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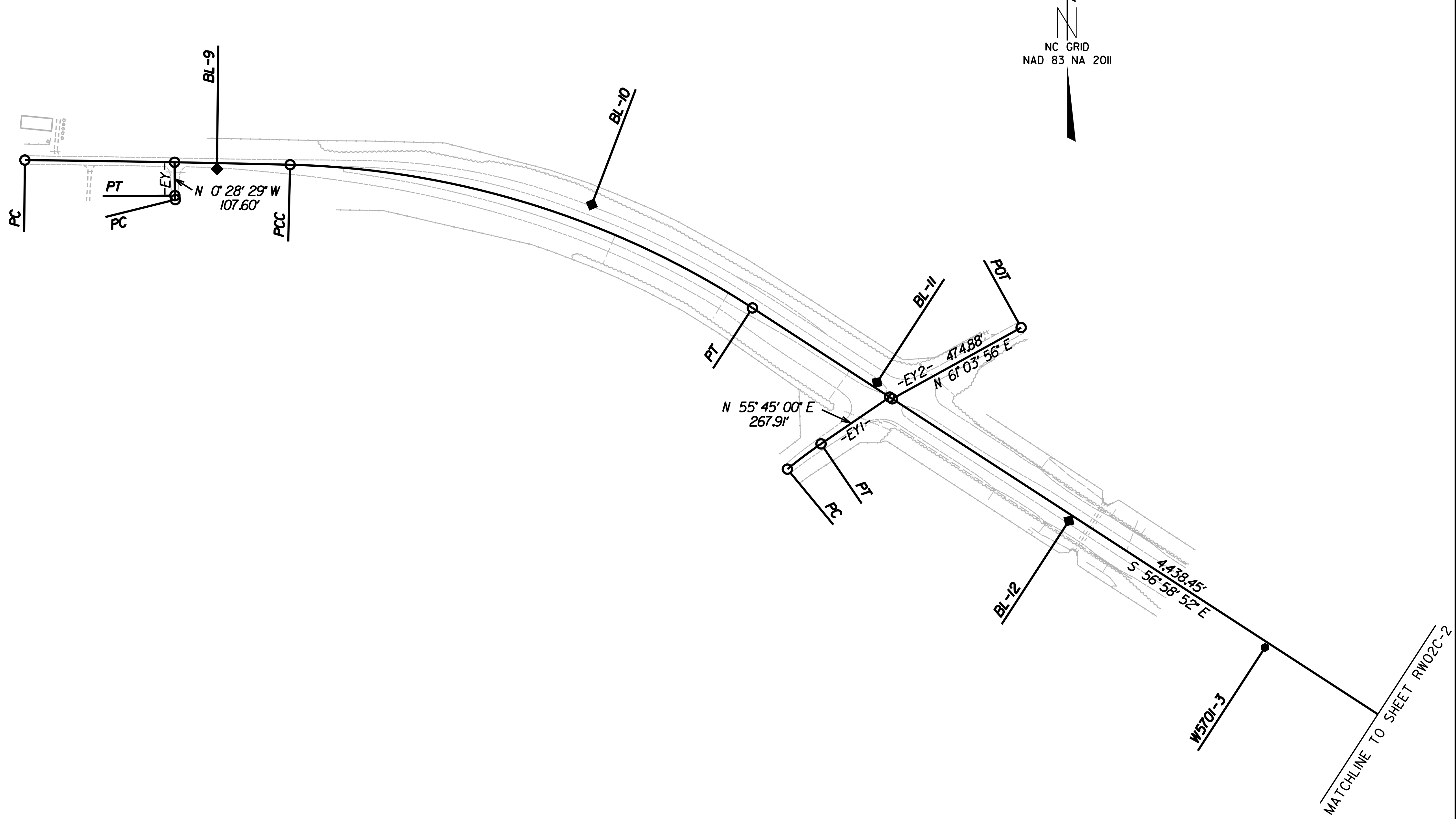
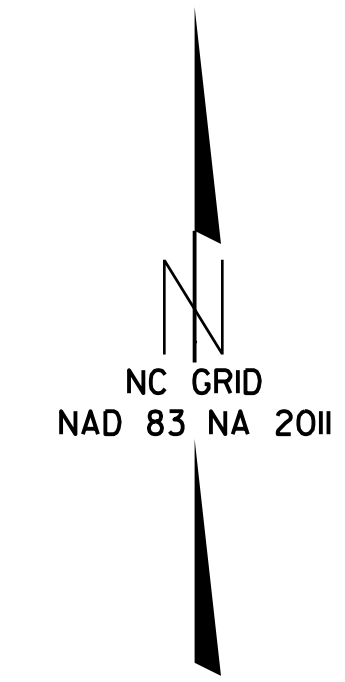
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6/2/09

