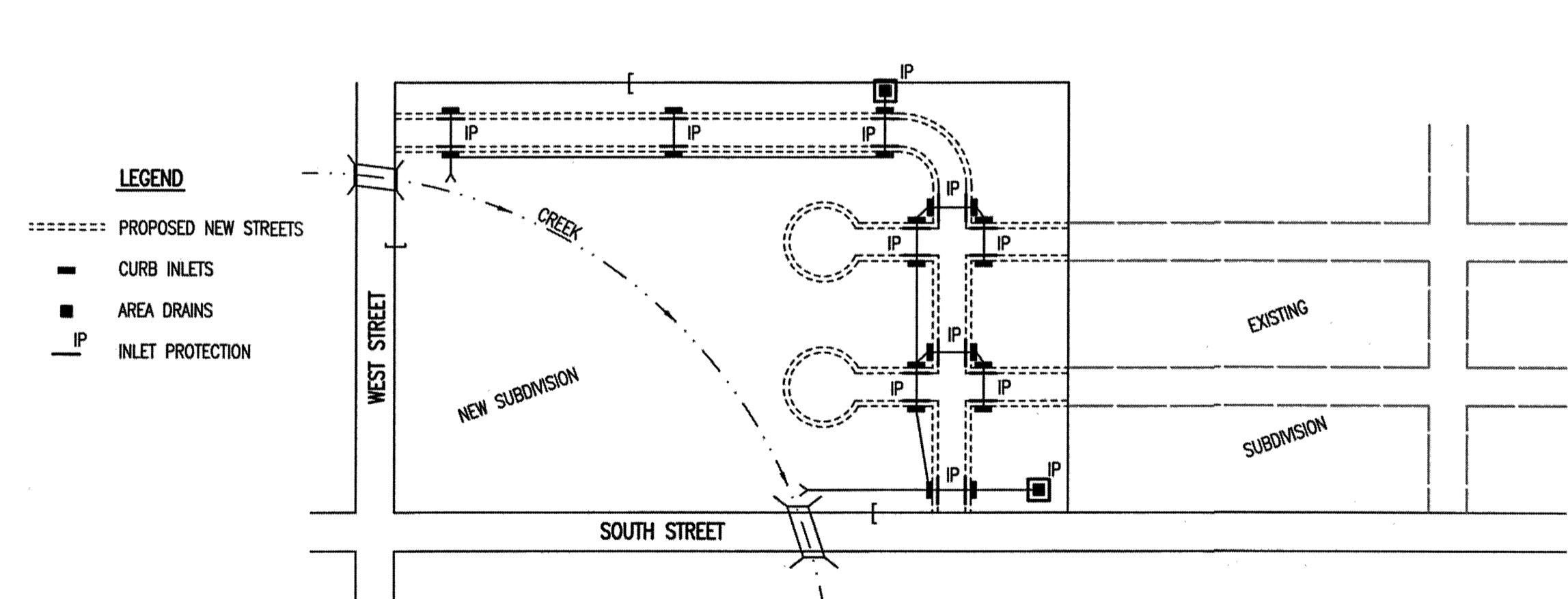
- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
- HAY BALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE EROSION CONTROL DEVICES WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
- SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR STREETS ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE EROSION CONTROL DEVICES WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
- ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED WITHIN 48 HOURS OR BY FRIDAY AT 6:00 PM, WHICHEVER IS EARLIER.
- CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL EROSION CONTROL DEVICES AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE EROSION CONTROL DEVICES AT THEIR WORK LOCATIONS, AS NEEDED.
- UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
- IF THE INITIAL EARTH WORK AND UTILITIES ARE DONE AS PART OF A PUBLIC IMPROVEMENT PROJECT, THESE EROSION CONTROL DEVICES WILL BE INSTALLED BY THE CONTRACTOR AS SPECIFIED IN THE INDIVIDUAL PROJECT CONTRACTS. THE CONTRACTOR WILL MAINTAIN THE DEVICES UNTIL COMPLETION OF THE CONTRACT, AT WHICH TIME THE DEVELOPER WILL ASSUME MAINTENANCE RESPONSIBILITIES. IF THESE CONTRACTS ARE NOT PUBLIC IMPROVEMENT PROJECTS, THE DEVELOPER WILL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THESE DEVICES.
- WITHIN 14 DAYS OF COMPLETION OF EARTHWORK ACTIVITIES IN ANY GIVEN AREA, THAT AREA SHALL BE TEMPORARILY OR PERMANENTLY SEEDED AND MULCHED.

