

**AMENDMENT NO. 1**  
**To**  
**COOPERATIVE AGREEMENT FOR**  
**DESIGN AND CONSTRUCTION OF WATER MAIN RELOCATIONS**  
**AND UPGRADES IN ASSOCIATION WITH**  
**“IMPROVEMENTS TO LEE’S SUMMIT ROAD, ANDERSON DRIVE TO U.S.**  
**40 HWY”**  
**COUNTY PROJECT NO. 3122; FEDERAL NO. STP-3301 (454)**

This Agreement Amendment is made by and between **the City of Kansas City, Missouri Water Services Department** (hereinafter referred to as “the City”), and the **County of Jackson, Missouri** ( hereinafter called referred to as “the “County”), this 15 day of July, 2014.

Whereas, it is the mutual desire of the parties hereto to amend the Agreement, entered into on the 22nd day of April, 2013 hereinafter called the “Original Agreement”; and,

Whereas, in the Original Agreement the County agreed to include water main relocation plans as part of the roadway project; and,

Whereas, the lines of division of responsibility for relocation costs have been modified since the Original Agreement and agreed to in principle by the City and the County; and,

Whereas, Jackson County Public Works submitted “Plans, Specifications & Estimate” for both projects to the Missouri Department of Transportation (MoDOT) for review on March 14<sup>th</sup> 2014; and

Whereas, the Estimate at the time of PS&E submittal increased Kansas City’s share for construction from \$913,300 to \$1,586,000 and the County’s share for construction from \$624,200 to \$1,378,000; and,

Whereas, the County is obligated to make payment to MoDOT for both the County’s share and the City’s share no later than 5 days prior to MoDOT’s advertisement of the projects, scheduled at this time to be August 14, 2014; and,

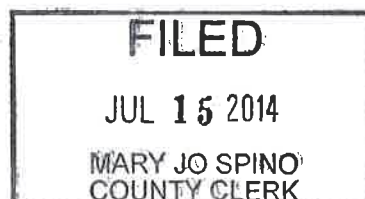
Whereas, it would put undue hardship on the County to front the additional \$672,700 to cover Kansas City’s portion of the relocation expense.

Therefore, it is hereby agreed that the Original Agreement be amended as follows:

**ARTICLE I – SECTIONS AMENDED: :**

1. Delete Paragraph 1 of Section entitled “Kansas City Obligations – Construction”, Page 2 and replace with the following Paragraph 1:

“1. Payment: City will pay to the County a payment of \$913,300.00 within 30 days following notice of the County’s “Plans Specifications and Estimate”



IN WITNESS WHEREOF, the parties hereto have caused this Amendment No. 1 to the Cooperative Agreement to be executed by their respective representatives, thereunto duly authorized as of the day and year first above written.

Approved by:

Michael D. Sanders  
Michael D. Sanders  
County Executive

Recommended by:

Earl Newill  
Earl Newill  
Acting Director of Public Works

Approved to form this 15 day of July, 2014

Jerry D. Holden  
County Counselor

ATTEST BY:

Mary Jo Spino  
Mary Jo Spino  
Clerk of the County Legislature

By: \_\_\_\_\_  
Architect

~~REVENUE CERTIFICATE~~


~~I hereby certify that there is a balance otherwise unencumbered to the credit of the appropriation to which this Agreement is chargeable, and a cash balance otherwise unencumbered in the treasury from which payment is to be made, each sufficient to meet the obligation of \$ \_\_\_\_\_ which is hereby authorized.~~

~~\_\_\_\_\_ Date \_\_\_\_\_ Finance Director~~

~~Account Code \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_~~

~~Tax ID # \_\_\_\_\_~~

KANSAS CITY, MISSOURI

  
Terry Leeds, P.E. Director  
Water Services Department

APPROVED AS TO FORM:

  
Assistant City Attorney

Pursuant to Sections 50.660 and 55.160 RSMo., I certify that there is an unencumbered balance or anticipated revenue to be placed to the credit of the appropriation to which the foregoing expenditure is to be charged, and an unencumbered cash balance or anticipated revenue in the treasury to the credit of the fund from which payment is to be made, each sufficient to meet the obligation hereby incurred.


by  6/27/2014  
Director of Finance Date

EXHIBIT B - AMENDMENT 1

LEES SUMMIT ROAD - WATER MAIN REPLACEMENT													
Opinion of Probable Cost													
Created By: JIA													
Date: 01/12/2014													
Checked By: JIA													
Date: 01/20/14													
Bid Item Number	Description	Unit	Unit Price	County Project	KCMO WSD	MODOT Project	MODOT (LSR)	Total Quantity	County Project	KCMO WSD	MODOT Project	MODOT (LSR)	Total Cost
				Jackson County	JAP2387B	JAP2387	JAP2387	Jackson County	JAP2387B	JAP2387	JAP2387	JAP2387	
1	24" CP Class 54 RJ Valves w/Polyma, Excavation, Bedding & Backfill	Ln Ft	\$300	0.44	1420	0	0	1	\$55,000	\$331,000	\$0	\$0	\$386,000
2	24" CP Class 54 RJ Valves w/Polyma, Excavation, Bedding & Backfill	Ln Ft	\$115	1131	129	296	315	1565	\$129,045	\$197,905	\$25,561	\$41,025	\$352,536
3	12" DIP Class 52 Valves w/Polyma, Excavation, Bedding & Backfill	Ln Ft	\$70	860	328	61	1,563	2652	\$60,200	\$187,400	\$0	\$0	\$247,600
4	Passivated Joint Valves	Ln Ft	\$270	1347	1511	0	2,868	5726	\$363,600	\$418,730	\$0	\$0	\$782,330
5	20" DIP Class 54 RJ Valves w/Polyma, Excavation, Bedding & Backfill	Ln Ft	\$250	40	0	0	40	40	\$9,975	\$0	\$0	\$0	\$10,000
6	20" DIP Class 54 RJ Valves w/Polyma, Excavation, Bedding & Backfill	Ln Ft	\$125	262	105	200	668	635	\$32,717	\$13,125	\$24,998	\$0	\$69,142
7	8" DIP Class 52 RJ Valves w/Polyma, Excavation, Bedding & Backfill	Ln Ft	\$69	0	95	0	95	95	\$0	\$8,127	\$0	\$0	\$11,170
8	8" DIP Class 52 RJ Valves w/Polyma, Excavation, Bedding & Backfill	Ln Ft	\$74	231	179	0	410	620	\$17,102	\$13,208	\$0	\$0	\$30,340
9	42" Steel Cast Iron w/Polyma A End Seal (315" thickness)	Ln Ft	\$150	0	203	0	203	203	\$0	\$197,240	\$0	\$0	\$197,240
10	42" PVC Cast Iron w/Polyma A End Seal	Ln Ft	\$200	30	30	0	60	60	\$6,000	\$0	\$0	\$0	\$12,000
11	24" PVC Cast Iron w/Polyma A End Seal	Ln Ft	\$115	0	15	0	15	15	\$0	\$0	\$0	\$0	\$1,725
12	12" PVC Cast Iron w/Polyma A End Seal	Ln Ft	\$60	20	0	0	20	20	\$1,200	\$0	\$0	\$0	\$1,200
13	24" CL 54 - 11.25 Degree Bend	Each	\$5,500	2	6	0	8	8	\$11,000	\$33,000	\$0	\$0	\$44,000
14	24" CL 54 - 22.5 Degree Bend	Each	\$5,500	0	2	0	2	2	\$11,000	\$0	\$0	\$0	\$11,000
15	24" CL 54 - 45 Degree Bend	Each	\$5,500	0	4	0	4	4	\$22,000	\$0	\$0	\$0	\$22,000
16	12" CL 52 - 11.25 Degree Bend	Each	\$1,400	1	1	0	2	2	\$1,400	\$0	\$0	\$0	\$1,400
17	12" CL 52 - 22.5 Degree Bend	Each	\$1,400	4	5	0	9	9	\$12,600	\$0	\$0	\$0	\$12,600
18	12" CL 52 - 45 Degree Bend	Each	\$1,400	0	2	0	2	2	\$2,800	\$0	\$0	\$0	\$2,800
19	12" CL 52 - 80 Degree Bend	Each	\$1,650	0	1	0	1	1	\$1,650	\$0	\$0	\$0	\$1,650
20	8" CL 52 - 45 Degree Bend	Each	\$1,100	0	4	0	4	4	\$4,400	\$0	\$0	\$0	\$4,400
21	8" CL 52 - 22.5 Degree Bend	Each	\$1,000	0	2	0	2	2	\$2,000	\$0	\$0	\$0	\$2,000
22	8" CL 52 - 45 Degree Bend	Each	\$1,000	0	1	0	1	1	\$1,000	\$0	\$0	\$0	\$1,000
23	8" CL 52 - 80 Degree Bend	Each	\$1,000	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
24	8" CL 52 - 45 Degree Bend	Each	\$1,000	1	0	0	1	1	\$1,000	\$0	\$0	\$0	\$1,000
25	8" CL 52 - 80 Degree Bend	Each	\$1,000	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
26	24" Solid Sleeve Coupling	Each	\$1,600	0	2	0	2	2	\$3,200	\$0	\$0	\$0	\$3,200
27	12" Solid Sleeve Coupling	Each	\$400	0	1	0	1	1	\$400	\$0	\$0	\$0	\$400
28	8" Solid Sleeve Coupling	Each	\$300	0	2	0	2	2	\$600	\$0	\$0	\$0	\$600
29	4" Solid Sleeve Coupling	Each	\$275	0	2	0	2	2	\$550	\$0	\$0	\$0	\$550
30	Accessories to Dip Meter	Each	\$6,000	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
31	50' PCCP to Dip Meter	Each	\$6,000	2	0	0	2	2	\$10,000	\$0	\$0	\$0	\$10,000
32	24" x 12" Reducer	Each	\$3,500	1	0	0	1	1	\$3,500	\$0	\$0	\$0	\$3,500
33	12" x 6" Reducer	Each	\$1,000	2	2	0	4	4	\$2,000	\$0	\$0	\$0	\$2,000
34	8" x 4" Reducer	Each	\$500	2	0	0	2	2	\$1,000	\$0	\$0	\$0	\$1,000
35	Plugs	Each	\$2,500	2	0	0	2	2	\$5,000	\$0	\$0	\$0	\$5,000
36	24" Plug	Each	\$2,500	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
37	12" Plug	Each	\$2,500	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
38	8" Plug	Each	\$375	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
39	24" Bubbly Valve with Anchor Coupling	Each	\$11,000	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
40	12" Gate Valve	Each	\$2,900	0	6	2	16	22	\$64,800	\$11,800	\$0	\$0	\$76,600
41	8" Gate Valve	Each	\$1,550	0	2	0	2	2	\$3,100	\$0	\$0	\$0	\$3,100
42	4" Gate Valve	Each	\$1,200	0	1	0	1	1	\$2,400	\$0	\$0	\$0	\$2,400
43	24" Air & Vacuum Release Valve Assembly with Vent	Each	\$12,000	0	2	0	2	2	\$24,000	\$0	\$0	\$0	\$24,000
44	12" Air & Vacuum Release Valve Assembly with Vent	Each	\$4,000	0	1	0	1	1	\$4,000	\$0	\$0	\$0	\$4,000
45	8" Air & Vacuum Release Valve Assembly with Vent	Each	\$3,000	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
46	24" x 24" DIP Tee	Each	\$12,800	2	0	0	2	2	\$25,600	\$0	\$0	\$0	\$25,600
47	24" x 12" DIP Tee	Each	\$12,400	1	3	0	4	4	\$49,200	\$0	\$0	\$0	\$49,200
48	12" x 6" DIP Tee	Each	\$1,000	0	2	0	2	2	\$2,000	\$0	\$0	\$0	\$2,000
49	8" x 6" DIP Tee	Each	\$900	0	1	0	1	1	\$900	\$0	\$0	\$0	\$900
50	24" x 24" Valve	Each	\$12,900	1	0	0	1	1	\$12,900	\$0	\$0	\$0	\$12,900
51	24" x 24" Valve	Each	\$7,800	1	0	0	1	1	\$7,800	\$0	\$0	\$0	\$7,800