PROJECT REFERENCE NO.	SHEET NO.
W-5701B	RW02C-1
<b>Location and Surveys</b>	
Johnson, Mirmiran & Thompson, Inc. 9201 Arboretum Parkway, Suite 310 Richmond, VA 23236	

# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-6  
FOR FURTHER  
ALIGNMENT DETAILS

### NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED FROM VARIOUS SOURCES. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.

REVISIONS

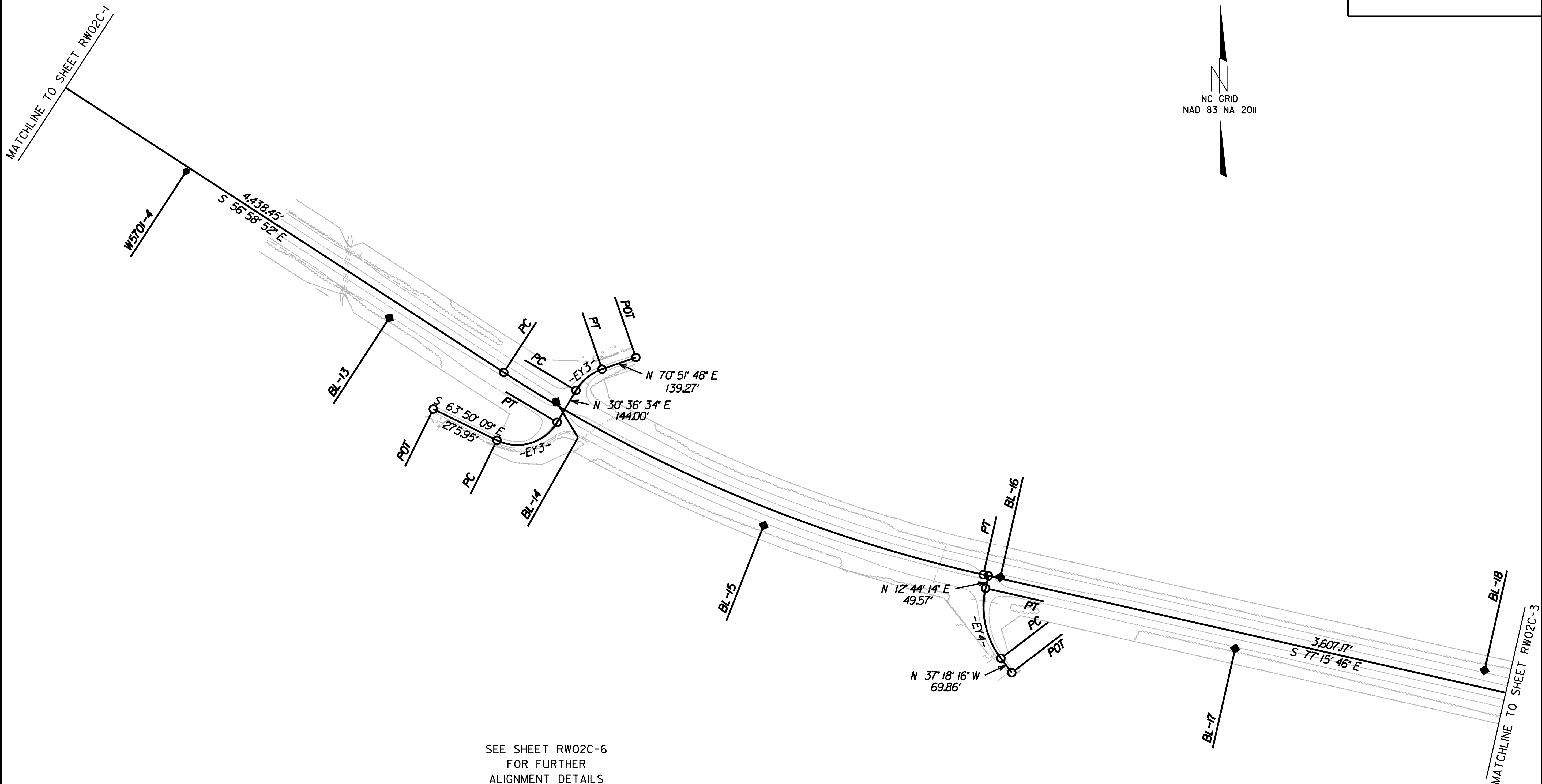
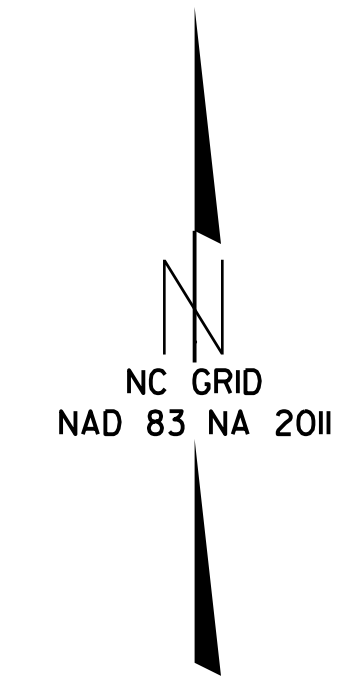
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 Lcdowns AT LS-311565

