

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8086	D6 2015-2 HSRR	SANGAMON	11	1

DOT# 294281X
MP 177.87

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.U. ROUTE 8086 AND ANDREW RD
SECTION D6 2015-2 HSRR
PROJECT HSR - 8086 (001)
TRAFFIC SIGNAL AND RAILROAD INTERCONNECT
IMPROVEMENTS
SANGAMON COUNTY /FANCY CREEK TOWNSHIP

D-96-067-14

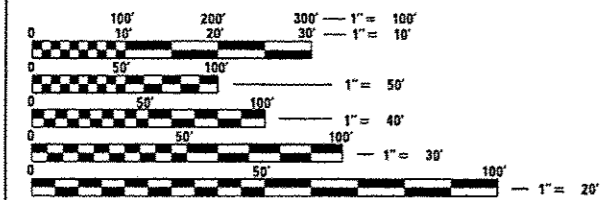
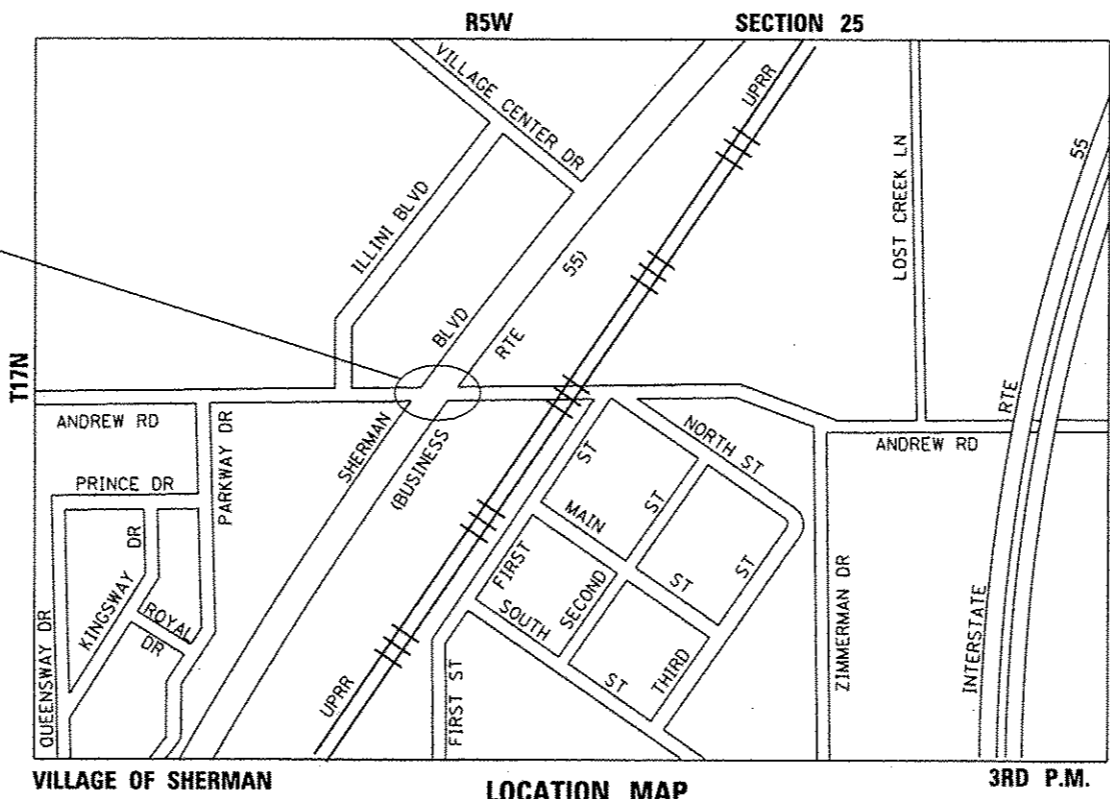


LIST OF HIGHWAY STANDARDS
SEE SHEET NO. 2

- FUNCTIONAL CLASSIFICATION**
- URBAN PRINCIPAL ARTERIAL (BUSINESS ROUTE 55)**
2014 ADT = 10,800 (2036 ADT = 20,694)
P.V. = 95.41% S.U. = 2.41% M.U. = 1.88%
DESIGN SPEED = 45MPH
 - URBAN MINOR ARTERIAL (IL ROUTE 124)**
2014 ADT = 5,300 (2036 ADT = 10,155)
P.V. = 96.80% S.U. = 2.26% M.U. = 0.94%
DESIGN SPEED = 35MPH
 - URBAN MINOR ARTERIAL (COUNTY HIGHWAY 1)**
2014 ADT = 4,850 (2036 ADT = 9,293)
P.V. = 88.66% S.U. = 10.31% M.U. = 1.03%
DESIGN SPEED = 30MPH

C-96-067-14

PROJECT LOCATION



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

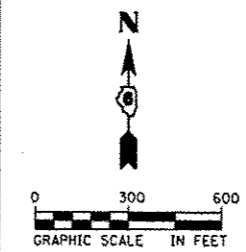
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

DISTRICT 6 NO. (217) 782-7301
PROJECT ENGINEER: JAY EDWARDS, P.E. NO. (217)785-0597
TOWNSHIP: FANCY CREEK
CONTRACT NO. 72G96

AECOM
AECOM
303 EAST WACKER DRIVE, SUITE 1400
CHICAGO, ILL 60601
PH. 312-373-7700



Matthew J. Letourneau
IL. REG. P.E. NO. 62-055763
EXPIRES: 11-30-2017



FINAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED December 17, 2015
Raja Z. D. M. J.
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Jan 29, 2016
Mawleen M. Addis, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 29, 2016
Emor Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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GENERAL NOTES

NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET. THE CONTRACTOR SHALL DEVELOP A PLAN TO ACCOMPLISH THIS WORK AND MINIMIZE DISRUPTION OF VEHICULAR, RAIL, AND PEDESTRIAN TRAFFIC. THIS PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

ALL UTILITIES, SCHOOL DISTRICTS, LOCAL POLICE, AND FIRE DEPARTMENTS SHALL BE NOTIFIED BY THE CONTRACTOR A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE AND MAINTAIN ACCESS TO ABUTTING PROPERTIES AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT.

THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITY FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR THEIR MARKING OF THE EXACT LOCATION PRIOR TO CONSTRUCTION.

BEFORE STARTING ANY WORK, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES (MINIMUM 48 HOURS NOTIFICATION IS REQUIRED). THE CONTRACTOR SHALL CALL THE UNION PACIFIC "CALL BEFORE YOU DIG" OPERATION AT 1-800-336-9193 FOR FIELD LOCATIONS OF UNION PACIFIC OWNED BURIED FIBER OPTIC CABLES IN UNION PACIFIC RIGHT OF WAY.

MEMBERS OF "JULIE" KNOWN TO BE WITHIN THE VICINITY OF THE IMPROVEMENT ARE:

1. SPRINT (FO)
2. AT&T (T) (FO)
3. AMEREN (G)
4. CASS CABLE TELEVISION/GREENE COUNTY PARTNERS (T)
5. VILLAGE OF SHERMAN (S)
6. WILLIAMVILLE WATER AND SEWER (W)
7. FRONTIER COMMUNICATIONS (FO)

NON-"JULIE" MEMBERS WITHIN THE VICINITY OF THE IMPROVEMENT ARE:

1. UNION PACIFIC RAILROAD COMPANY (U.P.R.R.)

THE CONTRACTOR SHALL COORDINATE WITH THE UPRR SIGNAL DEPARTMENT FOR ITEMS REMOVED OR INSTALLED BY THE UPRR SIGNAL DEPARTMENT.

U.P.R.R. FLAGGERS SHALL BE PRESENT WHEN WORKING WITHIN THE U.P.R.R. RIGHT-OF-WAY. THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE U.P.R.R. TO ASSURE THAT FLAGGERS ARE PRESENT DURING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

FOR STABILIZATION, ALL TYPE III BARRICADES (WHERE NEEDED) SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION. THE AREAS TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT-OF-WAY. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF "UNDERGROUND CONDUIT, PVC, 2" DIA."

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB NUMBER SHOWN IN THE LIST OF HIGHWAY STANDARDS INCLUDED ON THIS SHEET OR REFERENCED IN THESE PLANS.

THE CONTRACTOR SHALL KEEP EXISTING ADJACENT STREETS CLEAN OF DIRT, MUD, AND OTHER DEBRIS AND, WHEN NECESSARY, CLEAN SAID PAVEMENTS ON A DAILY BASIS OR WHEN DIRECTED BY THE ENGINEER. NO EXTRA COMPENSATION SHALL BE ALLOWED THE CONTRACTOR FOR THIS WORK.

THE FURNISHING, INSTALLATION, RELOCATION AND REMOVAL OF ALL TRAFFIC CONTROL SIGNS, DETOUR SIGNS, AND TRAFFIC CONTROL DEVICES SHOWN ON THE APPLICABLE IDOT TRAFFIC CONTROL STANDARDS SHALL BE PAID FOR UNDER THE "TRAFFIC CONTROL AND PROTECTION" PAY ITEMS. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL SIGNS AS REQUIRED BY THE ENGINEER, THE COST OF WHICH WILL ALSO BE INCLUDED IN THE "TRAFFIC CONTROL AND PROTECTION" PAY ITEMS.

THE SCALE SHOWN ON THE DRAWINGS APPLIES ONLY TO FULL SIZE PLANS AND NOT TO THE REDUCED SIZE PLANS. REDUCED SIZED PLANS CAN BE PRINTED TO SCALE FOR USE IN THE FIELD.

EXISTING UTILITIES ARE SHOWN ON THE PLANS ACCORDING TO INFORMATION OBTAINED FROM THE LOCAL AGENCIES, OWNERS, AND FIELD SURVEYS. THE ACCURACY AND COMPLETENESS OF SAID INFORMATION IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTENCE, NATURE AND EXACT LOCATIONS OF ALL UTILITY LINES AND APPURTENANCES WITHIN THE LIMITS OF THE IMPROVEMENTS.

GENERAL NOTES

BENCHMARKS FOR THE PROJECT ARE DESCRIBED IN THE PLANS AND ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ALL COORDINATES REFERENCED IN THE PLAN DRAWINGS AND ALL CONTROL COORDINATES ARE BASED ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, WEST ZONE, NAD 83 / 2011 ADJ.

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-04	TRAFFIC CONTROL DEVICES
814001-03	HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
857006-01	SUPERVISED RAILROAD INTERCONNECT CIRCUIT
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING

COMMITMENTS

NONE.
 October 19, 2015

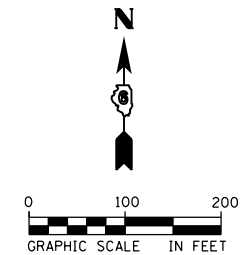
DISTRICT SIX	
EXAMINED	November 5 th 20 15
<i>Mike Warrington</i>	
OPERATIONS ENGINEER	
EXAMINED	November 4 20 15
<i>Ron Duchambeau</i>	
PROJECT IMPLEMENTATION ENGINEER	
EXAMINED	November 9 20 15
<i>Jeff P. Myer</i>	
PROGRAM DEVELOPMENT ENGINEER	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE
				TRAFFIC SIGNALS 2942B1X
				100% HSR
				100% FED
				0021
67100100	MOBILIZATION	L SUM	1	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	324	324
81400100	HANDHOLE	EACH	1	1
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1	1
87301290	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 18 3C	FOOT	1,083	1,083
87301750	ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	588	588
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	609	609
87900200	DRILL EXISTING HANDHOLE	EACH	1	1
89502215	MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	1
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,083	1,083
X0323071	SPARE FULL ACTUATED CONTROLLER, SPECIAL	EACH	1	1
X8571315	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1	1
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1	1
X8600105	MASTER CONTROLLER (SPECIAL)	EACH	1	1
X8950105	REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1	1