LEES SUMMIT ROAD - WATER MAIN REPLACEMENT  
 Opinion of Probable Cost

Created By: JHL  
 Date: 5/17/2014  
 Checked By: JMB  
 Date: 5/17/2014

Bid Item Number	Description	Unit	Unit Price	Quantity by Entity					Total Quantity	Cost by Entity					Total Cost
				Jackson County JAP2387B	KCMO WSD JAP2387B	KCMO WSD (US49) JAP2387	MODOOT Project MODOOT (LSR) JAP2387	MODOOT (LSR) JAP2387		Jackson County JAP2387B	KCMO WSD JAP2387B	KCMO WSD (US49) JAP2387	MODOOT Project MODOOT (LSR) JAP2387		
	24" Batching Block - Tee Branch	Each	\$2,000	1	0	0	0	0	1	\$2,000	\$0	\$0	\$0	\$2,000	
	12" Batching Block - Tee Branch	Each	\$400	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	
	6" Batching Block - Tee Branch	Each	\$100	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	
	6" Batching Block - Tee Branch	Each	\$40	0	2	0	0	0	2	\$80	\$200	\$0	\$0	\$280	
	12" Batching Block - Plug	Each	\$400	0	1	0	0	0	1	\$400	\$0	\$0	\$0	\$400	
	24" Batching Block - Branch	Each	\$4,000	1	0	0	0	0	1	\$4,000	\$0	\$0	\$0	\$4,000	
	12" Batching Block - Branch	Each	\$500	1	0	0	0	0	1	\$500	\$0	\$0	\$0	\$500	
	6" Batching Block - Branch	Each	\$200	0	2	0	0	0	2	\$400	\$400	\$0	\$0	\$800	
	6" Batching Block - Other	Each	\$100	4	1	0	0	0	5	\$400	\$100	\$0	\$0	\$500	
	24" Straddle Blocks	Each	\$5,000	5	3	0	0	0	8	\$25,000	\$15,000	\$0	\$0	\$40,000	
	12" Straddle Blocks	Each	\$1,500	4	3	0	0	0	7	\$6,000	\$4,500	\$0	\$0	\$10,500	
	6" Straddle Blocks	Each	\$750	0	2	0	0	0	2	\$1,500	\$1,500	\$0	\$0	\$3,000	
	6" Straddle Blocks	Each	\$250	3	2	0	0	0	5	\$1,250	\$1,000	\$0	\$0	\$2,250	
	Water Service Lines	LN FT	\$40	36	0	0	0	0	36	\$1,440	\$0	\$0	\$0	\$1,440	
	4" Water Service Lines - DIP Other 52	LN FT	\$40	68	118	0	0	0	175	\$7,000	\$4,720	\$0	\$0	\$11,720	
	3/4" Water Service Lines - Type K Copper	LN FT	\$30	341	604	0	0	0	1,045	\$3,120	\$18,224	\$0	\$0	\$21,344	
	Curb Stop Installation	Each	\$500	1	1	0	0	0	2	\$1,000	\$1,000	\$0	\$0	\$2,000	
	Water Installation	Each	\$500	0	1	0	0	0	1	\$500	\$500	\$0	\$0	\$1,000	
	Fire Hydrants	Each	\$4,000	7	5	1	0	0	13	\$52,000	\$20,000	\$4,000	\$0	\$76,000	
	Fire Hydrant Assembly for Distribution Main	Each	\$15,000	3	2	0	0	0	5	\$75,000	\$30,000	\$0	\$0	\$105,000	
	Fire Hydrant Assembly for Transmission Main (with extra valve)	Each	\$2,000	3	3	0	0	0	6	\$12,000	\$6,000	\$0	\$0	\$18,000	
	Gas Meter	LN FT	\$5	4024	5160	403	0	0	10,007	\$2,012	\$25,845	\$2,012	\$0	\$29,870	
	Gas Meter	LN FT	\$2	23	377	0	0	0	400	\$47	\$753	\$0	\$0	\$800	
	Trailing & Lubrication	LN FT	\$3	4524	5188	405	0	0	10,232	\$13,572	\$15,597	\$1,515	\$0	\$30,684	
	Total Opinion of Probable Construction Cost									\$1,378,000	\$1,588,200	\$77,000	\$83,000	\$3,124,000	

Note: The opinion of probable construction cost is made on the basis of HNTB's experience and qualifications as a practitioner of the engineering profession. Because HNTB has no control over the cost of labor, materials, equipment or other resources furnished by others, HNTB does not guarantee that proposed, bid, or actual project costs will not vary.

# EXHIBIT C

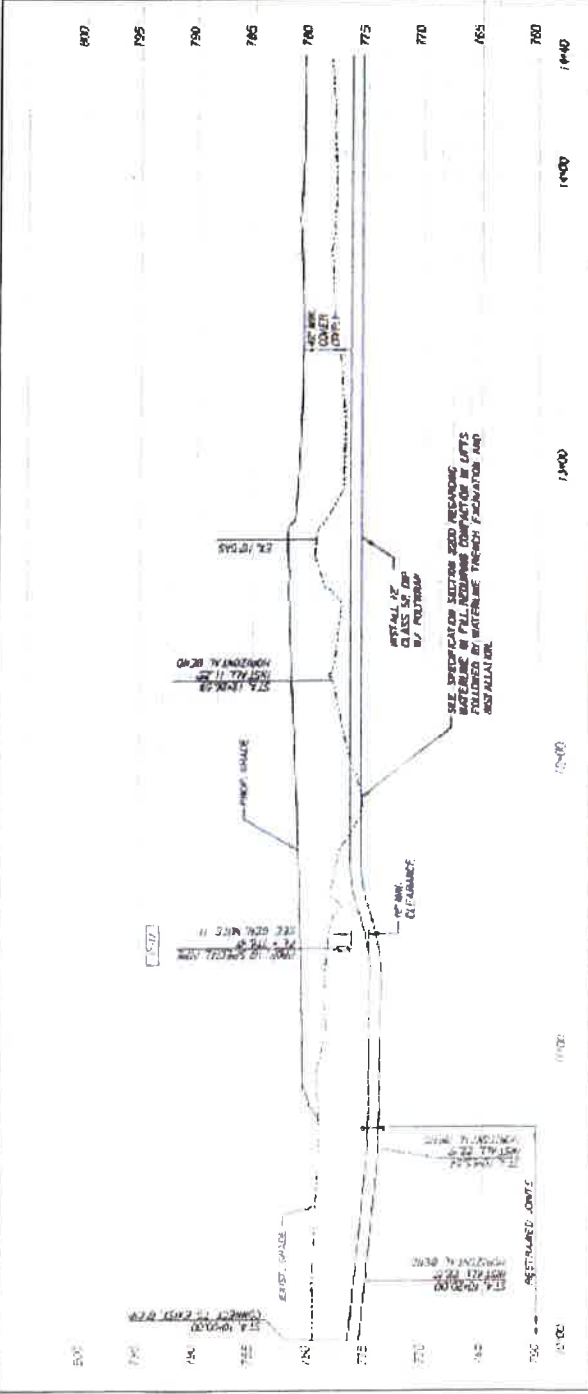
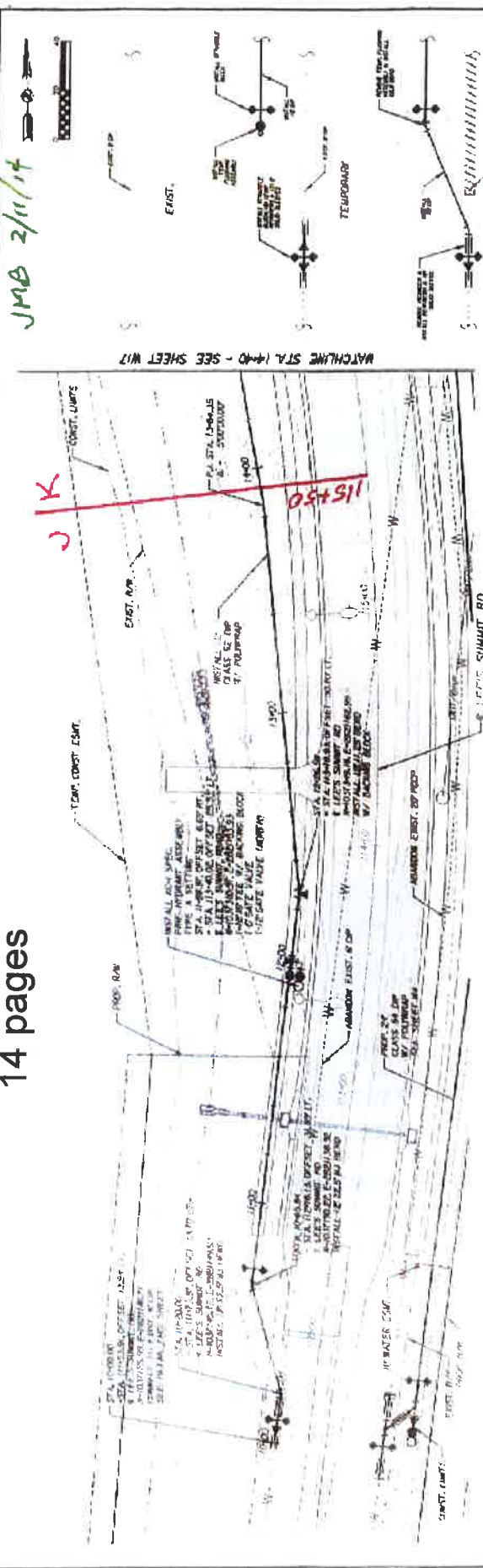
# AMENDMENT NO. 1

14 pages

Information for Inspectors only

J = Jackson  
K = KOMO/WSD

JMB 2/11/14



**STA. 10+00.00 CONNECTION DETAIL**  
NOT TO SCALE  
ALSTON, JIM'S THROUGH

**PERMANENT**

THE PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT.

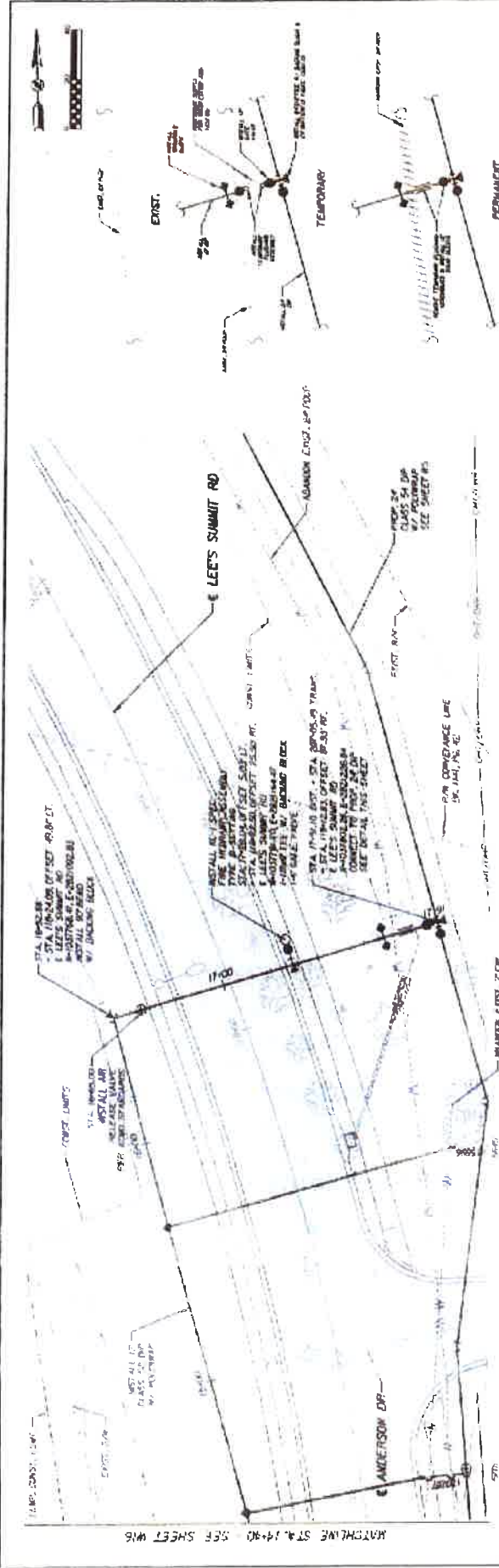
**WATER MAIN RELOCATION**  
RELOCATION OF 6.2\"/>