6/2/09

PROJECT REFERENCE NO.	SHEET NO.
W-5701B	RW02C-2
<b>Location and Surveys</b>	
Johnson, Mirmiran & Thompson, Inc. 9201 Arboretum Parkway, Suite 310 Richmond, VA 23236	

# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-6  
FOR FURTHER  
ALIGNMENT DETAILS

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REVISIONS

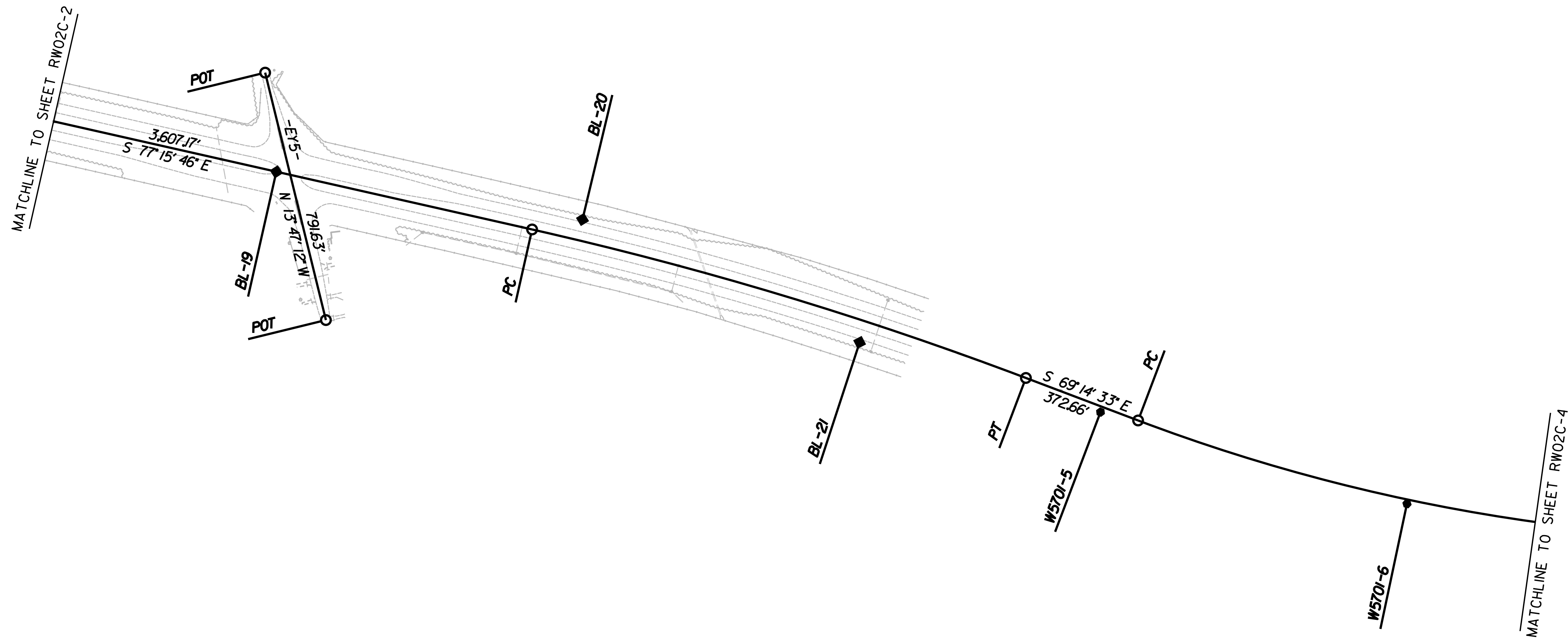
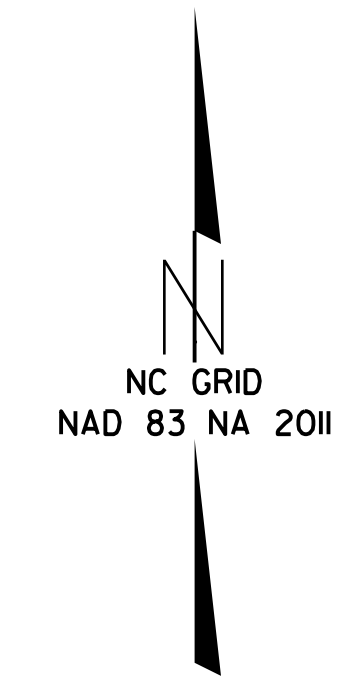
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 Lsdwms AT LS-311565

6/2/09

PROJECT REFERENCE NO.	SHEET NO.
W-5701B	RW02C-3
<b>Location and Surveys</b>	
Johnson, Mirmiran & Thompson, Inc. 9201 Arboretum Parkway, Suite 310 Richmond, VA 23236	