* =SPECIALTY ITEM

FILE NAME : 0072098-shr-500.dgn	USER NAME : zohreh_javanmardi	DESIGNED - ZGJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES ANDREW ROAD AND SHERMAN BOULEVARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 40,0000' / in.	CHECKED - MJL	REVISED -			8085	D6 2015-2 HSR	SANGAMON	11	3
PLOT DATE = 12/14/2015	DATE - 12/14/2015	REVISED -		SCALE: NTS	SHEET 1 OF 2 SHEETS	STA.	TO STA.	CONTRACT NO. 72096 ILLINOIS FED. AID PROJECT		



ALIGNMENT COORDINATES - SHERMAN BLVD (BUS. 55)			
	STATION	N	E
PC	263+77.90	1175809.4497	2454470.5285
PI	269+86.84	1176321.3523	2454800.3184
PT	275+94.64	1176795.6419	2455182.2280
POT	284+41.48	1177455.2226	2455713.3386

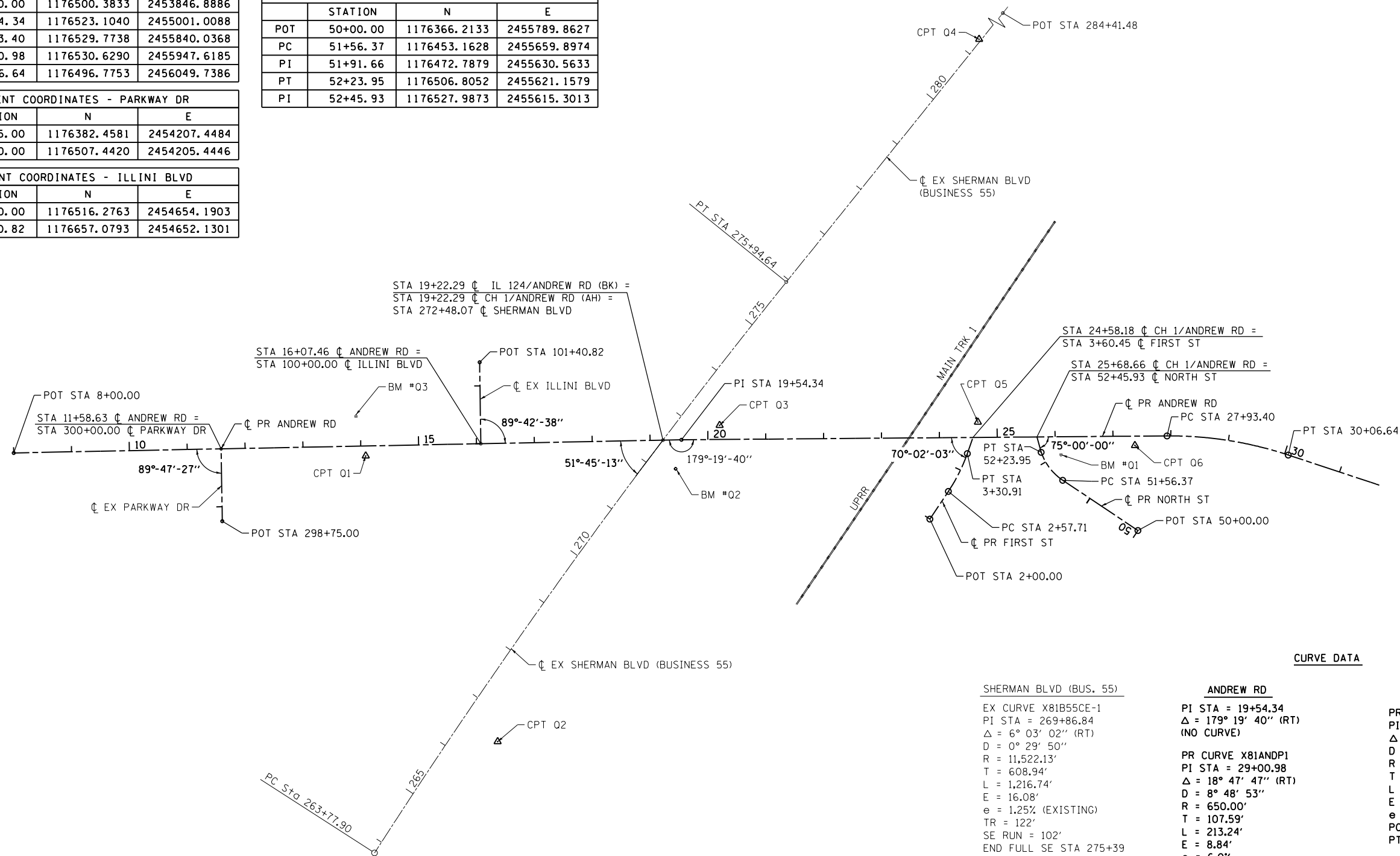
ALIGNMENT COORDINATES - FIRST ST			
	STATION	N	E
POT	2+00.00	1176385.9988	2455430.2047
PC	2+57.71	1176433.9952	2455462.2476
PI	2+94.50	1176464.5919	2455482.6743
PT	3+30.91	1176499.2683	2455494.9609
PI	3+60.45	1176527.1091	2455504.8256

ALIGNMENT COORDINATES - ANDREW RD			
	STATION	N	E
POT	8+00.00	1176500.3833	2453846.8886
PI	19+54.34	1176523.1040	2455001.0088
PC	27+93.40	1176529.7738	2455840.0368
PI	29+00.98	1176530.6290	2455947.6185
PT	30+06.64	1176496.7753	2456049.7386