**WATER DISTRIBUTION PLAN**  
STA. 10+00 TO STA. 14+40

PROFESSIONAL ENGINEER: JIM BLUMETT, E-6888  
CONTRACT NO. 15-120  
SHEET W16 OF W20

D = Distribution Main

← K →



STA. 17+91.10 CONNECTION DETAIL  
 RESTRIK AND'S THROUGH

TRAFFIC TABLE

NUMBER	TYPE	WIDTH	LENGTH	SPACING
1	18\"/>			

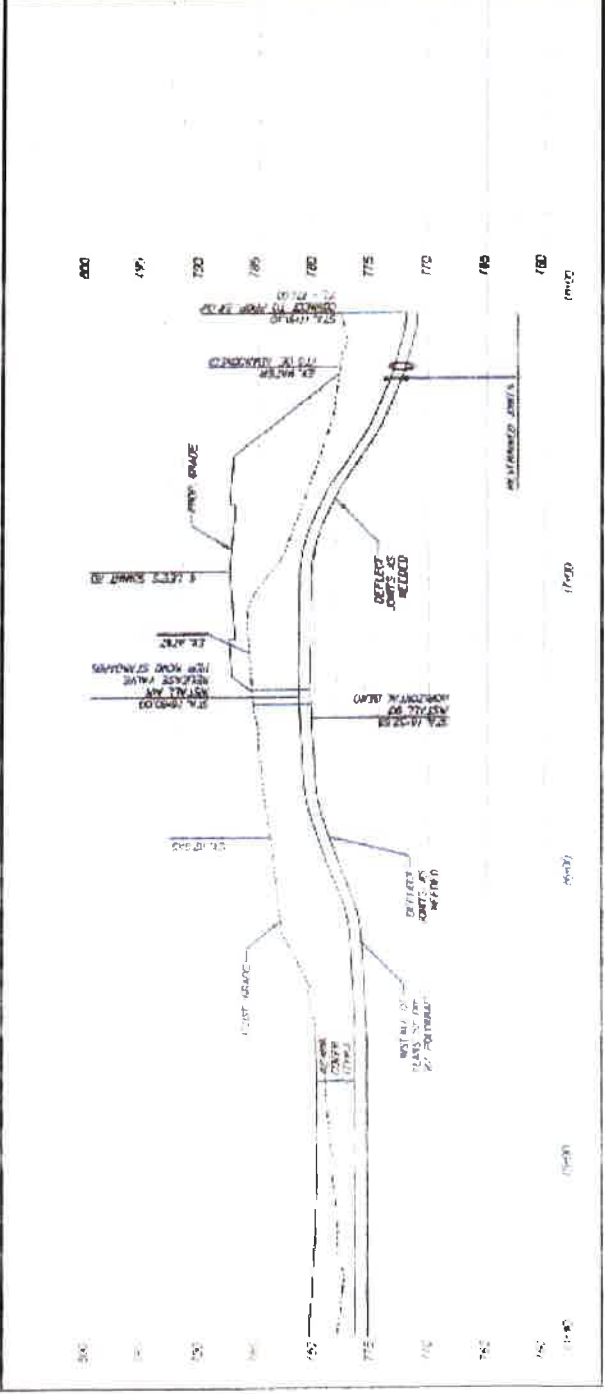
THE PROTECTIVE, WATER CONTAINING AND RESTRIKING, SHALL APPEAR ON THE FACE REAR OF THE PROJECT. THE PROTECTIVE SHALL BE INSTALLED BY THE CONTRACTOR AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT. THE PROTECTIVE SHALL BE MAINTAINED THROUGHOUT THE PROJECT. THE PROTECTIVE SHALL BE MAINTAINED THROUGHOUT THE PROJECT.

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT  
**WATER MAIN RELOCATION**  
 RELOCATION OF 48\"/>

**WATER DISTRIBUTION RELOCATION PLAN**  
 STA. 14+40 TO STA. 17+91.10

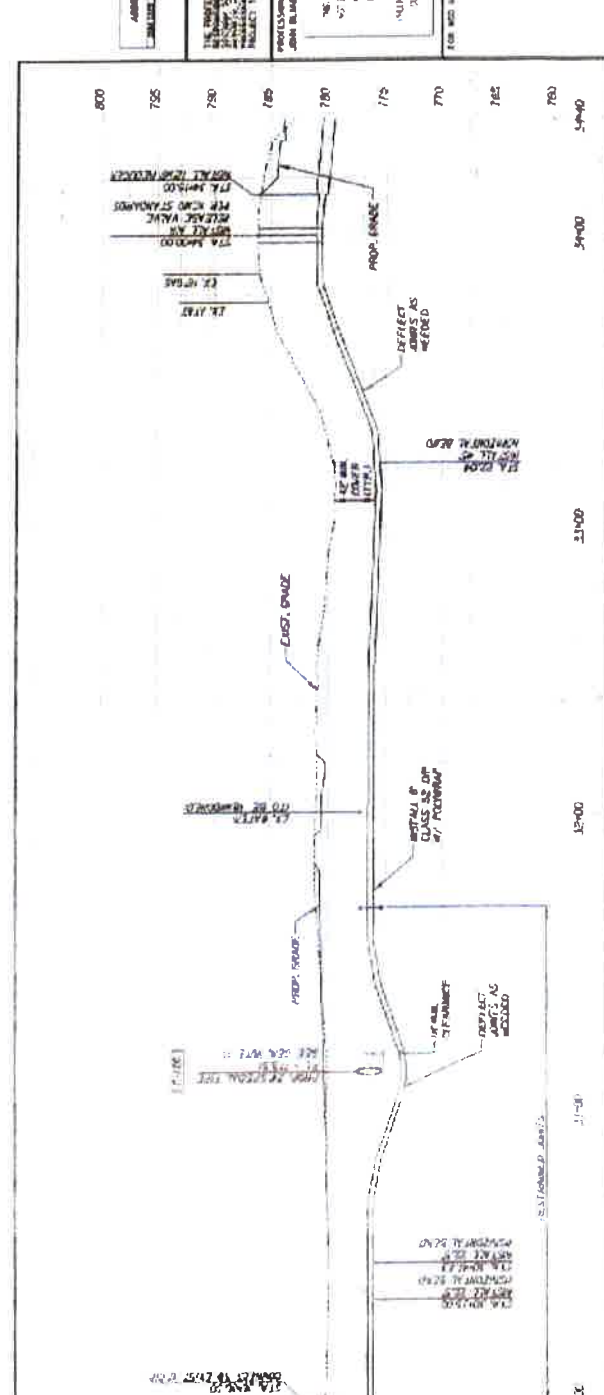
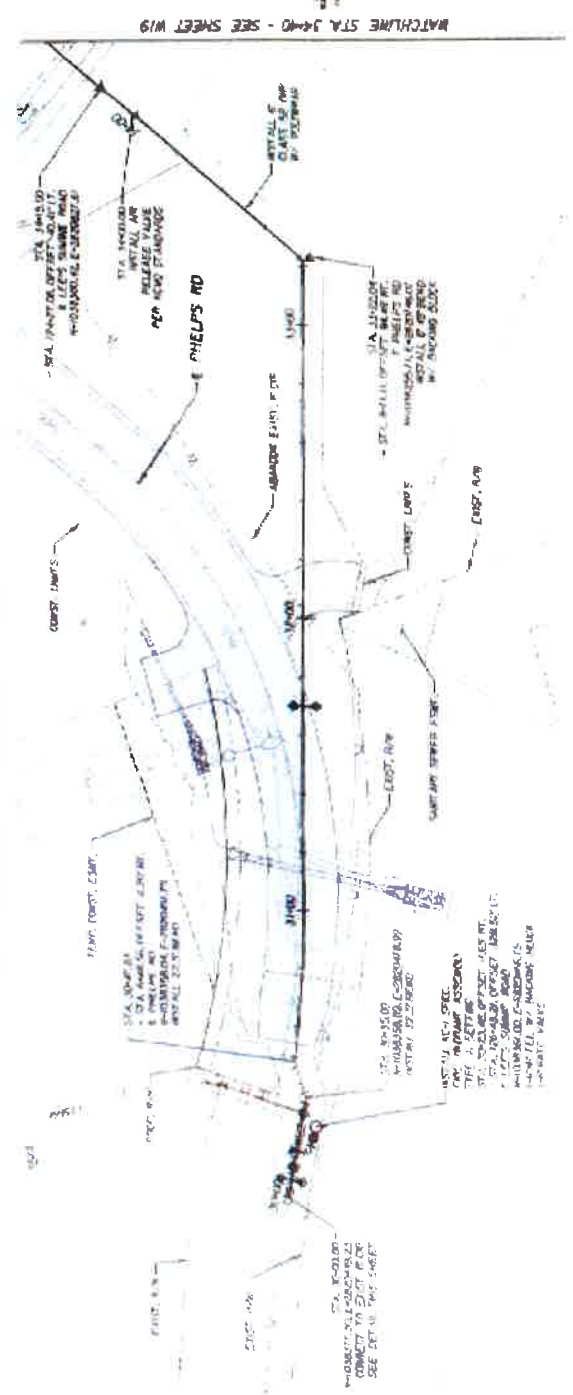
PROJECT NO. 115  
 DATE 1981

NO.	DATE	BY	REVISIONS
1	AUG 2003	W. J. ...	...



THIS DRAWING IS THE PROPERTY OF THE KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT. IT IS TO BE USED FOR THE PROJECT ONLY AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF THE KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT.

← K →



PERMANENT  
STA. 30+00.00 CONNECTION DETAIL  
RESTRAIN JOINT'S THROUGHOUT

ADDRESS	QUANTITY	UNIT	PRICE	TOTAL	DATE	BY	CHECKED	APPROVED

THE PROFESSIONAL ENGINEER HAS REVIEWED THE PROJECT AND HAS FOUND IT TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MISSOURI ENGINEERING BOARD. THE ENGINEER'S SIGNATURE IS REQUIRED FOR THE PROJECT TO BE VALID.

PROFESSIONAL ENGINEER  
JAMES BLUMETT  
L-3088

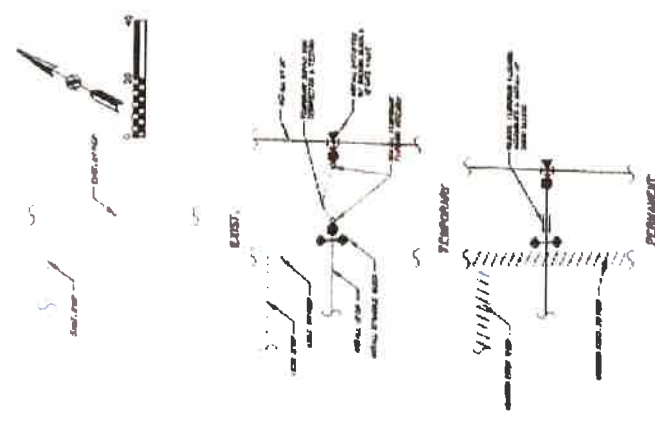
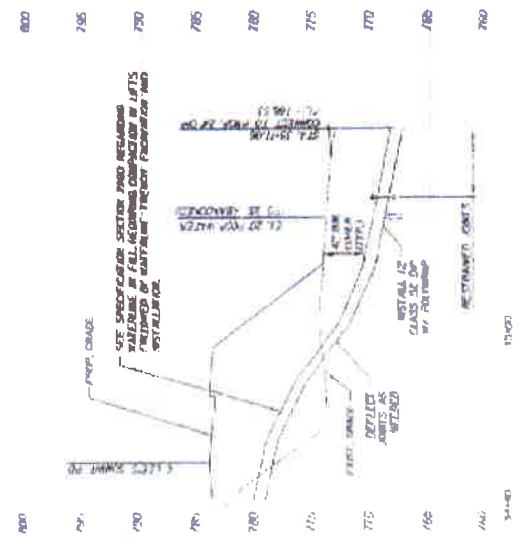
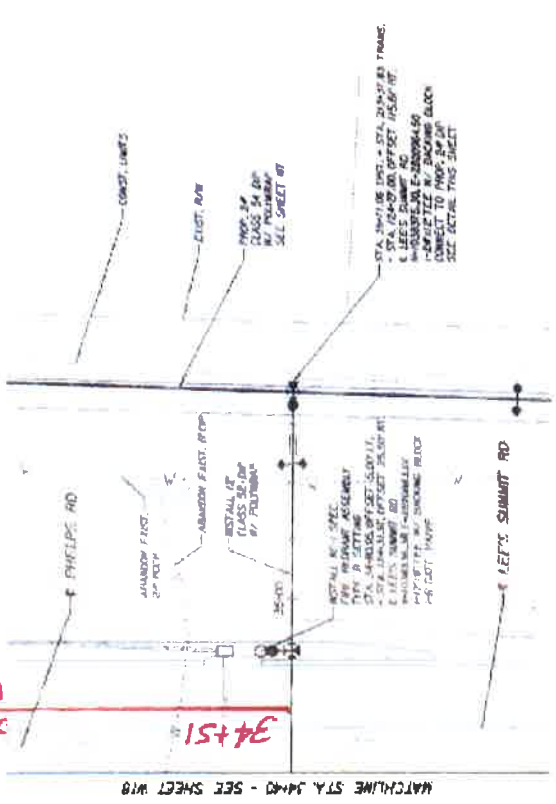
WATER MAIN RELOCATION  
RELOCATION OF 12" DIA. 24" WATER MAIN LOCATED ALONG LEFT SIDE ROAD FROM STA. 18+00 TO SOUTH OF PHASES RD. SECTION COUNTY: MISSOURI CITY, MO: 63044