# SURVEY CONTROL SHEET

## W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION



SEE SHEET RW02C-6  
 FOR FURTHER  
 ALIGNMENT DETAILS

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REVISIONS

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6/2/09

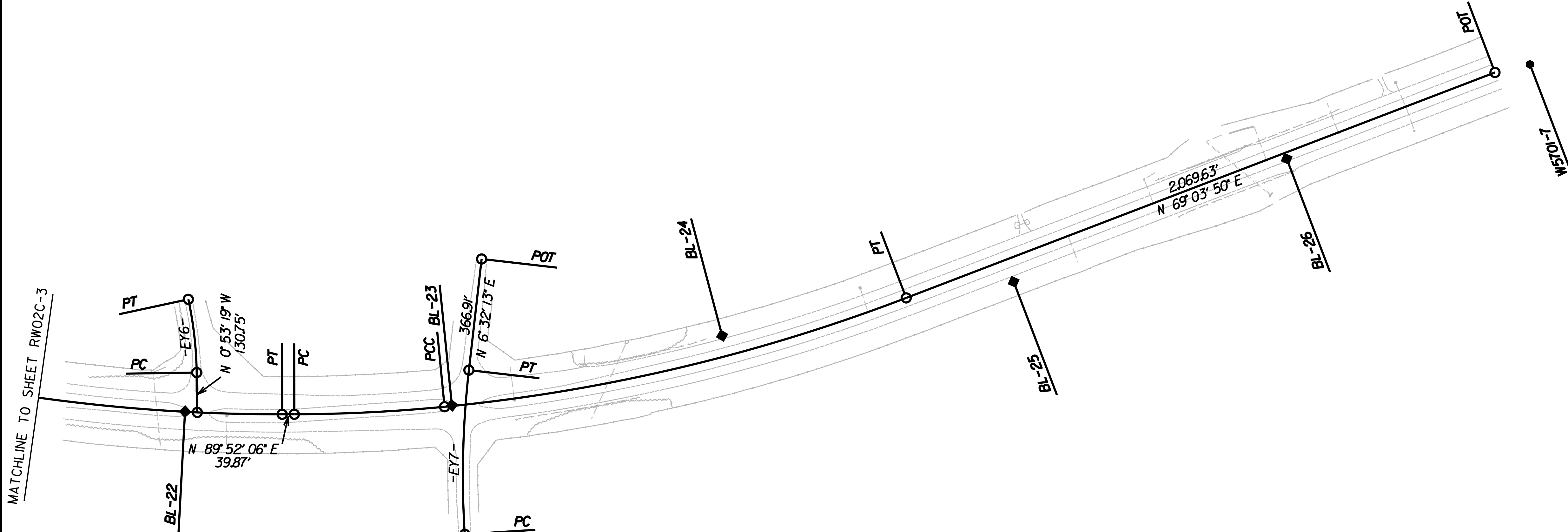
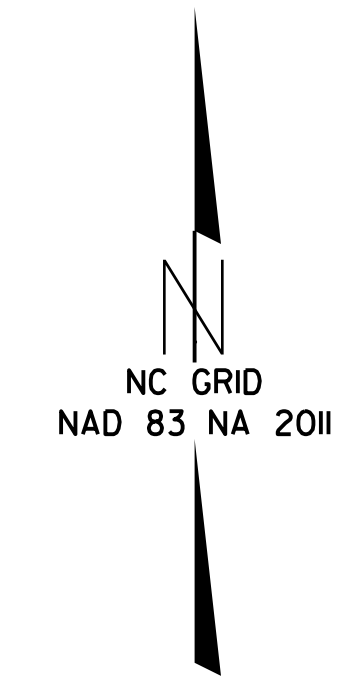
REVISIONS

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# SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
W-5701B	RW02C-4
Location and Surveys	
Johnson, Mirmiran & Thompson, Inc. 9201 Arboretum Parkway, Suite 310 Richmond, VA 23236	



W5701-8

SEE SHEET RW02C-6  
FOR FURTHER  
ALIGNMENT DETAILS

### NOTES:

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# SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. W-5701B	SHEET NO. RW02C-5
Location and Surveys	
Johnson, Mirmiran & Thompson, Inc. 9201 Arboretum Parkway, Suite 310 Richmond, VA 23236	

