

PROJECT COORDINATES ARE ILLINOIS STATE PLANE, EAST ZONE NAD 83 (2011)

PROPOSED CENTERLINE CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING
IL. RO	UTE 53			
POT	10+00.00	0.00' RT	1682780.929	1025624.936
BEGIN	11+12.18	0.00' RT	1682862.280	1025702.178
PC	12+12.18	0.00' RT	1682934.796	1025771.033
PT	16+17.17	0.00' RT	1683218.779	1026059.673
PC	17+21.24	0.00' RT	1683289.196	1026136.295
PT	21+45.54	0.00' RT	1683587.201	1026438.206
POI	26+45.54	0.00' RT	1683950.907	1026781.307
PC	31+57.57	0.00' RT	1684323.361	1027132.662
PT	35+12.91	0.00' RT	1684588.966	1027368.637
PC	36+16.91	0.00' RT	1684668.742	1027435.359
PT	39+83.62	0.00' RT	1684942.610	1027679.145
END	40+83.62	0.00' RT	1685015.216	1027747.901
POT	51+81.22	0.00' RT	1685812.181	1028502.599
COAL	CITY ROAD			
POT	98+00.00	0.00' RT	1683920.576	1025740.865
BEGIN	103+24.55	0.00' RT	1683935.861	1026265.192
POI	108+40.88	0.00' RT	1683950.907	1026781.307
POI	108+47.38	0.00' RT	1683957.593	1026787.615
PC	109+80.38	0.00' RT	1683961.468	1026920.550
PRC	111+75.93	0.00' RT	1683963.981	1027116.082
PT	113+07.48	0.00' RT	1683964.969	1027247.624
END	113+57.48	0.00' RT	1683965.893	1027297.615
PΙ	114+17.80	0.00' RT	1683967.007	1027357.926
POT	117+46.06	0.00' RT	1683977.280	1027686.019

EXISTING ROW CONTROL

POINT	STATION	OFFSET		NORTHING	EASTING
138	11+10.00	31.05′	LT	1682882.080	1025678.159
29	18+67.31	179.78′	RT	1683655.553	1026793.112
95	20+50.00	1.29'	RT	1683517.332	1026373.013
27	26+47.73	2.77'	RT	1683950.597	1026784.824
128	25+80.78	63.48′	LT	1683947.356	1026690.688
24	26+41.64	3. 25'	LT	1683950.302	1026776.266
26	26+88.74	3.07'	LT	1683984.439	1026808.713
15	106+07.49	1.66′	RT	1683942.446	1026548.056
133	105+57.54	1.92'	RT	1683940.727	1026498.135
136	105+23.99	35. 22'	RT	1683906.466	1026465.570
13	106+40.71	31.32'	LΤ	1683976.376	1026580.306
37	31+98.78	1.01'	LΤ	1684354.128	1027160.097
39	33+24.40	1.66′	RT	1684445.202	1027246.661
107	41+87.37	29.58′	RT	1685070.204	1027840.716
46	98+10.00	5.50′	RT	1683915.370	1025751.021
23	98+73.58	27. 79'	LΤ	1683950.501	1025813.607
8	98+73.66	5.21'	RT	1683917.517	1025814.644
43	101+88.01	29. 24′	LΤ	1683961.106	1026127.859
41	101+88.09	3. 76′	RT	1683928.122	1026128.896
10	105+02.51	2. 22'	RT	1683938.824	1026443.144
22	105+02.44	30.68′	LΤ	1683971.712	1026442.111
21	105+31.74	30.82	LΤ	1683972.700	1026471.396
74	116+00.08	3. 88'	LΤ	1683976.594	1027539.997
35	115+58.25	3. 75′	LΤ	1683975.155	1027498.189
25	26+00.64	2.59	RT	1683916.460	1026752.378
857	NE COR SEC	3		1684025.965	1028974.112
4	NW COR SE 1	/4 SEC 3	34	1686578.852	1026391.985
1 3 5	SW COR SEC	34		1683850.921	1023841.377
856	SE COR SEC	34		1684030.652	1029119.452
141	SW COR SE 1	/4 SEC 1	10	1673338.661	1026646.179
858	S 1/4 COR S	EC 34		1683939.841	1026472.397
140	NW COR NE 1	/4 SEC 3	3	1683935.534	1026348.504

PROPOSED ROW CONTROL

POINT	STATION	NORTHING	EASTING		
102	11+10.00	28.95'	RT	1682840.767	1025721.670
99	12+12.18	55.00'	RT	1682896.928	1025810.919
90	16+17.17	55.00'	RT	1683178.283	1026096.890
89	17+21.24	75.00'	RT	1683233.975	1026187.045
88	21+45.54	75.00'	RT	1683535.736	1026492.762
87	25+50.00	75.00'	RT	1683829.942	1026770.301
86	109+00.00	76.50′	RT	1683882.659	1026842.438
85	110+00.19	56.47'	RT	1683905.564	1026941.812
84	111+01.02	50.30'	RT	1683913.476	1027041.624
66	110+39.57	43.79′	LT	1684006.687	1026978.881
64	28+50.00	70.00′	RT	1684051.597	1026972.525
137	105+14.13	45.00'	RT	1683896.404	1026456.007
110	106+54.50	45.00'	LT	1683990.456	1026593.689
63	31+57.57	70.00'	RT	1684275.326	1027183.580
79	32+15.79	70.00'	RT	1684318.369	1027223. 788
80	33+39.37	70.00'	RT	1684411.034	1027307.737
58	35+12.91	70.00'	RT	1684544.057	1027422.332
57	36+16.91	75.00'	RT	1684620.622	1027492.888
56	39+83.62	75.00'	RT	1684891.040	1027733.602
131	41+00.00	29. 42'	RT	1685006.879	1027780.527
48	98+10.00	38.50′	RT	1683882.383	1025751.983
45	98+10.00	45.00'	RT	1683875.886	1025752.172
44	98+10.00	45.00'	LT	1683965.848	1025749.549
47	98+10.00	27.50'	LT	1683948.356	1025750.059
49	98+73.54	45.00'	LT	1683967.700	1025813.067
50	101+87.98	45.00'	LT	1683976.862	1026127.364
82	115+99.98	44.68'	RT	1683928.046	1027541.412
81	116+00.01	29.12'	RT	1683943.608	1027540.958
109	115+58.15	36.75′	LT	1684008.135	1027497.053
70	115+58.11	50.41'	LT	1684021.779	1027496.584

PROPOSED TEMPORARY EASEMENT CONTROL

POINT	STATION	OFFSE	T	NORTHING	EASTING
94	19+75.00	75.00′	RT	1683411.832	1026372.476
93	19+75.00	85.00′	RT	1683404.765	1026379.550
92	20+50.00	85.00′	RT	1683458.919	1026432.975
91	20+50.00	75.00′	RT	1683465.897	1026425.812
118	106+59.54	50.00′	LT	1683995.601	1026598.579
115	104+30.00	45.00′	LT	1683983.915	1026369.286
114	104+30.00	60.00′	LT	1683998.908	1026368.849
111	105+02.41	45.00′	LT	1683986.024	1026441.661
116	105+02.37	60.00′	LT	1684001.017	1026441.190
117	105+31.70	60.00′	LT	1684001.872	1026470.507
112	105+31.72	45.00′	LT	1683986.879	1026470.964

PROPOSED PERMANENT EASEMENT CONTROL

POINT	STATION	OFFSET	NORTHING EASTING
119	27+09.83	63.00′ LT	1684040.895 1026779.59
120	106+90.66	60.00' RT	1683886.555 1026632.89

LEGEND



SECTION / QUARTER SECTION LINE — PLATTED LOT LINES PROPERTY (DEED) LINE APL APPARENT PROPERTY LINE EXISTING CENTERLINE EXISTING RIGHT OF WAY LINE - PROPOSED RIGHT OF WAY LINE — — — EXISTING EASEMENT — — — PROPOSED EASEMENT AC — EXISTING ACCESS CONTROL LINE -AC- PROPOSED ACCESS CONTROL LINE MEASURED / CALCULATED DIMENSION RECORDED DIMENSION EXISTING BUILDING

129.32

(129.32')

STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS.
BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY
MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.

PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)

RIGHT OF WAY STAKING PROPOSED TO BE SET

ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED.

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND".
TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES BY THE COMBINATION
FACTOR OF 0.99995522. REFERENCED N.G.S. MONUMENT PID-AE2536

STATE OF ILLINOIS) COUNTY OF

THIS IS TO CERTIFY THAT I, MARK E. CARTER, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE,_____AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER_____,)
HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 3, TOWNSHIP 32 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN AND SECTION 34, TOWNSHIP 33 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, WILL COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF

DATED AT____ ___. ILLINOIS THIS __ DAY OF ___

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3614

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



PLAT OF HIGHWAYS STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** IL RTE 53 & COAL CITY ROAD

IDOT USE ONLY

COUNTY: WILL JOB NO.: R-91-014-14

SHEET 9 OF 9 SHEETS

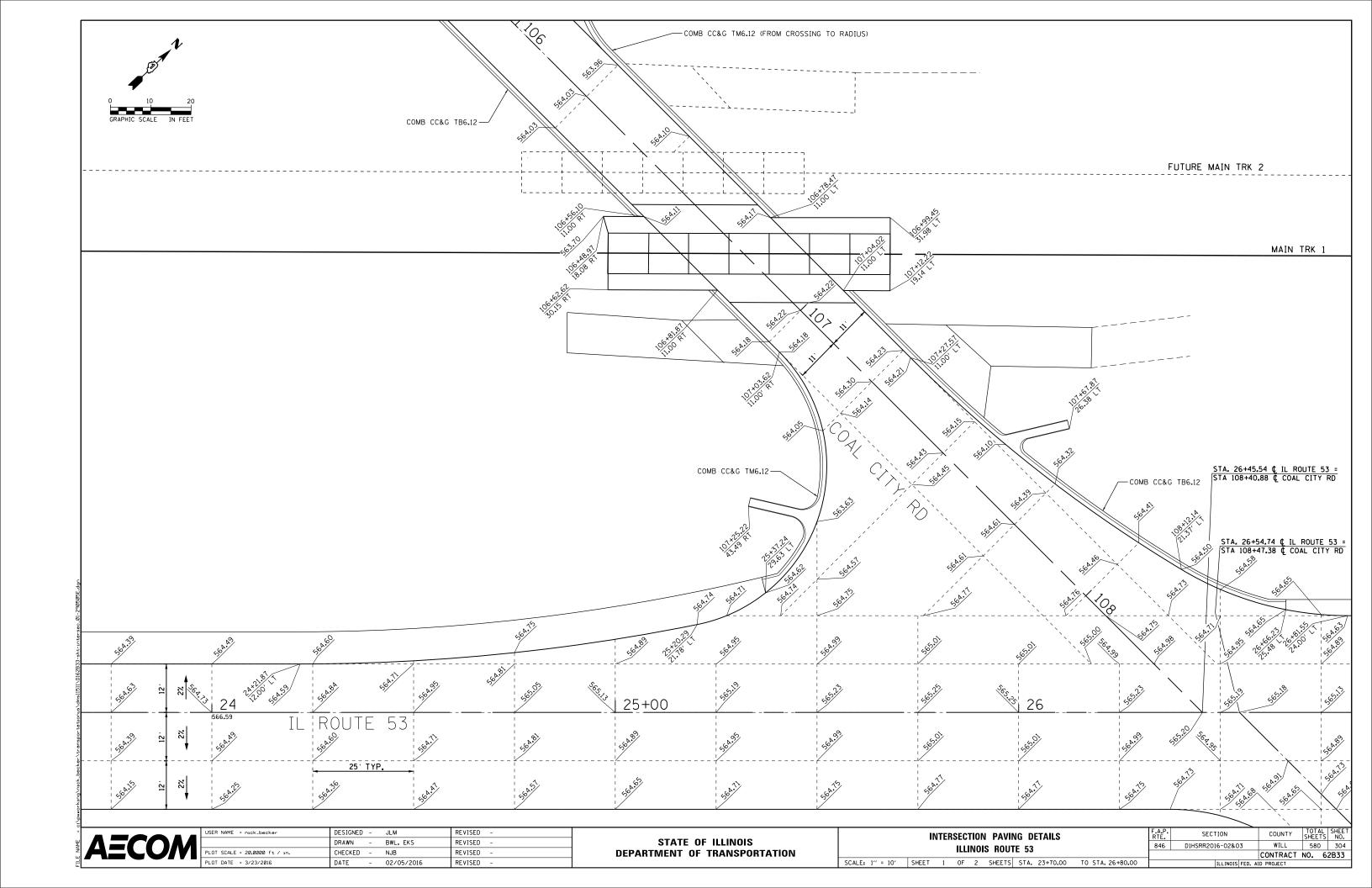
LIMITS:

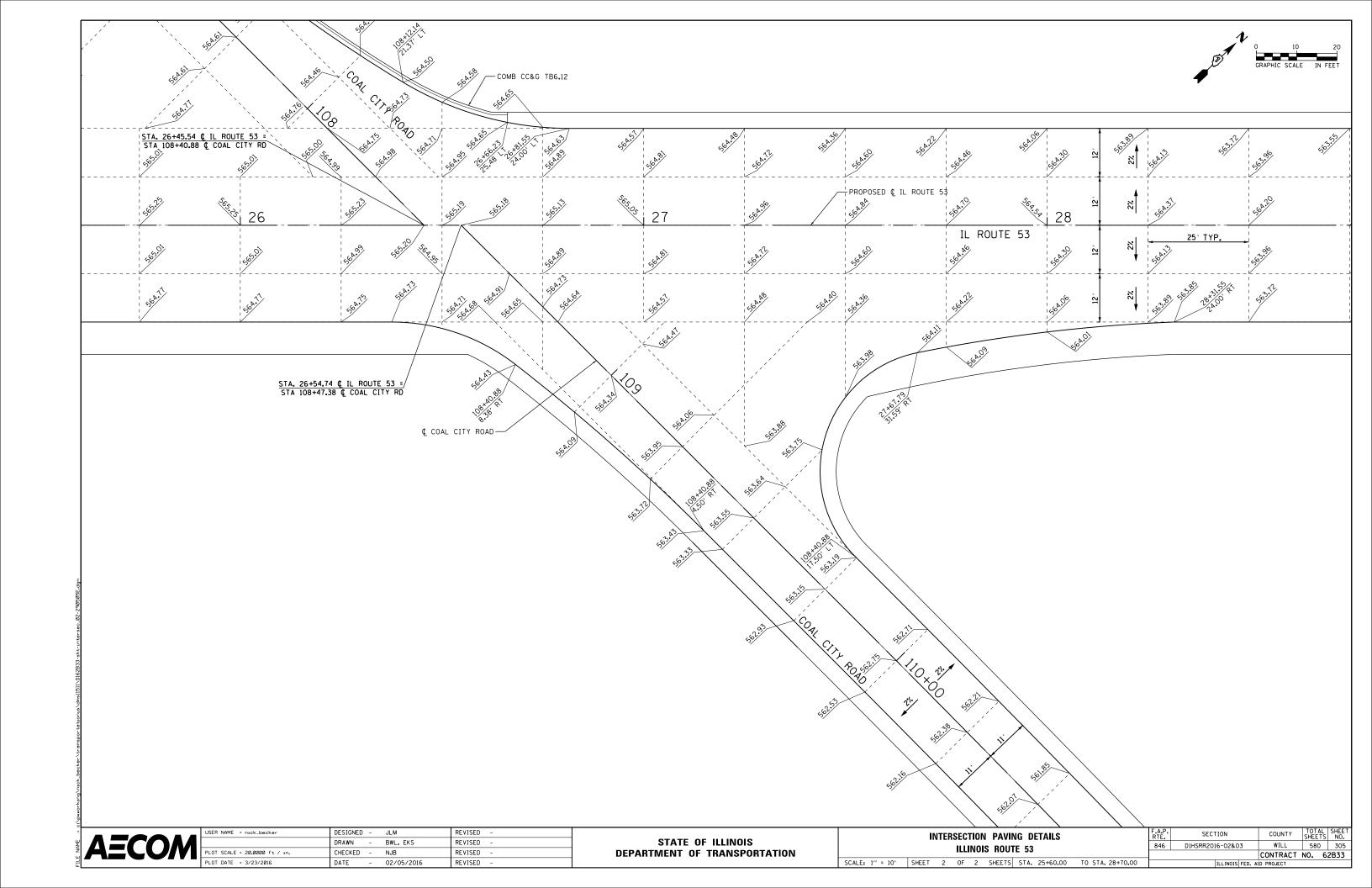
SECTION: D1 HSRR TO STA. SCALE:

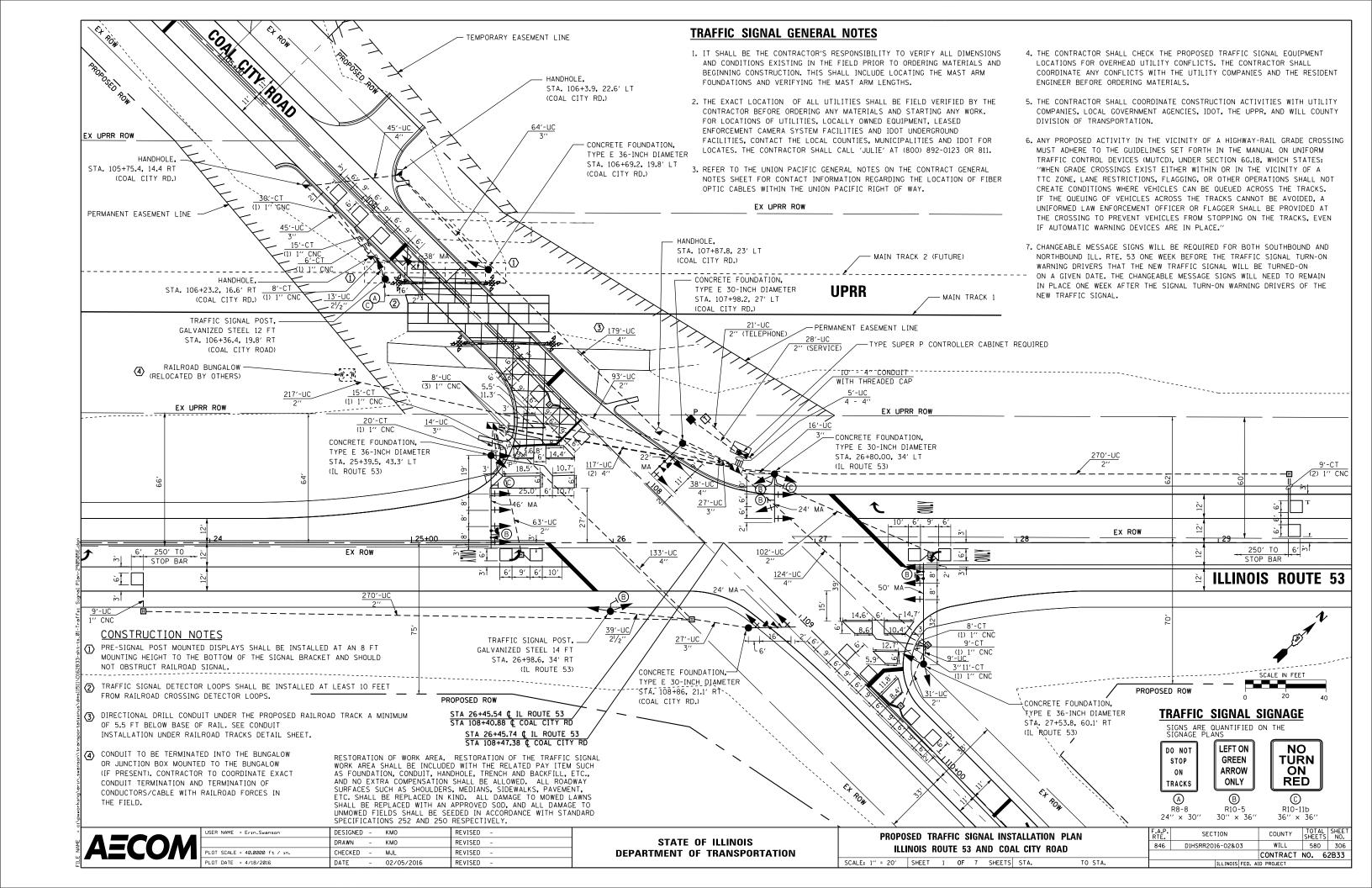
BUREAU OF LAND ACQUISITION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196

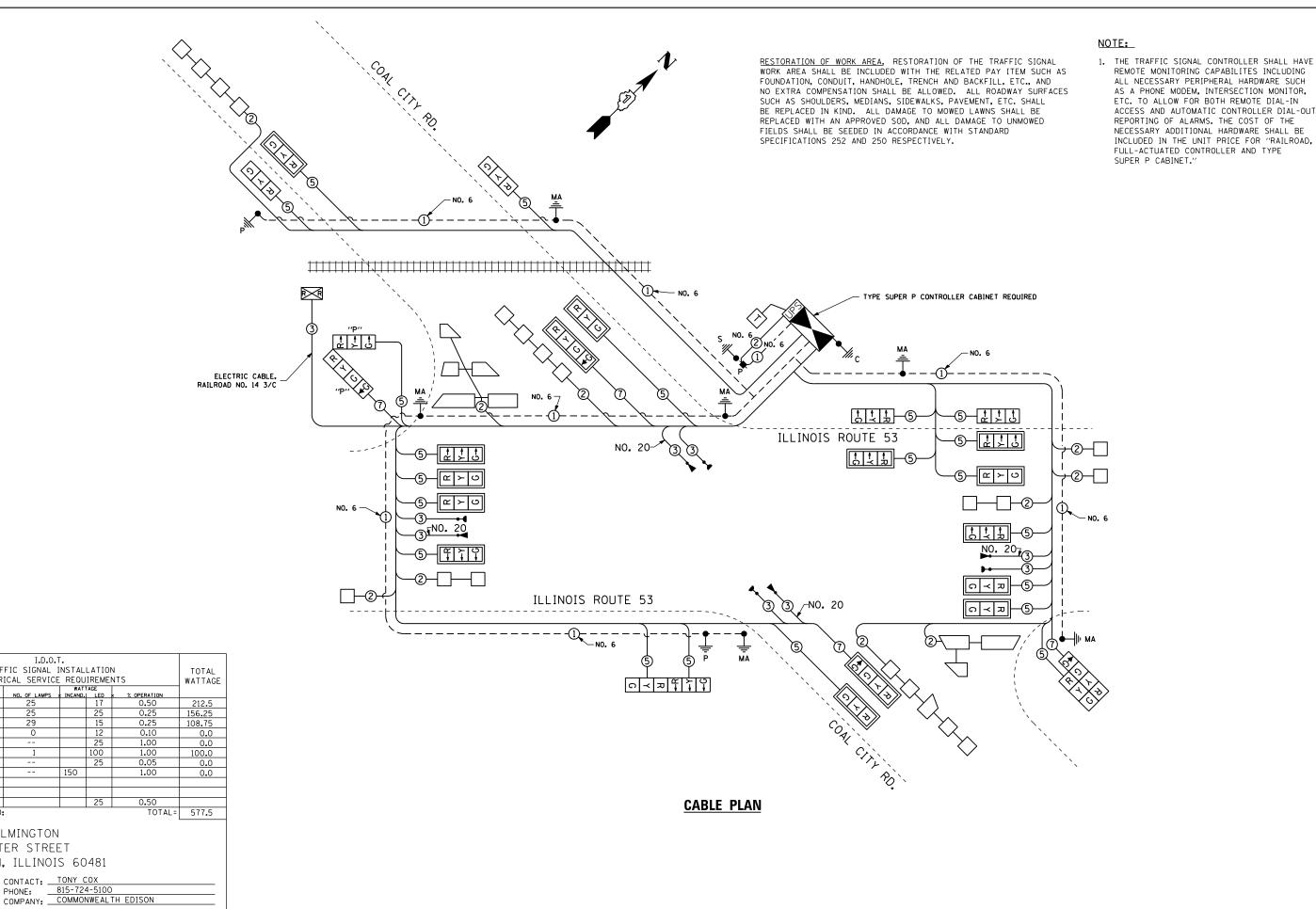
FOR INFORMATION ONLY

REVISION DATE: / / REVISION MADE BY:









CITY OF WILMINGTON 1165 S. WATER STREET WILMINGTON, ILLINOIS 60481 ENERGY SUPPLY: CONTACT: TONY COX PHONE: 815-724-5100 PHONE:

TYPE SIGNAL (RED)

PED. SIGNAL

CONTROLLER

ILLUM. SIGN

FLASHER

VIDEO SYSTEM

ENERGY COST TO:

(GREEN)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

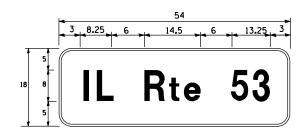
> DESIGNED - KMO REVISED DRAWN KMO REVISED LOT SCALE = 40.0000 ft / 1n. CHECKED -MJL REVISED PLOT DATE = 4/12/2016 DATE REVISED 02/05/2016

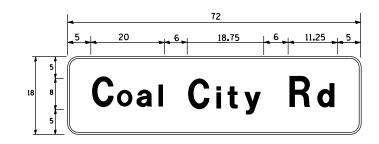
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL CABLE PLAN ILLINOIS ROUTE 53 AND COAL CITY ROAD SCALE: N.T.S. SHEET 2 OF 7 SHEETS STA.

SECTION COUNTY 846 D1HSRR2016-02&03 WILL 580 307 CONTRACT NO. 62B33

SIGN PANEL – TYPE 1 OR TYPE 2





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6.75	1	ZZ	2

DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	9	1	ZZ	2

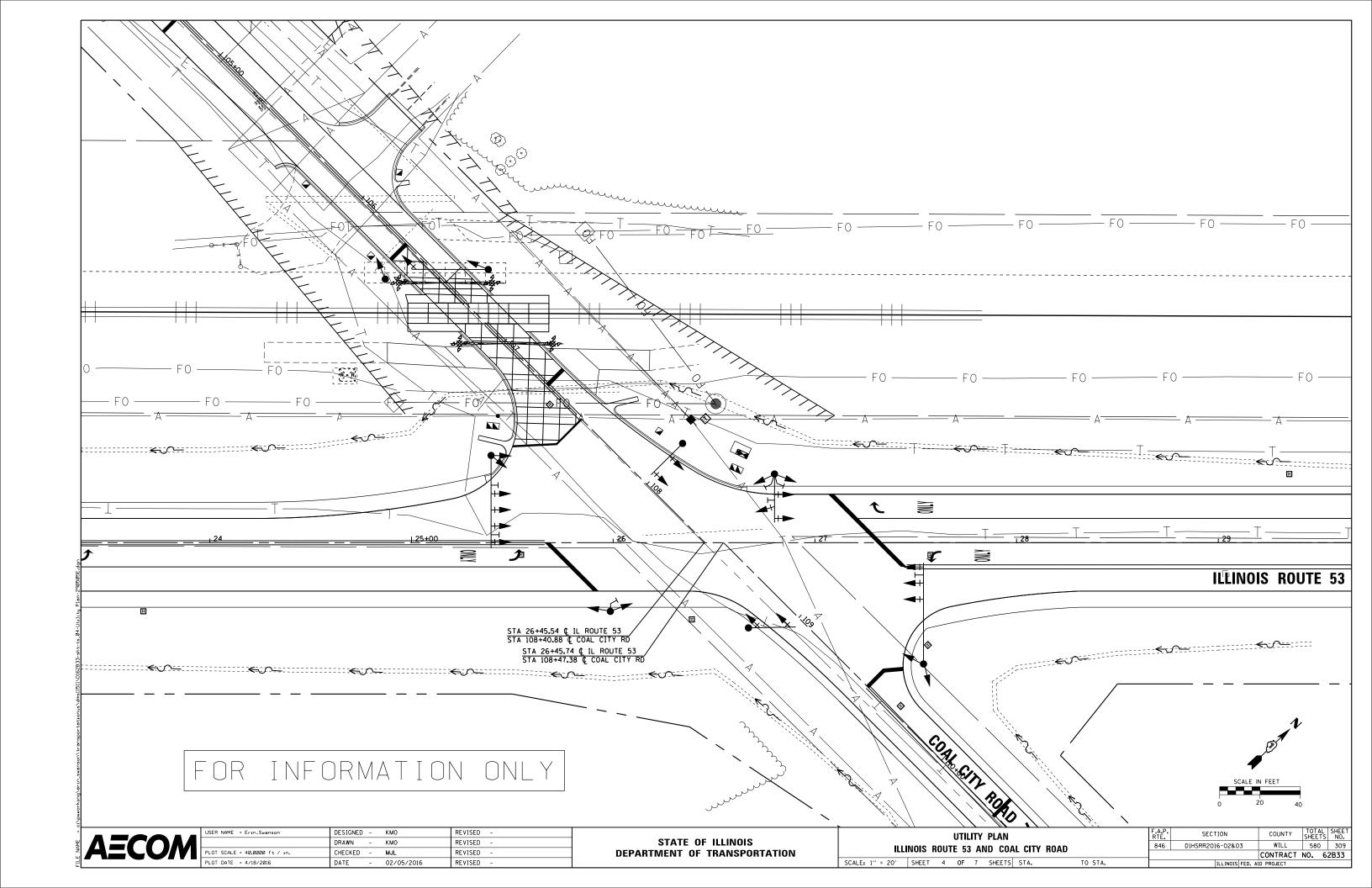
SCHEDULE OF QUANTITIES

001125022 01 00711111120		
ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SQ FT	32
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1,095
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	52
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	202
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	783
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	8
DOUBLE HANDHOLE	EACH	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	914
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4,517
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	825
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	231
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	46
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING	FOOT	1.153
CONDUCTOR, NO. 6 1C		.,
TRAFFIC SIGNAL POST, GALVANIZED STEEL 12 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION,		1
BRACKET MOUNTED	LACII	•
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION,	EVCH	1
BRACKET MOUNTED	LACII	•
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	15
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP, TYPE I	FOOT	1.147
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE.	FOOT	914
NO. 20 3/C	1001	314
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE	EACH	1
SUPER P CABINET (SPECIAL)	LACIT	1
UNINTERRUPTIBLE POWER SUPPLY. SPECIAL	EACH	1
RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	
MATERIOAD INDIECTIVE LIADILITY INSURANCE	L JUM	0.5

USER NAME = Erin_Swanson	DESIGNED	-	кмо	REVISED -
	DRAWN	-	KMO	REVISED -
PLOT SCALE = 40.0000 ft / in.	CHECKED	-	MJL	REVISED -
PLOT DATE = 4/18/2016	DATE	-	02/05/2016	REVISED -

				ND	SCHE	DUL	E OF	QUAN	TITIES		
ı			ILLINOIS	SF	OUTE	53	AND	COAL	CITY	ROAD	
ı	SCALE:	N.T.S.	SHEET	3	OF	7 :	SHEETS	STA.		TO	STA.

F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.
846	D1HSRR2016-02	2&03	WILL	580	308
			CONTRACT	NO. 6	2B33
	ILLIN	OIS FED. A	ID PROJECT		



SEQUENCE OF OPERATION

MOVEMENT N					7 1)				6 1		5	2							6							3			4 —				C /			F L A S H
PHASE				1 + 5	i				1 + 6			2 + 5	,						2 +	6						3						4					
INTERVAL	1	2A	2B	3A	3B	4A	4B	5	6A	6B	7	8.8	8B	9	10A	10B	11A	11B	12A	12B	13A	13B	14A	14B	15	16A	16B	17	18A	18B 18	BC 1	8D :	19A	19B	19C	19D	
CHANGE TO		1 -	+ 6	2 -	+ 5	2 -	+ 6		2 -	+ 6		2 -	+ 6		1 -	+ 5	1	+ 6	2 -	+ 5	3	'	4			4, 1 2 + 1 + 2 +	- 6		·	1 + 5				1 + 2 -			
ILLINOIS ROUTE 53 FAR LEFT AND LEFT MAST ARM SIGNALS	ا ا	G	G	Y	R	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	2 -	R_ -	R	R	R	R	R
ILLINOIS ROUTE 53 S/B CENTER LEFT AND CENTER RIGHT MAST ARM AND LEFT NEAR REVERSE MAST ARM SIGNALS	R	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	R	G	G	Y	R	Y	R	Y	R	R	R	R	R	R	R I	?	R	R	R	R	R	R
ILLINOIS ROUTE 53 RIGHT MAST ARM, FAR RIGHT, RIGHT NEAR REVERSE MAST ARM, AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	G	G	G	R	R	R	G	Y	R	G	G	Y	R	→	R	G	G	R	R	R	G	G	G			G	G	G	G	R
ILLINOIS ROUTE 53 N/B FAR LEFT, FAR LEFT REVERSE MAST ARM, AND LEFT MAST ARM SIGNALS	G G	Y	R	G	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	? -		R	R	R	R	R
ILLINOIS ROUTE 53 N/B CENTER AND RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	G	G	G	G	Y	R	Y	R	G	G	Y	R	Y	R	R	R	R	R	R	R	?	R	R	R	R	R	R
COAL CITY ROAD FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-G _G	Υ	R	R	R	R	?	R	R	R	R	R	R
COAL CITY ROAD W/B RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R I	?	R	R	R	R	R	R
COAL CITY ROAD (PRE-SIGNAL) E/B ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	?	R	Y	R	R	R	R
COAL CITY ROAD (EAST OF TRACKS) E/B FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	<u>G</u> G	G _C	G _C	,	R -	G _C	<u>_</u> C	Y	R	R
COAL CITY ROAD (EAST OF TRACKS) E/B RIGHT MAST ARM SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	,	R	G	G	Y	R	R

PHASES 2 AND 6 SHALL BE PLACED ON RECALL.