WATER DISTRIBUTION  
RELOCATION PLAN  
STA. 30+00 TO STA. 34+40

DATE: 10/15/19	SCALE: 1" = 40'	PROJECT NO.: 1818-10-100
DRAWN BY: JMS	CHECKED BY: JMS	APPROVED BY: JMS
DATE: 10/15/19	SCALE: 1" = 40'	PROJECT NO.: 1818-10-100
DRAWN BY: JMS	CHECKED BY: JMS	APPROVED BY: JMS
DATE: 10/15/19	SCALE: 1" = 40'	PROJECT NO.: 1818-10-100
DRAWN BY: JMS	CHECKED BY: JMS	APPROVED BY: JMS

MISSOURI CITY, MISSOURI  
WATER MAIN RELOCATION  
RELOCATION OF 12" DIA. 24" WATER MAIN LOCATED ALONG LEFT SIDE ROAD FROM STA. 18+00 TO SOUTH OF PHASES RD. SECTION COUNTY: MISSOURI CITY, MO: 63044

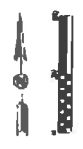




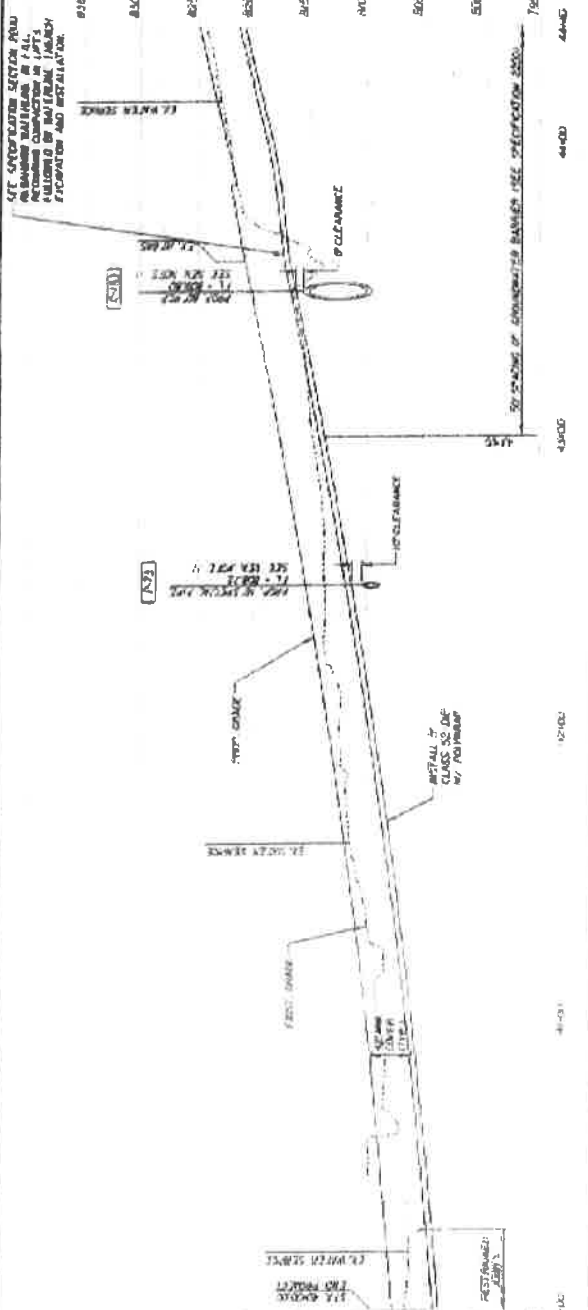
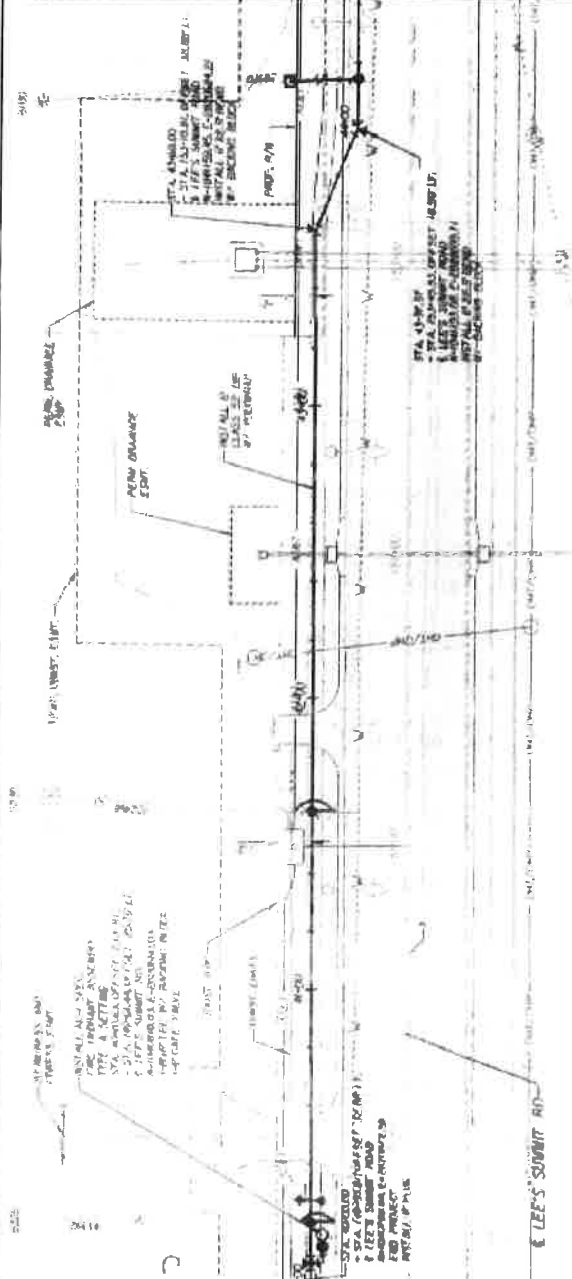
STA. 35+71.06 CONNECTION DETAIL  
NOT TO SCALE  
RESTRAIN JOINT'S THROUGHOUT

THE PROFESSIONAL ENGINEER'S SIGNATURE AND PERSONAL SEAL APPEAR ON THE FINAL ASSUMPTIVE CONTRACT AND ARE NOT TO BE REPRODUCED OR COPIED. ANY REPRODUCTION OF THESE DRAWINGS WITHOUT THE WRITTEN CONSENT OF THE ENGINEER IS STRICTLY PROHIBITED. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROJECT AND THE PROJECT ONLY. THE ENGINEER'S LIABILITY IS NOT EXTENDED TO ANY OTHER PROJECTS OR TO ANY OTHER PARTY. THE ENGINEER'S LIABILITY IS LIMITED TO THE PROJECT AND THE PROJECT ONLY. THE ENGINEER'S LIABILITY IS NOT EXTENDED TO ANY OTHER PROJECTS OR TO ANY OTHER PARTY.

PROFESSIONAL ENGINEER JOHN B. BROWN 100 W. 10th St. Topeka, KS 66604 TEL: 785-233-1111		<b>KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT</b> <b>WATER MAIN RELOCATION</b> RELOCATION OF 6" DIA. WATER MAIN UNDER PHILIPS RD. AND SUMMIT RD. IN WARDEN DISTRICT, KANSAS CITY, MISSOURI.	
PROJECT NO. 100-1000000 DRAWING NO. W-1000000-01 DATE: AUG. 2000 SCALE: AS SHOWN		<b>KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT</b> <b>WATER DISTRIBUTION</b> <b>RELOCATION PLAN</b> STA. 34+40 TO STA. 35+71.06	
PROJECT NO. 100-1000000 DRAWING NO. W-1000000-01 DATE: AUG. 2000 SCALE: AS SHOWN		PROJECT NO. 100-1000000 DRAWING NO. W-1000000-01 DATE: AUG. 2000 SCALE: AS SHOWN	



WATCHLINE STA. 44+40 - SEE SHEET W21

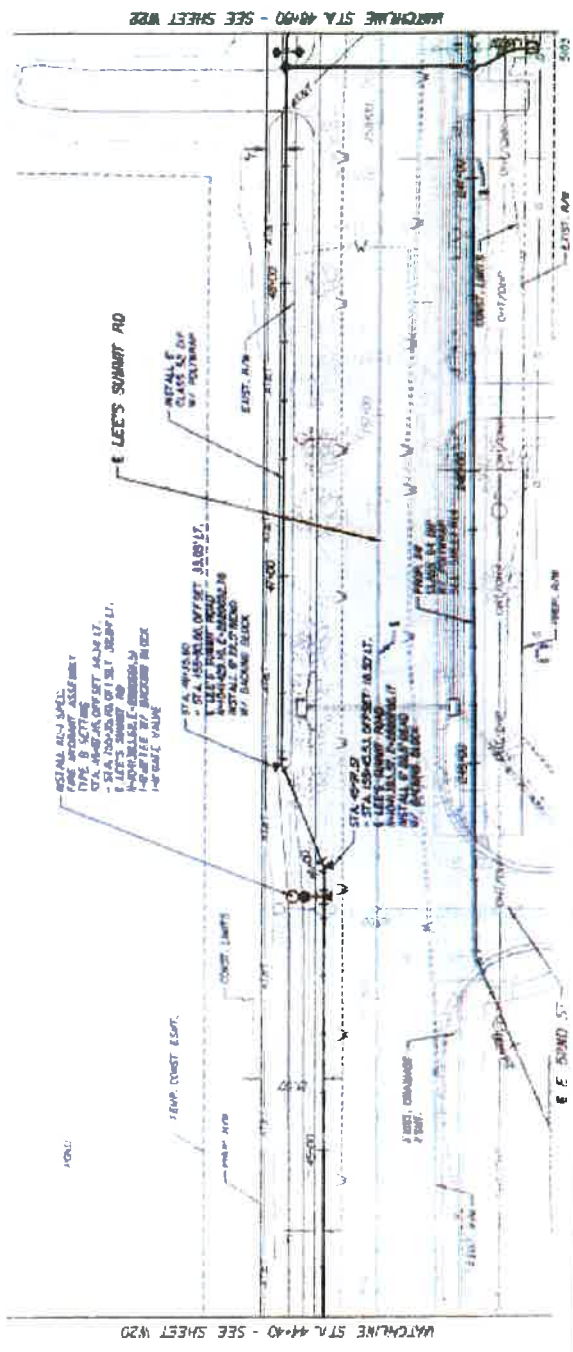


NO.	QUANTITY	UNIT	AMOUNT	DATE	BY	REVISION
1	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
2	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
3	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
4	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
5	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
6	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
7	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
8	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
9	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS
10	1	LINE	1.00	11/15/07	JK	ISSUED FOR PERMITS

**WATER MAIN RELOCATION**  
 RELOCATION OF 6" OF WATER MAIN LOCALITY  
 UNDER LEE'S SUMMIT ROAD FROM STA. 44+40 TO STA. 44+40  
 PROJECT NO. 07-000022

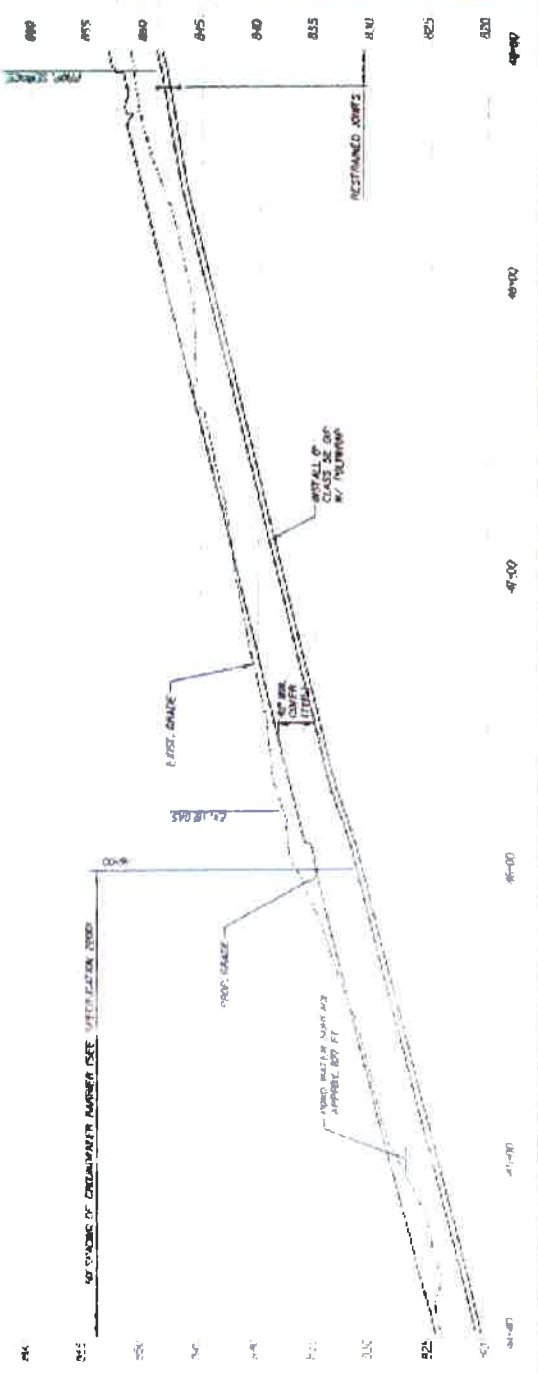
**WATER DISTRIBUTION RELOCATION PLAN**  
 STA. 40+00 TO STA. 44+40