ALIGNMENT COORDINATES - NORTH ST			
	STATION	N	E
POT	50+00.00	1176366.2133	2455789.8627
PC	51+56.37	1176453.1628	2455659.8974
PI	51+91.66	1176472.7879	2455630.5633
PT	52+23.95	1176506.8052	2455621.1579
PI	52+45.93	1176527.9873	2455615.3013

ALIGNMENT COORDINATES - PARKWAY DR			
	STATION	N	E
POT	298+75.00	1176382.4581	2454207.4484
PI	300+00.00	1176507.4420	2454205.4446

ALIGNMENT COORDINATES - ILLINI BLVD			
	STATION	N	E
PI	100+00.00	1176516.2763	2454654.1903
POT	101+40.82	1176657.0793	2454652.1301



CURVE DATA		SHERMAN BLVD (BUS. 55)	ANDREW RD	FIRST ST	NORTH ST
EX CURVE	X81B55CE-1	PI STA = 269+86.84	PI STA = 19+54.34	PR CURVE X811STP1	PR CURVE X81NORCNP1
PI STA	= 269+86.84	Δ = 6° 03' 02" (RT)	Δ = 179° 19' 40" (RT)	PI STA = 2+94.50	PI STA = 51+91.66
Δ	= 6° 03' 02" (RT)	D = 0° 29' 50"	(NO CURVE)	Δ = 14° 13' 01" (LT)	Δ = 40° 45' 40" (RT)
D	= 0° 29' 50"	R = 11,522.13'	PR CURVE X81ANDP1	D = 19° 25' 20"	D = 60° 18' 41"
R	= 11,522.13'	T = 608.94'	PI STA = 29+00.98	R = 295.00'	R = 95.00'
T	= 608.94'	Δ = 18° 47' 47" (RT)	Δ = 18° 47' 47" (RT)	T = 36.79'	T = 35.29'
L	= 1,216.74'	D = 8° 48' 53"	D = 8° 48' 53"	L = 73.20'	L = 67.58'
E	= 16.08'	R = 650.00'	R = 650.00'	E = 2.29'	E = 6.34'
e	= 1.25% (EXISTING)	T = 107.59'	T = 107.59'	e = NC	e = NC
TR	= 122'	L = 213.24'	L = 213.24'	PC STA = 2+57.71	PC STA = 51+56.37
SE RUN	= 102'	E = 8.84'	E = 8.84'	PT STA = 3+30.91	PT STA = 52+23.95
END FULL SE STA	275+39	e = 6.0%	e = 6.0%		
MATCH EXISTING SE STA	277+01	TR = 25'	TR = 25'		
PC STA	= 263+77.90	SE RUN = 97'	SE RUN = 97'		
PT STA	= 275+94.64	BEGIN SE TRANSITION STA	27+02		
		MATCH EXISTING SE STA	27+83		
		SEE CROSS SECTIONS			
		PC STA = 27+93.40			
		PT STA = 30+06.64			

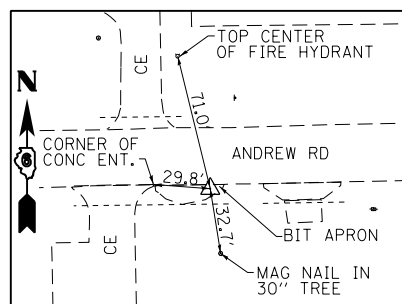
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		DRAWN - JTC	REVISED -
		CHECKED - JAC	REVISED -
		DATE - 12/14/2015	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ALIGNMENT, TIES, & BENCHMARKS

SCALE: 1" = 100' SHEET 1 OF 2 SHEETS STA. TO STA.

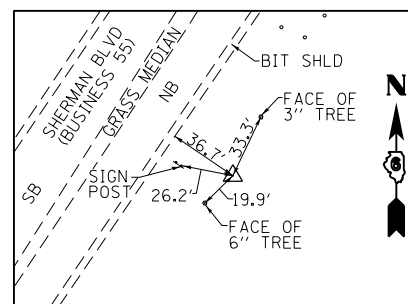
F.A.P. RTE. 8086	SECTION D6 2015-2 HSR	COUNTY SANGAMON	TOTAL SHEETS 11	SHEET NO. 5
CONTRACT NO. 72C96				ILLINOIS FED. AID PROJECT



CONTROL POINT Q1

SET MAG NAIL IN BIT APRON
(500' ± W OF SHERMAN BLVD)

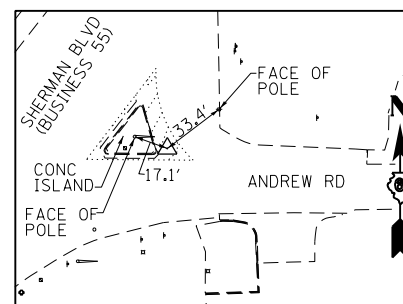
STA 14+08.22, 17.20' RT
N 1176495.161
E 2454455.327
ELEV 583.250



CONTROL POINT Q2

SET IRON PIN
(600' ± S OF ANDREW RD)

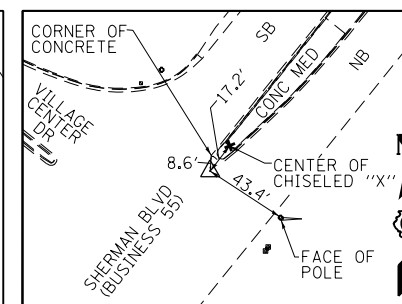
STA 266+56.54, 71.33' RT
N 1176001.767
E 2454683.267
ELEV 580.460



CONTROL POINT Q3

SET MAG NAIL IN PAVEMENT

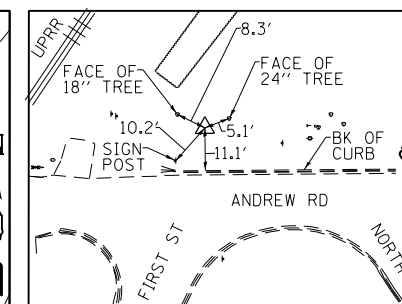
STA 20+20.37, 24.37' LT
N 1176547.995
E 2455066.836
ELEV 579.720