6/2/99

REVISIONS

BL	POINT	DESC.	NORTH	EAST	ELEVATION
W57011	W5701-1		983527.8700	2544116.1900	94.22
W57012	W5701-2		983451.4500	2545053.7900	79.75
BL9	BL-9		983389.9500	2546056.5500	85.67
BL10	BL-10		983274.8100	2547265.3200	82.79
BL11	BL-11		982700.8200	2548185.3000	76.70
BL12	BL-12		982254.3400	2548804.0400	63.39
W57013	W5701-3		981846.0700	2549436.6300	65.61
W57014	W5701-4		981304.7300	2550269.4900	69.11
BL13	BL-13		980734.7800	2551059.5900	65.48
BL14	BL-14		980408.7200	2551709.8900	73.13
BL15	BL-15		979926.6100	2552516.0100	79.14
BL16	BL-16		979726.4000	2553436.9700	88.76
BL17	BL-17		979447.4100	2554350.2700	94.55
BL18	BL-18		979363.7100	2555320.4800	93.49
BL19	BL-19		979119.4000	2556094.4800	92.82
BL20	BL-20		978971.2700	2557045.3000	85.75
BL21	BL-21		978589.3400	2557906.0700	77.95
W57015	W5701-5		978372.5100	2558654.0300	72.98
W57016	W5701-6		978087.8200	2559605.7700	76.79
BL22	BL-22		977985.2200	2560495.1100	83.44
BL23	BL-23		978005.7700	2561361.3600	89.98
BL24	BL-24		978234.6700	2562248.5500	90.48
BL25	BL-25		978411.1900	2563205.5800	84.35
BL26	BL-26		978814.5400	2564102.0700	79.62
W57017	W5701-7		979124.5500	2564900.2900	79.73
W57018	W5701-8		979479.6000	2565827.0800	87.06

.....  
 BM1 ELEVATION • 82.17  
 N 983254 E 2547337  
 SET ROD AND CAP  
 .....

.....  
 BM6 ELEVATION • 89.61  
 N 979240 E 2556173  
 SET ROD AND CAP  
 .....

.....  
 BM2 ELEVATION • 61.37  
 N 982379 E 2548798  
 SET NAIL IN 16" POPLAR  
 .....

.....  
 BM7 ELEVATION • 77.83  
 N 978642 E 2558173  
 SET ROD AND CAP  
 .....

.....  
 BM3 ELEVATION • 65.79  
 N 981151 E 2550663  
 SET ROD AND CAP  
 .....

.....  
 BM8 ELEVATION • 79.56  
 N 978093 E 2560056  
 SET ROD AND CAP  
 .....

.....  
 BM4 ELEVATION • 73.71  
 N 980233 E 2552169  
 SET ROD AND CAP  
 .....

.....  
 BM9 ELEVATION • 91.07  
 N 978208 E 2562139  
 SET ROD AND CAP  
 .....

.....  
 BM5 ELEVATION • 93.78  
 N 979579 E 2554381  
 SET ROD AND CAP  
 .....

.....  
 BM10 ELEVATION • 78.01  
 N 978936 E 2564166  
 SET ROD AND CAP  
 .....

**NOTES:**

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 Lsdwms AT LS-311565

# SURVEY CONTROL SHEET

W/ EXISTING CENTERLINE ALIGNMENTS PRIOR TO CONSTRUCTION

PROJECT REFERENCE NO. W-5701B	SHEET NO. RW02C-6
<b>Location and Surveys</b>	
Johnson, Mirmiran & Thompson, Inc. 9201 Arboretum Parkway, Suite 310 Richmond, VA 23236	