**HNTB**  
 HNTB  
 1501 4TH ST  
 SUITE 200  
 ST. LOUIS, MO 63102  
 PROJECT NO. 07-000022  
 SHEET NO. W22 OF W23



WATCHLINE STA. 44+40 - SEE SHEET W20

WATCHLINE STA. 48+00 - SEE SHEET W22



NO CHANGES TO EXISTING MAINS IF SEE RELOCATION NOTES



REVISIONS			TOLERANCES			UNITS		
NO.	DATE	DESCRIPTION	AS BUILT	PERCENT	MINIMUM	AS BUILT	PERCENT	MINIMUM

PROJECT: WATER MAIN RELOCATION		DATE: 11/11/11	
CLIENT: HNTB		SCALE: AS SHOWN	
PROJECT NO.: 44-40		SHEET NO.: W21	
DRAWN BY: [Name]		CHECKED BY: [Name]	
DESIGNED BY: [Name]		APPROVED BY: [Name]	

**WATER MAIN RELOCATION**

RELOCATION OF 6\"/>

**WATER DISTRIBUTION RELOCATION PLAN**

STA. 44+40 TO STA. 48+00

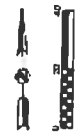
HNTB

11000 S. W. 11TH AVE.  
SUITE 100  
DALLAS, TEXAS 75241

11/11/11

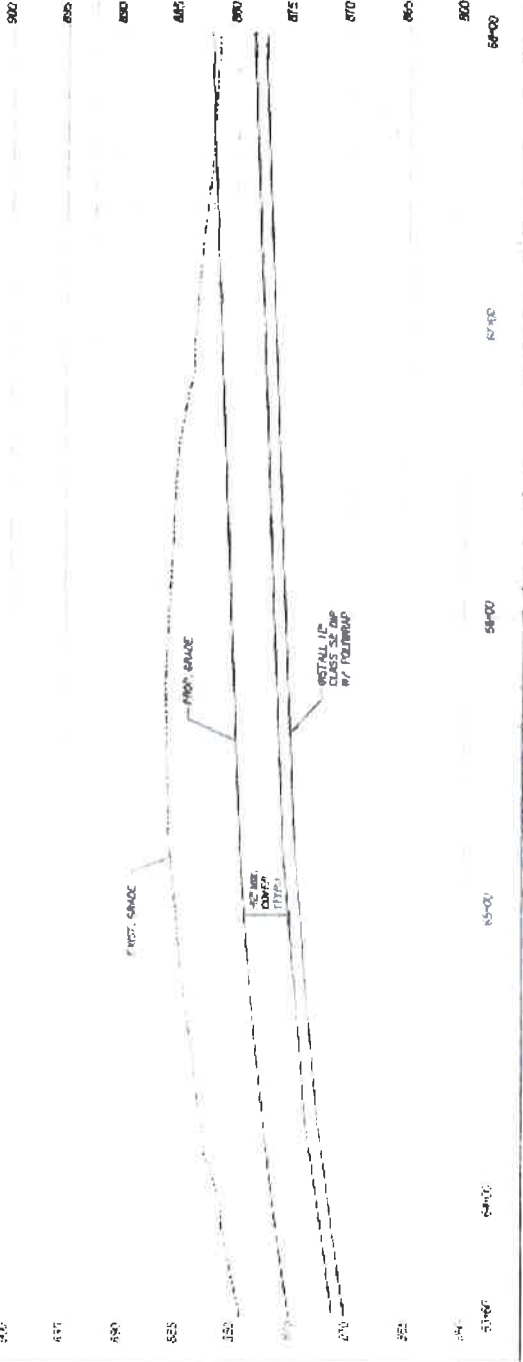
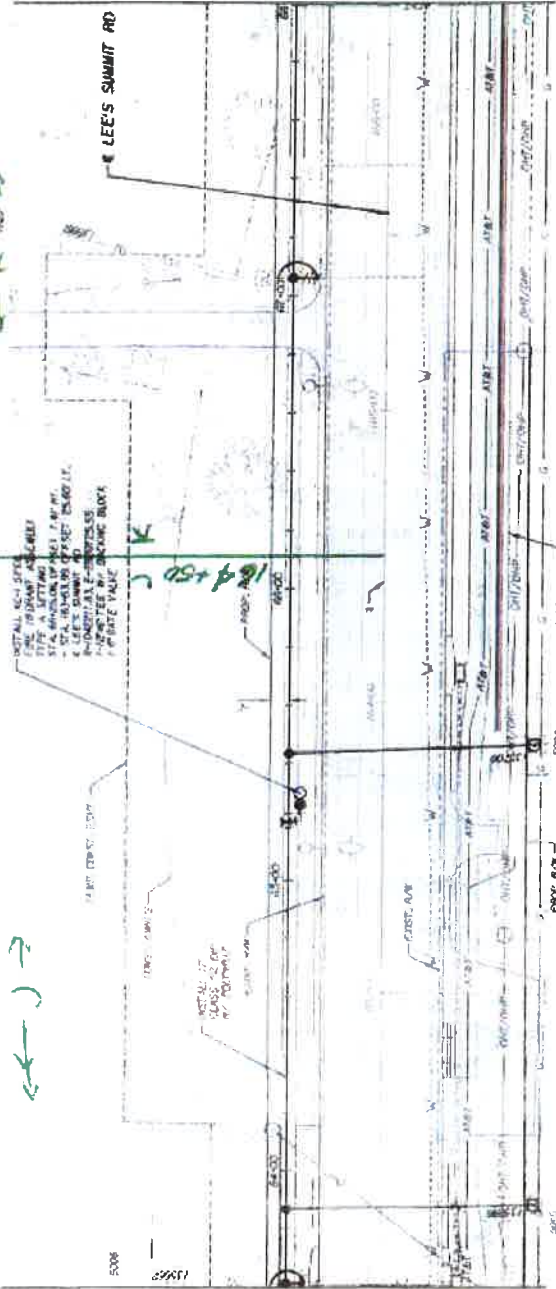
← J →





MATCHLINE STA. 63+60 - SEE SHEET W22

MATCHLINE STA. 68+00 - SEE SHEET W24



TRANSFER TABLE

NO.	DESCRIPTION	DATE	BY	CHKD.	REVISION
1	ISSUED FOR PERMITS	10/15/03	JMB	JMB	1
2	ISSUED FOR CONSTRUCTION	11/10/03	JMB	JMB	2
3	ISSUED FOR RECORD	12/15/03	JMB	JMB	3

THE PROFESSIONAL ENGINEER HAS REVIEWED AND APPROVED THE DESIGN AND SPECIFICATIONS FOR THIS PROJECT. HIS REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE DESIGN AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED TO HIM BY THE CLIENT. HIS REVIEW IS LIMITED TO THE DESIGN AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED TO HIM BY THE CLIENT.

PROFESSIONAL ENGINEER  
 JAMES B. SACKETT  
 E-13945

**WATER MAIN RELOCATION**  
 RELOCATION OF 24" DIAMETER WATER MAIN LOCATED ALONG LEE'S SUMMIT ROAD FROM NET 80 TO SOUTH OF SECTION 16-1-JACKSON COUNTY, JOHNS CITY, MISSOURI.

**WATER DISTRIBUTION RELOCATION PLAN**  
 STA. 63+60 TO STA. 68+00

PROJECT NO. **W22**  
 SHEET NO. **1** OF **2**

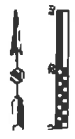
DATE: **10/15/03**

DESIGNED BY: **JMB**  
 CHECKED BY: **JMB**  
 DRAWN BY: **JMB**

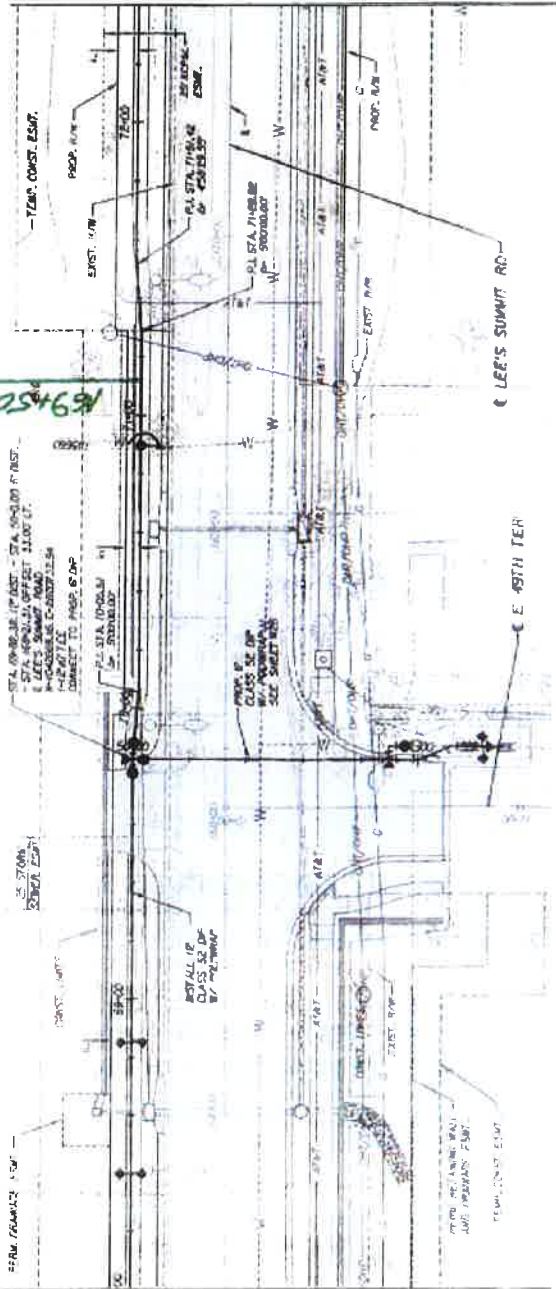
CONTRACT NO.: **16-1-JACKSON COUNTY, MISSOURI**

PROJECT LOCATION: **LEE'S SUMMIT ROAD, JOHNS CITY, MISSOURI**

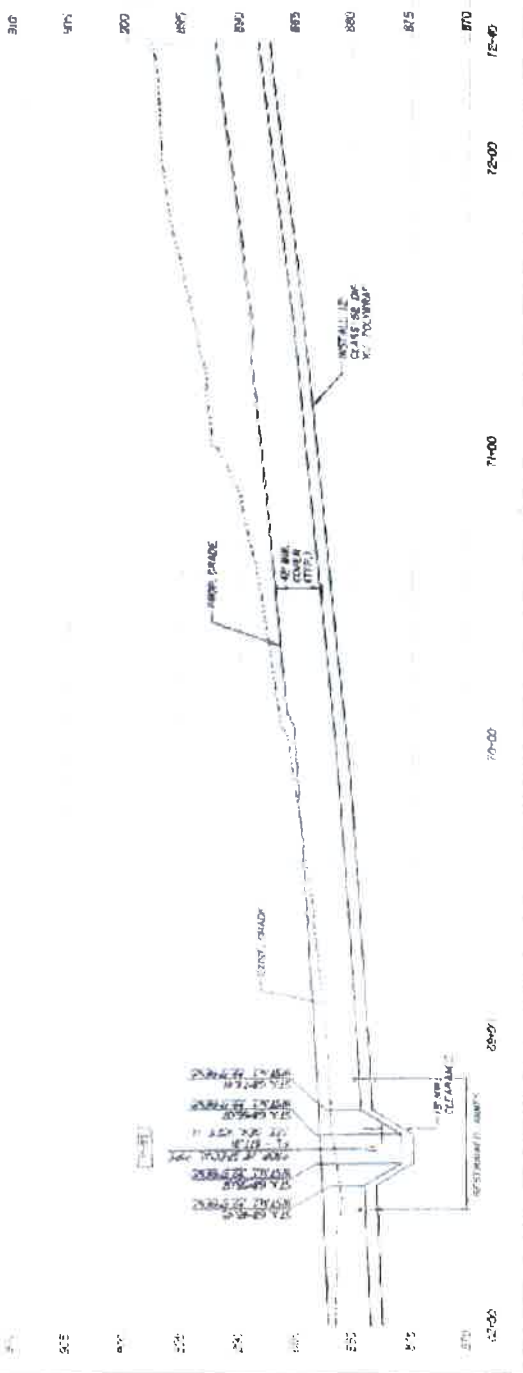
PROJECT NO. **W22** OF **W20**



MATCHLINE STA. 72+40 - SEE SHEET W25



MATCHLINE STA. 68+00 - SEE SHEET W24



REVISION TABLE

NO.	DATE	BY	CHKD BY	REVISION
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

THE PROFESSIONAL ENGINEER HAS REVIEWED THIS PROJECT AND HAS FOUND IT TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF JACKSON, MISSISSIPPI. HE HAS NOT GUARANTEED THE ACCURACY OF THE INFORMATION PROVIDED HEREON, NOR HAS HE GUARANTEED THE ACCURACY OF THE INFORMATION PROVIDED BY OTHER PROFESSIONALS OR CONTRACTORS. HE HAS NOT GUARANTEED THE ACCURACY OF THE INFORMATION PROVIDED BY OTHER PROFESSIONALS OR CONTRACTORS. HE HAS NOT GUARANTEED THE ACCURACY OF THE INFORMATION PROVIDED BY OTHER PROFESSIONALS OR CONTRACTORS.