CONTROL POINT Q4

SET MAG NAIL IN PAVEMENT
(900' ± N OF ANDREW RD)

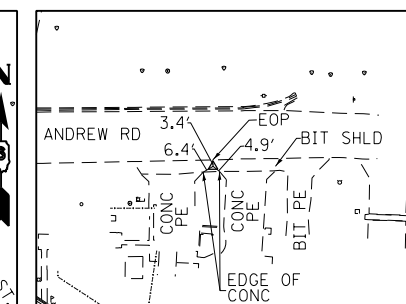
STA 281+30.08, 3.44' LT
N 1177214.842
E 2455515.356
ELEV 577.900



CONTROL POINT Q5

SET IRON PIN
(100' ± E OF RR TRACKS)

STA 24+66.86, 26.37' LT
N 1176553.546
E 2455513.298
ELEV 577.670



CONTROL POINT Q6

SET MAG NAIL IN BIT SHLD
(350' ± E OF RR TRACKS)

STA 27+37.83, 15.88' RT
N 1176513.453
E 2455784.593
ELEV 573.310

BENCHMARK

- BM #01- CHISELED "+" IN E BOLT OF FIRE HYDRANT, SE QUAD OF ANDREW RD & NORTH ST
STA 51+97, 29' RT
EL 577.99
- BM #02- CHISELED "□" SE CORNER OF CONCRETE BASE FOR TRAFFIC SIGNAL (W/O MAST ARM)
STA 272+22, 47' RT
EL 580.33
- BM #03- TOP OF BOLT ON FH BETWEEN "E" & "L" OF MUELLER
STA 13+93, 52' LT
EL 585.13

FILE NAME =
D672096-sh1-ATB-02.dgn
PLOT DATE = 12/14/2015

USER NAME = matthew.letourneau	DESIGNED - JAC	REVISED -
	DRAWN - JTC	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - JAC	REVISED -
	DATE - 12/14/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES, & BENCHMARKS

SCALE: NTS SHEET 2 OF 2 SHEETS STA. TO STA.

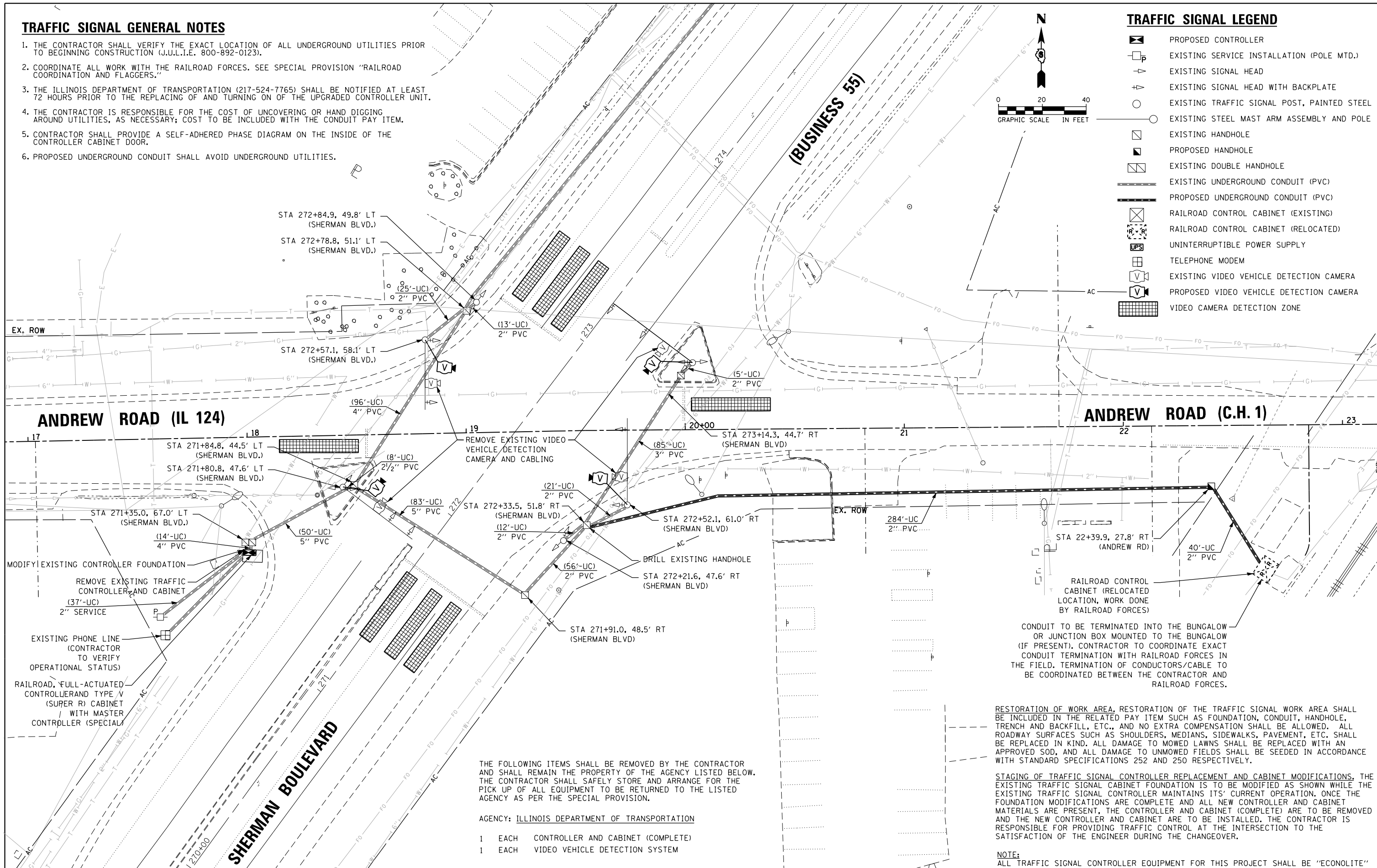
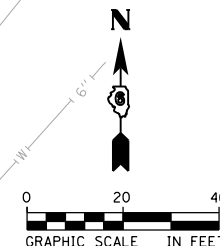
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8086	D6 2015-2 HSRR	SANGAMON	11	6
CONTRACT NO. 72C96			ILLINOIS FED. AID PROJECT	