AECOM

.	USER NAME = nick_becker	DESIGNED	-	KMO	REVISED -
		DRAWN	-	KM0	REVISED -
	PLOT SCALE = 40.0000 ft / in.	CHECKED	-	MJL	REVISED -
	PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

STATE	E 01	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

Т	RAFFIC	SIC	NAL	SE	QUENCE	OF OP	ERATION		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
li li	210MLL	RO	LITE	53	AND C	OAL CIT	Y ROAD		846	D1HSRR2016-02&03	WILL	580	310
	LLIIVOIO		OIL		AIND U	OAL OII	1 HOAD				CONTRACT	NO. 6	2B33
SCALE: 1" = 20"	SHEET	5	OF	7	SHEETS	STA.	TO	STA.		ILLINOIS FED. A	ID PROJECT		

EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

																											F	PREEMPTOR 3	PREEMPTOR 4	PREEMPTOR 5	PREEMPTOR 6	
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1		1		1		5	5	7	-	7	Ç		9)	9)	1	5	15	17		17		17						
EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1 A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	10	1R	1S	1 T	1U	1 V	1 W	1X	1Y	1Z	1AA	1BB 10	СС	2	3	4	5	CLEAR TO NORMAL SEQUENCE
CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	3 OR 5	1F	4	1H	2, 3 OR 5	4	2	1M	3, 4 OR 5	1P	2	1R	3 OR 5	1 T	4	1V	2, 3 OR 4	5	1Y	2 OR 5	1AA	3	1CC	4					
ILLINOIS ROUTE 53 S/B FAR LEFT AND LEFT MAST ARM SIGNALS	<u>Y</u>	R	Y	R	G	G	Y	R	G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R_	R	R	G	R	$ \diamond $
ILLINOIS ROUTE 53 CENTER LEFT AND CENTER RIGHT MAST ARM AND LEFT NEAR REVERSE MAST ARM SIGNALS	R	R	R	R	R	R	Y	R	G	R	R	R	Y	R	Y	R	G	G	R	R	R	R	R	R	R	R	R	R	R	G	R	\Diamond
ILLINOIS ROUTE 53 S/B RIGHT MAST ARM, FAR RIGHT, RIGHT NEAR REVERSE MAST ARM, AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	Y	R	G	R	R	R	<u> </u>	R	Y	R	G	G	R	R	R	Y	R	Y	R		G	R	R	G	R	♦
ILLINOIS ROUTE 53 FAR LEFT, FAR LEFT REVERSE MAST ARM, AND LEFT MAST ARM SIGNALS	G	G	Y	R	Y	R	R	R	R	G	<u> </u>	R	R	R	R	R	R	R	R	R	R	R	R	R	R		R	G	R	R	R	♦
ILLINOIS ROUTE 53 CENTER AND RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	G	Y	R	G	G	Y	R	Y	R	R	R	R	R	R	R	R	R	R	G	R	R	R	♦
COAL CITY ROAD FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	G G	R	R	R	R	R	R	R	R	R	-G	♦
COAL CITY ROAD W/B RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	G	R	R	R	R	R I	R	R	R	R	G	♦
COAL CITY ROAD (PRE-SIGNAL) E/B ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	G	G	Y	R	R	G	R	R	♦
COAL CITY ROAD (EAST OF TRACKS) E/B FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	G _C	^C C	Y	R	R	<u>G</u> G	R	R	♦
COAL CITY ROAD (EAST OF TRACKS) E/B RIGHT MAST ARM SIGNAL	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	G	G	Y	R	R	G	R	R	\Diamond

EMERGENCY VEHICLE PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3, 4, OR 5 IS TERMNIATED.

AECOM

.	USER NAME = nick_becker	DESIGNED	-	KMO	REVISED -
		DRAWN	-	KM0	REVISED -
П	PLOT SCALE = 40.0000 '/ in.	CHECKED	-	MJL	REVISED -
	PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

STATE OF IL	LINOIS
DEPARTMENT OF TR	ANSPORTATION

SCALE:

	Y VEHI						CE OF OPERATION TY ROAD	F.A.P. RTE. 846	SECTIO D1HSRR2016-	02&03	COUNTY WILL CONTRACT	TOTAL SHEETS 580	SHEET NO. 311 2B33
LE:	SHEET	6	OF	7	SHEETS	STA.	TO STA.		ILL	INOIS FED. A		1102	,2033

RAILROAD PREEMPTION SEQUENCE OF OPERATION

													PREEN NUMB	MPTOR SER 3	PREEN NUME	MPTOR BER 4	PREEN NUME	MPTOR SER 5	PREEN NUMB	MPTOR BER 6	PREEMPTOR NUMBER 2				
CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER		1	ļ	5		7		9	1	5	1	7													
CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	\												2	2		3		4	į	5					
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1E	1F	1G	1H	1J	1K	1L	1M	1N	1P	10	1R	15	1 T	1U	1V	2	3	4	5	CLEAR TO NORMAL
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1F	2	1H	2	1K	2	1M	2	1P	2	1R	2	1 T	2	1 V	2	3	4	5		SEQUENCE
ILLINOIS ROUTE 53 FAR LEFT AND LEFT MAST ARM SIGNALS	<u>Y</u>	R	<u> </u>	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
ILLINOIS ROUTE 53 S/B CENTER LEFT AND CENTER RIGHT MAST ARM AND LEFT NEAR REVERSE MAST ARM SIGNALS	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	G	Δ
ILLINOIS ROUTE 53 S/B RIGHT MAST ARM, FAR RIGHT, RIGHT NEAR REVERSE MAST ARM, AND NEAR RIGHT SIGNALS	R	R	Y_	R	R	R	Y	R	R	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	R	Δ
ILLINOIS ROUTE 53 FAR LEFT, FAR LEFT REVERSE MAST ARM, AND LEFT MAST ARM SIGNALS	¥_	R	R	R	¥_	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	R	Δ
ILLINOIS ROUTE 53 N/B CENTER AND RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	Y	R	Y	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	R	G	Δ
COAL CITY ROAD FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	Δ
COAL CITY ROAD W/B RIGHT MAST ARM AND NEAR RIGHT SIGNALS	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	Δ
COAL CITY ROAD (PRE-SIGNAL) E/B ALL SIGNALS	R	R	R	R	R	R	R	R	R	R	Y	R	R	R	Y	R	R	R	R	R	R	R	R	R	Δ
COAL CITY ROAD (EAST OF TRACKS) E/B FAR LEFT AND LEFT MAST ARM SIGNALS	R	R	R	R	R	R	R	R	R	R	_C _C	<u>G</u> C	R	R	<u>_</u> C _C	_ G	R	R	R	R	<u>G</u> G	Y	R	R	Δ
COAL CITY ROAD (EAST OF TRACKS) E/B RIGHT MAST ARM SIGNAL	R	R	R	R	R	R	R	R	R	R	G	G	R	R	G	G	R	R	R	R	G	Y	R	R	Δ
	•								•		•				•		•		•					HOLD	

A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD INTERVAL 5 IS TERMINATED.

AECOM

_	USER NAME = nick_becker	DESIGNED	-	KMO	REVISED -
		DRAWN	-	KM0	REVISED -
	PLOT SCALE = 40.0000 ft / in.	CHECKED	-	MJL	REVISED -
	PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

STATI	E 01	F ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	RAI	LROAD	PR	EEMP	ΓIΟΓ	N SEQI	JENCE	0F	OPERATION	
		ILLINO	S	ROUTE	53	AND	COAL	CITY	' ROAD	
_	20'	SHEET	7	ΩF	7	SHEETS	STA		TO STA	

F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHE! NO
846	D1HSRR2016-02&0	3	WILL	580	312
			CONTRACT	NO. 6	2B33
	ILLINOIS	FED. A	D PROJECT		

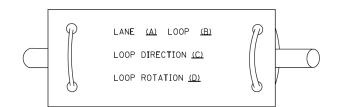
TRAFFIC SIGNAL LEGEND

<u>ITEM</u>	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	<u>ITEM</u>	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	\bowtie R	\boxtimes		EMERGENCY VEHICLE LIGHT DETECTOR	R≪	\ll	•	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET		R ➤ R	₹►₹	CONFIRMATION BEACON	Ro - (]	$\circ - \circlearrowleft$		COAVIAL CARLE		ď	
COMMUNICATIONS CABINET	C C R	E.C.C	CC	HANDHOLE	R □			COAXIAL CABLE		— <u> </u>	—©—
MASTER CONTROLLER		EMC	МС	HEAVY DUTY HANDHOLE	R	H	H	VENDOR CABLE FOR CAMERA			(v)
MASTER MASTER CONTROLLER UNINTERRUPTABLE POWER SUPPLY	UPS R	EMMC EUPS	MMC UPS	DOUBLE HANDHOLE	R			COPPER INTERCONNECT CABLE,			C
SERVICE INSTALLATION,			P	JUNCTION BOX	R		0	NO. 18 3 PAIR TWISTED, SHIELDED			 6 <u></u>
(P) POLE OR (G) GROUND MOUNT	- <u></u> R	- <u>-</u> -	-≣ -	UNDERGROUND CONDUIT,				FIBER OPTIC CABLE NO. 62.5/125, MM12F		— <u>12</u> F—	
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R	P	P	GALVANIZED STEEL (UC) TEMPORARY SPAN WIRE, TETHER WIRE,	R			FIBER OPTIC CABLE NO. 62,5/125, MM12F SM12F		<u>—24F</u>	—(24F)—
STEEL MAST ARM ASSEMBLY AND POLE	R	O	•	AND CABLE							
ALUMINUM MAST ARM ASSEMBLY AND POLE	R	0		COMMON TRENCH			СТ	FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F		—36F	—36F—
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	^R O¤	0-×	• ×	COILABLE NONMETALLIC CONDUIT (EMPTY) SYSTEM ITEM		5	CNC S	GROUND ROD AT (C) CONTROLLER,			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R [PTZ][]	PTZ J	● <u> PTZ</u> I	INTERSECTION ITEM		I	ΙΡ	(H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		с П—»	c⊪⊷
SIGNAL POST	R O	0	•	REMOVE ITEM	R			CONTROLLER CABINET AND	RCF		
TEMPORARY WOOD POLE (CLASS 5 OR	O R ⊗	\otimes	•	RELOCATE ITEM	RL			FOUNDATION TO BE REMOVED			
BETTER) 45 FOOT (13.7m) MINIMUM	⊗ 	>	>	ABANDON ITEM	А		R	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	ORMF		
GUY WIRE SIGNAL HEAD	R	>	<u>→</u>	12" (300mm) TRAFFIC SIGNAL SECTION		R	К	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)	>		→ ²	12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		(R) (S)		STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND	RMF		
SIGNAL HEAD WITH BACKPLATE	+R	+>	+-			R	R	FOUNDATION TO BE REMOVED	O A		
SIGNAL HEAD OPTICALLY PROGRAMMED		→ ▷′′p′′	- ►"P"	SIGNAL FACE		G	G	SIGNAL POST AND FOUNDATION TO BE REMOVED	RPF		
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R ○ >'F''	○>''F''	→ "F"			(+ y) (- G)	◆ Y ◆ G	INTERSECTION & SAMPLING (SYSTEM) DETECTOR		[IS]	IS
PEDESTRIAN SIGNAL HEAD	R - ∏	-0	-1			R	R	SAMPLING (SYSTEM) DETECTOR		[s]	S
PEDESTRIAN PUSHBUTTON DETECTOR	R	©	©	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		(c)	Y	QUEUE DETECTOR		[<u>]</u>	٥
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	@APS	APS	"RB" INDICATES REFLECTIVE BACKPLATE		← ?	◆ Y ◆ G				
ILLUMINATED SIGN "NO LEFT TURN"	R		•	40// 4700 1 PERESTRAN GARANT NEAR		"P"	"P"	PREFORMED QUEUE DETECTOR		<u>[PQ</u>]	РО
ILLUMINATED SIGN	R			12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W		PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
"NO RIGHT TURN"			®	12" (300mm) PEDESTRIAN SIGNAL HEAD				PREFORMED SAMPLING (SYSTEM) DETECTOR		PS I	PS
DETECTOR LOOP, TYPE I				INTERNATIONAL SYMBOL, OUTLINED			Ta.			-	
PREFORMED DETECTOR LOOP)¢	Р	12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID		K	*	RAILROA	D SYMBO	DLS	
MICROWAVE VEHICLE SENSOR	R (M)1	M	M	PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		(C)	₽ C ※ D			<u>EXISTING</u>	PROPOSED
VIDEO DETECTION CAMERA	$\mathbb{R}_{\mathbb{Q}}$	$\overline{\mathbb{V}}$	<u> </u>	RADIO INTERCONNECT	 	##+0	 •	RAILROAD CONTROL CABINET			
VIDEO DETECTION ZONE						1.	·	RAILROAD CANTILEVER MAST ARM	2	X OX X X	X OX X
DIV. TV T. 700M CHIED	R			RADIO REPEATER	R ERR	ERR	RR	FLASHING SIGNAL		$\times \Theta \times$	X⊙X
PAN, TILT, ZOOM CAMERA		PTZ)	₽IZ I	DENOTES NUMBER OF CONDUCTORS, ELECTRICABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDE				CROSSING GATE		\	***
WIRELESS DETECTOR SENSOR	RW R	(W)	(w)	GROUND CABLE IN CONDUIT	_U	(1)	(1)	CROSSBUCK		<u></u> ≥≤	*
WIRELESS ACCESS POINT FILE NAME = USER NAME = footemj		SIGNED - DAG/BCK	REVISED	NO. 6 SOLID COPPER (GREEN)					IFAP		TOTAL CHE
USER NAME = footemj	DR	AWN - BCK	REVISED		ATE OF ILLINOI			DISTRICT ONE Standard traffic signal design details	F.A.P. RTE. 846	SECTION D1HSRR2016-02&03	COUNTY TOTAL SHEETS NO WILL 580 31:
Ct April 160 J/2 25 5. ign PLOT SCALE = 50.8000 ' PLOT DATE = 1/13/2014	′ 10. CHI	AWN - BCK ECKED - DAD TE - 10-28-09	REVISED REVISED REVISED	- DEPARTMEN	ATE OF ILLINOI IT OF TRANSP		SCALE: NO	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	846		WILL

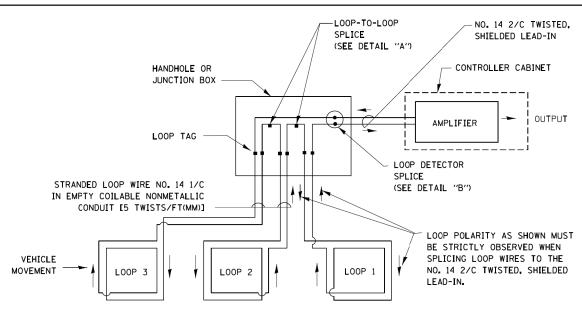
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

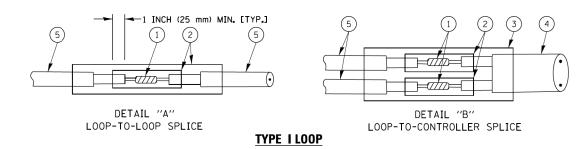


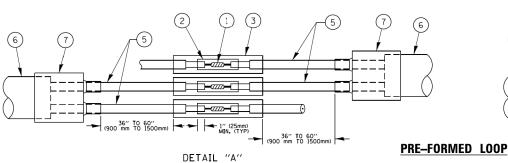
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP *1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



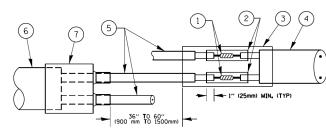
DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
 THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