**WATER MAIN RELOCATION**  
**WATER DISTRIBUTION**  
**RELOCATION PLAN**  
**STA. 68+00 TO STA. 72+40**

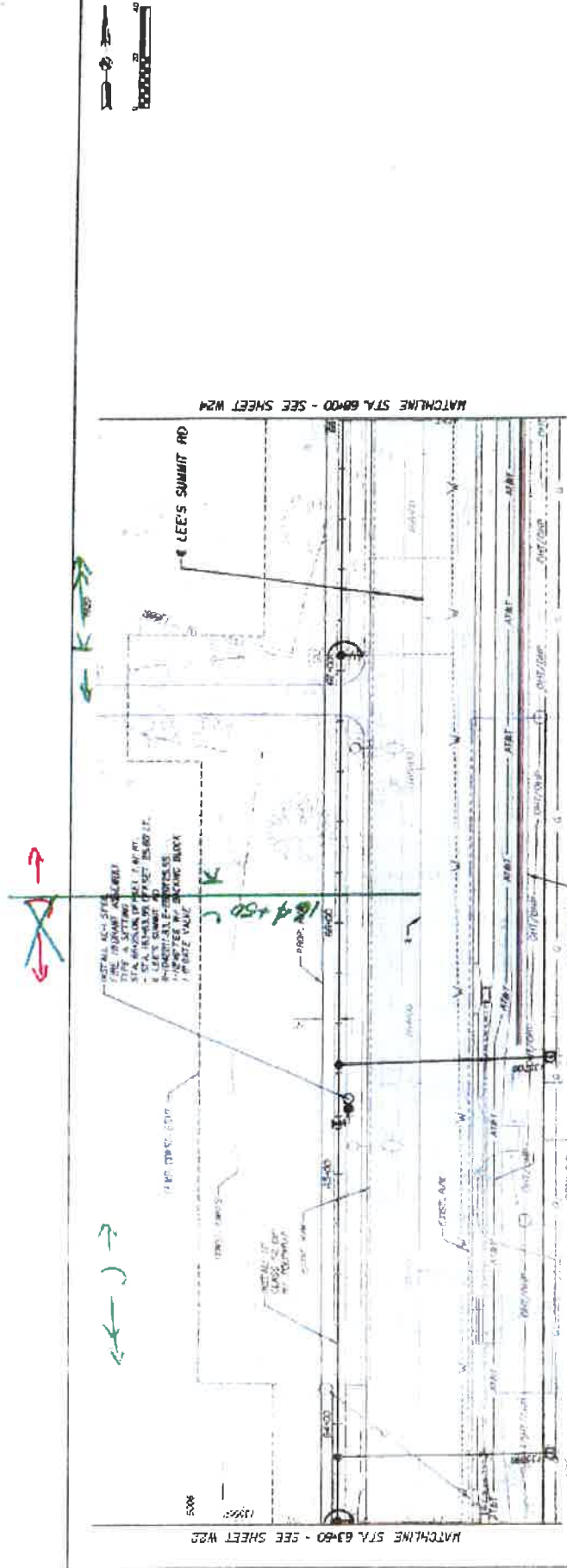
PROFESSIONAL ENGINEER (P.E.)

PROJECT NO. 0000025

DATE: 08/20/02

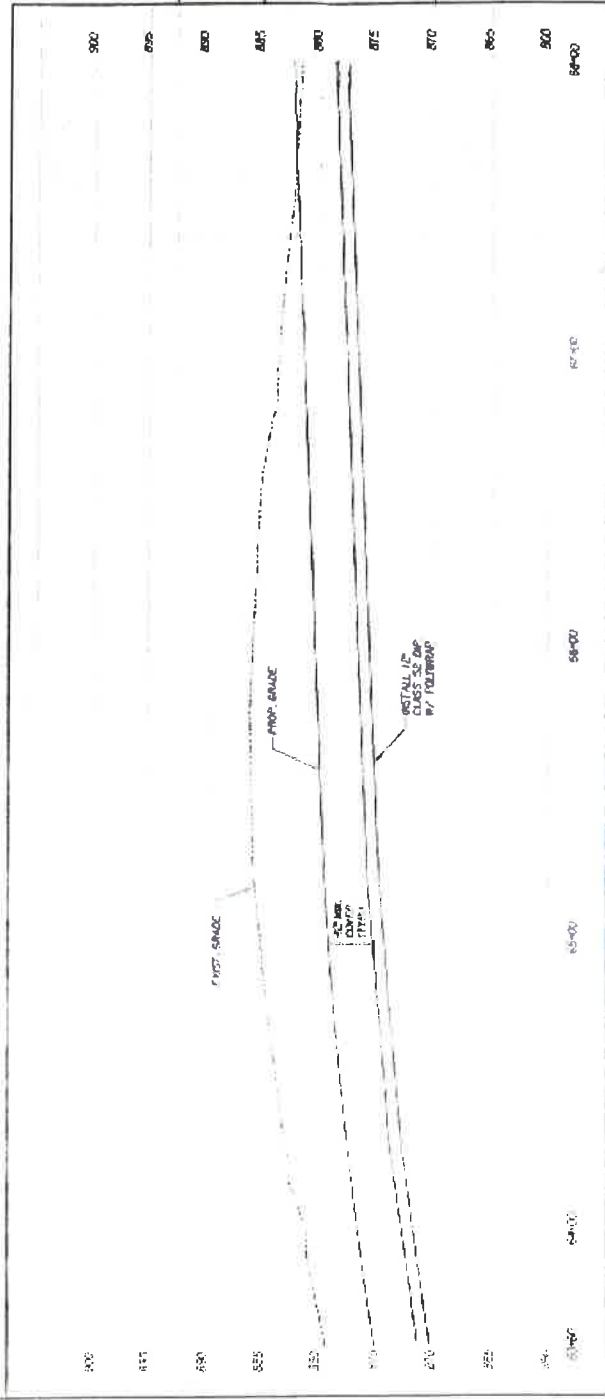
SCALE: 1" = 40'

PROJECT: W24 OF W25



MATCHLINE STA. 63+60 - SEE SHEET W22

MATCHLINE STA. 69+00 - SEE SHEET W24



920  
915  
910  
905  
900  
895  
890  
885  
880  
875  
870  
865  
860  
855  
850

63+00 64+00 65+00 66+00 67+00 68+00 69+00

TRANSMISSION TABLE

PIPE SIZE	PIPE TYPE	DEPTH	CONCRETE	SPACING	REMARKS
12"	CPVC	48"	YES	5'	
18"	CPVC	48"	YES	5'	
24"	CPVC	48"	YES	5'	
30"	CPVC	48"	YES	5'	
36"	CPVC	48"	YES	5'	
42"	CPVC	48"	YES	5'	
48"	CPVC	48"	YES	5'	
54"	CPVC	48"	YES	5'	
60"	CPVC	48"	YES	5'	
66"	CPVC	48"	YES	5'	
72"	CPVC	48"	YES	5'	
78"	CPVC	48"	YES	5'	
84"	CPVC	48"	YES	5'	
90"	CPVC	48"	YES	5'	

THE PROFESSIONAL ENGINEER'S AND SURVEYOR'S SEAL, ADDRESS, AND EXPIRATION DATE ARE REQUIRED ON THE MAIN DRAWING. THE PROFESSIONAL ENGINEER'S AND SURVEYOR'S SEAL, ADDRESS, AND EXPIRATION DATE ARE REQUIRED ON THE MAIN DRAWING. THE PROFESSIONAL ENGINEER'S AND SURVEYOR'S SEAL, ADDRESS, AND EXPIRATION DATE ARE REQUIRED ON THE MAIN DRAWING.

PROFESSIONAL ENGINEER'S SEAL  
JON H. WELLS  
E-2005

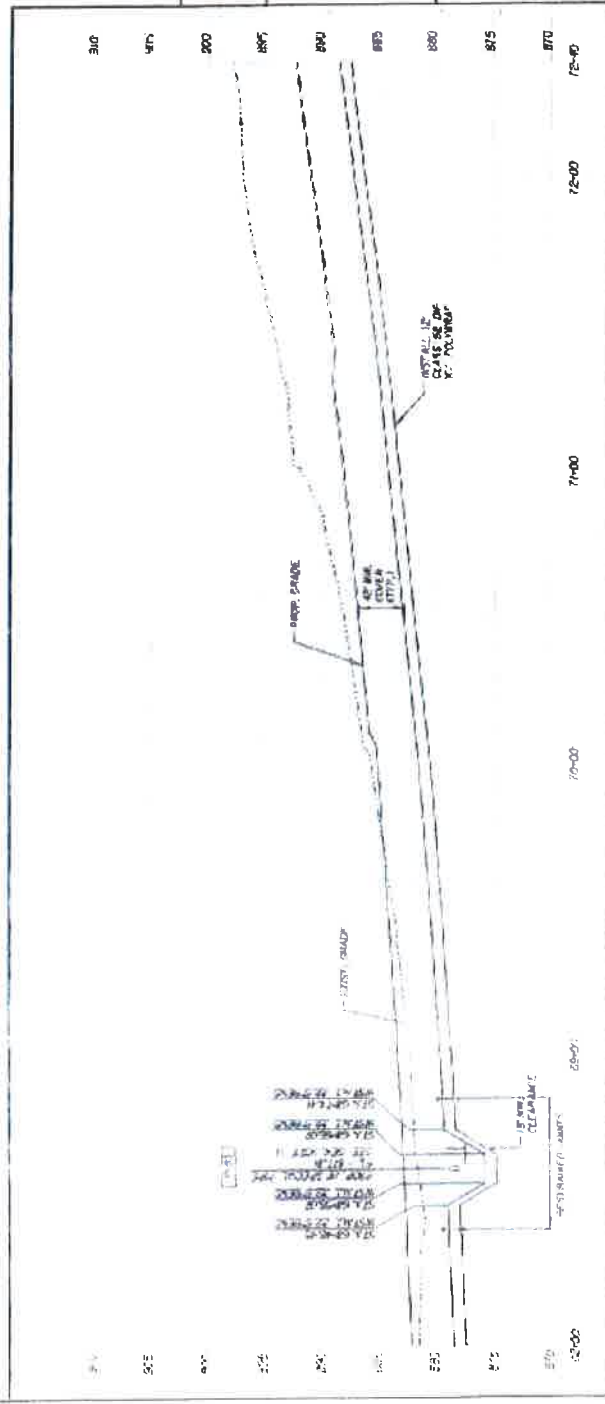
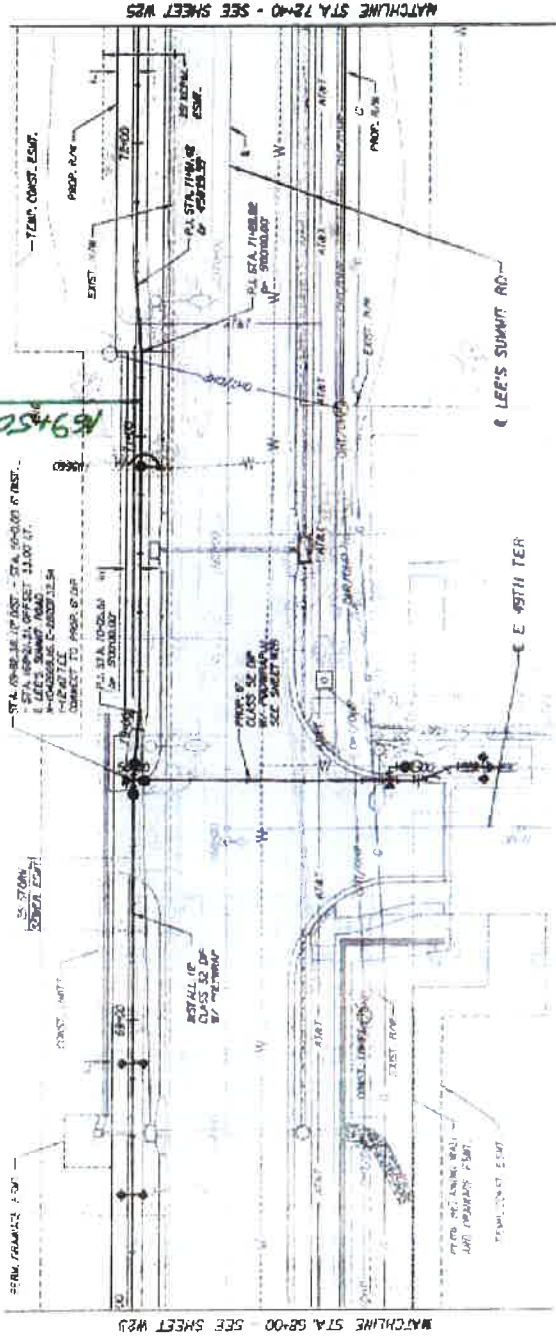
**WATER MAIN RELOCATION**  
RELOCATION OF 60" CPVC WATER MAIN LOCATED UNDER LEE'S SUMMIT ROAD TO SOUTH OF JACKSONVILLE COUNTY, FLORIDA. PROJECT TO BE COMPLETED BY THE END OF 2005.