TRAFFIC SIGNAL GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION (J.U.L.I.E. 800-892-0123).
2. COORDINATE ALL WORK WITH THE RAILROAD FORCES. SEE SPECIAL PROVISION "RAILROAD COORDINATION AND FLAGGERS."
3. THE ILLINOIS DEPARTMENT OF TRANSPORTATION (217-524-7765) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO THE REPLACING OF AND TURNING ON OF THE UPGRADED CONTROLLER UNIT.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES, AS NECESSARY; COST TO BE INCLUDED WITH THE CONDUIT PAY ITEM.
5. CONTRACTOR SHALL PROVIDE A SELF-ADHERED PHASE DIAGRAM ON THE INSIDE OF THE CONTROLLER CABINET DOOR.
6. PROPOSED UNDERGROUND CONDUIT SHALL AVOID UNDERGROUND UTILITIES.

TRAFFIC SIGNAL LEGEND

- PROPOSED CONTROLLER
- EXISTING SERVICE INSTALLATION (POLE MTD.)
- EXISTING SIGNAL HEAD
- EXISTING SIGNAL HEAD WITH BACKPLATE
- EXISTING TRAFFIC SIGNAL POST, PAINTED STEEL
- EXISTING STEEL MAST ARM ASSEMBLY AND POLE
- EXISTING HANDHOLE
- PROPOSED HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING UNDERGROUND CONDUIT (PVC)
- PROPOSED UNDERGROUND CONDUIT (PVC)
- RAILROAD CONTROL CABINET (EXISTING)
- RAILROAD CONTROL CABINET (RELOCATED)
- UNINTERRUPTIBLE POWER SUPPLY
- TELEPHONE MODEM
- EXISTING VIDEO VEHICLE DETECTION CAMERA
- PROPOSED VIDEO VEHICLE DETECTION CAMERA
- VIDEO CAMERA DETECTION ZONE



THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR THE PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE SPECIAL PROVISION.

- AGENCY: ILLINOIS DEPARTMENT OF TRANSPORTATION
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
 - 1 EACH VIDEO VEHICLE DETECTION SYSTEM

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

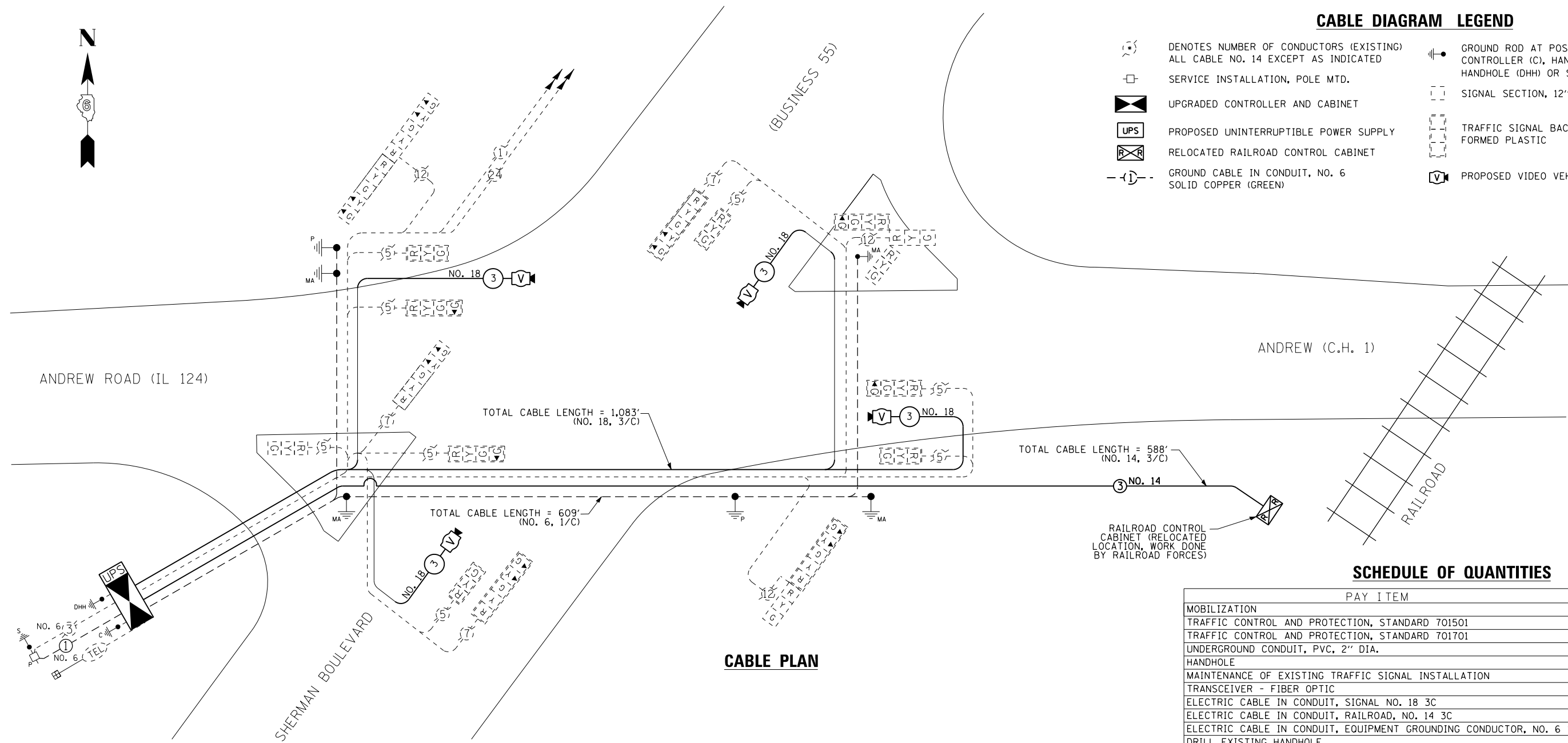
STAGING OF TRAFFIC SIGNAL CONTROLLER REPLACEMENT AND CABINET MODIFICATIONS. THE EXISTING TRAFFIC SIGNAL CABINET FOUNDATION IS TO BE MODIFIED AS SHOWN WHILE THE EXISTING TRAFFIC SIGNAL CONTROLLER MAINTAINS ITS' CURRENT OPERATION. ONCE THE FOUNDATION MODIFICATIONS ARE COMPLETE AND ALL NEW CONTROLLER AND CABINET MATERIALS ARE PRESENT, THE CONTROLLER AND CABINET (COMPLETE) ARE TO BE REMOVED AND THE NEW CONTROLLER AND CABINET ARE TO BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL AT THE INTERSECTION TO THE SATISFACTION OF THE ENGINEER DURING THE CHANGEOVER.