LOOP-TO-LOOP SPLICE



DETAIL "B" LOOP-TO-CONTROLLER SPLICE

COUNTY

WILL

SHEETS

CONTRACT NO. 62B33

580 314

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE: NONE

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

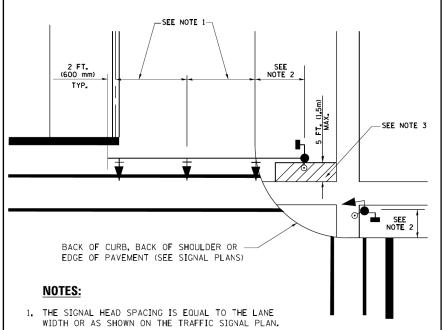
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

CALCOM

USER NAME = footemj	DESIGNED	-	DAD	REVISED	-	DAG 1-1-14
dgn	DRAWN	-	BCK	REVISED	-	
PLOT SCALE = 50.0000 ' / in.	CHECKED	-	DAD	REVISED	-	
PLOT DATE = 1/13/2014	DATE	-	10-28-09	REVISED	-	

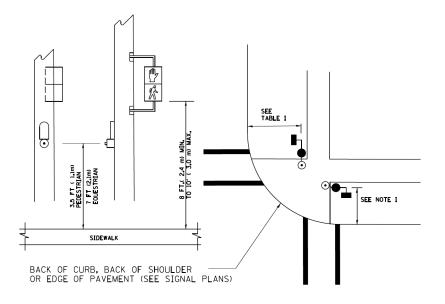
DISTRICT ONE		F.A.P. RTE.	SECTION
STANDARD TRAFFIC SIGNAL D	DESIGN DETAILS	846	D1HSRR2016-02&03
STANDARD TRAFFIC SIGNAL I	JESIUN DETAILS		TS-05
SHEET NO 2 OF 7 SHEETS	AT2 OT AT2	EED D	DAD DICT NO 1 THE INDIC FED A

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALKBICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



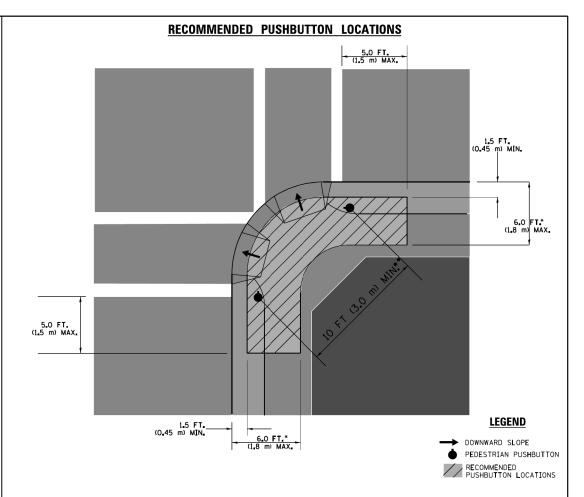
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

<u>PEDESTRIAN SIGNAL POST</u> <u>AND</u> PEDESTRIAN PUSH BUTTON POST



NOTES

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- •• WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

- 1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HICHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HICHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

	THAT TO STOWN E EAST MENT OF	
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1 _• 2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

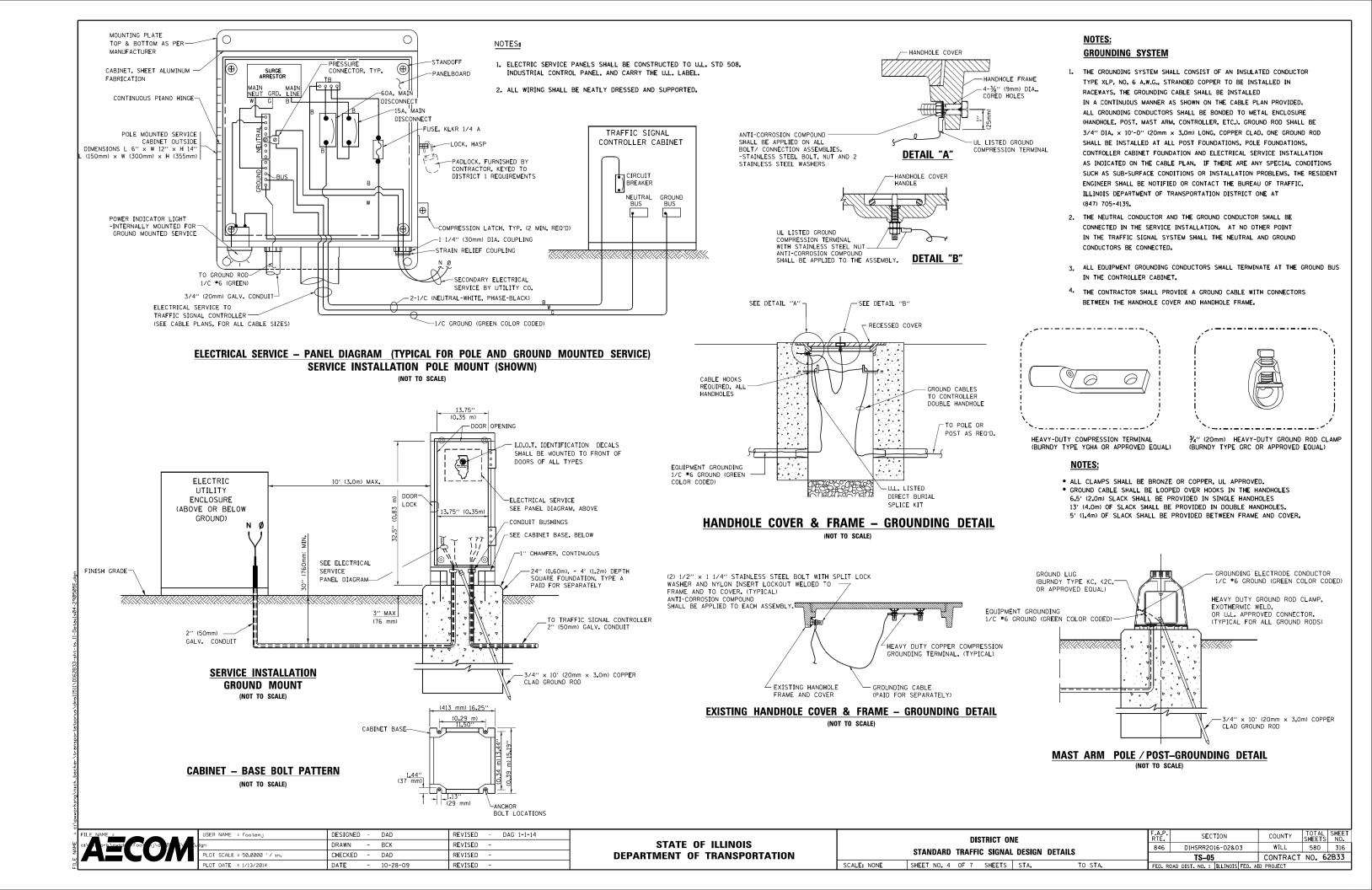
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

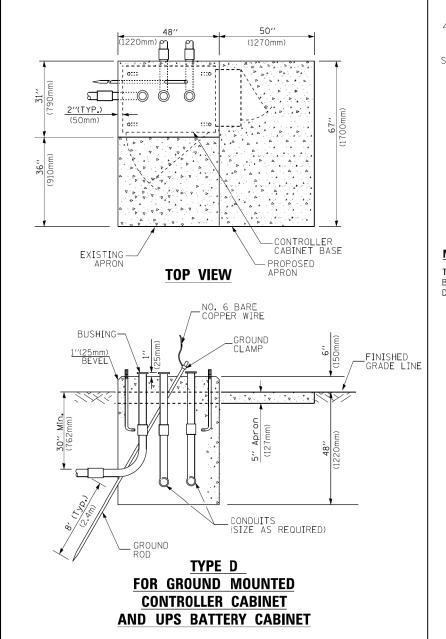
SCALE: NONE

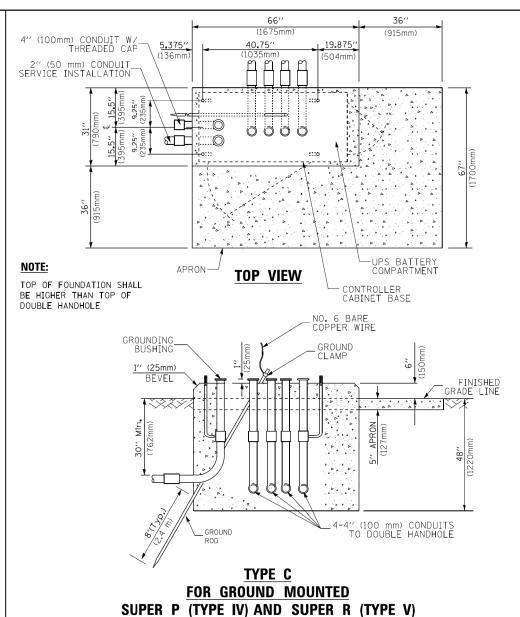
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Æ 5.	dgn	DRAWN	-	BCK	REVISED	-	
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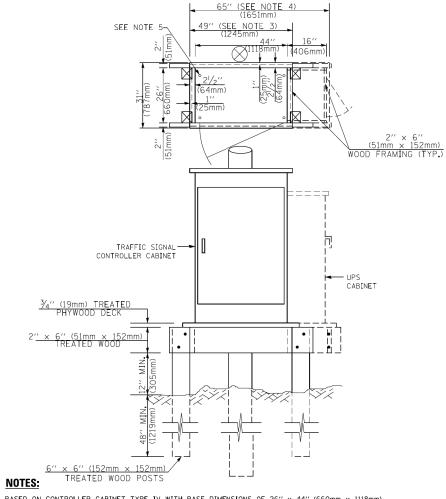
	DIS	DISTRICT ONE				SECTION	COUNTY TOTAL		SHEET S NO.	
STANDARD TRAFFIC SIGNAL DESIGN DETAILS				846	D1HSRR2016-02&03	WILL	580	315		
STANDARD	INAFFI	C SIGNAL	DESIGN	DETAILS		TS-05	CONTRACT	NO. 6	2B33	
SHEET NO. 3	OF 7	SHEETS	STA.	TO STA.	FED. RC	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT			







CONTROLLER CABINETS



- BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm).
 ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
- 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER **WOOD SUPPORT PLATFORM**

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD)		
(L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

CABLE SLACK

FOUNDATION	DEPTH			
TYPE A - Signal Post	4'-0" (1.2m)			
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)			
TYPE D - CONTROLLER	4'-0" (1.2m)			
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0'' (1 . 2m)			

DEPTH OF FOUNDATION

SCALE: NONE

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4 ₄ 1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4 . 6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

- 1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For mast arm assemblies with dual arms refer to state standard 878001...

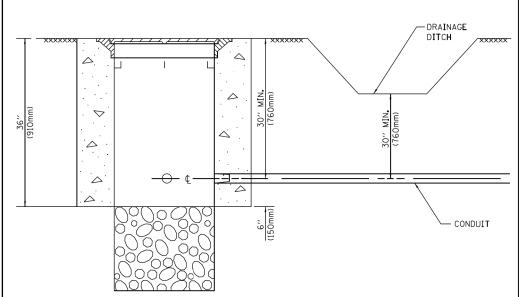
DEPTH OF MAST ARM FOUNDATIONS, TYPE E



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PLOT DATE = 1/13/2014	DATE	-	10-28-09	REVISED	-	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

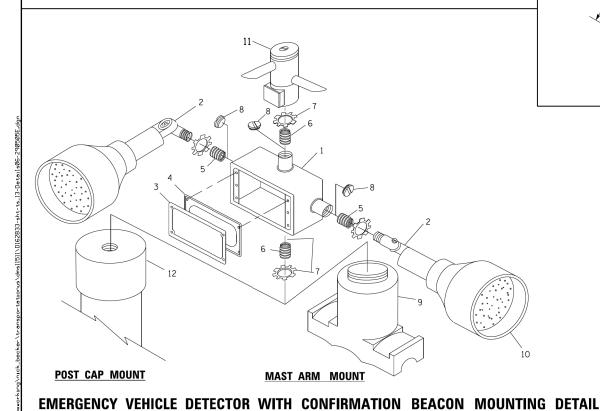
		DIS	STRICT ON	IE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	STANDARD TRAFFIC SIGNAL DESIGN DETAILS						D1HSRR2016-02&03	WILL	580	317
	STANDAND	INAFF	IC SIGNA	L DESIGN		TS-05	CONTRACT	NO. 6	2B33	
NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA.						FED. RO	AD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		

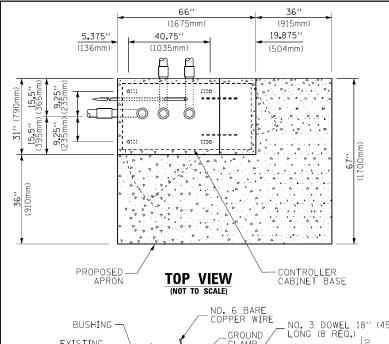


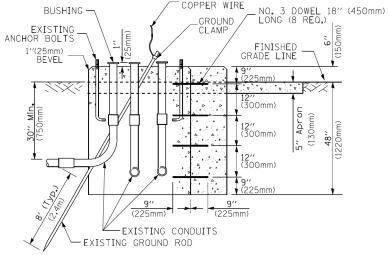
NOTES:

- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

HANDHOLE WITH MINIMUM CONDUIT DEPTH







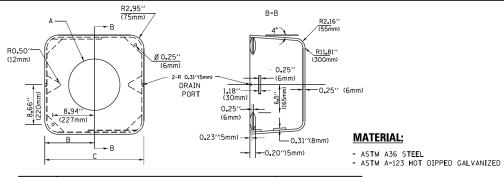
MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)

ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾''(19 mm) CLOSE NIPPLE
7	¾′′(19 mm) LOCKNUT
8	¾′′(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
- 11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS *2 AND *11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM *1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM *2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM *9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM *9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

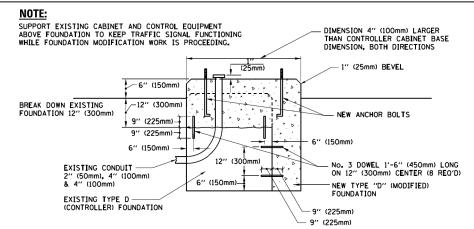


Α	В	С	HEIGHT	WEIGHT
VARIES	9.5′′(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18 . 5′′(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

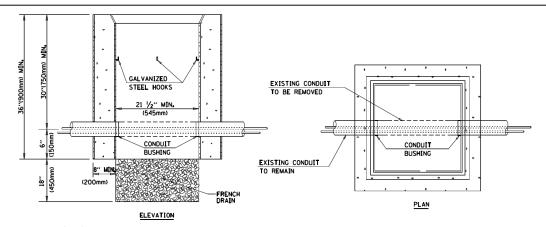
SHROUD

NOTES:

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
 THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