**WATER DISTRIBUTION RELOCATION PLAN**  
STA. 63+60 TO STA. 69+00

DATE: 11/14/05  
DRAWN BY: JHW  
CHECKED BY: JHW  
SCALE: AS SHOWN

DATE	11/14/05
BY	JHW
CHECKED	JHW
SCALE	AS SHOWN

PROJECT NO. N/A  
SHEET NO. W23 OF W29



PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION	BY	CHECKED
1	10/15/14	PREPARED FOR SUBMITTAL	JK	JK
2	10/15/14	REVISED PER COMMENTS	JK	JK
3	10/15/14	REVISED PER COMMENTS	JK	JK
4	10/15/14	REVISED PER COMMENTS	JK	JK
5	10/15/14	REVISED PER COMMENTS	JK	JK
6	10/15/14	REVISED PER COMMENTS	JK	JK
7	10/15/14	REVISED PER COMMENTS	JK	JK
8	10/15/14	REVISED PER COMMENTS	JK	JK
9	10/15/14	REVISED PER COMMENTS	JK	JK
10	10/15/14	REVISED PER COMMENTS	JK	JK

THE PROFESSIONAL ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR ALL PLANS AND SPECIFICATIONS. THE PROFESSIONAL ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR ALL PLANS AND SPECIFICATIONS. THE PROFESSIONAL ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR ALL PLANS AND SPECIFICATIONS.

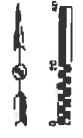
**WATER MAIN RELOCATION**  
 RELOCATION OF 12" D. WATER MAIN LOCAL TO ALONG LEE'S SUMMIT ROAD FROM STA. 68+00 TO STA. 72+40. PROJECT NO. 15461-017-1201.

**WATER DISTRIBUTION RELOCATION PLAN**  
 STA. 68+00 TO STA. 72+40

PROFESSIONAL ENGINEER  
 NAME: JAMES K. JOHNSON  
 LICENSE NO.: 15461-017-1201  
 PROJECT NO.: 15461-017-1201

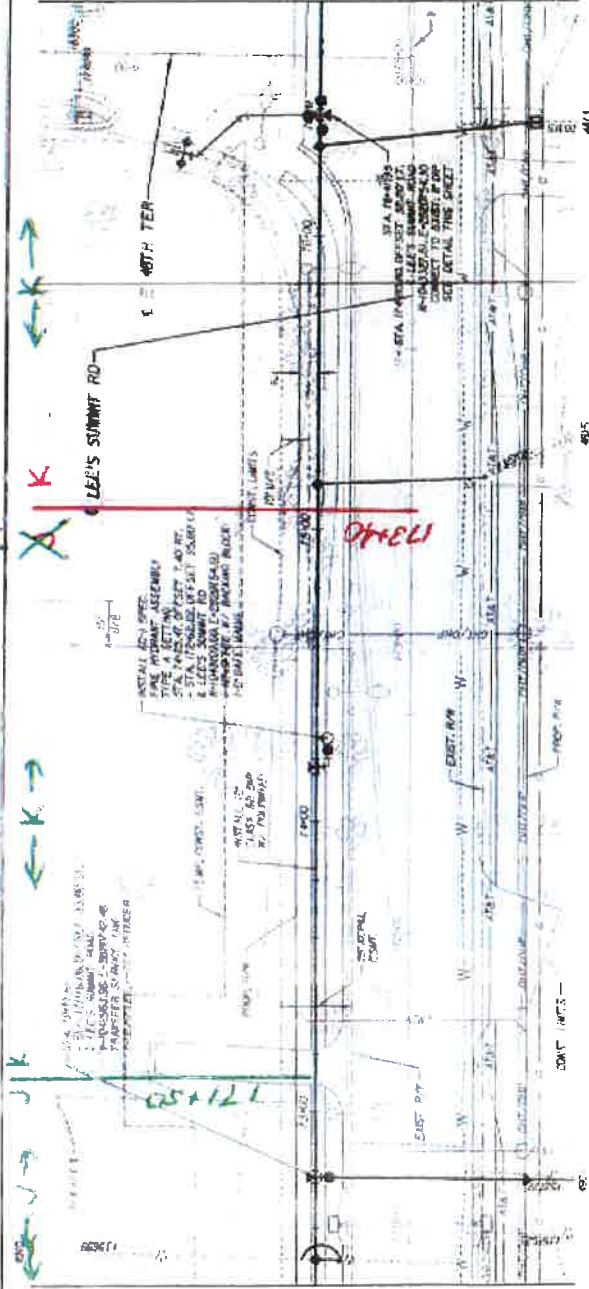
DATE	10/15/14
BY	JK
CHECKED	JK
DATE	10/15/14
BY	JK
CHECKED	JK
DATE	10/15/14
BY	JK
CHECKED	JK
DATE	10/15/14
BY	JK
CHECKED	JK



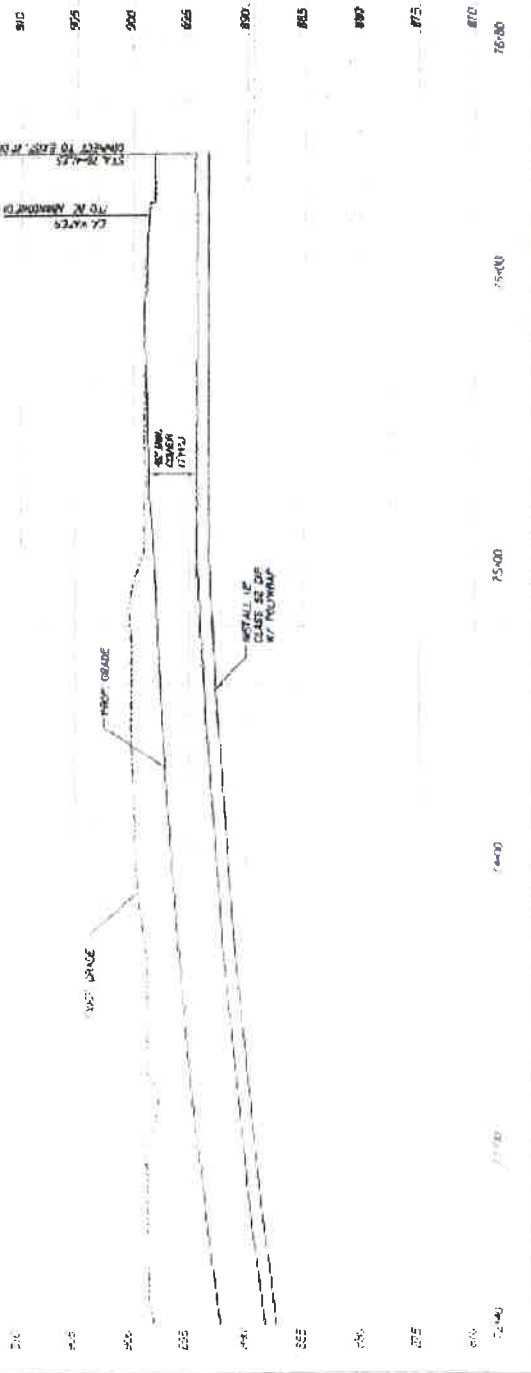


MATCHLINE STA. 72+45 - SEE SHEET W24

MATCHLINE STA. 76+80 - SEE SHEET W27



DEVELOP STA. 76+80 TO BE DETERMINED IN FINAL DESIGN PERFORMING WRECK SURVEY



TRANSFER TABLE

NUMBER	REVISION	DATE	BY	CHKD	APP'D

THE CONTRACTOR SHALL MAINTAIN THE EXISTING 48\"/>

**WATER MAIN RELOCATION**  
 RELOCATION OF 48\"/>

**WATER DISTRIBUTION PLAN**  
 RELOCATION PLAN  
 STA. 72+45 TO STA. 76+80

PROJECT NO. HNTB  
 12-10-2010  
 12-10-2010  
 12-10-2010

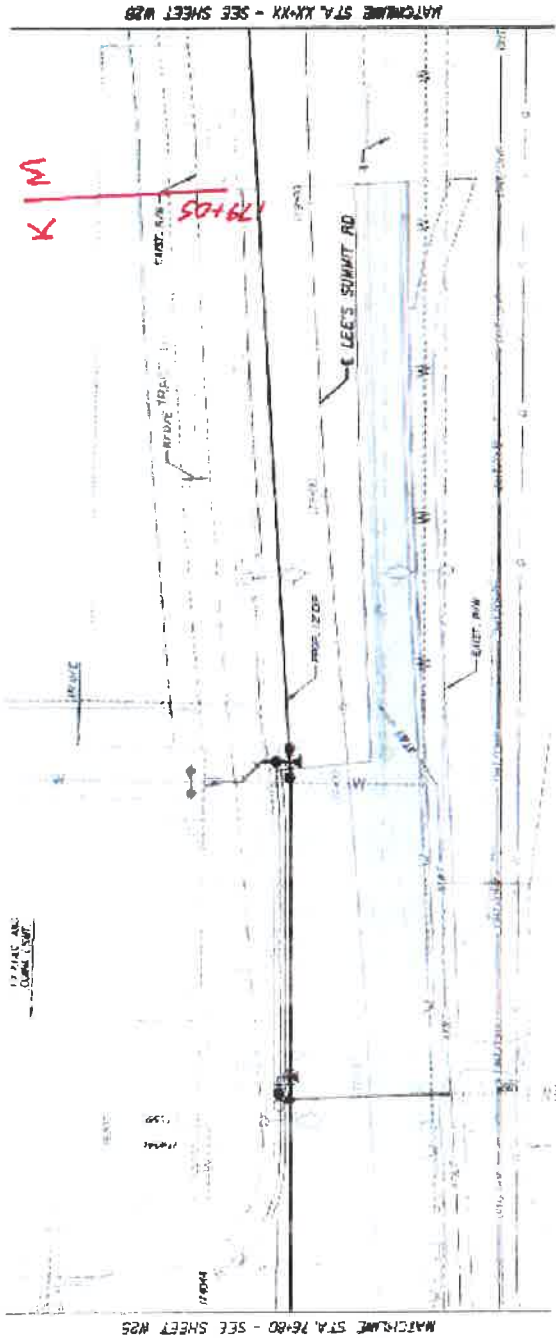
DATE: 12-10-2010  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 IN CHARGE: [Name]

SCALE: AS SHOWN  
 SHEET NO. W25  
 OF W25



M = MoDOT

← K →



OF PROFESSIONAL ENGINEER AND ARCHITECT HAS REVIEWED THIS PROJECT AND HAS FOUND IT TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MISSOURI ENGINEERING AND ARCHITECTURE BOARD. THE ENGINEER AND ARCHITECT ARE NOT RESPONSIBLE FOR THE CONSTRUCTION OF THIS PROJECT OR FOR THE PERFORMANCE OF THE CONTRACTOR.