NOTE:
ALL TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE"

FILE NAME = D672096-sht-1.dgn	USER NAME = matthew.letourneau	DESIGNED - ZGJ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODIFICATION PLAN ANDREW ROAD AND SHERMAN BOULEVARD	F.A.P. RTE. 8086	SECTION D6 2015-2 HSR	COUNTY SANGAMON	TOTAL SHEETS 11	SHEET NO. 7		
PLOT SCALE = 40.0000 Ft / in.	CHECKED - MJL	REVISIED -	REVISIED -			SCALE: 1" = 20'	SHEET 1 OF 5 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
PLOT DATE = 12/14/2015	DATE - 12/14/2015	REVISIED -	REVISIED -									
CONTRACTOR NO. 72C96												

CABLE DIAGRAM LEGEND

- DENOTES NUMBER OF CONDUCTORS (EXISTING) ALL CABLE NO. 14 EXCEPT AS INDICATED
- SERVICE INSTALLATION, POLE MTD.
- UPGRADED CONTROLLER AND CABINET
- PROPOSED UNINTERRUPTIBLE POWER SUPPLY
- RELOCATED RAILROAD CONTROL CABINET
- GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
- GROUND ROD AT POST (P), MAST ARM (MA), CONTROLLER (C), HANDHOLE (HH), DOUBLE HANDHOLE (DHH) OR SERVICE INSTALLATION (S)
- SIGNAL SECTION, 12"
- TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC
- PROPOSED VIDEO VEHICLE DETECTION SYSTEM



CABLE PLAN

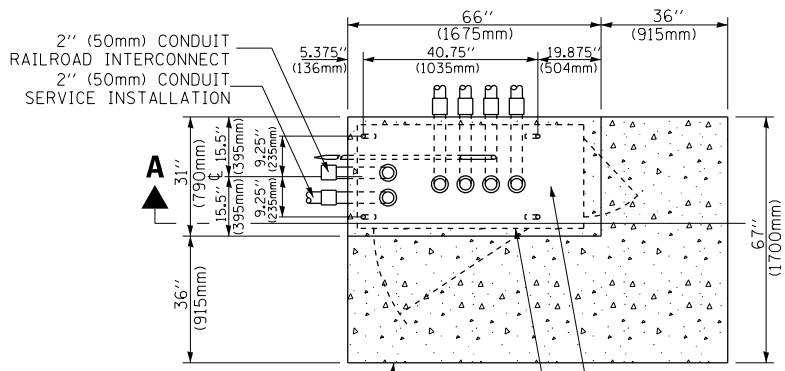
SCHEDULE OF QUANTITIES

PAY ITEM	UNITS	QNTY.
MOBILIZATION	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	324
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 18 3C	FOOT	1,083
ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C	FOOT	588
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	609
DRILL EXISTING HANDHOLE	EACH	1
MODIFY EXISTING CONTROLLER FOUNDATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,083
SPARE FULL ACTUATED CONTROLLER, SPECIAL	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1
MASTER CONTROLLER (SPECIAL)	EACH	1
REMOVE EXISTING TRAFFIC CONTROLLER AND CABINET	EACH	1
VIDEO VEHICLE DETECTION SYSTEM	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	4
RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

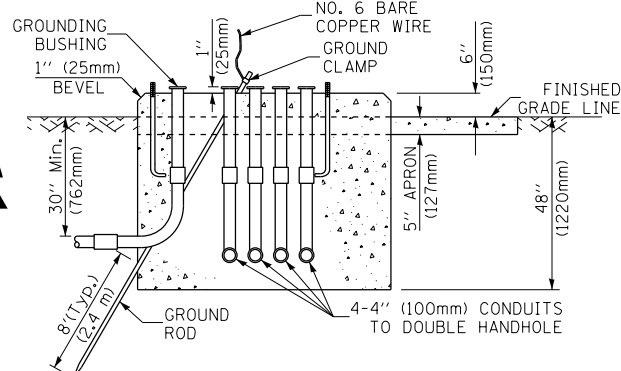
NOTES:

- CONTROLLER SPECIFIED: FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE II, 8 PHASE, IN TYPE V "SUPER R" CABINET (ECONOLITE).