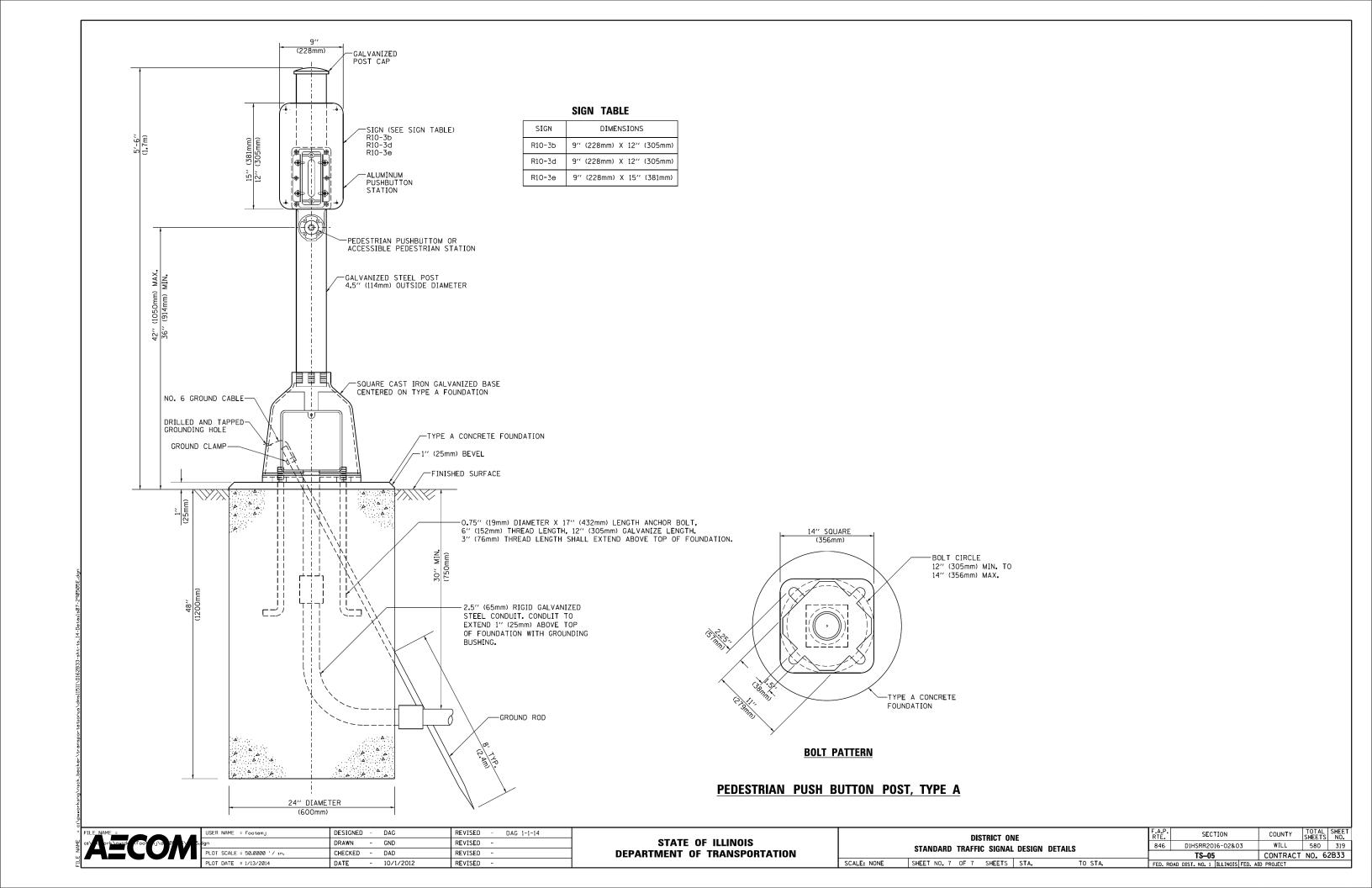
HANDHOLE TO INTERCEPT EXISTING CONDUIT

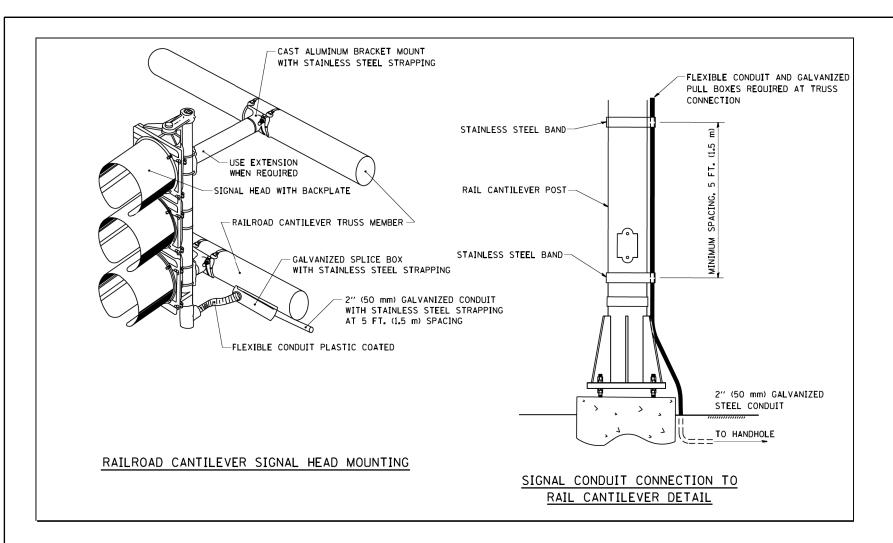


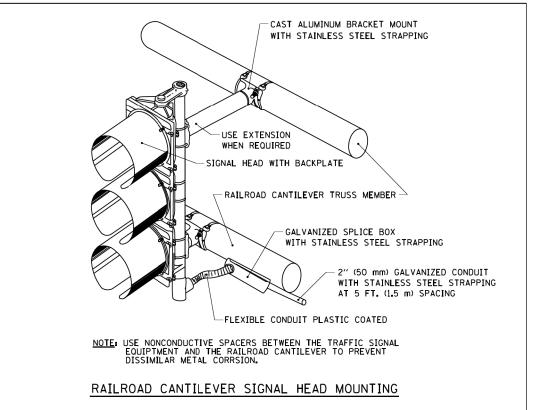
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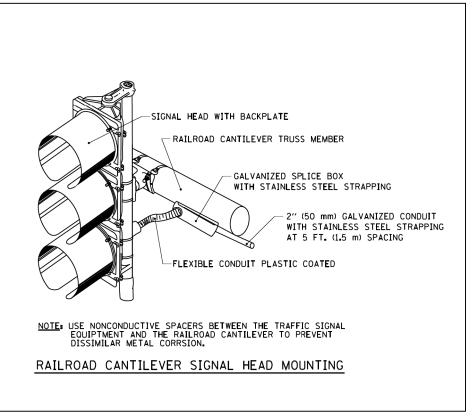
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS								
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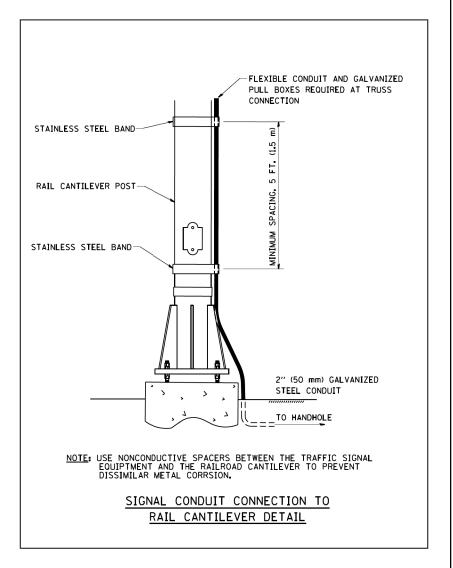






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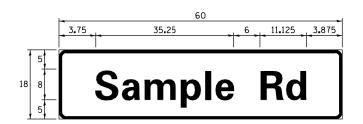


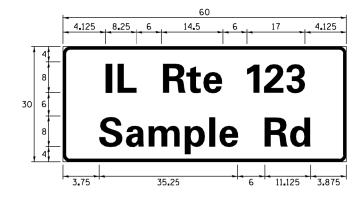
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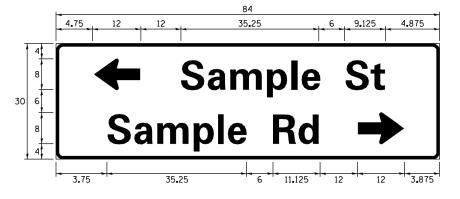
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RAILROAD CANTILEVER		F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
SIGNAL HEAD MOUNTING DETAIL			846 D1HSRR2016-02&03		580	320
			TS-06	CONTRACT	NO. 6	2B33
NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		

SIGN PANEL - TYPE 1 OR TYPE 2







DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D OR C	-	1 OR 2	ZZ	

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH (INCH)			
NAME	ADDREVALION	SERIES "C"	SERIES "D"		
AVENUE	Ave	15.000	18.250		
BOULEVARD	Blvd	17.125	20.000		
CIRCLE	Cir	11.125	13.000		
COURT	C†	8. 250	9.625		
DRIVE	Dr	8.625	10.125		
HIGHWAY	Hwy	18.375	22.000		
ILLINOIS	ΙL	7. 000	8. 250		
LANE	L	9.125	10.750		
PARKWAY	Pkwy	23.375	27.375		
PLACE	PΙ	7.125	7. 750		
ROAD	Rd	9.625	11.125		
ROUTE	R†e	12.625	14.500		
STREET	S†	8. 000	9.125		
TERRACE	Ter	12.625	14.625		
TRAIL	Tr	7. 750	9.125		
UNITED STATES	US	10.375	12.250		

GENERAL NOTES

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" × 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUX OF 8'-O" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-O" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-O" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THERE IS SPACE AVAILABLE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

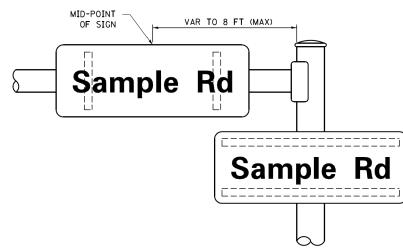
LOCAL SUPPLIERS: PARTS LISTING:

- J.O. HERBERT COMPANY, INC MIDLOTHIAN, VA	SIGN CHANNEL SIGN SCREWS	PART #HPN053 (MED. CHANNEL) 1/4" × 14 × 1" H.W.H. *3
		SELF TAPPING WITH NEOPRENE WASHER
- WESTERN REMAC, INC.	BRACKETS	PART #HPN034 (UNIVERSAL)
WOODRIDGE. IL		CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

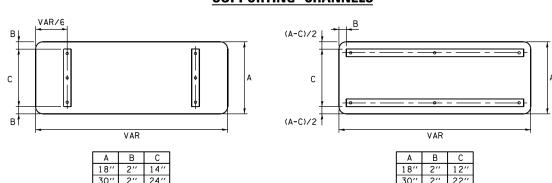
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

ARM OR POLE MOUNTED



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

FHWA SERIES "C"				FHWA SERIES "D"					
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)		
Α	0.240	5.122	0.240	Α	0.240	6.804	0.240		
В	0.880	4.482	0.480	В	0.960	5.446	0.400		
С	0.720	4.482	0.720	С	0.800	5.446	0.800		
D E	0.880 0.880	4.482 4.082	0.720 0.480	D E	0.960 0.960	5. 446 4. 962	0.800		
F	0.880	4.082	0.480	F	0.960	4. 962	0.240		
G	0.720	4. 482	0.720	G	0.800	5.446	0.800		
Н	0.880	4.482	0.880	Н	0.960	5.446	0.960		
I	0.880	1.120	0.880	I	0.960	1.280	0.960		
J	0.240	4.082	0.880	J	0.240	5.122	0.960		
K L	0.880 0.880	4.482 4.082	0.480 0.240	K L	0.960 0.960	5.604 4.962	0.400		
M	0.880	5. 284	0.880	M	0.960	6. 244	0. 960		
N	0.880	4.482	0.880	N N	0.960	5. 446	0.960		
0	0.720	4.722	0.720	0	0.800	5.684	0.800		
Р	0.880	4.482	0.720	Р	0.960	5.446	0.240		
Q	0.720	4.722	0.720	0	0.800	5.684	0.800		
R	0.880	4.482	0.480	R	0.960	5.446	0.400		
S T	0.480 0.240	4.482 4.082	0.480 0.240	S T	0.400 0.240	5. 446 4. 962	0.400		
U	0. 240	4.082	0. 240	U	0. 240	5.446	0. 240		
V	0.240	4. 962	0.240	V	0.240	6. 084	0.240		
W	0.240	6.084	0.240	w	0.240	7. 124	0.240		
Х	0.240	4.722	0.240	Х	0.400	5.446	0.400		
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240		
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400		
<u>a</u>	0.320 0.720	3.842 4.082	0.640	0	0.400	4.562 4.802	0.720		
С	0. 120	4.002	0.480 0.240	С	0.800 0.480	4. 722	0.480		
d	0.480	4.082	0.720	d	0.480	4.802	0,800		
e	0.480	4.082	0.320	e	0.480	4. 722	0. 320		
f	0.320	2.480	0.160	f	0.320	2.882	0.160		
g	0.480	4.082	0.720	g	0.480	4.802	0.800		
h •	0.720	4.082	0.640	h	0.800	4. 722	0.720		
i	0.720 0.000	1.120 2.320	0.720 0.720	i	0.800	1. 280 2. 642	0.800		
k	0.720	4. 322	0.160	k	0.800	5. 122	0.160		
ı	0.720	1.120	0.720	ì	0.800	1. 280	0.800		
m	0.720	6.724	0.640	m	0.800	7.926	0.720		
n	0.720	4.082	0.640	n	0.800	4.722	0.720		
0	0.480	4.082	0.480	0	0.480	4.882	0.480		
P	0.720	4.082	0.480 0.720	P	0.800	4.802	0.480		
q r	0.480 0.720	4.082 2.642	0.160	r	0.480 0.800	4. 802 3. 042	0.800		
s	0. 720	3. 362	0. 240	s	0.320	3. 762	0.240		
+	0.080	2.882	0.080	+	0.080	3. 202	0.080		
u	0.640	4.082	0.720	u	0.720	4.722	0.800		
٧	0.160	4. 722	0.160	٧	0.160	5.684	0.160		
W	0.160	7. 524	0.160	w	0.160	9.046	0.160		
×	0.000	5. 202	0.000	×	0.000	6. 244	0.000		
y z	0.160 0.240	4.962 3.362	0.160 0.240	y z	0.160 0.240	6.004 4.002	0.160		
1	0.720	1.680	0.880	1	0.800	2.000	0.960		
2	0.480	4.482	0.480	2	0.800	5.446	0.800		
3	0.480	4.482	0.480	3	1.440	5.446	0.800		
4	0.240	4.962	0.720	4	0.160	6.004	0.960		
5	0.480	4.482	0.480	5	0.800	5.446	0.800		
6 7	0.720	4.482 4.482	0.720	6 7	0.800	5. 446 5. 446	0.800		
8	0.240 0.480	4.482	0.720 0.480	8	0.560 0.800	5. 446	0.560		
9	0.480	4.482	0.480	9	0.800	5. 446	0.800		
0	0.720	4. 722	0.720	0	0.800	5. 684	0.800		
-	0.240	2.802	0.240	-	0.240	2.802	0.240		
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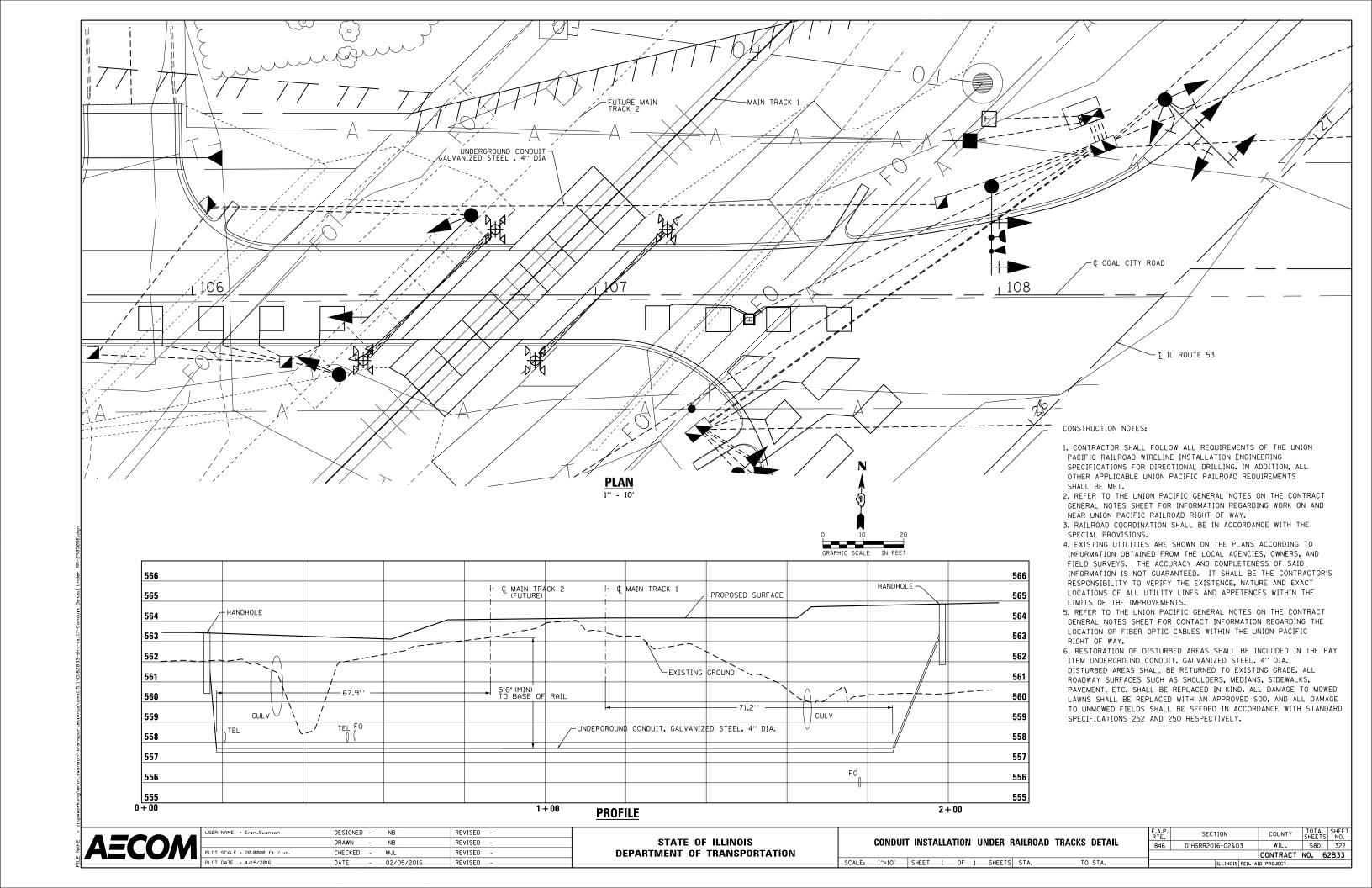
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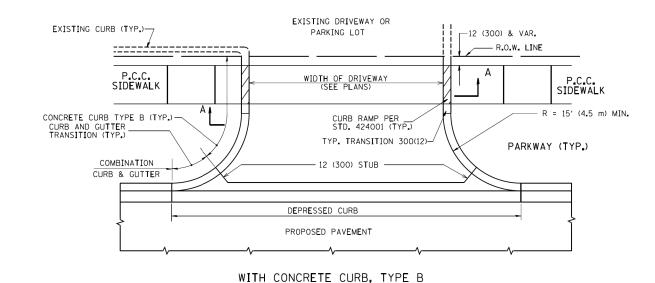
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