REVISIONS

EL										
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	
PC	983418.154	2545437.129	S 88°59'21.9" E	855.42	00°47'25.9"(RT)	00°05'32.7"	855.43	427.72	62000.00	
CURVE										
PCC	983403.067	2546292.416	S 72°47'15.4" E	1560.79	31°36'47.0"(RT)	01°59'59.5"	1580.77	811.07	2865.00	
CURVE										
PT	982941.205	2547783.310	S 56°58'51.9" E	4438.45						
PC	980522.623	2551504.910	S 67°07'18.8" E	2024.78	20°16'53.9"(LT)	00°59'47.2"	2035.39	1028.46	5750.00	
CURVE										
PT	979735.445	2553370.410	S 77°15'45.8" E	3607.17						
PC	978940.132	2556888.812	S 73°15'09.2" E	1601.47	08°01'13.1"(RT)	00°30'01.4"	1602.78	802.70	11450.00	
CURVE										
PT	978478.663	2558422.356	S 69°14'32.7" E	372.66						
PC	978346.587	2558770.825	S 79°41'13.1" E	2066.64	20°53'20.9"(LT)	01°00'18.7"	2078.13	1050.73	5700.00	
CURVE										
PT	977976.605	2560804.077	N 89°52'06.4" E	39.87						
PC	977976.696	2560843.948	N 87°08'49.5" E	493.78	05°26'33.8"(LT)	01°06'06.6"	493.97	247.17	5200.00	
CURVE										
PCC	978001.273	2561337.115	N 76°44'41.1" E	1557.11	15°21'43.2"(LT)	00°59'01.0"	1561.78	785.60	5825.00	
CURVE										
PT	978358.302	2562852.741	N 69°03'49.5" E	2069.63						
PC	979097.841	2564785.731								

EY										
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	
PC	983290.526	2545922.399								
CURVE			N 07°13'00.3" W	13.07	13°29'02.8"(RT)	102°56'47.6"	13.10	6.58	55.66	
PT	983303.490	2545920.758								
PC	983411.090	2545919.866	N 00°28'28.9" W	107.60						

EY1										
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	
PC	982421.063	2547896.087								
CURVE			N 53°03'56.5" E	135.81	05°22'05.9"(RT)	03°57'05.2"	135.86	67.98	1450.00	
PT	982502.670	2548004.642								
PC	982653.451	2548226.092	N 55°44'59.5" E	267.91						

EY2				
POINT	N	E	BEARING	DIST
POT	982648.029	2548234.435		
LINE			N 61°03'55.6" E	474.88
POT	982877.782	2548650.039		

EY3										
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	
POT	980380.027	2551230.611								
LINE			S 63°50'08.7" E	275.95						
PC	980258.347	2551478.287								
CURVE			N 73°23'12.8" E	244.49	85°33'17.0"(LT)	31°49'51.6"	268.78	166.55	180.00	
PT	980328.250	2551712.575								
PC	980452.187	2551785.899	N 30°36'34.3" E	144.00						
CURVE										
PT	980534.942	2551887.137	N 50°44'10.9" E	130.76	40°15'13.1"(RT)	30°09'20.4"	133.49	69.63	190.00	
PC	980580.597	2552018.707	N 70°51'47.5" E	139.27						

EY4										
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	
POT	979354.240	2553481.231								
LINE			N 37°18'16.0" W	69.86						
PC	979409.809	2553438.892								
CURVE			N 12°17'00.9" W	279.15	50°02'30.2"(RT)	17°21'44.5"	288.22	154.03	330.00	
PT	979682.564	2553379.504								
PC	979730.918	2553390.434	N 12°44'14.2" E	49.57						

EY5				
POINT	N	E	BEARING	DIST
POT	978658.612	2556248.441		
LINE			N 13°47'11.8" W	791.63
POT	979427.431	2556059.791		

EY6										
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	
POT	977982.776	2560525.490								
LINE			N 00°53'18.6" W	130.75						
PC	978113.507	2560523.463								
CURVE			N 06°30'48.0" W	241.76	11°14'58.8"(LT)	04°38'44.6"	242.15	121.47	1233.30	
PT	978353.709	2560496.039								

EY7										
POINT	N	E	BEARING	DIST	DELTA	D	L	T	R	
PC	977582.877	2561403.340								
CURVE			N 01°27'41.8" E	538.74	10°09'01.7"(RT)	01°52'53.9"	539.45	270.43	3045.00	
PT	978121.446	2561417.082								
PC	978485.974	2561458.853	N 06°32'12.7" E	366.91						

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