**PHASE 3 - STREET CONSTRUCTION**



- DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL EROSION CONTROL DEVICES INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
- CURB OPENING INLET PROTECTION:
  - SUMP AREAS - INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
  - NON-SUMP LOCATIONS - PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
- EROSION CONTROL DEVICES WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE BELOW TOP OF CURB), ADDITIONAL DEVICES WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
- SEE DETAIL SHEET FOR BACK OF CURB PROTECTION.
- THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAY BALE OR SILT FENCE EROSION CONTROL DEVICES AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
- THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB EROSION CONTROL DEVICES.
- THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB EROSION CONTROL DEVICES IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

**PHASE 2 - INSTALLATION OF STORM SEWER**

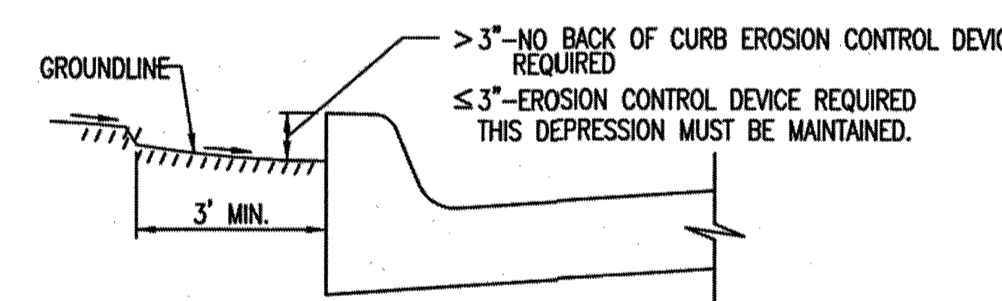


- DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL EROSION CONTROL DEVICES REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
- AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
- AREA DRAINS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAY BALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
- CURB OPENING INLETS - AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION DEVICES MUST BE INSTALLED. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION. SEE PHASE 3 - STREET CONSTRUCTION.
- THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE DEVICES.
- THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE EROSION CONTROL DEVICES ONCE INSTALLED.
- ALL DISTURBED GROUND WILL BE FINAL GRADED AND TEMPORARILY OR PERMANENTLY SEEDED WITHIN 14 DAYS IF COMPLETION OF WORK IN ANY GIVEN PART OF THE SUBDIVISION.
- ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

**GENERAL NOTES**

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, LAKES, STREETS OR ANY OTHER DRAINAGE FEATURE.
- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON SOIL EROSION BMP'S DETAIL SHEETS.
- PERSONS DESTROYING EROSION CONTROL DEVICES SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT DEVICES.
- THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 1 ACRE OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL DEVICES ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLANS.
- FOR SUBDIVISIONS SMALLER THAN 1 ACRE, SOIL EROSION DEVICES ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
- FAILURE TO USE AND MAINTAIN SOIL EROSION DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE DEVICES OTHER THAN THAT SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
- A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.

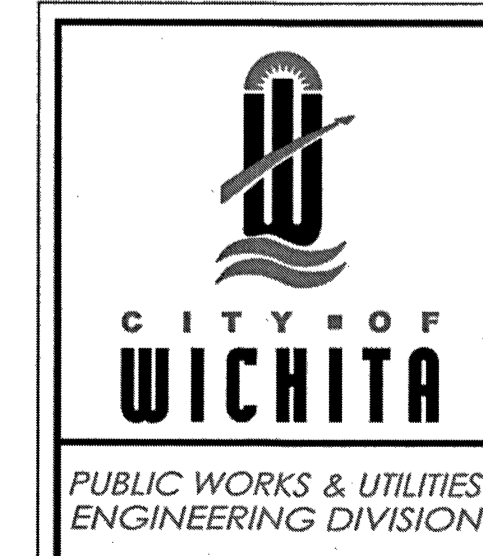
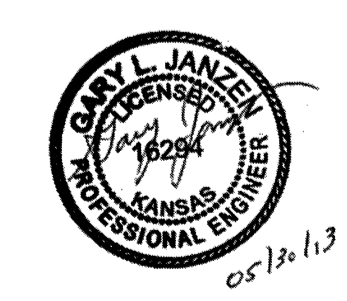
SEE DETAIL SHEET FOR  
BACK OF CURB PROTECTION DETAIL



**CURB BACKFILL DETAIL  
(STREET CONSTRUCTION ONLY)**

THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER, THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

REVISION DATE: MAY 2013



**SUBDIVISION DEVELOPMENT PROCESS**

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

PROJECT NUMBER: \_\_\_\_\_ OCA NUMBER: \_\_\_\_\_ DATE: \_\_\_\_\_

CITY ENGINEER'S OFFICE  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

SHEET \_\_\_\_\_

SW-505

NO.	BY	CD	DATE	REVISION
3.	VZ	BY	03/01/2015	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
2.	VZ	BY	11/02/15	REVISION FOLLOWING RESPONSE TO CITY COMMENTS
1.	VZ	BY	11/18/2014	REVISED FOR REMOVAL OF ROUNDABOUT ORIGINAL SUBMITTAL

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