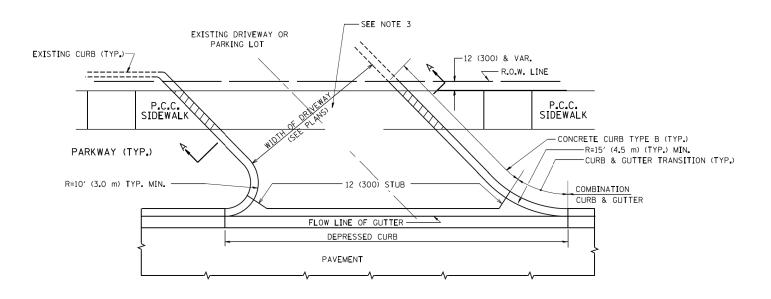
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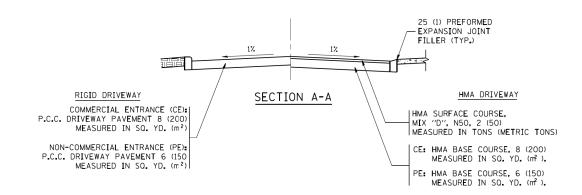
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	ILLINOIS FED. A	D PROJECT		
	TS-02	CONTRACT	NO. 6	2B3
846	D1HSRR2016-02&03	WILL	580	32
RTE.	SECTION	COUNTY	SHEETS	SHE N(

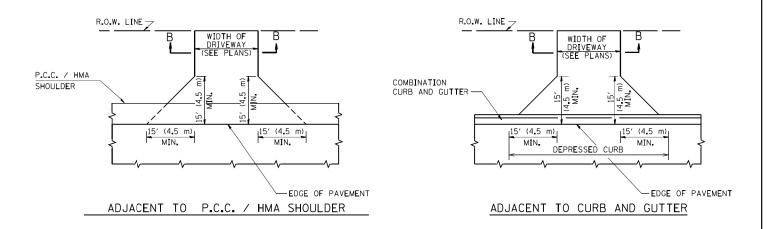


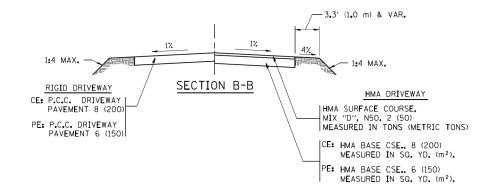






WITH CONCRETE CURB, TYPE B





RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY OUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

AND

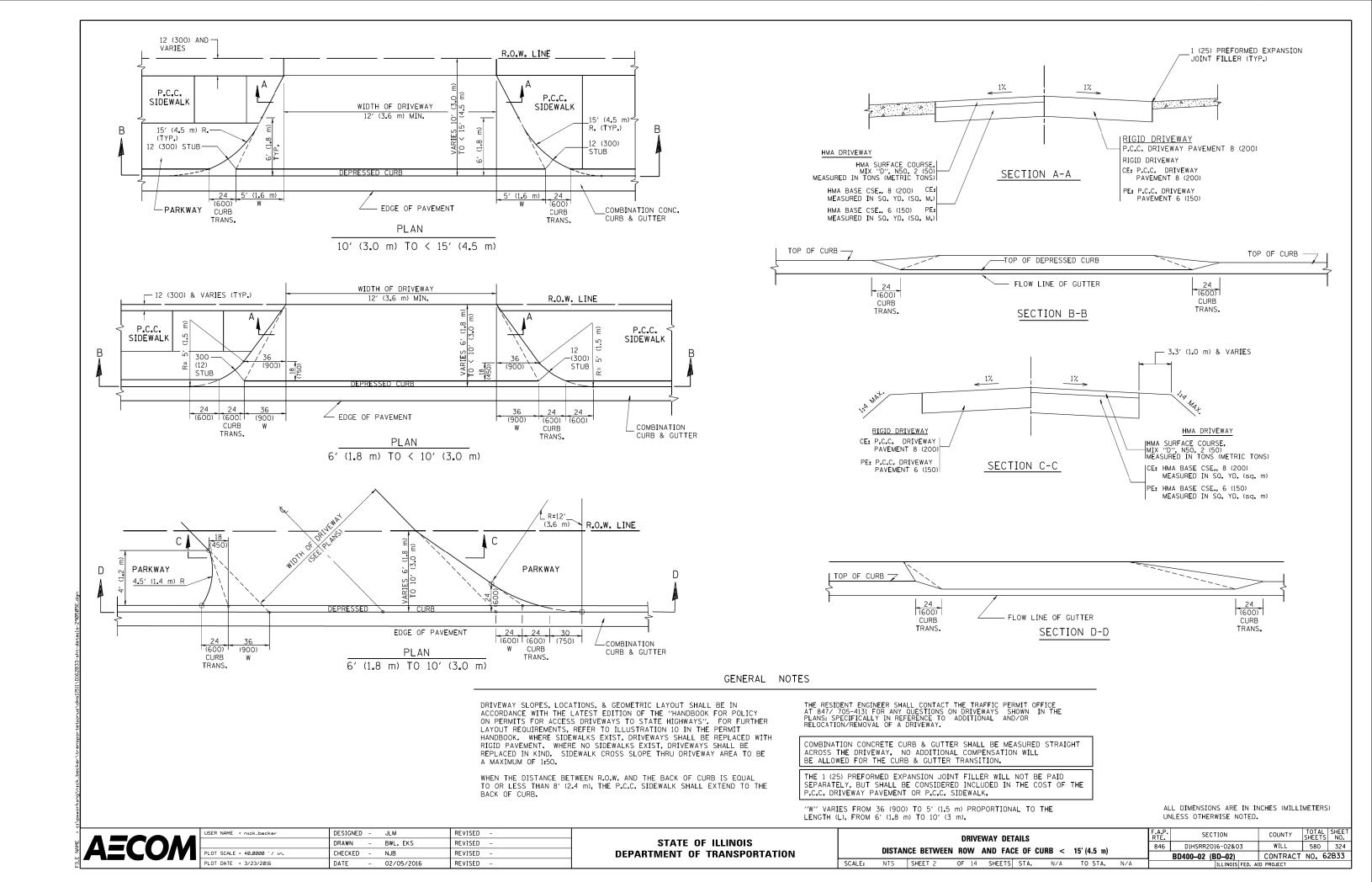
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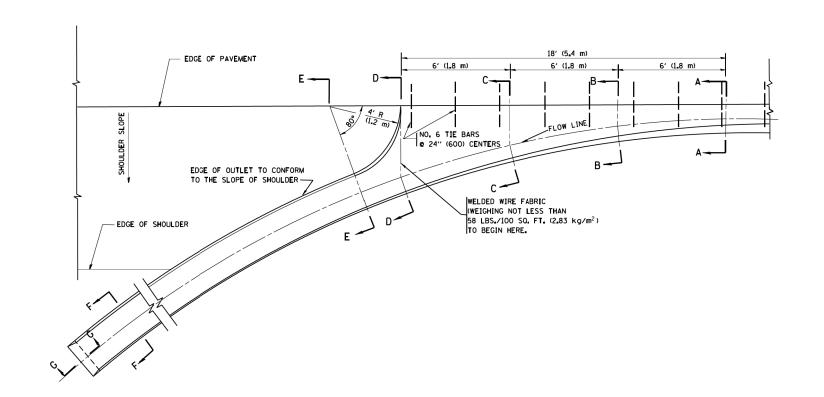
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- 1	USER NAME = nick_becker	DESIGNED	-	JLM	REVISED -
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	PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

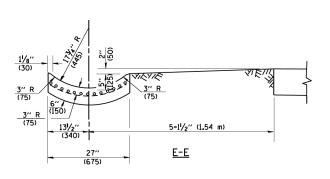
DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W.								F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	EACE OF	CHDD 0	ED	CE OE CL	IOIII DED		15' (4.5 m)		846	D1HSRR2016-02&03	WILL	580	323
_	TAGE OF	CUND 0	EDI	GE OF SE	IUULDEN		15 (4.5 111)			BD0156-07 (BD-01)	CONTRACT	NO. 6	2B33
	SHEET 1	OF	14	SHEETS	STA.	N/A	TO STA.	N/A		ILLINOIS FED. A	D PROJECT		

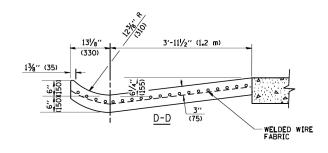


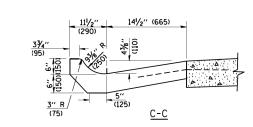


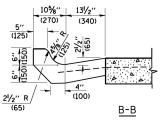


* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A
ARE SHOWN ON STATE STANDARD 606001.
FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER,
TYPE B-6,24 (B-15,60) SEE STATE STANDARD 606006.









GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

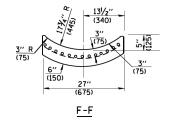
TIE BARS SHALL BE NO. 20 (NO.6) AT 24" (600) CENTERS UNLESS OTHERWISE SHOWN.

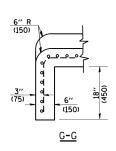
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL=
1.25 CU, YDS, (0,96 m³) CLASS SI CONCRETE (OUTLET) FOR 9" (225) PAV'T,
1.27 CU, YDS, (0,96 m³) CLASS SI CONCRETE (OUTLET) FOR 10" (250) PAV'T,
FOR SECTION F-F=
0.045 CU, YDS, (0,03 m³) CLASS SI CONCRETE PER ft, (m),

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



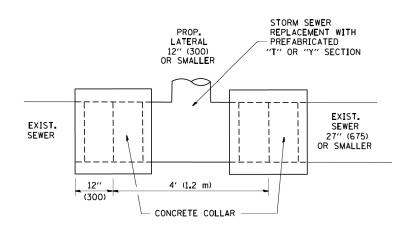


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FILE NAME	AECOM

USER NAME = nick_becker	DESIGNED	-	JLM	REVISED -	
	DRAWN	-	BWL, EKS	REVISED -	
PLOT SCALE = 40.0000 '/ in.	CHECKED	-	NJB	REVISED -	
PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -	
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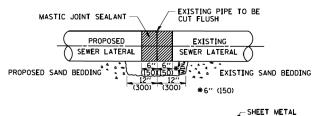
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

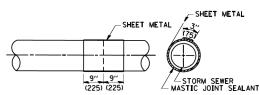
									F.A.P. SECTION			COUNTY	TOTAL SHEETS	SHEET NO.	
								846	D1HSRR20	16-02&03	WILL	580	325		
CURB AND GUTER								В	D600-01	(BD-03)	CONTRACT	NO. 6	2B33		
	SCALE:	NTS	SHEET 3	OF 14	SHEETS	STA.	N/A	TO STA.	N/A			ILLINOIS FED. A	D PROJECT		

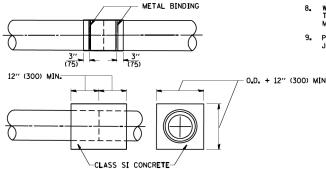


DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



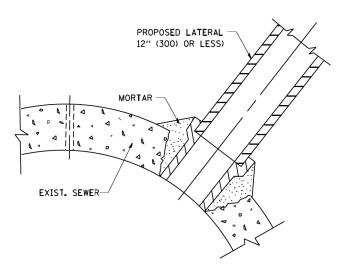




DETAIL "B" CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- 3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' × 6' (300 × 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- 4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- 7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- 8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS: A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

SCALE: NTS SHEET 4

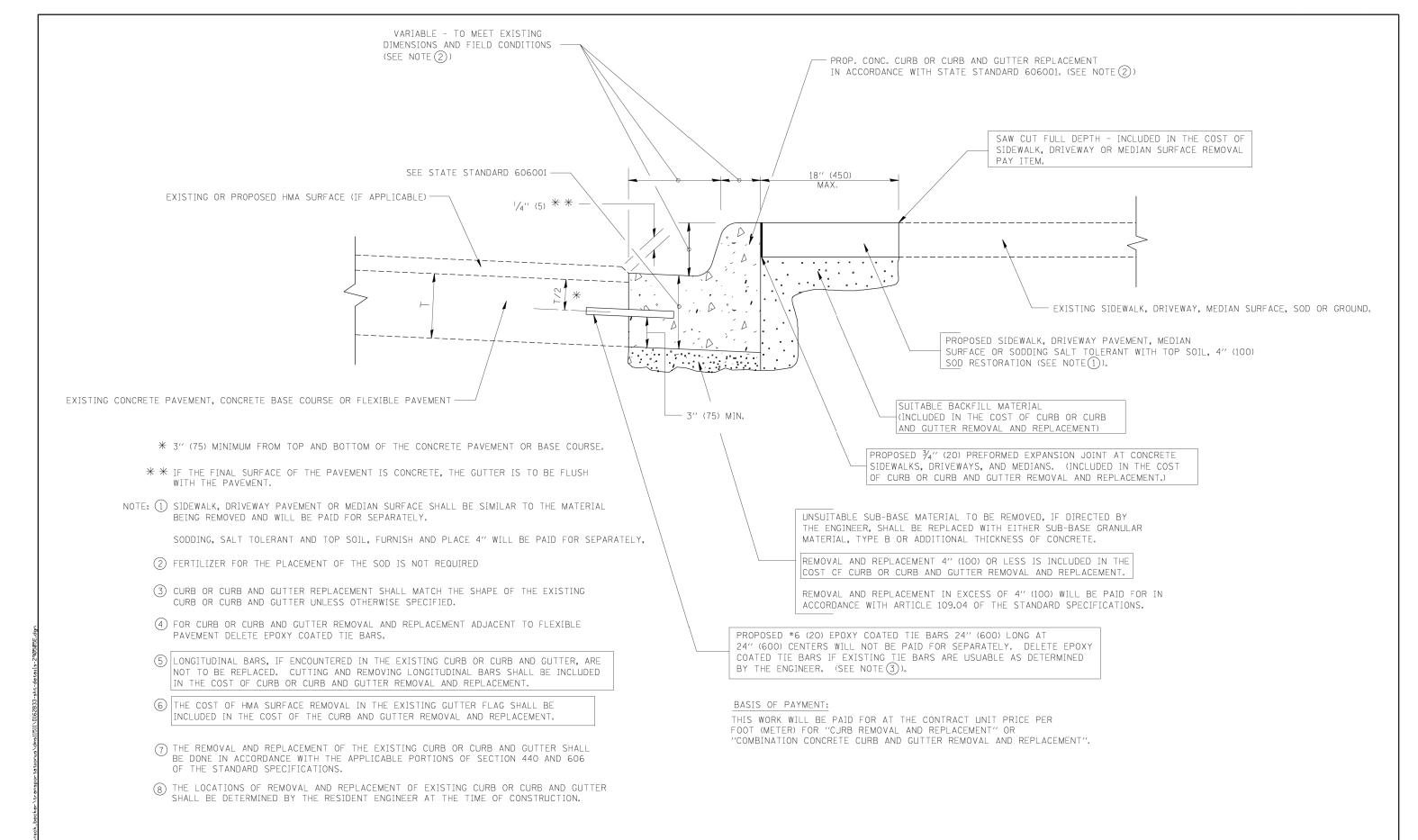
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