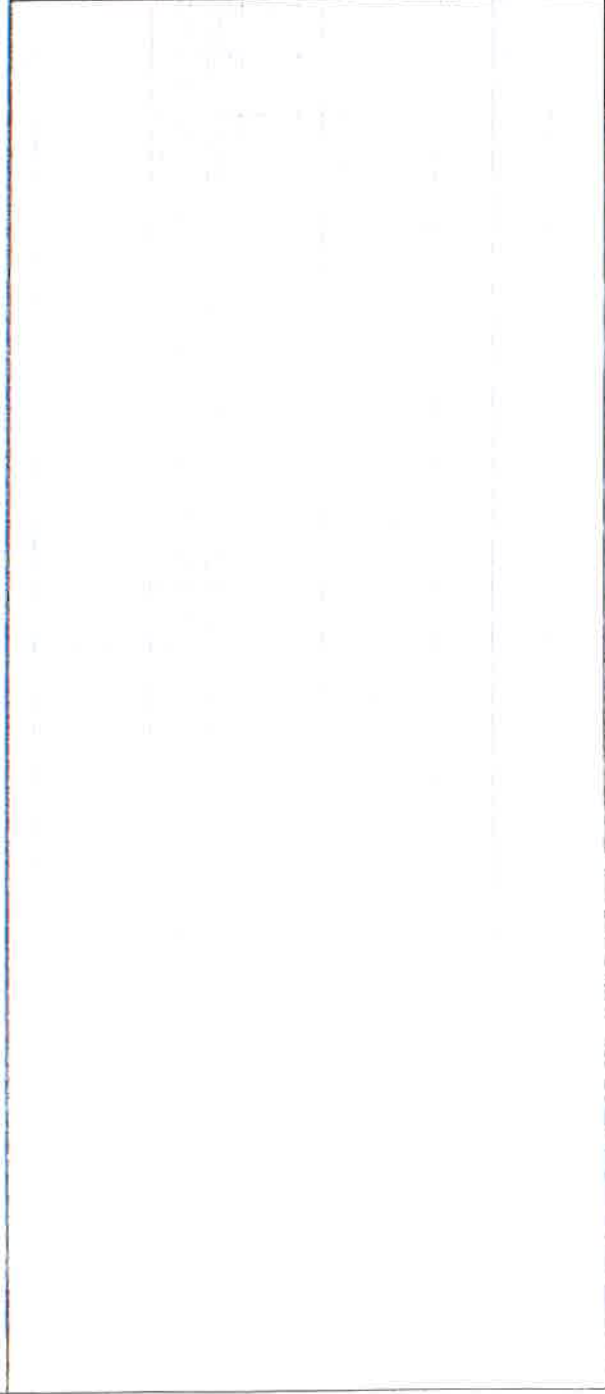
**WATER MAIN RELOCATION**  
WATER DISTRIBUTION  
RELOCATION PLAN  
STA. 76+80 TO STA. XX

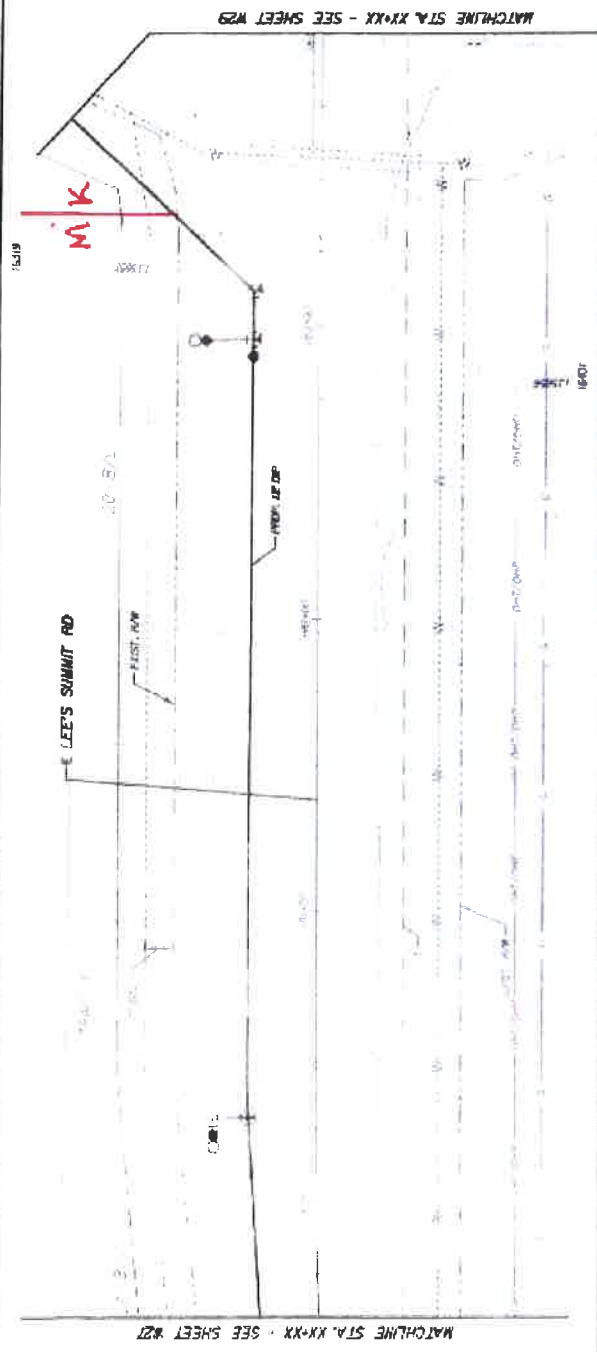
**HINTS**  
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE MISSOURI ENGINEERING AND ARCHITECTURE BOARD REQUIREMENTS.  
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE APPROPRIATE AGENCIES.  
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.  
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS TO ALL ADJACENT PROPERTIES.  
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL EXISTING UTILITIES AND STRUCTURES TO ORIGINAL OR BETTER CONDITION.  
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP ALL DEBRIS AND RESTORING ALL AREAS TO ORIGINAL OR BETTER CONDITION.  
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION.  
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL AFFECTED PARTIES IN WRITING AT LEAST 14 DAYS BEFORE THE START OF CONSTRUCTION.  
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL AFFECTED PARTIES IN WRITING AT LEAST 14 DAYS BEFORE THE END OF CONSTRUCTION.  
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL AFFECTED PARTIES IN WRITING AT LEAST 14 DAYS BEFORE THE START OF ANY MAJOR WORK.

DESIGNED BY	DATE	SCALE
CONTRACT NO.	DATE	SCALE
SHEET NO.	DATE	SCALE
TOTAL SHEETS	DATE	SCALE

PROFESSIONAL ENGINEER  
JAMES BLUMETT  
C-000000

MISSOURI CITY, MISSOURI WATER SERVICES DEPARTMENT





THE PROFESSIONAL ENGINEER'S DESIGN AND PERSONAL SEAL APPEAR ON THIS SCALE DRAWING. THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. ANY REVISIONS TO THIS DRAWING MUST BE MADE BY THE ENGINEER AND MUST BE APPROVED BY THE CITY ENGINEER. THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.

PROFESSIONAL ENGINEER'S SEAL  
 JOHN BRADLEY C-2098

**WATER MAIN RELOCATION**  
 RELOCATION OF 30" DIA. 20' DEPTH MAIN LOCATED ALONG LEE'S SUMMIT ROAD FROM STA 40 TO SOUTH OF INTERSECTION OF LEE'S SUMMIT ROAD, WARDEN CITY, MISSOURI.  
**WATER DISTRIBUTION RELOCATION PLAN**  
 STA. XX TO STA. XX

PROJECT NO.		SHEET NO.	
18111		18111-18111	
DATE		DATE	
10/15/11		10/15/11	
DRAWN BY		CHECKED BY	
JMB		JMB	
SCALE		SCALE	
AS SHOWN		AS SHOWN	
PROJECT NO.		PROJECT NO.	
18111		18111	
SHEET NO.		SHEET NO.	
18111-18111		18111-18111	

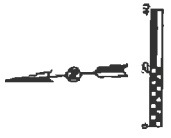
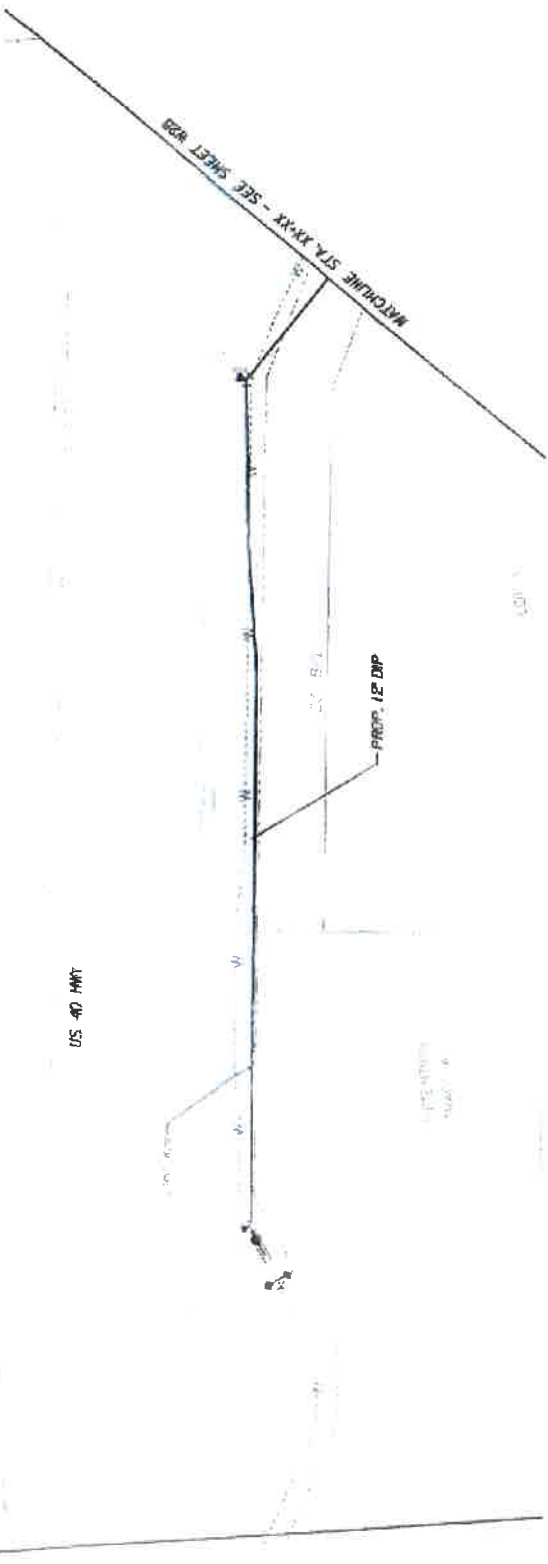
NO TOLERANCE  
 NO CORRECTION  
 NO ALTERATION  
 NO DEVIATION  
 NO VARIATION

BY THE ENGINEER  
 JOHN BRADLEY  
 MISSOURI REGISTERED PROFESSIONAL ENGINEER  
 NO. 18111  
 EXPIRES 10/15/11

MISSOURI REGISTERED PROFESSIONAL ENGINEER  
 JOHN BRADLEY  
 NO. 18111  
 EXPIRES 10/15/11

PROJECT NO. 18111  
 SHEET NO. 18111-18111

← K →



THE PROFESSIONAL ENGINEER'S SIGNATURE AND PERSONAL SEAL APPEARS ON THE FACE HEREOF.  
REVISIONS TO THIS PLAN SHALL BE MADE BY THE ENGINEER'S SIGNATURE AND SEAL.  
NO OTHER DOCUMENTS OR INSTRUMENTS SHALL BE MADE BY THE PROFESSIONAL ENGINEER.  
PROJECT TO BE COMPLETED BY THE CITY OF KANSAS CITY, MISSOURI.

PROFESSIONAL ENGINEER J.E. JAMES  
JOHN B. JAMES  
7-28845

KANSAS CITY, MISSOURI WATER SERVICES DEPARTMENT  
**WATER MAIN RELOCATION**  
RELOCATION OF 24\"/>

DATE OF ISSUE	10/11/11	DATE OF REVISION	
ISSUED BY	J.E. JAMES	DATE	
ISSUED FOR	NO. 11111	DATE	
CONTRACT NO.	N/A	DATE COMPLETED	
PROJECT NO.	11111	DATE COMPLETED	
PROJECT NAME	WATER MAIN RELOCATION		
PROJECT LOCATION	KANSAS CITY, MISSOURI		
PROJECT NUMBER	11111		
PROJECT DESCRIPTION	WATER MAIN RELOCATION		
PROJECT DRAWING NO.	11111		
PROJECT SHEET NO.	11111		
PROJECT TOTAL SHEETS	11111		
PROJECT TOTAL SHEETS COMPLETED	11111		
PROJECT TOTAL SHEETS REMAINING	11111		
PROJECT TOTAL SHEETS COMPLETED PERCENT	11111		
PROJECT TOTAL SHEETS REMAINING PERCENT	11111		
PROJECT TOTAL SHEETS COMPLETED PERCENT	11111		
PROJECT TOTAL SHEETS REMAINING PERCENT	11111		
PROJECT TOTAL SHEETS COMPLETED PERCENT	11111		
PROJECT TOTAL SHEETS REMAINING PERCENT	11111		

FOR THE CITY OF KANSAS CITY, MISSOURI  
DATE: 10/11/11  
PROJECT NO.: 11111  
SHEET NO.: 11111  
TOTAL SHEETS: 11111