THE TRAFFIC SIGNAL CONTROLLER SHALL HAVE REMOTE MONITORING CAPABILITIES INCLUDING ALL NECESSARY PERIPHERAL HARDWARE SUCH AS A PHONE MODEM, ETC. TO ALLOW FOR BOTH REMOTE DIAL-IN ACCESS AND AUTOMATIC CONTROLLER DIAL-OUTREPORTING OF ALARMS. THE COST OF THE NECESSARY ADDITIONAL HARDWARE SHALL BE INCIDENTAL TO THE UNIT PRICE FOR "RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL".
- SEE TRAFFIC SIGNAL PLAN FOR NOTES REGARDING THE STAGING OF TRAFFIC SIGNAL CONTROLLER REPLACEMENT AND CABINET FOUNDATION MODIFICATION.



TOP VIEW



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION FOR GROUND MOUNTED SUPER P (TYPE IV) AND SUPER R (TYPE V) CONTROLLER CABINETS

NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE

SEQUENCE OF OPERATION

MOVEMENT																											FLASH			
PHASE	1 + 5							1 + 6					2 + 5					2 + 6			3			4						
INTERVAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				
CHANGE TO	/		2 + 6		1 + 6		2 + 5		/		2 + 6		2 + 5, 3 OR 4		/		2 + 6		1 + 6, 3 OR 4		/		3 OR 4		4, 1+5, 1+6, 2+6 OR 2+5			/		3, 1+5, 1+6, 2+6 OR 2+5
SHERMAN BOULEVARD LEFT END MAST ARM AND FAR LEFT SIGNALS	N/B	$\leftarrow R_G$	$\leftarrow R_Y$	R	$\leftarrow R_Y$	R	$\leftarrow R_G$	$\leftarrow R_G$	R	R	R	R	R	$\leftarrow G_G$	$\leftarrow G_Y$	G	$\leftarrow Y_Y$	R	G	Y	R	R	R	R	R	R	R	R	R	R
SHERMAN BOULEVARD MID MAST ARM, FAR RIGHT, AND NEAR SIGNALS	N/B	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R
SHERMAN BOULEVARD LEFT END MAST ARM AND FAR LEFT SIGNALS	S/B	$\leftarrow R_G$	$\leftarrow R_Y$	R	$\leftarrow R_G$	$\leftarrow R_G$	$\leftarrow R_Y$	R	$\leftarrow G_G$	$\leftarrow G_Y$	G	$\leftarrow Y_Y$	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R
SHERMAN BOULEVARD MID MAST ARM SIGNAL	S/B	R	R	R	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	
SHERMAN BOULEVARD FAR RIGHT AND NEAR RIGHT SIGNALS	S/B	R	R	R	R	R	R	R	$\leftarrow G_G$	$\leftarrow G_Y$	G	$\leftarrow Y_Y$	R	R	R	R	R	R	G	Y	R	R	R	R	$\leftarrow R_G$	$\leftarrow R_Y$	R	R	R	
ANDREW ROAD LEFT MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	$\leftarrow G_G$	Y	R	R	R	
ANDREW ROAD FAR RIGHT AND NEAR RIGHT SIGNALS	E/B	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	
ANDREW ROAD LEFT END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	$\leftarrow G_G$	Y	R	R	R	R	R	
ANDREW ROAD FAR RIGHT AND NEAR RIGHT SIGNALS	W/B	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	R	

PHASES 2+6 SHALL BE PLACED ON RECALL.

RAILROAD PREEMPTION SEQUENCE OF OPERATION

CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER												PREEMPTOR NUMBER 2		CLEAR TO NORMAL SEQUENCE		
	1		8		13		18		21	24		2	3		4	5
RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1A	1B	1C	1D	1G	1H	1E	1F	1G	1H	1J	2	3	4	5	
CHANGE TO RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER	1B	2	1D	2	1H	2	1F	2	2	2	1J	3	4	5		
SHERMAN BOULEVARD LEFT END MAST ARM AND FAR LEFT SIGNALS	N/B ← R _Y	R	R	R	← Y _Y	R	Y	R	R	R	R	R	R	R	G	△
SHERMAN BOULEVARD MID MAST ARM, FAR RIGHT, AND NEAR SIGNALS	N/B	R	R	R	Y	R	Y	R	R	R	R	R	R	R	G	△
SHERMAN BOULEVARD LEFT END MAST ARM AND FAR LEFT SIGNALS	S/B ← R _Y	R	← Y _Y	R	R	R	Y	R	R	R	R	R	R	R	G	△
SHERMAN BOULEVARD MID MAST ARM SIGNAL	S/B	R	Y	R	R	R	Y	R	R	R	R	R	R	R	G	△
SHERMAN BOULEVARD FAR RIGHT AND NEAR RIGHT SIGNALS	S/B	R	Y _Y →	R	R	R	Y	R	R	R _Y →	R	R	R	R	G	△
ANDREW ROAD LEFT MAST ARM AND FAR LEFT SIGNALS	E/B	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	△
ANDREW ROAD FAR RIGHT AND NEAR RIGHT SIGNALS	E/B	R	R	R	R	R	R	R	R	Y	R	R	R	R	R	△
ANDREW ROAD LEFT END MAST ARM AND FAR LEFT SIGNALS	W/B	R	R	R	R	R	R	R	← G _G	R	R	← G _G	Y	R	R	△
ANDREW ROAD FAR RIGHT AND NEAR RIGHT SIGNALS	W/B	R	R	R	R	R	R	R	G	R	R	G	Y	R	R	△
HOLD																

△ RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION AFTER RAILROAD INTERVAL 5 IS TERMINATED.

NOTES:

1. ONCE PREEMPTION HAS BEEN CALLED, THE TRACK CLEAR SIGNAL DISPLAY SHALL APPEAR IMMEDIATELY AFTER ALL NECESSARY VEHICULAR CLEARANCES HAVE BEEN PROVIDED.
2. THE RAILROAD PREEMPTION SEQUENCE OF OPERATION SHALL HAVE PRIORITY OVER ALL OTHER SEQUENCES OF OPERATION.