USER NAME = nick_becker	DESIGNED	-	JLM	REVISED -
	DRAWN	-	BWL, EKS	REVISED -
PLOT SCALE = 40.0000 '/ in.	CHECKED	-	NJB	REVISED -
PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

DETAIL OF STORM SEWER	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
NNECTION TO EXISTING SEWER	846	D1HSRR2016-02&03	WILL	580	326
MAECHON TO EVISTING SEARCH		BD500-01 (BD-7)	CONTRACT	NO. 62	2B33
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CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

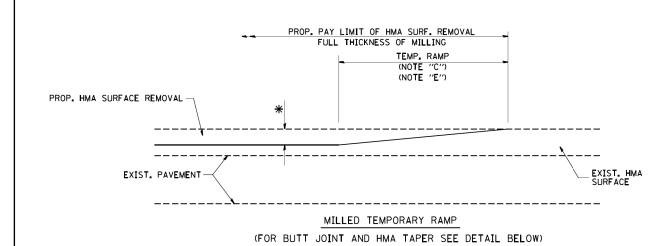
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



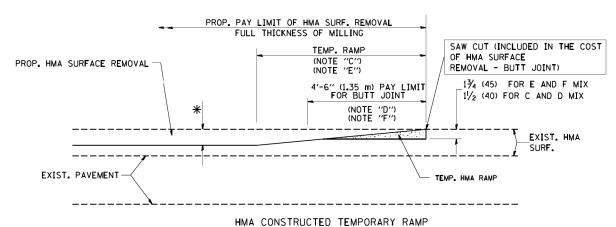
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PLOT SCALE = 40.0000 '/ in.	CHECKED	-	NJB	REVISED -
PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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	- D	EMOV/	\I A	ND REPL	ACEME	MT			846	D
	n	CIVIO V A	1L /	NIV NEFL	ACCIVIC	141				BD60
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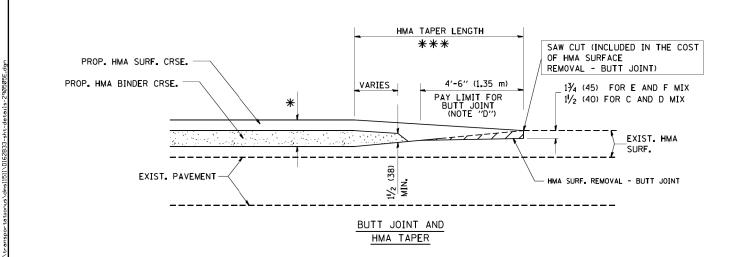
OPTION 1



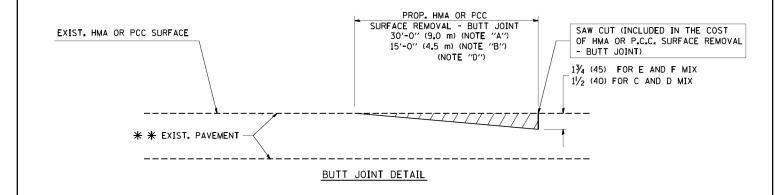
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

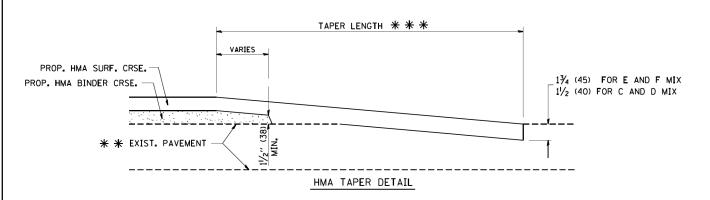
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER)
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

SCALE:

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

COUNTY

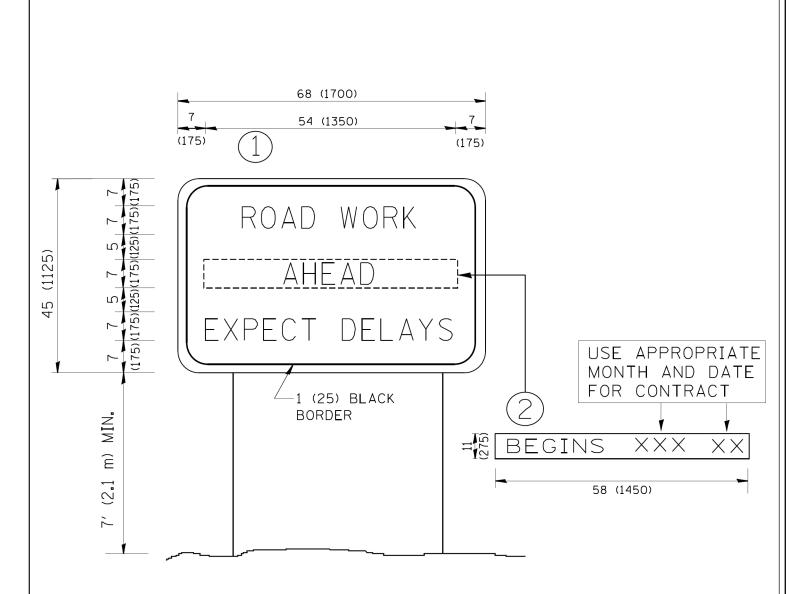
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CONTRACT NO. 62B33



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		DRAWN	-	BWL, EKS	REVISED	-
	PLOT SCALE = 40.0000 '/ in.	CHECKED	-	NJB	REVISED	-
•	PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED	-

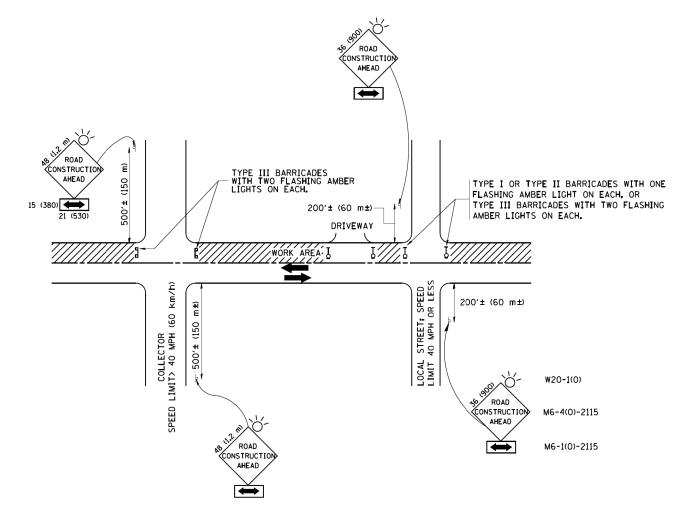
		BUTT	JOINT A	ND				F.A.P. RTE.	SE	CTION
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		HWA I		IAILO					BD400-05	BD32
NTS	SHEET 6	OF 14	SHEETS	STA.	N/A	TO STA.	N/A			TI I INO



NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.



 USER NAME
 = nick_becker
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 DRAWN
 BWL, EKS
 REVISED

 PLOT SCALE = 40.0000 '/ in.
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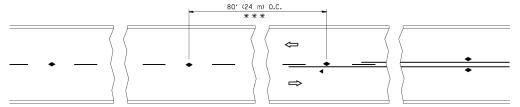
 PLOT DATE = 3/23/2016
 DATE
 02/05/2016
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

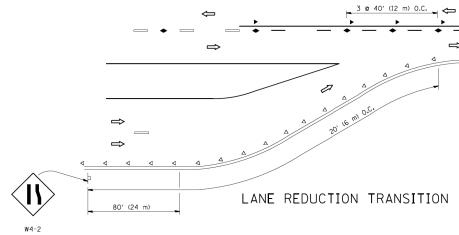
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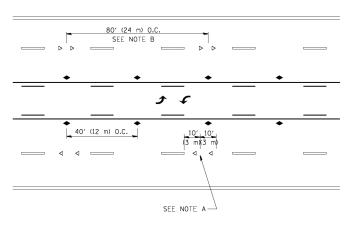
| SECTION | COUNTY | TOTAL | SHEET | NO. |
| DIHSRR2016-02&03 | WILL | 580 | 329 |
| TC-10 | CONTRACT | NO. | 62B33



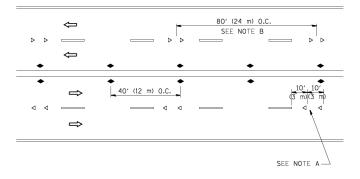
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

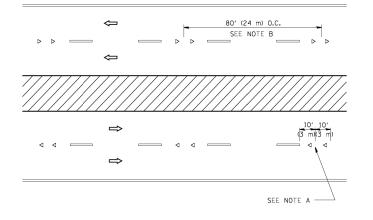




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

- MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

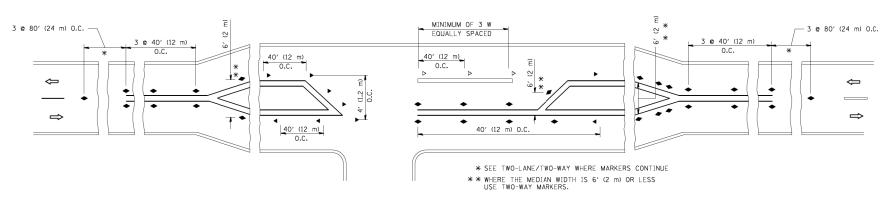
---- YELLOW STRIPE

── WHITE STRI

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- ◆ TWO-WAY AMBER MARKER

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
- MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

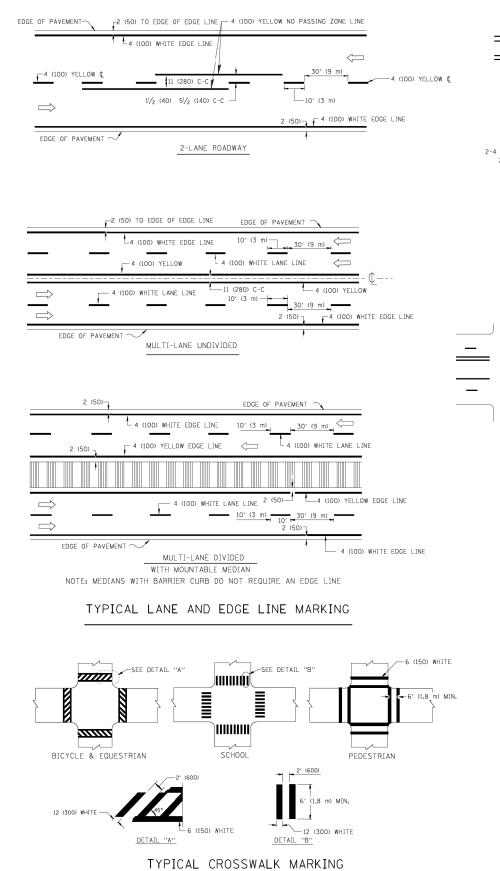
All dimensions are in inches (millimeters) unless otherwise shown.



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PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

			TYPICAL	APPLICA	TIONS			
	RAISED	REFLECTIVE	PAVEMENT	MARKER	S (SNC	W-PLOW	RESISTANT	Γ)
SCALE:	NTS	SHEET 8	OF 14	SHEETS	STA.	N/A	TO STA.	N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	TC-11	CONTRACT	NO. 6	2B33
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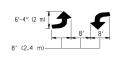


VARIES 12 (300) DIAGONALS -(MINIMUM 5) 2-4 (100) @ 11 (280) C-C 2-4 (100) @ 11 (280) C-C-MEDIAN LENGTH FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING

CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES. DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

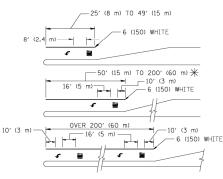
MEDIANS OVER 4' (1.2 m) WIDE -4 (100) YELLOW LINES (51/2 (140) C-C) 4 (100) YELLOW LINES (51/2 (140) C-C) -2-4 (100) YELLOW @ 11 (280) C-C

A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

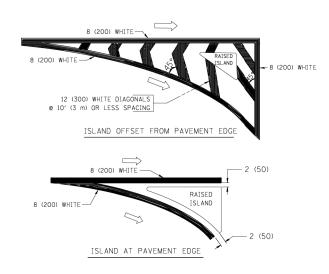


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \uparrow AREA = 15.6 SQ. FT. (1.5 m²) **(NLY** AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE
	© 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m ²) EACH "X"=54.0 SO. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

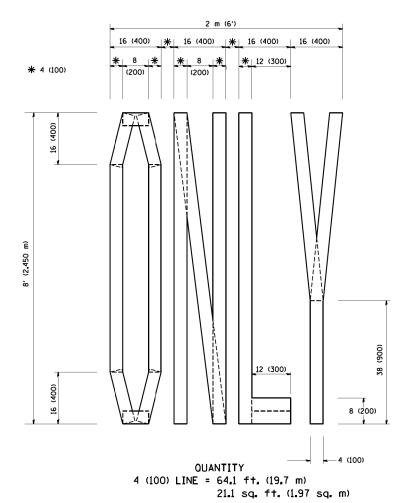
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

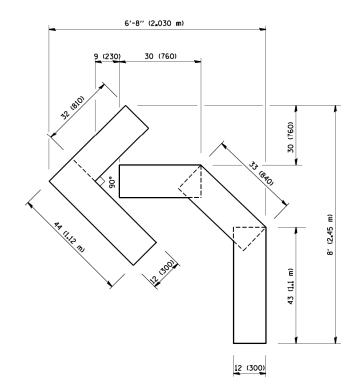
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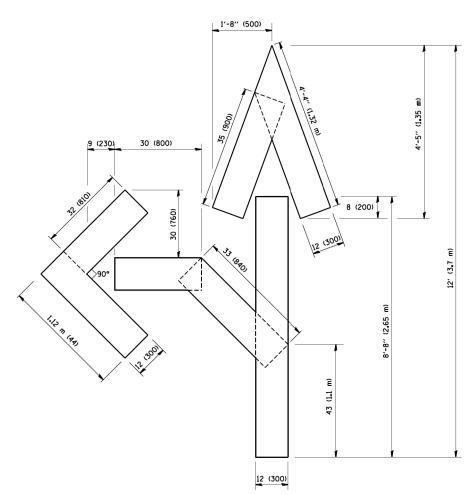
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			TVI	DICAL	DAY	/EMENT	MADVIN	ice			846	D1HSRR2016-02&03	WILL	580	331
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All dimensions are in inches (millimeters) unless otherwise shown.





OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



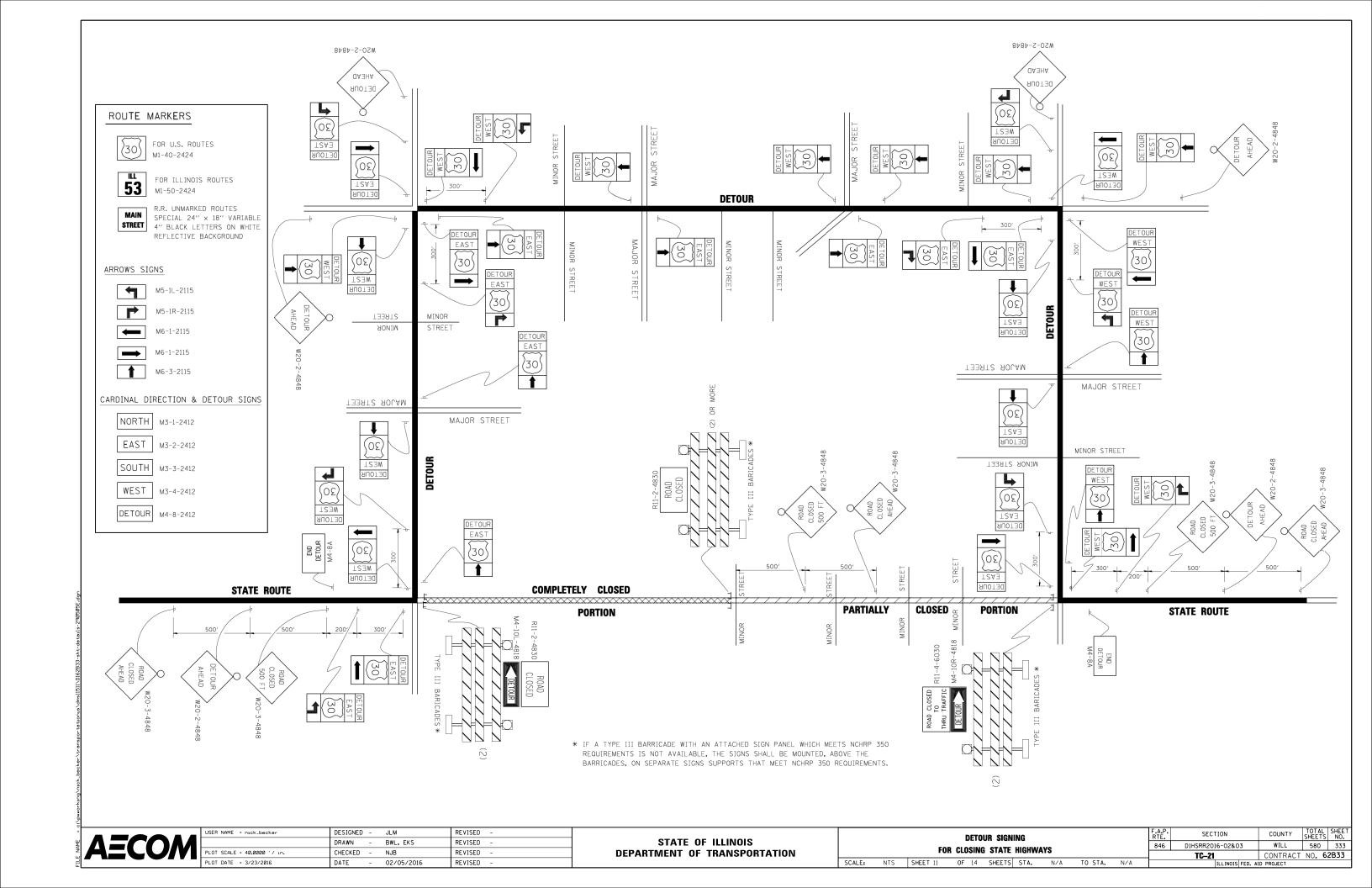
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

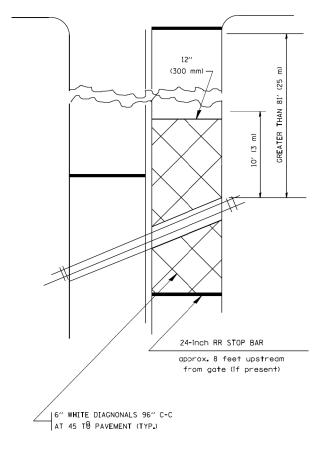


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		PAVEMENT	MAR	KING	LETTER	RS AND	SYMBOL	 S		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					FFIC ST					846	D1HSRR2016-02&03	WILL	580	332
			run	IKA	ILLIC 21	AGING					TC-16		6	2B33
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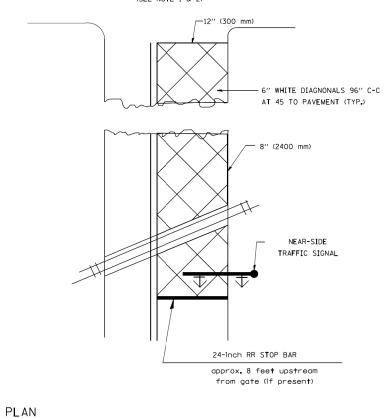


WITH INTERSECTION TRAFFIC SIGNALS



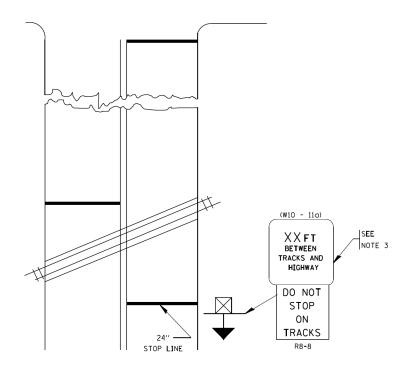
WITH NEAR-SIDE TRAFFIC SIGNALS

(SEE NOTE 1 & 2)



WITH NONSIGNALIZED INTERSECTION

81' (25 m) OR LESS TO CLOSEST RAIL



PLAN N.T.S

NOTES:

- 1. PAVEMENT MARKINGS TO BE INSTALLED ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED, THE PAVEMENT MARKINGS EXTENDS TO THE INTERSECTION.
- 3. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET (1.8 m) FROM THE RAIL CLOSEST TO THE INTERSECTION TO THE STOP LINE OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET (1.5 m). WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE THE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.

THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGE OF THE STRIPED-OUT AREA INSTEAD OF 6-FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.



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PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

SCALE: NTS

								F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
							846	D1HSRR2016-02&03	WILL	580	334		
TREATMENT FOR RAILROAD CROSSINGS										TC-23	CONTRACT	NO. 6	2B33
NTS SHEET 12 OF 14 S				SHEETS	STA.	N/A	TO STA.	N/A	ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

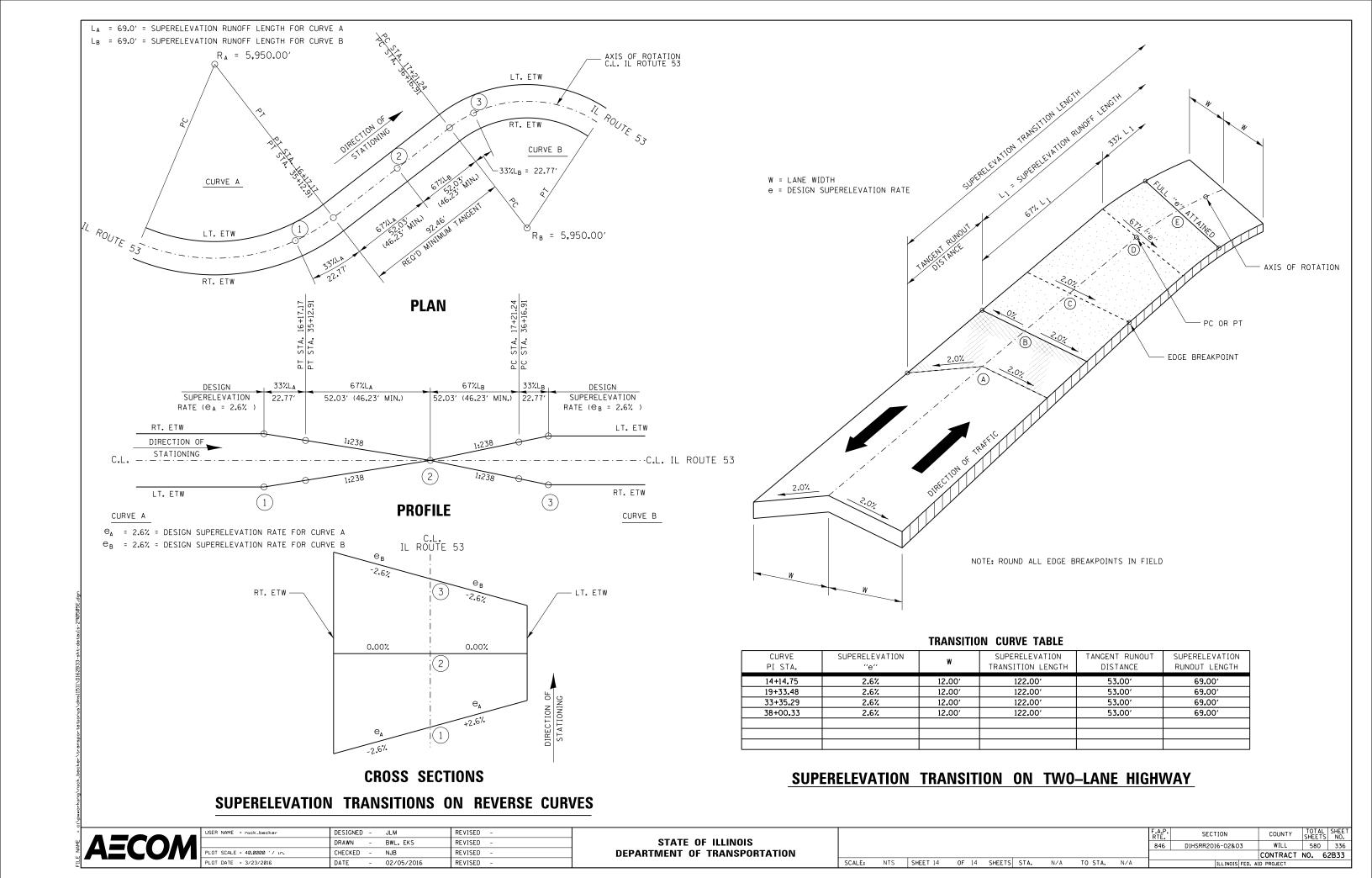
- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

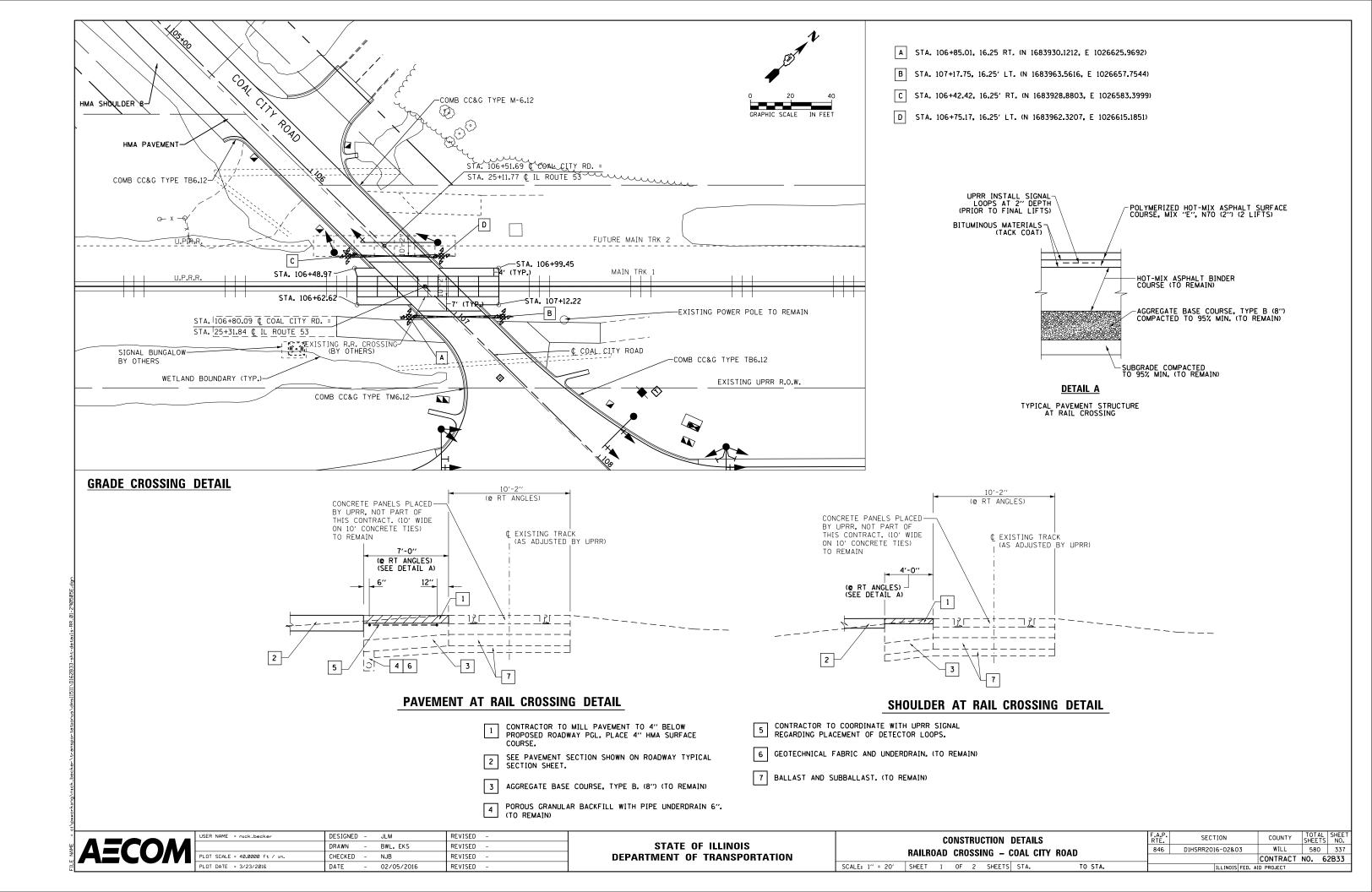
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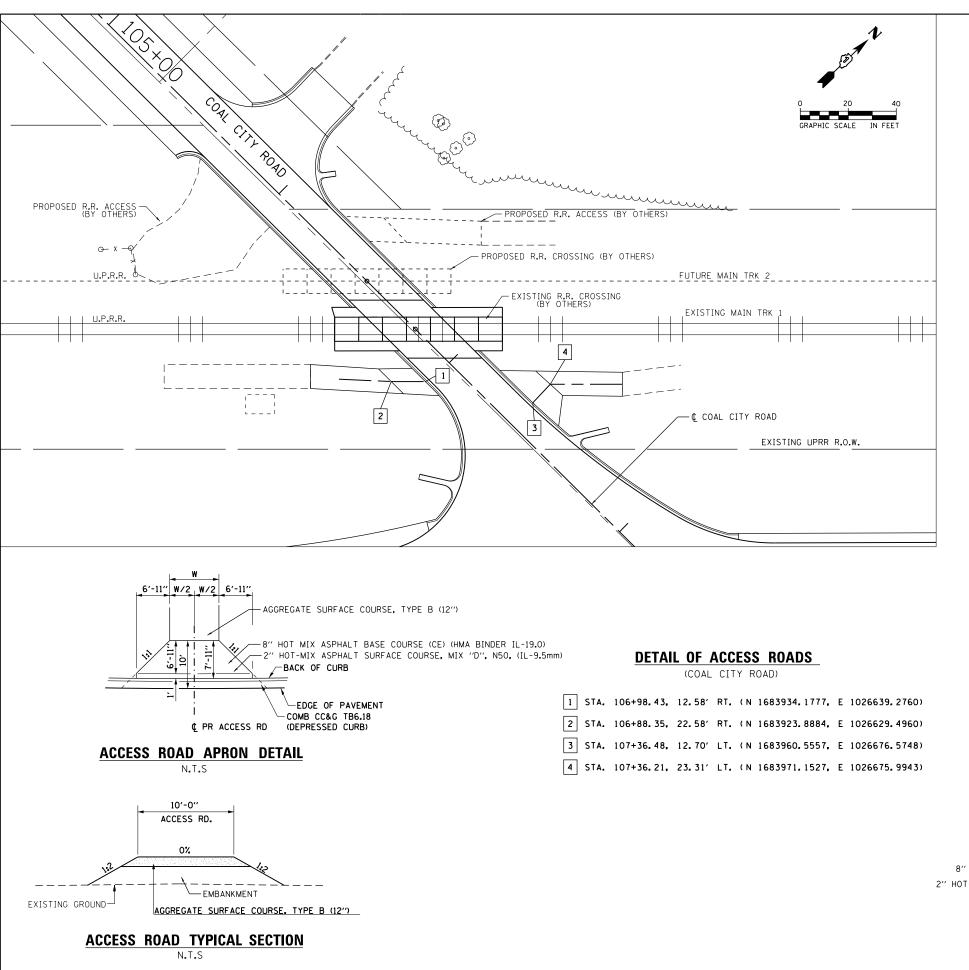
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DRIVEWAY ENTRANCE SIGNING								F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
								846	D1HSRR2016-02&03	WILL	580	335	
										TC-26	CONTRACT	NOO. 6	2B33
SCALE: NTS SHEET 13 OF 14 SHEETS STA. N/A TO STA. N/A										ILLINOIS FED. A	ID PROJECT		







EXISTING ACCESS ROAD

AGGREGATE SURFACE COURSE, TYPE B (12")

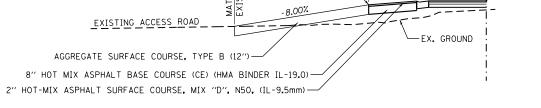
8" HOT MIX ASPHALT BASE COURSE (CE) (HMA BINDER IL-19.0)

2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL-9.5mm)

PROFILE

STA. 106+98.43 (RT)

¢ COAL CITY ROAD



PROFILE STA. 107+36.48 (LT)

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PLOT DATE = 3/23/2016	DATE	-	02/05/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS										F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ACCESS ROAD - COAL CITY ROAD									846	D1HSRR2016-02&03	WILL	580	338		
	ACCESS HOAD - COAL CITT HOAD												CONTRACT	NO. 6	2B33
	SCALE: 1" = 20'	SHEET	2	OF	2	SHEETS	STA.	N/A	TO STA.	N/A		ILLINOIS FED. AID PROJECT			

